

Confidential draft No. 2 submitted to the Securities and Exchange Commission on December 24, 2013.
 This draft registration statement has not been publicly filed with the Securities and Exchange Commission
 and all information herein remains strictly confidential.

Registration No. 333-

**UNITED STATES
 SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

**Form S-1
 REGISTRATION STATEMENT
 UNDER
 THE SECURITIES ACT OF 1933**

Aquinox Pharmaceuticals (USA) Inc.
 (Exact name of registrant as specified in its charter)

Delaware
 (State or other jurisdiction of
 incorporation or organization)

2834
 (Primary Standard Industrial
 Classification Code Number)
430-5600 Parkwood Way,
Richmond, B.C., Canada V6V 2M2
(604) 629-9223
 (Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

98-0542593
 (I.R.S. Employer
 Identification Number)

David J. Main
President and Chief Executive Officer
Aquinox Pharmaceuticals Inc.
430-5600 Parkwood Way,
Richmond, B.C., Canada V6V 2M2
(604) 629-9223
 (Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer
 Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price (1) (2)	Amount of Registration Fee (3)
Common Stock, \$0.000001 par value per share	\$	\$

(1) Estimated solely for the purpose of computing the amount of registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

(2) Includes shares the underwriters have the option to purchase.

(3) Calculated pursuant to Rule 457(o) under the Securities Act of 1933, as amended, based on an estimate of the proposed maximum aggregate offering price.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion. Dated December 24, 2013.

Shares



Aquinox Pharmaceuticals (USA) Inc.

Common Stock

We are offering _____ shares of our common stock. This is our initial public offering and no public market currently exists for our stock. We expect the initial public offering price to be between \$ _____ and \$ _____. We intend to apply to list our common stock on the NASDAQ Global Market under the symbol "AQXP."

We are an "emerging growth company" as the term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our common stock involves a high degree of risk. Please see "[Risk Factors](#)" beginning on page 10 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	<u>PER SHARE</u>	<u>TOTAL</u>
Public Offering Price	\$ _____	\$ _____
Underwriting Discounts and Commissions	\$ _____	\$ _____
Proceeds to Aquinox before expenses	\$ _____	\$ _____

Certain of our directors and existing stockholders, or their affiliates, have indicated an interest in purchasing in the aggregate between \$ _____ million and \$ _____ million of shares of our common stock in this offering. The shares will be offered and sold on the same terms as the other shares that are being offered and sold in this offering to the public. Although we anticipate that these parties will purchase all of the shares of our common stock that these parties have indicated an interest in purchasing, indications of interest are not binding agreements or commitments to purchase and any of these parties may determine to purchase more, less or no shares in this offering.

Delivery of the shares of common stock purchased in this offering is expected to be made on or about _____, 2014. We have granted the underwriters an option for a period of 30 days to purchase up to _____ additional shares of common stock. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be \$ _____, and total proceeds to us, before expenses, will be \$ _____.

Joint Book-Running Managers

Jefferies

Cowen and Company

Co-Manager

Canaccord Genuity

Prospectus dated _____, 2014.

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You should rely only on the information contained in this prospectus and any free writing prospectus prepared by or on behalf of us or to which we have referred you. We have not authorized anyone to provide you with information that is different. We are offering to sell shares of our common stock, and seeking offers to buy shares of our common stock, only in jurisdictions where offers and sales are permitted. The information in this prospectus is complete and accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or any sale of shares of our common stock.

Until and including _____, 2014 (25 days after the date of this prospectus), all dealers that buy, sell or trade shares of our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

For investors outside the United States: neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of shares of our common stock and the distribution of this prospectus outside the United States.

Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to "Aquinox," "the company," "we," "us," "our" and similar references refer to Aquinox Pharmaceuticals (USA) Inc. and Aquinox Pharmaceuticals Inc. This prospectus contains registered marks, trademarks and trade names of other companies. All other trademarks, registered marks and trade names appearing in this prospectus are the property of their respective holders.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our common stock, you should carefully read this entire prospectus, including our combined financial statements and the related notes thereto and the information set forth under the sections of this prospectus captioned "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," in each case included in this prospectus.

Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to "Aquinox," "the company," "we," "us," "our" and similar references refer to Aquinox Pharmaceuticals (USA) Inc. and Aquinox Pharmaceuticals Inc.

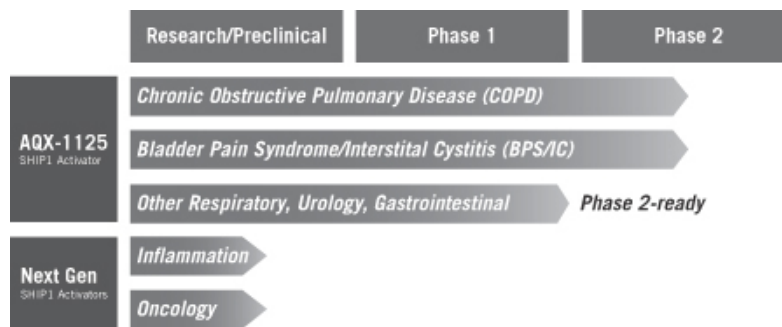
Our Company

We are a clinical-stage pharmaceutical company discovering and developing novel drug candidates to treat inflammation and cancer. Our primary focus is anti-inflammatory product candidates targeting SHIP1, which is a key regulator of an important cellular signaling pathway in immune cells, known as the PI3K pathway. Our lead product candidate, AQX-1125, is a SHIP1 activator and has demonstrated broad anti-inflammatory activity. AQX-1125 has successfully completed three clinical trials dosed as a once daily oral product with over 100 subjects having received AQX-1125 to date. We are currently investigating AQX-1125 in two Phase 2 clinical trials, one for Chronic Obstructive Pulmonary Disease, or COPD, and one for Bladder Pain Syndrome/Interstitial Cystitis, or BPS/IC. COPD and BPS/IC are debilitating chronic inflammatory diseases affecting millions of people worldwide.

Inflammation can be reduced by activation of SHIP1 (SH2-containing inositol-5'-phosphatase 1), which is a natural modulator of the PI3K (P13 kinase) pathway. If the PI3K pathway is overactive, immune cells may produce an abundance of pro-inflammatory signaling molecules and migrate to and concentrate in tissues, resulting in excessive or chronic inflammation. Drugs activating SHIP1 may reduce the function and migration of immune cells and have an anti-inflammatory effect. In addition, because SHIP1 is predominantly present in immune cells, off-tissue toxicities may be minimized. Immune cells with lowered levels of SHIP1 cause abnormal inflammation at mucosal surfaces in response to inflammatory stimuli. Accordingly, we are targeting inflammatory diseases that occur at mucosal surfaces, including those of the respiratory, urinary and gastrointestinal tracts, for which we believe there is broad therapeutic and market potential.

Our Pipeline

The development status of AQX-1125 and our next generation product candidates is summarized below:



AQX-1125 is our lead product candidate and has generated positive clinical data from three completed clinical trials, demonstrating a favorable safety profile and anti-inflammatory activity. Importantly, our clinical trial

results were consistent with the drug-like properties and anti-inflammatory activities demonstrated in our preclinical studies. We believe AQX-1125 is the only SHIP1 activator currently in clinical trials and that no SHIP1 activator has yet received marketing approval as a treatment for disease in humans. For AQX-1125, we retain full worldwide rights and hold patents with terms through at least 2024.

Our three completed clinical trials included one Phase 1 safety trial and two proof-of-concept trials. The first proof-of-concept trial was conducted to evaluate the anti-inflammatory properties, safety and pharmacokinetics of AQX-1125 following a lipopolysaccharide (LPS) challenge in healthy subjects. A LPS challenge is the inhalation by the subject of an environmental inflammatory stimuli to cause recruitment of immune cells and temporary inflammation in the lungs. LPS is known to be contained in cigarette smoke and therefore the LPS challenge is used to stimulate inflammation similar to that seen in the lungs of COPD patients. AQX-1125 met its primary endpoint in the 450 mg dose part of this trial by reducing the temporary inflammation by reducing the recruitment of immune cells, more specifically sputum neutrophils by approximately 62% ($p=0.062$) compared to placebo. The second proof-of-concept trial evaluated the anti-inflammatory properties, safety and pharmacokinetics of AQX-1125 following an inhaled allergen challenge in mild to moderate asthmatics. The trial met its primary endpoint by demonstrating an approximate 20% improvement in the late asthmatic response (LAR) by 450 mg of AQX-1125 versus placebo ($p=0.027$). For both proof-of-concept trials the "p" values are statistical calculations to determine whether the effects of AQX-1125 are significant in comparison to placebo based upon pre-specified statistical targets. In the case of the LPS challenge trial, we pre-specified that any result less than 0.1 would be significant and for the allergen challenge we pre-specified that any result less than 0.05 would be significant. Consequently, we believe both trials were successful and demonstrated significant activity of AQX-1125 as compared to placebo. Based on our three completed clinical trials, we have demonstrated that AQX-1125:

- has desirable pharmacokinetic properties that make it suitable for once daily oral administration;
- is generally well tolerated, exhibiting mild to moderate adverse events primarily related to gastrointestinal upset that resolve without treatment or long-term effects and are reduced by taking the drug candidate with food; and
- has anti-inflammatory properties consistent with those exhibited in preclinical studies and exhibited activity in two trials using two distinct inflammatory challenges.

Development Plan

We are currently investigating AQX-1125 in two Phase 2 clinical trials, one in COPD and one in BPS/IC.

Chronic Obstructive Pulmonary Disease (COPD)

COPD is a lung disease frequently associated with cigarette smoking and air pollution. COPD is characterized by progressive loss of lung function and chronic inflammation of the airways. The disease is estimated to affect up to 600 million people worldwide with estimates of the number of people suffering from the moderate and severe forms that most frequently require treatment ranging from 65 million to over 200 million.

Our Phase 2 trial, known as the FLAGSHIP trial, will evaluate the effect of AQX-1125 compared to placebo in approximately 350-400 unstable moderate to severe COPD patients who have experienced a recent exacerbation. We believe the selection of COPD as a targeted clinical indication matches well with AQX-1125's demonstrated ability, in both preclinical studies and clinical trials, to reduce inflammation, in particular neutrophils, in the airways in response to environmental inflammatory stimuli. This trial focuses on COPD patients with frequent exacerbations, a population with frequent clinical symptoms that we believe will allow us to detect the effects of AQX-1125 in a 12 week trial. The primary endpoint is the change in the severity, duration and reoccurrence of exacerbations in patients treated with AQX-1125 once daily oral capsules versus placebo, as measured by EXACT-PRO, a patient-reported tool that measures symptoms. Initial results are expected in the first quarter of 2015.

Bladder Pain Syndrome/Interstitial Cystitis (BPS/IC)

BPS/IC is a chronic urinary bladder disease characterized by erosion of the lining and chronic inflammation of the bladder, pelvic pain and increased urinary urgency and/or frequency. BPS/IC currently affects an estimated

14 million people in the United States. BPS/IC is accepted to be one of the most challenging urological conditions without effective therapy.

Our Phase 2 trial, known as the LEADERSHIP trial, is investigating AQX-1125's ability compared to placebo to reduce pain and urinary symptoms in approximately 70 BPS/IC patients. We believe AQX-1125 is a candidate for evaluation in BPS/IC due to the fact that it has demonstrated activity in both preclinical studies and clinical trials relevant to BPS/IC and is delivered to the bladder via the bloodstream and excreted unmetabolized into the urine thereby achieving high concentrations proximate to the inflamed bladder wall. We are currently conducting a multi-center randomized, double-blind, placebo-controlled Phase 2 trial of AQX-1125 once daily oral capsules for six weeks in women suffering from chronic pain associated with BPS/IC. The primary endpoint is to measure the difference in the change from baseline in the mean daily bladder pain score based on an 11-point numeric rating scale at two, four and six weeks recorded by electronic diary. Initial results are expected before the end of 2014.

Expanded Clinical Indications

We believe our preclinical data and clinical proof-of-concept trial results support AQX-1125's potential to treat a range of diseases characterized by mucosal inflammation of the respiratory, urinary and gastrointestinal tracts such as, chronic rhinosinusitis, nephritis, eosinophilic esophagitis and inflammatory bowel disease. We intend to initiate additional Phase 2 trials with AQX-1125 focusing on diseases that would complement our ongoing evaluation of AQX-1125 in COPD and BPS/IC both from a market and risk-diversification perspective.

Next Generation SHIP1 Activators

We have several next generation product candidates in preclinical development that are also SHIP1 activators. We believe there are anti-inflammatory diseases that would be better addressed by next generation SHIP1 activators that have different properties from AQX-1125 such as concentrating in different tissues, having a different duration of action or being more suitable for different routes of administration.

We also intend to explore the role of SHIP1 activators in the treatment of cancer. The treatment of cancer by modulating the PI3K pathway via SHIP1 offers a potentially promising new approach to improve the treatment of either immune cell cancers or solid tumors. We believe next generation product candidates in the treatment of inflammation and cancer offer significant market potential.

Our Strategy

We intend to maintain and strengthen our leadership position in the development of small molecule drugs that target SHIP1. We have a management team with broad-based experience and expertise that span drug discovery through Phase 3 trials and regulatory filings. The key components of our strategy are to:

- target large, underserved markets with limited competition and an attractive path to approval;
- focus on successfully developing AQX-1125 for a range of inflammatory diseases;
- advance our next generation compounds in indications not covered by AQX-1125; and
- evaluate on a selective basis strategic partnerships to maximize the commercial potential of AQX-1125 and actively pursue partnerships for our next generation product candidates and other non-core assets.

Risks Associated to Our Business

Our business is subject to numerous risks and uncertainties, including those highlighted in the section of this prospectus captioned "Risk Factors" immediately following this prospectus summary. These risks include, among others, the following:

- we have no source of revenue, have an accumulated deficit of \$61.0 million as of September 30, 2013, may never become profitable and may incur substantial and increasing net losses for the foreseeable future as we continue development of, seek regulatory approvals for, and potentially begin to commercialize AQX-1125 and any future product candidates;

- ⁂ we will likely need to obtain additional capital to continue operations;
- ⁂ our success is primarily dependent on the regulatory approval and commercialization of AQX-1125 and any future product candidates;
- ⁂ SHIP1 has not been validated as a target;
- ⁂ we are subject to regulatory approval processes that are lengthy, time consuming and inherently unpredictable; we may not obtain approval for AQX-1125 or any of our future product candidates from the U.S. Food and Drug Administration or foreign regulatory authorities;
- ⁂ it is difficult and costly to protect our intellectual property rights;
- ⁂ we may be unable to recruit or retain key employees, including our senior management team; and
- ⁂ we depend on the performance of third parties, including contract research organizations and third-party manufacturers.

Our Corporate Information

We commenced operations as 6175813 Canada Inc., a corporation formed in December 2003 under the Canada Business Corporations Act. We subsequently changed the name of this corporation to Aquinox Pharmaceuticals Inc., which we refer to in this prospectus as AQXP Canada, in March 2006. We incorporated Aquinox Pharmaceuticals (USA) Inc., a corporation under the laws of the State of Delaware, in May 2007. Upon completion of the exchange of the common exchangeable and exchangeable preferred shares of AQXP Canada, and the redemption of certain other outstanding shares of AQXP Canada, as further described in the section of this prospectus captioned "Description of Capital Stock—Exchangeable Shares", AQXP Canada will be a wholly owned subsidiary of Aquinox Pharmaceuticals (USA) Inc. Our primary executive offices are located at 430-5600 Parkwood Way, Richmond, B.C., Canada V6V 2M2 and our telephone number is (604) 629-9223. Our website address is www.aqxpharma.com. The information contained in, or that can be accessed through, our website is not part of this prospectus.

Additionally, as a company with less than \$1 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as the term is used in the Jumpstart Our Business Startups Act, or the JOBS Act, and therefore we may take advantage of certain exemptions from various public company reporting requirements, including:

- ⁂ a requirement to only have two years of audited financial statements and only two years of related management discussion and analysis;
- ⁂ exemption from the auditor attestation requirement on the effectiveness of our internal controls over financial reporting;
- ⁂ an exemption from compliance with any requirement that the Public Company Accounting Oversight Board may adopt regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- ⁂ reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements; and
- ⁂ exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments.

We may take advantage of these provisions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company if we have more than \$1.0 billion in annual revenues, have more than \$700 million in market value of our capital stock held by non-affiliates, or issue more than \$1.0 billion of non-convertible debt over a three-year period. We may choose to take advantage of some, but not all, of the available benefits under the JOBS Act. We have taken advantage of some reduced reporting burdens in this prospectus. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock. In addition, the JOBS Act provides that an "emerging growth company" can delay adopting new or revised accounting standards until such time as those standards apply to private companies.

THE OFFERING

Common stock to be offered shares

Common stock to be outstanding after this offering shares

Use of proceeds We estimate that the net proceeds from this offering will be approximately \$ million, or approximately \$ million if the underwriters exercise in full their option to purchase additional shares of common stock, assuming an initial public offering price of \$ per share, which is the mid-point of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We expect to use the proceeds of this offering to conduct additional Phase 2 clinical trials to evaluate AQX-1125 as a potential treatment in indications beyond COPD and BPS/IC, to conduct additional toxicology studies, dose ranging studies, and large batch manufacturing and process development related for AQX-1125, to advance one or more of our next generation SHIP1 activator compounds through preclinical development, and to fund working capital, capital expenditures and other general corporate purposes which may include the acquisition or licensing of future product candidates, technologies, other assets or businesses. See the section of this prospectus captioned "Use of Proceeds" for a more complete description of the intended use of proceeds from this offering.

Risk factors You should read the section of this prospectus captioned "Risk Factors" for a discussion of factors to carefully consider before deciding to invest in shares of our common stock.

Proposed NASDAQ Global Market symbol "AQXP"

The number of shares of our common stock to be outstanding after this offering is based on 111,890,463 shares of common stock outstanding as of September 30, 2013, and excludes:

- ⁿ 9,872,184 shares of our common stock issuable upon the exercise of options outstanding under our Joint Canadian Stock Option Plan, or 2006 Plan, at a weighted average exercise price of \$0.3163 per share;
- ⁿ shares of our common stock reserved for future issuance under our 2014 Equity Incentive Plan, or 2014 Plan, which will become effective upon the completion of this offering, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2014 Plan; and
- ⁿ 339,287 shares of our common stock issuable upon the exercise of outstanding common stock warrants at a weighted average exercise price of \$0.01 per share.

Unless otherwise indicated, all information in this prospectus reflects and assumes the following:

- ⁿ the issuance of an aggregate of 5,793,776 shares of our common stock issuable upon the exchange of all of the outstanding common exchangeable shares of AQXP Canada, in connection with this offering, as described in the section of this prospectus captioned "Description of Capital Stock—Exchangeable Shares";

- ⁿ the issuance of an aggregate of 37,697,892 shares of our convertible preferred stock issuable upon the exchange of all of the outstanding exchangeable preferred shares of AQXP Canada, in connection with this offering, as described in the section of this prospectus captioned "Description of Capital Stock—Exchangeable Shares";
- ⁿ the conversion of all of the outstanding shares of our convertible preferred stock (including the 37,697,892 shares of our convertible preferred stock issuable upon the exchange of all of the outstanding exchangeable preferred shares of AQXP Canada) into an aggregate of 106,096,687 shares of our common stock, which will occur immediately prior to the completion of this offering;
- ⁿ a 1-for- reverse stock split of our common stock and convertible preferred stock to be effective prior to the consummation of this offering;
- ⁿ no purchase by certain of our directors and existing stockholders, or their affiliates, who have indicated an interest in purchasing in the aggregate between \$ million and \$ million shares of our common stock in this offering;
- ⁿ no exercise by the underwriters of their option to purchase up to additional shares of our common stock in this offering; and
- ⁿ the filing and effectiveness of our amended and restated certificate of incorporation upon the completion of this offering.

Certain of our directors and existing stockholders, or their affiliates, have indicated an interest in purchasing in the aggregate between \$ million and \$ million of shares of our common stock in this offering. These shares will be offered and sold on the same terms as the other shares that are being offered and sold in this offering to the public. Although we anticipate that these parties will purchase all of the shares of our common stock that these parties have indicated an interest in purchasing, indications of interest are not binding agreements or commitments to purchase and any of these parties may determine to purchase more, less or no shares of the offering.

SUMMARY COMBINED FINANCIAL DATA

You should read the summary combined financial data in conjunction with the sections of this prospectus captioned "Use of Proceeds," "Capitalization," "Selected Combined Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations" "Description of Capital Stock", and the combined financial statements and related notes, all included elsewhere in this prospectus.

Financial Statement Presentation

In 2007, AQXP Canada implemented a restructuring plan to facilitate investment in either AQXP Canada or Aquinox Pharmaceuticals (USA) Inc. Immediately prior to the completion of this offering, (i) each common exchangeable share of AQXP Canada will be transferred to Aquinox Pharmaceuticals (USA) Inc. in exchange for one share of common stock of Aquinox Pharmaceuticals (USA) Inc. and (ii) each exchangeable preferred share of AQXP Canada will be transferred to Aquinox Pharmaceuticals (USA) Inc. in exchange for one share of the corresponding series of preferred stock of Aquinox Pharmaceuticals (USA) Inc. (which, in turn, will be immediately converted into one share of common stock of Aquinox Pharmaceuticals (USA) Inc.). Following completion of these transactions, AQXP Canada will be a wholly owned subsidiary of Aquinox Pharmaceuticals (USA) Inc. Management has determined that AQXP Canada and Aquinox Pharmaceuticals (USA) Inc. are entities under common control as each of AQXP Canada and Aquinox Pharmaceuticals (USA) Inc. is owned beneficially by identical shareholders and as such the basis of presentation of the financial statements in this prospectus is on a combined basis. When, just prior to or contemporaneously with an initial public offering, a combination of companies under common control takes place, it is appropriate to present combined historical financial statements for all periods shown. The combined financial statements reflect the operations of both Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada and the historical results of Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada since inception. All intercompany transactions have been eliminated.

We have derived the combined statements of operations data for the fiscal years ended December 31, 2011 and December 31, 2012 and the combined balance sheet data as of December 31, 2011 and December 31, 2012 from our audited combined financial statements appearing elsewhere in this prospectus. The combined statements of operations data for the year to date period ended September 30, 2012 and September 30, 2013 and combined balance sheet data as of September 30, 2013 have been derived from our unaudited interim combined financial statements appearing elsewhere in this prospectus. We have prepared the unaudited combined financial statements on the same basis as the audited combined financial statements. Our historical results are not necessarily indicative of the results that should be expected in the future, and our interim results are not necessarily indicative of the results that should be expected for the full year or any other period.

Combined Statement of Operations Data

	YEAR ENDED DECEMBER 31, 2011	YEAR ENDED DECEMBER 31, 2012	DECEMBER 26, 2003 (INCEPTION) TO DECEMBER 31, 2012	NINE MONTH PERIOD ENDED SEPTEMBER 30, 2012	NINE MONTH PERIOD ENDED SEPTEMBER 30, 2013	DECEMBER 26, 2003 (INCEPTION) TO SEPTEMBER 30, 2013
Operating expenses						
Research and development	\$ 8,578,596	\$ 5,914,611	\$ 33,759,261	\$ 5,093,292	\$ 4,802,078	\$ 38,561,338
General and administrative	1,725,073	1,635,623	7,729,683	1,085,119	1,209,939	8,939,622
Amortization	125,598	130,784	551,601	99,823	45,198	596,799
Total operating expenses	<u>\$ 10,429,267</u>	<u>\$ 7,681,018</u>	<u>\$ 42,040,545</u>	<u>\$ 6,278,234</u>	<u>\$ 6,057,215</u>	<u>\$ 48,097,759</u>
Net loss and comprehensive loss incurred in the development stage	<u>\$ (10,507,008)</u>	<u>\$ (7,714,198)</u>	<u>\$ (38,545,538)</u>	<u>\$ (6,288,801)</u>	<u>\$ (5,189,256)</u>	<u>\$ (43,734,793)</u>
Total loss attributable to common stockholders	<u>\$ (14,319,278)</u>	<u>\$ (12,137,948)</u>	<u>\$ (52,558,728)</u>	<u>\$ (9,606,515)</u>	<u>\$ (9,660,864)</u>	<u>\$ (62,219,591)</u>
Basic and diluted loss per common stock	<u>\$ (2.47)</u>	<u>\$ (2.09)</u>	<u>\$ (9.07)</u>	<u>\$ (1.66)</u>	<u>\$ (1.67)</u>	<u>\$ (10.74)</u>
Basic and diluted weighted average common stock outstanding	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>
Net loss attributable to common stockholders —pro forma		<u>\$ (7,668,750)</u>			<u>\$ (6,048,894)</u>	
Pro forma net loss per common stock: (1)						
Basic and diluted		<u>\$ (0.10)</u>			<u>\$ (0.05)</u>	
Weighted average shares outstanding used to compute pro forma net loss per common stock:						
Basic and diluted		<u>79,163,262</u>			<u>111,890,463</u>	

Combined Balance Sheet Data

	DECEMBER 31, 2011	DECEMBER 31, 2012	SEPTEMBER 30, 2013	PRO FORMA ⁽²⁾ SEPTEMBER 30, 2013	PRO FORMA ⁽³⁾ AS ADJUSTED SEPTEMBER 30, 2013
Cash and cash equivalents	\$ 9,239,188	\$ 2,000,539	\$ 15,867,885	\$ 15,867,885	\$
Working capital	8,878,478	1,678,695	13,881,976	13,881,976	
Total assets	9,883,905	2,341,990	16,155,453	16,155,453	
Warrant liabilities	—	—	221,450	221,450	
Redemption option on preferred stock	—	—	974,742	—	
Accrued tax payable on preferred stock	664,579	1,059,487	1,481,462	—	
Total long-term debt	—	—	—	—	
Redeemable convertible preferred stock	47,900,948	51,975,238	71,897,622	—	
Total stockholders' (deficit) equity	(39,314,581)	(51,101,207)	(60,506,745)	13,847,075	
Total liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity	\$ 9,883,905	\$ 2,341,990	\$ 16,155,453	\$ 16,155,453	\$

- (1) Pro forma basic and diluted net loss per share represents net loss attributable to common stock holders divided by the pro forma weighted-average shares of common stock outstanding. The pro forma weighted-average shares outstanding reflects the conversion of our redeemable convertible preferred stock into our common stock as though the conversion had occurred on the first day of the relevant period. See Note 11 of the accompanying notes to our combined financial statements
- (2) Pro forma balance sheet reflects the conversion that gives effect to the conversion of our redeemable convertible preferred stock into our common stock. This exchange will result in the redemption option on preferred stock, and the accrued tax payable on preferred stock being derecognized.
- (3) Pro forma, as adjusted reflects the items described in footnote (2) above and, on an as adjusted basis, our sale of _____ shares of our common stock that we are offering at the assumed initial public offering price of \$ _____ per share, which is the midpoint of the range set forth on the cover page of this prospectus, after deducting the underwriting discount and estimated offering expenses payable by us. The pro forma as adjusted balance sheet data is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each \$ _____ increase or decrease in the assumed initial public offering price of \$ _____ per share, which is the midpoint of the range set forth on the cover page of this prospectus, would increase or decrease each of cash and cash equivalents, working capital, total assets and total stockholders' (deficit) equity on a pro forma as adjusted basis by approximately \$ _____ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. Each increase or decrease by _____ shares in the number of shares offered by us would increase or decrease each of cash and cash equivalents, working capital, total assets and total stockholders' (deficit) equity by approximately \$ _____ million, assuming that the assumed initial price to public remains the same, and after deducting the estimated underwriting discount but before estimated offering expenses payable by us.
- The pro forma balance sheet as adjusted basis reflects the term loan facility with Silicon Valley Bank ("SVB") AQXP Canada entered into on October 23, 2013 for up to \$4.0 million, of which \$2.5 million was advanced on October 30, 2013.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before making your decision whether to invest in shares of our common stock, you should carefully consider the risks described below, together with the other information contained in this prospectus, including our combined financial statements and the related notes appearing at the end of this prospectus. We cannot assure you that any of the events discussed in the risk factors below will not occur. These events could have a material and adverse impact on our business, results of operations, financial condition and cash flows and our future prospects would likely be materially and adversely affected. If that were to happen, the trading price of our common stock could decline, and you could lose all or part of your investment.

Risks Related to Our Financial Position and Capital Needs

We have incurred significant losses in every quarter since our inception and anticipate that we will continue to incur significant losses in the future.

We are a clinical-stage pharmaceutical company with a limited operating history. Investment in pharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval or become commercially viable. We do not have any products approved by regulatory authorities for marketing or commercial sale and have not generated any revenue from product sales, or otherwise, to date, and we continue to incur significant research, development and other expenses related to our ongoing operations. As a result, we are not profitable and have incurred losses in every reporting period since our inception in 2003. For the year ended December 31, 2012 and the nine months ended September 30, 2013, we reported a net loss of \$7.7 million and \$5.2 million, respectively. As of September 30, 2013, we had an accumulated deficit since inception of \$61.0 million.

We expect to continue to incur significant expenses and operating losses for the foreseeable future. We anticipate these losses to increase as we continue the research and development of, and seek regulatory approvals for, AQX-1125 and any of our future product candidates, and potentially begin to commercialize any products that may achieve regulatory approval. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our financial condition. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenues. Our prior losses and expected future losses have had and will continue to have an adverse effect on our financial condition. If AQX-1125 or any future product candidate fails in clinical trials or does not gain regulatory approval, or if approved, fails to achieve market acceptance, we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods.

We have a limited operating history, which may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

Our operations to date have been primarily limited to organizing and staffing our company, acquiring product and technology rights, discovering and developing novel small molecule drug candidates and undertaking preclinical studies and clinical trials of AQX-1125. We have not yet obtained regulatory approval for AQX-1125 or any future product candidate. Consequently, evaluating our performance, viability or future success will be more difficult than if we had a longer operating history or approved products on the market.

We currently have no source of product revenue and may never become profitable.

To date, we have not generated any revenues from commercial product sales, or otherwise. Our ability to generate revenue from product sales and achieve profitability will depend upon our ability, alone or with any future collaborators, to successfully commercialize products, including AQX-1125 or any future product candidates that we may develop, in-license or acquire in the future. Even if we are able to successfully achieve regulatory approval for AQX-1125 or any future product candidates, we do not know when any of these products will generate revenue from product sales for us, if at all. Our ability to generate revenue from product sales from AQX-1125 or any of our future product candidates also depends on a number of additional factors, including our or any future collaborators' ability to:

- ⁿ complete development activities, including the necessary clinical trials;
- ⁿ complete and submit new drug applications, or NDAs, to the U.S. Food and Drug Administration, or FDA, and obtain regulatory approval for indications for which there is a commercial market;

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- ⁿ complete and submit applications to, and obtain regulatory approval from, foreign regulatory authorities;
- ⁿ set a commercially viable price for our products;
- ⁿ establish and maintain supply and manufacturing relationships with third parties, and ensure adequate and legally compliant manufacturing of bulk drug substances and drug products to maintain that supply;
- ⁿ develop a commercial organization capable of sales, marketing and distribution for any products for which we obtain marketing approval and intend to sell ourselves in the markets in which we choose to commercialize on our own;
- ⁿ find suitable distribution partners to help us market, sell and distribute our approved products in other markets;
- ⁿ obtain coverage and adequate reimbursement from third-party payors, including government and private payors;
- ⁿ achieve market acceptance for our products, if any;
- ⁿ establish, maintain and protect our intellectual property rights; and
- ⁿ attract, hire and retain qualified personnel.

In addition, because of the numerous risks and uncertainties associated with pharmaceutical product development, including that AQX-1125 or any future product candidates may not advance through development or achieve the endpoints of applicable clinical trials, we are unable to predict the timing or amount of increased expenses, or when or if we will be able to achieve or maintain profitability. In addition, our expenses could increase beyond expectations if we decide to or are required by the FDA, or foreign regulatory authorities, to perform studies or trials in addition to those that we currently anticipate. Even if we are able to complete the development and regulatory process for AQX-1125 or any future product candidates, we anticipate incurring significant costs associated with commercializing these products.

Even if we are able to generate revenues from the sale of AQX-1125 or any future product candidates that may be approved, we may not become profitable and may need to obtain additional funding to continue operations. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce our operations.

Our operating results may fluctuate significantly on a quarterly and annual basis, which may make our future operating results difficult to predict and could cause our operating results to fall below expectations or our guidance.

Our quarterly and annual operating results have varied significantly in the past and may continue to fluctuate significantly in the future from quarter-to-quarter or year-to-year due to a variety of factors, many of which are beyond our control, which may make it difficult for us to predict our future operating results. Factors that may contribute to these fluctuations include the following, as well as other factors described elsewhere in this prospectus:

- ⁿ our ability to obtain additional funding for research and development and manufacturing activities relating to AQX-1125 or any of our future product candidates;
- ⁿ the timing and cost of research and development activities relating to AQX-1125 or any of our future product candidates, which may change from time to time;
- ⁿ the cost of manufacturing AQX-1125 or any of our future product candidates, which may vary depending on the quantity of production and the terms of our agreements with manufacturers;
- ⁿ expenditures that we will or may incur to acquire or develop additional product candidates and technologies;
- ⁿ the level of demand for AQX-1125 or any of our future product candidates, should they receive approval, which may vary significantly;
- ⁿ our ability to enroll patients in clinical trials;
- ⁿ the success or failure of clinical studies through all phases of clinical development for AQX-1125 or any of our future product candidates or competing product candidates, including our Phase 2 trials of AQX-1125, or any other change in the competitive landscape of our industry;
- ⁿ any delays in regulatory review and approval of AQX-1125 or any of our future product candidates;
- ⁿ potential side effects of AQX-1125 or our future product candidates that could delay or prevent commercialization or cause an approved drug to be taken off the market;

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- the ability of patients or healthcare providers to obtain coverage of or sufficient reimbursement for AQX-1125 or our future product candidates and our ability to achieve acceptance among patients and physicians;
- competition from existing and potential future drugs that compete with AQX-1125 or our future product candidates;
- our ability to receive approval and commercialize AQX-1125 or our future product candidates outside of the United States;
- our dependency on third-party manufacturers to supply or manufacture our AQX-1125 or our future product candidates;
- our ability to establish or maintain collaborations, licensing or other arrangements;
- our ability and third parties' abilities to protect intellectual property rights;
- costs related to and outcomes of potential intellectual property litigation;
- costs associated with recently enacted healthcare legislation;
- our ability to adequately support future growth;
- our ability to attract and retain key personnel to manage our business effectively;
- our ability to build our finance infrastructure and improve our accounting systems and controls;
- potential product liability claims;
- potential liabilities associated with hazardous materials;
- fluctuations in foreign currency exchange rates;
- our ability to use potential future operating losses and our federal and state net operating loss carryforwards to offset taxable income;
- potential unforeseen business disruptions that increase our costs or expenses;
- our ability to maintain adequate insurance policies; and
- the changing and volatile U.S., European and global economic environments.

Investors should not rely on our quarterly or annual results as an indication of our future performance. This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated revenue and/or earnings guidance we may provide.

We are likely to require additional capital to finance our operations and to repay existing debt, which may not be available to us on acceptable terms, or at all. If we fail to obtain necessary financing, we may be unable to complete the development and potential commercialization of AQX-1125 or develop future product candidates.

Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is expensive. Our operations have consumed substantial amounts of cash since inception. We expect research and clinical development expenses to increase substantially in connection with our ongoing activities, particularly as we advance AQX-1125 or future product candidates in clinical trials and launch and commercialize any product candidates for which we receive regulatory approval, including potentially building our own commercial organization. In addition, in October 2013, AQXP Canada entered into a \$4.0 million debt facility with Silicon Valley Bank, or SVB (with \$2.5 million advanced and outstanding as of October 30, 2013). Aquinox Pharmaceuticals (USA) Inc. is a guarantor of AQXP Canada's obligations under the debt facility. The debt facility is collateralized by a first position lien against substantially all of Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada's corporate assets excluding intellectual property, but including all proceeds thereof. We believe that our existing cash and cash equivalents and interest thereon and the principal amounts borrowed under the SVB debt facility, will be sufficient to fund our operating requirements for at least the next 12 months. However, circumstances may cause us to consume capital more rapidly than we anticipate. We will likely require additional capital for the further development and potential commercialization of AQX-1125 or future product candidates and may also need to raise additional funds sooner to pursue a more accelerated development of AQX-1125 or future product candidates.

If we need to secure additional financing, additional fundraising efforts may divert our management from our day-to-day activities, which may adversely affect our ability to develop and commercialize AQX-1125 or future product

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candidates. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. If we do not raise additional capital when required or on acceptable terms, we may need to:

- significantly delay, scale back or discontinue clinical trials related to the development or commercialization of AQX-1125 or any of our future product candidates or cease operations altogether;
- seek strategic alliances for research and development programs at an earlier stage than we would otherwise desire or on terms less favorable than might otherwise be available; or
- relinquish, or license on unfavorable terms, our rights to AQX-1125 or any future product candidates that we otherwise would seek to develop or commercialize ourselves.

If we need to conduct additional fundraising activities and we do not raise additional capital in sufficient amounts or on terms acceptable to us, we may be prevented from pursuing development and commercialization efforts, which will have a material adverse effect on our business, operating results and prospects.

Our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors, including the factors discussed elsewhere in this "Risk Factors" section. We have based this estimate on assumptions that may prove to be wrong, and we could spend our available capital resources sooner than we currently expect. Our future funding requirements, both near and long-term, will depend on many factors, including, but not limited to:

- the initiation, progress, timing, costs and results of clinical trials for AQX-1125 and any future product candidates;
- the clinical development plans we establish for AQX-1125 or any future product candidates;
- the achievement of milestones and our obligation to make milestone payments under our present or any future in-licensing agreements;
- the number and characteristics of product candidates that we discover or in-license and develop;
- the outcome, timing and cost of regulatory review by the FDA and comparable foreign regulatory authorities, including the potential for the FDA or comparable foreign regulatory authorities to require that we perform more studies than those that we currently expect;
- the cost to establish, maintain, expand and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with licensing, preparing, filing, prosecuting, defending and enforcing any patent claims and maintaining and enforcing other intellectual property rights;
- the effect of competing technological and market developments;
- the costs and timing of the implementation of commercial-scale outsourced manufacturing activities; and
- the costs and timing of establishing sales, marketing and distribution capabilities for any product candidates for which we may receive regulatory approval in territories where we choose to commercialize products on our own.

If we are unable to expand our operations or otherwise capitalize on our business opportunities due to a lack of capital, our business, results of operations, financial condition and cash flows and future prospects could be materially adversely affected.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies, AQX-1125 or any future product candidates.

Until we can generate substantial revenue from product sales, if ever, we expect to finance future cash needs through a combination of private and public equity offerings, debt financings, strategic collaborations and alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of existing stockholders will be diluted, and the terms may include liquidation or other preferences that adversely affect the rights of existing stockholders. Additional capital may not be available on reasonable terms, if at all. If we raise additional funds through the issuance of additional debt or equity securities, that could result in dilution to our existing stockholders, and/or increased fixed payment obligations. Furthermore, these securities may have rights senior to those of our common stock and could contain

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covenants that include restrictive covenants limiting our ability to take important actions and potentially impair our competitiveness, such as limitations on our ability to incur additional debt, make capital expenditures, acquire, sell or license intellectual property rights or declare dividends. For example, we currently have a \$4.0 million debt facility with SVB (with \$2.5 million advanced and outstanding as of October 30, 2013), and Aquinox Pharmaceuticals (USA) Inc. is a guarantor of AQXP Canada's obligations under the debt facility. The SVB debt facility requires Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada to meet certain operating and financial covenants and place restrictions on our operating and financial flexibility including limiting our ability to dispose of certain assets, engage in certain strategic transactions, incur indebtedness, pay dividends, or make distributions or engage in certain other transactions. If we raise additional funds through strategic collaborations and alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies AQX-1125 or our future product candidates, or grant licenses on terms that are not favorable to us. If we are unable to raise additional funds through equity or debt financing when needed, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

We plan to use potential future operating losses and our federal and state net operating loss, or NOL, carryforwards to offset taxable income from revenue generated from operations or corporate collaborations. However, our ability to use NOL carryforwards could be limited as a result of issuance of equity securities.

We plan to use our current year operating losses to offset taxable income from any revenue generated from operations or corporate collaborations. To the extent that our taxable income exceeds any current year operating losses, we plan to use our NOL carryforwards to offset income that would otherwise be taxable. However, under the Tax Reform Act of 1986, the amount of benefits from our NOL carryforwards may be impaired or limited if we incur a cumulative ownership change of more than 50%, as interpreted by the U.S. Internal Revenue Service, over a three-year period. As a result, our use of federal NOL carryforwards could be limited by the provisions of Section 382 of the U.S. Internal Revenue Code of 1986, as amended, depending upon the timing and amount of additional equity securities that we issue. State NOL carryforwards may be similarly limited. Any such disallowances may result in greater tax liabilities than we would incur in the absence of such a limitation and any increased liabilities could adversely affect our business, results of operations, financial condition and cash flow and future prospects.

An acquisition of control of AQXP Canada could result in adverse Canadian tax consequences, including limitations on AQXP Canada's ability to use non-capital loss carryforwards and other similar tax attributes to offset taxable income for Canadian tax purposes.

In the event control of AQXP Canada were to be acquired by a person or a group of persons within the meaning of the Income Tax Act (Canada), referred to herein as the Tax Act, in connection with the exchange of shares of AQXP Canada for shares of Aquinox Pharmaceuticals (USA) Inc. or otherwise, there may be limitations on AQXP Canada's ability to use its non-capital loss carryforwards and other similar tax attributes following the acquisition of control. In general, an acquisition of control would result in AQXP Canada losing its net capital loss carryforwards, if any, and AQXP Canada's non-capital loss carryforwards and other similar tax attributes only being "useable" to offset income, excluding capital gains, derived from the business operated by AQXP Canada that generated such tax attributes or a business "similar" to such business and provided the business that generated the tax attributes continues to be carried on by AQXP Canada for profit or with a reasonable expectation of profit. We expect that we will continue to carry on the business of AQXP Canada for profit or with a reasonable expectation of profit and that, accordingly, its non-capital loss carryforwards and other similar tax attributes should be available to offset future income for Canadian tax purposes to the extent of income from that business or "similar" businesses, subject to expiry of such loss carryforwards over time pursuant to the provisions of the Tax Act. If our use of these non-capital loss carryforwards or other similar tax attributes is restricted as a result of an acquisition of control or otherwise, our Canadian federal income tax liability may be materially increased, which could adversely affect our business, results of operations, financial condition and cash flow and future prospects.

Fluctuations in foreign currency exchange rates could result in changes in our reported revenues and earnings.

We currently incur significant expenses denominated in foreign currencies, specifically in connection with our operations in Canada. In addition, we expect that we will utilize numerous clinical trial sites as part of our clinical trials for AQX-1125 which will be located in various countries outside of the United States. We expect that these clinical trial sites will invoice us in the local currency of the site. We do not engage in foreign currency hedging arrangements for our accounts payable, and, consequently, foreign currency fluctuations may adversely affect our earnings. We may decide to manage this risk by hedging our foreign currency exposure, principally through derivative

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contracts. Even if we decide to enter into such hedging transactions, we cannot be sure that such hedges will be effective or that the costs of such hedges will not exceed their benefits. Fluctuations in the rate of exchange between the U.S. dollar and foreign currencies, primarily the Canadian dollar, could result in material amounts of cash being required to settle the hedge transactions or could adversely affect our financial results.

Risks Related to Our Business and Industry

Our future success is dependent primarily on the regulatory approval and commercialization of AQX-1125 and any of our future product candidates.

We do not have any products that have gained regulatory approval. Currently, our only clinical-stage product candidate is AQX-1125, which is currently undergoing Phase 2 clinical trials.

As a result, our near-term prospects, including our ability to finance our operations and generate revenue, are substantially dependent on our ability to obtain regulatory approval for, and, if approved, to successfully commercialize AQX-1125 in a timely manner. We cannot commercialize AQX-1125 or our future product candidates in the United States without first obtaining regulatory approval for the product from the FDA; similarly, we cannot commercialize AQX-1125 or our future product candidates outside of the United States without obtaining regulatory approval from comparable foreign regulatory authorities. The FDA review process typically takes years to complete and approval is never guaranteed. Before obtaining regulatory approvals for the commercial sale of any AQX-1125 or our future product candidates for a target indication, we must demonstrate with substantial evidence gathered in preclinical and well-controlled clinical studies, generally including two well-controlled Phase 3 trials, and, with respect to approval in the United States, to the satisfaction of the FDA, that the product candidate is safe and effective for use for that target indication and that the manufacturing facilities, processes and controls are adequate. Obtaining regulatory approval for marketing of AQX-1125 or our future product candidates in one country does not ensure we will be able to obtain regulatory approval in other countries but a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in other countries.

Even if AQX-1125 or any of our future product candidate were to successfully obtain approval from the FDA and comparable foreign regulatory authorities, any approval might contain significant limitations related to use restrictions for specified age groups, warnings, precautions or contraindications, or may be subject to burdensome post-approval study or risk management requirements. If we are unable to obtain regulatory approval for AQX-1125 in one or more jurisdictions, or any approval contains significant limitations, we may not be able to obtain sufficient funding or generate sufficient revenue to continue the development of any of our future product candidate that we may discover, in-license, develop or acquire in the future. Also, any regulatory approval of any of AQX-1125 or our future product candidates, once obtained, may be withdrawn. Furthermore, even if we obtain regulatory approval for AQX-1125, the commercial success of AQX-1125 will depend on a number of factors, including the following:

- development of a commercial organization or establishment of a commercial collaboration with a commercial infrastructure,
- establishment of commercially viable pricing and obtain approval for adequate reimbursement from third-party and government payors;
- the ability of our third-party manufacturers to manufacture quantities of AQX-1125 using commercially sufficient processes and at a scale sufficient to meet anticipated demand and enable us to reduce our cost of manufacturing;
- our success in educating physicians and patients about the benefits, administration and use of AQX-1125;
- the availability, perceived advantages, relative cost, relative safety and relative efficacy of alternative and competing treatments;
- the effectiveness of our own or our potential strategic collaborators' marketing, sales and distribution strategy and operations;
- acceptance of AQX-1125 as safe and effective by patients and the medical community; and
- a continued acceptable safety profile of AQX-1125 following approval.

Many of these factors are beyond our control. If we or our potential commercialization collaborators are unable to successfully commercialize AQX-1125, we may not be able to earn sufficient revenues to continue our business.

Because the results of preclinical testing or earlier clinical trials are not necessarily predictive of future results, AQX-1125, which is currently in Phase 2 clinical trials, or any future product candidate we advance into clinical trials, may not have favorable results in later clinical trials or receive regulatory approval.

Success in preclinical testing and early clinical trials does not ensure that later clinical trials will generate adequate data to demonstrate the efficacy and safety of an investigational drug. A number of companies in the pharmaceutical and biotechnology industries, including those with greater resources and experience, have suffered significant setbacks in clinical trials, even after seeing promising results in earlier clinical trials. Despite the results reported in earlier clinical trials for AQX-1125, we do not know whether the clinical trials we are conducting, or may conduct, will demonstrate adequate efficacy and safety to result in regulatory approval to market AQX-1125 or any of our future product candidates in any particular jurisdiction. Even if we believe that we have adequate data to support an application for regulatory approval to market our product candidates, FDA or other applicable foreign regulatory authorities may not agree and may require we conduct additional clinical trials. If later-stage clinical trials do not produce favorable results, our ability to achieve regulatory approval for any of our product candidates may be adversely impacted.

In the Phase 2 trial we are conducting to evaluate the effect of AQX-1125 on COPD patients, we are enrolling only unstable moderate to severe COPD patients following a recent exacerbation. We believe this novel trial design will allow us to measure sufficient clinical events to detect the effects of AQX-1125 on the change in the severity, duration and reoccurrence of exacerbations in COPD patients as measured by a change in EXACT scores as the primary endpoint in a 12 week trial. The EXACT-PRO is a validated 14-item questionnaire to be completed daily by the patient on an electronic diary to assess the change in symptoms associated with a COPD exacerbation. Answers are converted into a numerical score between 0-100. By comparing the daily scores over a 12 week period for patients receiving AQX-1125 versus those receiving placebo we believe we can measure the effects of AQX-1125 on the change in the severity, duration and reoccurrence of exacerbations in COPD patients more sensitively than with traditional endpoints such as lung function measures or numbers of re-exacerbations. We have not discussed our use of EXACT-PRO with the FDA, and we do not know whether the FDA will accept EXACT-PRO as a primary endpoint for Phase 3 studies. We are not aware of any other clinical trial utilizing EXACT scores as a primary endpoint in a Phase 2 or Phase 3 trial. If the FDA does not accept EXACT-PRO, it could delay our ability to advance AQX-1125 into clinical trials for marketing approval in COPD, and the FDA may require that we use other clinical COPD measures, such as Forced Expiratory Volume in one second (FEV₁), a measure of lung function that is reduced in COPD, as the primary endpoint, rather than EXACT-PRO. Even if the FDA accepts EXACT-PRO for our Phase 3 trials and our Phase 2 clinical trial in COPD supports advancement of Phase 3 clinical trials, the trial duration may need to be longer than the 12 weeks of our current Phase 2 trial.

In addition, we have not yet established the optimal dose for AQX-1125. There can be no guarantee that the 200 mg dose currently being studied in our Phase 2 clinical trial will be efficacious or, if it is, whether it will be the optimal dose. We believe we will need to conduct additional clinical trials to evaluate additional dose levels of AQX-1125. There can not be any guarantee that any of these studies will be successful in determining a dose of AQX-1125 suitable for marketing approval.

SHIP1 has not been validated as a target.

Our primary focus is small molecule anti-inflammatory product candidates targeting SHIP1, which is a key regulator of an important cellular signaling pathway in immune cells. To date, no drug which specifically targets SHIP1 has been demonstrated to provide clinical benefit or been approved by any regulatory authority for the treatment of disease. Therefore, SHIP1 has not been validated as a target, as such we are pursuing development of AQX-1125 against a novel and unproven target. We believe AQX-1125 is the only SHIP1 activator currently in clinical trials. SHIP1 activators as a class of drug, including AQX-1125, may ultimately prove unsuitable for treatment of human diseases, or if approved for treatment of human diseases, may be commercially unsuccessful, either of which could cause our business to fail.

Clinical drug development involves a lengthy and expensive process with an uncertain outcome.

Clinical testing is expensive, can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and early clinical trials.

We may experience delays in our ongoing or future clinical trials and we do not know whether planned clinical trials will begin or enroll subjects on time, need to be redesigned or be completed on schedule, if at all. All of our clinical

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trials to date have been conducted outside the United States and we do not know whether the FDA will approve the commencement of future clinical trials. While we do not anticipate any future delays, there can be no assurance that the FDA or other comparable foreign regulatory authority will not put clinical trials of AQX-1125 or any other of our product candidates on clinical hold in the future. Clinical trials may be delayed, suspended or prematurely terminated for a variety of reasons, such as:

- ⁿ delay or failure in reaching agreement with the FDA or a comparable foreign regulatory authority on a trial design that we are able to execute;
- ⁿ delay or failure in obtaining authorization to commence a trial or inability to comply with conditions imposed by a regulatory authority regarding the scope or design of a clinical trial;
- ⁿ delay or failure in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- ⁿ delay or failure in obtaining institutional review board, or IRB, approval or the approval of other reviewing entities, including comparable foreign regulatory authorities, to conduct a clinical trial at each site;
- ⁿ withdrawal of clinical trial sites from our clinical trials as a result of changing standards of care or the ineligibility of a site to participate in our clinical trials;
- ⁿ delay or failure in recruiting and enrolling suitable subjects to participate in a trial;
- ⁿ delay or failure in subjects completing a trial or returning for post-treatment follow-up;
- ⁿ clinical sites and investigators deviating from trial protocol, failing to conduct the trial in accordance with regulatory requirements, or dropping out of a trial;
- ⁿ inability to identify and maintain a sufficient number of trial sites, many of which may already be engaged in other clinical trial programs, including some that may be for the same indication;
- ⁿ failure of our third parties, such as CROs, to satisfy their contractual duties or meet expected deadlines;
- ⁿ delay or failure in adding new clinical trial sites;
- ⁿ ambiguous or negative interim results or results that are inconsistent with earlier results;
- ⁿ feedback from the FDA, the IRB, data safety monitoring boards, or a comparable foreign regulatory authority, or results from earlier stage or concurrent preclinical studies and clinical trials, that might require modification to the protocol for the trial;
- ⁿ decision by the FDA, the IRB, a comparable foreign regulatory authority, or us, to impose a clinical hold following an inspection of our clinical trial operations or trial sites, or recommendation by a data safety monitoring board or comparable foreign regulatory authority, to suspend or terminate clinical trials at any time for safety issues or for any other reason;
- ⁿ unacceptable risk-benefit profile, unforeseen safety issues or adverse side effects;
- ⁿ failure to demonstrate a benefit from using a drug;
- ⁿ delays in the testing, validation, manufacturing and delivery of the product candidates to the clinical sites;
- ⁿ lack of adequate funding to continue the clinical trial, including the incurrance of unforeseen costs due to enrollment delays, requirements to conduct additional clinical trials or increased expenses associated with the services of our CROs and other third parties; or
- ⁿ changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

As an organization, we have never conducted a Phase 3 clinical trial or submitted an NDA before, and may be unable to do so for AQX-1125 or any product candidate we are developing.

We are currently conducting Phase 2 clinical trials and we may need to conduct additional Phase 2 clinical trials before initiating our Phase 3 clinical trials. If our additional Phase 2 clinical trials are successful, we intend to conduct Phase 3 trials of AQX-1125, either alone or with a future collaborator. The conduct of Phase 3 clinical trials and the submission of a successful NDA is a complicated process. As an organization, we have not conducted a Phase 3 clinical trial before, have limited experience in preparing, submitting and prosecuting regulatory filings, and have not submitted an NDA before. We also have had limited interactions with the FDA and have not discussed our current clinical trial designs or implementation with the FDA. Consequently, even if our Phase 2 clinical trials are successful, we may be unable to successfully and efficiently execute and complete necessary clinical trials in a way

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that leads to NDA submission and approval of AQX-1125 or any other product candidate we are developing. We may require more time and incur greater costs than our competitors and may not succeed in obtaining regulatory approvals of products that we develop. Failure to commence or complete, or delays in, our planned clinical trials, would prevent us from or delay us in commercializing AQX-1125 or any other product candidate we are developing.

If we are unable to enroll subjects in clinical trials, we will be unable to complete these trials on a timely basis.

Patient enrollment, a significant factor in the timing of clinical trials, is affected by many factors including the size and nature of the patient population, the proximity of subjects to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, ability to obtain and maintain patient consents, risk that enrolled subjects will drop out before completion, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating. Furthermore, we rely on CROs and clinical trial sites to ensure the proper and timely conduct of our clinical trials, and while we have agreements governing their committed activities, we have limited influence over their actual performance. For example, in our Phase 1b LPS challenge proof-of-concept trial of AQX-1125, a large number of data points were lost for one part of the trial through error, rendering an analysis for efficacy uninterpretable for that part.

If we experience delays in the completion or termination of, any clinical trial of AQX-1125 or any future product candidates, the commercial prospects of our product candidates will be harmed, and our ability to generate product revenues from any of these product candidates will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product candidate development and approval process and could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, and jeopardize our ability to commence product sales, which would impair our ability to generate revenues and may harm our business, results of operations, financial condition and cash flows and future prospects. In addition, many of the factors that could cause a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of AQX-1125 or our future product candidates.

The regulatory approval processes of the FDA and comparable foreign regulatory authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for AQX-1125 or our future product candidates, our business will be substantially harmed.

The time required to obtain approval by the FDA and comparable foreign regulatory authorities is unpredictable, but typically takes many years following the commencement of preclinical studies and clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. We have not obtained regulatory approval for any product candidate, and it is possible that neither AQX-1125 nor any future product candidates we may discover, in-license or acquire and seek to develop in the future will ever obtain regulatory approval.

Our product candidates could fail to receive regulatory approval from the FDA or a comparable foreign regulatory authority for many reasons, including:

- ⁿ disagreement over the design or implementation of our clinical trials;
- ⁿ failure to demonstrate that a product candidate is safe and effective for its proposed indication;
- ⁿ failure of clinical trials to meet the level of statistical significance required for approval;
- ⁿ failure to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- ⁿ disagreement over our interpretation of data from preclinical studies or clinical trials;
- ⁿ disagreement over whether to accept efficacy results from clinical trial sites outside the United States where the standard of care is potentially different from that in the United States;
- ⁿ the insufficiency of data collected from clinical trials of AQX-1125 or our future product candidates to support the submission and filing of an NDA or other submission or to obtain regulatory approval;
- ⁿ disapproval of the manufacturing processes or facilities of third-party manufacturers with whom we contract for clinical and commercial supplies; or
- ⁿ changes in the approval policies or regulations that render our preclinical and clinical data insufficient for approval.

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The FDA or a comparable foreign regulatory authority may require more information, including additional preclinical or clinical data to support approval, which may delay or prevent approval and our commercialization plans, or we may decide to abandon the development program altogether. Even if we do obtain regulatory approval, AQX-1125 or our future product candidates may be approved for fewer or more limited indications than we request, approval contingent on the performance of costly post-marketing clinical trials, or approval with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. In addition, if AQX-1125 or our future product candidate produce undesirable side effects or safety issues, the FDA may require the establishment of Risk Evaluation Mitigation Strategies, or REMS, or a comparable foreign regulatory authority may require the establishment of a similar strategy, that may, restrict distribution of our products and impose burdensome implementation requirements on us. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

We have had limited interactions with the FDA and have not discussed our clinical trial designs or implementation or our proposed regulatory approval strategy with the FDA. Even if we believe our current or planned clinical trials are successful, the FDA may not agree that our completed clinical trials provide adequate data on the safety or efficacy of AQX-1125 or our future product candidates to permit us to proceed to Phase 3 clinical trials. Approval by comparable foreign regulatory authorities does not ensure approval by the FDA and approval by one or more foreign regulatory authorities does not ensure approval by regulatory authorities in other countries or by the FDA. However, a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in others. We may not be able to file for regulatory approvals and even if we file we may not receive the necessary approvals to commercialize our products in any market.

We are conducting, and may in the future conduct, clinical trials for AQX-1125 or any future product candidates in sites outside the United States and the FDA may not accept data from trials conducted in such locations.

We have conducted, and may in the future choose to conduct, one or more of our clinical trials outside the United States. For example, our Phase 2 trial for AQX-1125 in BPS/IC patients, known as the LEADERSHIP trial, is being conducted in sites across Canada and our Phase 2 trial for AQX-1125 in COPD patients with frequent exacerbations, known as the FLAGSHIP trial, is being conducted at sites in Northern and Central Europe.

Although the FDA may accept data from clinical trials conducted outside the United States, acceptance of this data is subject to certain conditions imposed by the FDA. For example, the clinical trial must be well designed and conducted and performed by qualified investigators in accordance with ethical principles. The study population must also adequately represent the U.S. population, and the data must be applicable to the U.S. population and U.S. medical practice in ways that the FDA deems clinically meaningful. Generally, the patient population for any clinical studies conducted outside of the United States must be representative of the population for whom we intend to label the product in the United States. In addition, while these clinical trials are subject to the applicable local laws, FDA acceptance of the data will be dependent upon its determination that the studies also complied with all applicable U.S. laws and regulations. There can be no assurance the FDA will accept data from trials conducted outside of the United States. If the FDA does not accept the data from our LEADERSHIP and FLAGSHIP clinical trials, it would likely result in the need for additional trials, which would be costly and time-consuming and delay or permanently halt our development of AQX-1125 or any future product candidates.

AQX-1125 or our future product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following any marketing approval.

Undesirable side effects caused by AQX-1125 or our future product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign regulatory authority. For example, even though AQX-1125 administered orally has generally been well tolerated by patients in our earlier-stage clinical trials, in our animal toxicity studies certain side-effects, including severe ulcerations to the gastrointestinal tract of dogs and adverse effects to the ocular lens of some animals occurred. There can be no assurance that these toxicities in animals will not occur in humans. If these toxicities do occur in our future clinical trials they could cause delay or even discontinuance of further development of AQX-1125 or future product candidates, which would impair our ability to generate revenues and would have a material adverse effect our business, results of operations, financial condition and cash flows and future prospects. To date, the most common side-effect of AQX-1125 noted in clinical

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trials is mild gastrointestinal upset including mild diarrhea, nausea and gastric pain. No severe side effects have been noted to date. There can be no assurance that side-effects from AQX-1125 in future clinical trials will be continue to be mild or that side-effects in general will not prompt the discontinued development of AQX-1125 or future product candidates. As a result of these side effects or further safety or toxicity issues that we may experience in our clinical trials in the future, we may not receive approval to market AQX-1125 or any future product candidates, which could prevent us from ever generating revenues or achieving profitability. Results of our trials could reveal an unacceptably high severity and prevalence of side effects. In such an event, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of our product candidates for any or all targeted indications. The drug-related side effects could affect patient recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Any of these occurrences may have a material adverse effect on our business, results of operations, financial condition and cash flows and future prospects.

Additionally, if AQX-1125 or any of our future product candidates receives marketing approval, and we or others later identify undesirable side effects caused by such product, a number of potentially significant negative consequences could result, including:

- ⁿ we may be forced to suspend marketing of such product;
- ⁿ regulatory authorities may withdraw their approvals of such product;
- ⁿ regulatory authorities may require additional warnings on the label that could diminish the usage or otherwise limit the commercial success of such products;
- ⁿ the FDA or other regulatory bodies may issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings about such product;
- ⁿ the FDA may require the establishment or modification of REMS or a comparable foreign regulatory authority may require the establishment or modification of a similar strategy that may, for instance, restrict distribution of our products and impose burdensome implementation requirements on us;
- ⁿ we may be required to change the way the product is administered or conduct additional clinical trials;
- ⁿ we could be sued and held liable for harm caused to subjects or patients
- ⁿ we may be subject to litigation or product liability claims; and
- ⁿ our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved.

Even if AQX-1125 or our future product candidates receive regulatory approval, they may still face future development and regulatory difficulties.

Even if we obtain regulatory approval for AQX-1125 or a future product candidate, it would be subject to ongoing requirements by the FDA and comparable foreign regulatory authorities governing the manufacture, quality control, further development, labeling, packaging, storage, distribution, safety surveillance, import, export, advertising, promotion, recordkeeping and reporting of safety and other post-market information. The safety profile of any product will continue to be closely monitored by the FDA and comparable foreign regulatory authorities after approval. If the FDA or comparable foreign regulatory authorities become aware of new safety information after approval of AQX-1125 or any future product candidate, they may require labeling changes or establishment of a REMS or similar strategy, impose significant restrictions on a product's indicated uses or marketing, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance. For example, the label ultimately approved for AQX-1125, if it achieves marketing approval, may include restrictions on use.

In addition, manufacturers of drug products and their facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with current good manufacturing practices, or cGMP, and other regulations. If we or a regulatory agency discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. If we, our

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product candidates or the manufacturing facilities for our product candidates fail to comply with applicable regulatory requirements, a regulatory agency may:

- ⁂ issue warning letters or untitled letters;
- ⁂ impose restrictions on the marketing or manufacturing of the product candidates;
- ⁂ mandate modifications to promotional materials or require us to provide corrective information to healthcare practitioners;
- ⁂ require us or any future collaborator to enter into a consent decree, which can include imposition of various fines, reimbursements for inspection costs, required due dates for specific actions and penalties for noncompliance;
- ⁂ seek an injunction or impose civil or criminal penalties or monetary fines;
- ⁂ suspend or withdraw regulatory approval;
- ⁂ suspend any ongoing clinical trials;
- ⁂ refuse to approve pending applications or supplements to applications filed by us;
- ⁂ suspend or impose restrictions on operations, including costly new manufacturing requirements; or
- ⁂ seize or detain products, refuse to permit the import or export of products, or require us to initiate a product recall.

The occurrence of any event or penalty described above may inhibit our ability to commercialize AQX-1125 or any future product candidates and generate revenue.

The FDA strictly regulates the advertising and promotion of drug products, and drug products may only be marketed or promoted for their FDA approved uses, consistent with the product's approved labeling. Advertising and promotion of any product candidate that obtains approval in the United States will be heavily scrutinized by the FDA, the Department of Justice, or the DOJ, the Office of Inspector General of the Department of Health and Human Services, or HHS, state attorneys general, members of Congress and the public. Violations, including promotion of our products for unapproved or off-label uses, are subject to enforcement letters, inquiries and investigations, and civil, criminal and/or administrative sanctions by the FDA. Additionally, advertising and promotion of, any product candidate that obtains approval outside of the United States will be heavily scrutinized by comparable foreign regulatory authorities.

In the United States, engaging in impermissible promotion of our future products for off-label uses can also subject us to false claims litigation under federal and state statutes, which can lead to civil, criminal and/or administrative penalties and fines and agreements that materially restrict the manner in which we promote or distribute our drug products. These false claims statutes include the federal False Claims Act, which allows any individual to bring a lawsuit against a pharmaceutical company on behalf of the federal government alleging submission of false or fraudulent claims, or causing to present such false or fraudulent claims, for payment by a federal program such as Medicare or Medicaid. If the government prevails in the lawsuit, the individual may share in any fines or settlement funds. Since 2004, these False Claims Act lawsuits against pharmaceutical companies have increased significantly in volume and breadth, leading to several substantial civil and criminal settlements based on certain sales practices promoting off-label drug uses. This growth in litigation has increased the risk that a pharmaceutical company will have to defend a false claim action, pay settlement fines or restitution, agree to comply with burdensome reporting and compliance obligations, and be excluded from the Medicare, Medicaid and other federal and state healthcare programs. If we do not lawfully promote our approved products, we may become subject to such litigation and, if we are not successful in defending against such actions, those actions could have a material adverse effect our business, results of operations, financial condition and cash flows and future prospects.

Existing government regulations may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of AQX-1125 or any future product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and/or be subject to fines or enhanced government oversight and reporting obligations, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

Failure to obtain regulatory approval in international jurisdictions would prevent AQX-1125 or any future product candidates from being marketed outside the United States.

In order to market and sell our products in the European Union and many other jurisdictions, we must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, it is required that the product be approved for reimbursement before the product can be approved for sale in that country. Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. We may not obtain approvals from regulatory authorities outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. A failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory approval process in others. We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our products in any market. If we are unable to obtain approval of AQX-1125 or any of our future product candidates by regulatory authorities in the European Union or another jurisdiction, the commercial prospects of that product candidate may be significantly diminished and our business prospects could decline.

Recently enacted and future legislation, including potentially unfavorable pricing regulations or other healthcare reform initiatives, may increase the difficulty and cost for us to obtain marketing approval of and commercialize AQX-1125 or our future product candidates and affect the prices we may obtain.

The regulations that govern, among other things, marketing approvals, coverage, pricing and reimbursement for new drug products vary from country to country. In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of AQX-1125 or our future product candidates, restrict or regulate post-approval activities and affect our ability to successfully sell any product candidates for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or Medicare Modernization Act, changed the way Medicare covers and pays for certain pharmaceutical products. The legislation expanded Medicare coverage for outpatient prescription drugs prescribed to the elderly and introduced a new reimbursement methodology based on average sales prices for physician administered drugs. In addition, this legislation provided authority for limiting the number of outpatient prescription drugs that will be covered in any therapeutic class. In recent years, Congress has considered further reductions in Medicare reimbursement for drugs administered by physicians. The Centers for Medicare & Medicaid Services, the agency that administers the Medicare program, also has the authority to revise reimbursement rates and to implement coverage restrictions for drugs. Cost reduction initiatives and changes in coverage implemented through legislation or regulation could decrease utilization of and reimbursement for any approved products, which in turn could affect the price we can receive for those products. While the Medicare Modernization Act and Medicare regulations apply only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in establishing their own coverage policies and reimbursement rates. Therefore, any reduction in reimbursement that results from federal legislation or regulation may result in a similar reduction in payments from private payors.

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, or the Affordable Care Act, in an effort to, among other things, broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for healthcare and health insurance industries, impose new taxes and fees on pharmaceutical and medical device manufacturers and impose additional health policy reforms. The Affordable Care Act, among other things, also expanded manufacturers' rebate liability to include covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations increased the minimum rebate due for innovator drugs from 15.1% of average manufacturer price, or AMP, to 23.1% of AMP and capped the total rebate amount for innovator drugs at 100% of AMP. The Affordable Care Act and subsequent legislation also revised the definition of AMP for calculating and reporting Medicaid drug rebates on outpatient prescription drug prices. This

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could increase the amount of Medicaid drug rebates to states. Furthermore, the Affordable Care Act imposes a significant annual, nondeductible fee on companies that manufacture or import certain branded prescription drug products. Substantial new provisions affecting compliance have also been enacted, which may affect our business practices with healthcare practitioners, and a significant number of provisions are not yet, or have only recently become, effective. Although it is too early to determine the full effect of the Affordable Care Act, and any of its implementing regulations, the new law has the potential to: substantially change healthcare financing and delivery by both governmental and private insurers; continue the pressure on pharmaceutical pricing, especially under the Medicare program; and increase our regulatory burdens and operating costs.

In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. More recently, on August 2, 2011, the President signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee did not achieve a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year that went into effect on April 1, 2013. On January 2, 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on our customers and accordingly, our financial operations. Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether existing regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of AQX-1125 or our future product candidates, if any, may be.

In the United States, the European Union and other potentially significant markets for AQX-1125 and our future product candidates, government authorities and third-party payors are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which has resulted in lower average selling prices. Furthermore, the increased emphasis on managed healthcare in the United States and on country and regional coverage, pricing and reimbursement controls in the European Union will put additional pressure on product coverage, pricing, reimbursement and utilization, which may adversely affect our business, results of operations, financial condition and cash flows and future prospects. These pressures can arise from various sources, including but not limited to, rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid and healthcare reform, pharmaceutical reimbursement policies and pricing in general.

Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product candidate in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, which could negatively impact the revenues we are able to generate from the sale of the product in that particular country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates even if our product candidates obtain marketing approval.

Laws and regulations governing international operations may preclude us from developing, manufacturing and selling certain product candidates outside of the United States and Canada and require us to develop and implement costly compliance programs.

As we expand our operations outside of the United States and Canada, we must comply with numerous laws and regulations in each jurisdiction in which we plan to operate. We must also comply with U.S. laws applicable to the foreign operations of U.S. businesses and individuals, such as the Foreign Corrupt Practices Act, or FCPA, and Canadian laws applicable to the foreign operations of Canadian businesses and individuals, such as the Corruption of Foreign Public Officials Act, or CFPOA. The creation and implementation of international business practices compliance programs is costly and such programs are difficult to enforce, particularly where reliance on third parties is required.

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The FCPA prohibits any U.S. individual or business from paying, offering, authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with certain accounting provisions requiring us to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations. The anti-bribery provisions of the FCPA are enforced primarily by the DOJ. The Securities and Exchange Commission, or the SEC, is involved with enforcement of the books and records provisions of the FCPA.

Compliance with the FCPA is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical studies and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

Various laws, regulations and executive orders also restrict the use and dissemination outside of the United States, or the sharing with certain non-U.S. nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. Our expanding presence outside of the United States will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from developing, manufacturing, or selling certain products and product candidates outside of the United States, which could limit our growth potential and increase our development costs.

The failure to comply with laws governing international business practices may result in substantial penalties, including suspension or debarment from government contracting. Violation of the FCPA can result in significant civil and criminal penalties. Indictment alone under the FCPA can lead to suspension of the right to do business with the U.S. government until the pending claims are resolved. Conviction of a violation of the FCPA can result in long-term disqualification as a government contractor. The termination of a government contract or relationship as a result of our failure to satisfy any of our obligations under laws governing international business practices would have a negative impact on our operations and harm our reputation and ability to procure government contracts. The SEC also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions.

The CFPOA prohibits Canadian businesses and individuals from giving or offering to give a benefit of any kind to a foreign public official, or any other person for the benefit of the foreign public official, where the ultimate purpose is to obtain or retain a business advantage. Furthermore, a company may be found liable for violations by not only its employees, but also by its third-party agents. Any failure to comply with the CFPOA, as well as applicable laws and regulations in foreign jurisdictions, could result in substantial penalties or restrictions on our ability to conduct business in certain foreign jurisdictions, which may have a material adverse impact on us and our share price.

Even if we are able to commercialize AQX-1125 or our future product candidates, the products may not receive coverage and adequate reimbursement from third-party payors, which could harm our business.

Our ability to commercialize any products successfully will depend, in part, on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government authorities, private health insurers, health maintenance organizations and third-party payors. Patients who are prescribed medications for the treatment of their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their prescription drugs. Coverage and adequate reimbursement from government healthcare programs, such as Medicare and Medicaid, and private health insurers are critical to new product acceptance. Patients are unlikely to use AQX-1125 or our future product candidates unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our product candidates. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. As a result, government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. Third-party payors may also seek additional clinical evidence, beyond the data required to obtain marketing approval, demonstrating clinical benefits and value in specific patient populations before covering our products for those patients. We cannot be sure

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that coverage and adequate reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If coverage and reimbursement are not available or are available only at limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, obtaining coverage does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sales and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may only be temporary. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used. Reimbursement rates may also be based in part on existing reimbursement amounts for lower cost drugs or may be bundled into the payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Coverage and reimbursement for drug products can differ significantly from payor to payor. As a result, the coverage and reimbursement determination process is often a time-consuming and costly process with no assurance that coverage and adequate reimbursement will be obtained or applied consistently. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own coverage and reimbursement policies. Our inability to promptly obtain coverage and profitable reimbursement rates from both government-funded and private payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

We have never marketed a drug before, and if we are unable to establish an effective sales force and marketing infrastructure, or enter into acceptable third-party sales and marketing or licensing arrangements, we may be unable to generate any revenue.

We do not currently have an infrastructure for the sales, marketing and distribution of pharmaceutical drug products and the cost of establishing and maintaining such an infrastructure may exceed the cost-effectiveness of doing so. In order to market any products that may be approved by the FDA and comparable foreign regulatory authorities, we must build our sales, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenue and may not become profitable. We will be competing with many companies that currently have extensive and well-funded sales and marketing operations. Without an internal commercial organization or the support of a third party to perform sales and marketing functions, we may be unable to compete successfully against these more established companies.

AQX-1125 and our future product candidates, if approved, may not achieve adequate market acceptance among physicians, patients, and healthcare payors and others in the medical community necessary for commercial success.

Even if we obtain regulatory approval for AQX-1125 or any of our product candidates that we may develop or acquire in the future, the product may not gain market acceptance among physicians, healthcare payors, patients or the medical community. Our commercial success also depends on coverage and adequate reimbursement of our product candidates by third-party payors, including government payors, generally, which may be difficult or time-consuming to obtain, may be limited in scope and may not be obtained in all jurisdictions in which we may seek to market our products. Market acceptance of any of our product candidates for which we receive approval depends on a number of factors, including:

- ⁿ the efficacy and safety of such product candidates as demonstrated in clinical trials;
- ⁿ the clinical indications for which the product candidate is approved;
- ⁿ acceptance by physicians and patients of the product candidate as a safe and effective treatment;
- ⁿ the potential and perceived advantages of product candidates over alternative treatments;
- ⁿ the safety of product candidates seen in a broader patient group, including a product candidate's use outside the approved indications;

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- ⁿ the prevalence and severity of any side effects;
- ⁿ product labeling or product insert requirements of the FDA or other regulatory authorities;
- ⁿ the timing of market introduction of our products as well as competitive products;
- ⁿ the cost of treatment in relation to alternative treatments;
- ⁿ the availability of coverage and adequate reimbursement and pricing by third-party payors and government authorities;
- ⁿ relative convenience and ease of administration;
- ⁿ the effectiveness of our sales and marketing efforts and those of our collaborators; and
- ⁿ unfavorable publicity relating to the product candidate.

If any of our product candidates are approved but fail to achieve market acceptance among physicians, patients, or healthcare payors, we will not be able to generate significant revenues, which would compromise our ability to become profitable.

Our relationships with healthcare professionals, principal investigators, consultants, customers (actual and potential) and third-party payors are and will be subject, directly and indirectly, to applicable anti-kickback, fraud and abuse, privacy, transparency and other healthcare laws and regulations, which could expose us to penalties, including without limitation, civil, criminal and administrative sanctions, civil penalties, damages, fines, disgorgement, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings and the curtailment or restructuring of our operations.

As a pharmaceutical company, even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid or other third-party payors, federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to our future arrangements with third-party payors and customers who are in a position to purchase, recommend and/or prescribe our product candidates for which we obtain marketing approval. These broadly applicable fraud and abuse and other healthcare laws and regulations may constrain our future business or financial arrangements and relationships with healthcare professionals, principal investigators, consultants, customers, and third-party payors and other entities, including our marketing practices, educational programs and pricing policies. Restrictions under applicable federal and state healthcare laws and regulations that may affect our ability to operate include, but are not limited to, the following:

- ⁿ the federal Anti-Kickback Statute, among other things, prohibits persons from knowingly and willfully soliciting, offering, receiving or providing paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation of, any good, facility, item or service, for which payment may be made, in whole or in part, under a federal healthcare program such as Medicare and Medicaid;
- ⁿ federal civil and criminal false claims laws and civil monetary penalty laws impose criminal and civil penalties, including through civil whistleblower or qui tam actions, among other things, prohibits individuals or entities from knowingly presenting, or causing to be presented, to the federal government, including the Medicare and Medicaid programs, claims for payment or approval that are false or fraudulent or from knowingly making a false statement to improperly avoid, decrease or conceal an obligation to pay money to the federal government;
- ⁿ the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, among other things, imposes criminal liability for knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or to obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g. public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of or payment for healthcare benefits, items or services relating to healthcare matters;
- ⁿ HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and its implementing regulations, also imposes certain obligations, including mandatory contractual terms, with

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respect to safeguarding the privacy, security and transmission of individually identifiable health information without the appropriate authorization by entities subject to the law, such as health plans, healthcare clearinghouses and healthcare providers;

- ⁿ the federal Physician Payment Sunshine Act, created under Section 6002 of the Affordable Care Act and its implementing regulations, requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to "payments or other transfers of value" made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by physicians (as defined above) and their immediate family members and payments or other "transfers of value" to such physician owners and their immediate family members; and
- ⁿ analogous state and foreign laws and regulations, including: state anti-kickback and false claims laws which may apply to our business practices, including, but not limited to, research, distribution, sales and marketing arrangements and claims involving healthcare items or services reimbursed by state governmental and non-governmental third-party payors, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the applicable compliance guidance promulgated by the federal government; state laws that require drug manufacturers to track gifts and other remuneration and items of value provided to healthcare professionals and entities and file reports relating to pricing and marketing information; and state and foreign laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. Recent healthcare reform legislation has also strengthened these laws. For example, the Affordable Care Act, among other things, amends the intent requirement of the federal anti-kickback statute. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, the Affordable Care Act codified case law that a claim that includes items or services resulting from a violation of the federal anti-kickback statute constitutes a false or fraudulent claim for purposes of the False Claims Act. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations, agency guidance, or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to penalties, including without limitation, significant civil, criminal and administrative penalties, damages, fines, disgorgement, exclusion from government funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings, and the curtailment or restructuring of our operations. If any physicians or other healthcare providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. Moreover, we expect there will continue to be federal and state laws and regulations, proposed and implemented, that could impact our operations and business. The extent to which future legislation or regulations, if any, relating to healthcare fraud abuse laws or enforcement, may be enacted or what effect such legislation or regulation would have on our business remains uncertain.

We may form strategic alliances in the future, and we may not realize the benefits of such alliances.

We may form strategic alliances, create joint ventures or collaborations or enter into licensing arrangements with third parties that we believe will complement or augment our existing business. These relationships or those like them may require us to incur non-recurring and other charges, increase our near- and long-term expenditures, issue securities that dilute our existing stockholders or disrupt our management and business. In addition, we face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for AQX-1125 or any future drug candidates and programs because our research and development pipeline may be insufficient, our drug candidates and programs may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our drug candidates and programs as having the requisite potential to demonstrate safety and efficacy. If we license products or businesses, we may not be able to

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realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture. We cannot be certain that, following a strategic transaction or license, we will achieve the revenues or specific net income that justifies such transaction. Any delays in entering into new strategic partnership agreements related to our drug candidates could also delay the development and commercialization of our drug candidates and reduce their competitiveness even if they reach the market.

Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could cause significant liability for us and harm our reputation.

We are exposed to the risk of employee fraud or other misconduct, including intentional failures to comply with FDA regulations or similar regulations of comparable foreign regulatory authorities, provide accurate information to the FDA or comparable foreign regulatory authorities, comply with manufacturing standards we have established, comply with federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable foreign regulatory authorities, report financial information or data accurately or disclose unauthorized activities to us. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. We will adopt a code of conduct for our directors, officers and employees, or the Code of Business Conduct and Ethics, which will be effective as of consummation of this offering, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, results of operations, financial condition and cash flows from future prospects, including the imposition of significant fines or other sanctions.

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do.

The development and commercialization of new drug products is highly competitive. We face competition with respect to our current product candidate, AQX-1125, and will face competition with respect to any future product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of the disease indications for which we are developing our future product candidates. Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to our approach, and others are based on entirely different approaches. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

More established companies may have a competitive advantage over us due to their greater size, cash flows and institutional experience. Compared to us, many of our competitors may have significantly greater financial, technical and human resources.

As a result of these factors, our competitors may obtain regulatory approval of their products before we do, which will limit our ability to develop or commercialize AQX-1125 or any of our future product candidates. Although there are no approved therapies that specifically target SHIP1, there are currently approved therapies for treating the same diseases or indications for which our product candidates may be useful. In addition, many companies are developing new therapeutics, and we cannot predict what the standard of care will be as our product candidates progress through clinical development.

If AQX-1125, our current product candidate, were approved as treatment of COPD, it could face competition from currently approved and marketed products, including GlaxoSmithKline (fluticasone/salmeterol—LABA/ICS combination (Advair) and umeclidinium, vilanterol—LAMA (Anoro)), GlaxoSmithKline/Theravance (LABA/ICS combination fluticasone/vilanterol (Breo Ellipta), Boehringer Ingelheim/Pfizer (tiotropium—LAMA (Spiriva)), Boehringer Ingelheim (olodaterol—LABA), AstraZeneca (formoterol/budesonide—LABA/ICS (Symbicort)), Almirall SA (AMA aclidinium (Tudorza Pressair), and Novartis AG (LABA indacaterol (Onbrez Breezhaler) and glycopyrrolate/

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indacaterol—LABA/LAMA (Ultibro Breezhaler)) and Takeda Pharmaceuticals International GmbH (Phosphodiesterase-4 (PDE4) inhibitor, Roflumilast). If AQX-1125, our current product candidate, were approved for the treatment of BPS/IC, it could face competition from currently approved and marketed products, including Janssen Pharmaceuticals Inc.'s pentosan polysulfate sodium, marketed in the United States as Elmiron, which is now generic. Also, we believe that Gilead Sciences, Inc., Amgen Inc., and TG Therapeutics, Inc. are developing drugs that target the delta and/or gamma isoforms of PI3K. In addition, many companies are developing product candidates directed to disease targets in the fields of COPD and BPS/IC, including in the specific diseases for which we are currently developing AQX-1125, or for which we may develop AQX-1125 or other SHIP1 activators in the future. Such companies include Pfizer, AbbVie, Urogen, TARIS, and Afferent.

We believe that our ability to successfully compete will depend on, among other things:

- the efficacy and safety profile of AQX-1125, including relative to marketed products and product candidates in development by third parties;
- the time it takes for AQX-1125 or any of our future product candidates to complete clinical development and receive marketing approval;
- the ability to commercialize AQX-1125 and future product candidates that receive regulatory approval;
- whether coverage and adequate levels of reimbursement are available under private and governmental health insurance plans, including Medicare;
- the ability to establish, maintain and protect intellectual property rights related to our product candidates;
- the ability to manufacture commercial quantities of AQX-1125 and future product candidates that receive regulatory approval; and
- acceptance of AQX-1125 and future product candidates that receive regulatory approval by physicians and other healthcare providers.

Our failure to successfully identify, acquire, develop and commercialize additional product candidates or approved products other than AQX-1125 could impair our ability to grow.

Although a substantial amount of our efforts will focus on the continued clinical testing and potential approval of our most advanced product candidate, AQX-1125, a key element of our growth strategy is to acquire, develop and/or market additional products and product candidates. All of our other potential product candidates remain in the discovery and preclinical study stages. Research programs to identify product candidates require substantial technical, financial and human resources, whether or not any product candidates are ultimately identified. Because our internal research capabilities are limited, we may be dependent upon pharmaceutical and biotechnology companies, academic scientists and other researchers to sell or license products or technology to us. The success of this strategy depends partly upon our ability to identify, select and acquire promising pharmaceutical product candidates and products. The process of proposing, negotiating and implementing a license or acquisition of a product candidate or approved product is lengthy and complex. Other companies, including some with substantially greater financial, marketing and sales resources, may compete with us for the license or acquisition of product candidates and approved products. We have limited resources to identify and execute the acquisition or in-licensing of third-party products, businesses and technologies and integrate them into our current infrastructure. Moreover, we may devote resources to potential acquisitions or in-licensing opportunities that are never completed, or we may fail to realize the anticipated benefits of such efforts. Any product candidate that we acquire may require additional development efforts prior to commercial sale, including extensive clinical testing and approval by the FDA and applicable foreign regulatory authorities. All product candidates are prone to risks of failure typical of pharmaceutical product development, including the possibility that a product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities. In addition, we cannot provide assurance that any products that we develop or approved products that we acquire will be manufactured profitably or achieve market acceptance.

Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that we may develop.

We face an inherent risk of product liability exposure related to the testing of AQX-1125 and any future product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. Product liability claims may be brought against us by subjects enrolled in our clinical trials, patients,

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healthcare providers or others using, administering or selling our products. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we may develop;
- termination of clinical trial sites or entire trial programs;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial subjects or patients;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize our product candidates.

We currently have obtained product liability insurance coverage, which is limited to \$5 million per occurrence and \$5 million in the aggregate. This coverage may not be adequate to cover all liabilities that we may incur. Insurance coverage is becoming increasingly expensive and in the future we may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. We intend to expand our insurance coverage for products to include the sale of commercial products if we obtain marketing approval for AQX-1125 or our future product candidates, but we may be unable to obtain commercially reasonable product liability insurance for any products approved for marketing. Large judgments have been awarded in class action lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims brought against us, particularly if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business.

We will need to expand our operations and grow the size of our organization, and we may experience difficulties in managing this growth.

As of December 20, 2013, we had 13 employees. As our development and commercialization plans and strategies develop, or as a result of any future acquisitions, we will need additional managerial, operational, sales, marketing, scientific, and financial headcount and other resources. Our management, personnel and systems currently in place may not be adequate to support this future growth. Future growth would impose significant added responsibilities on members of management, including:

- managing our clinical trials effectively, which we anticipate being conducted at numerous clinical sites;
- identifying, recruiting, maintaining, motivating and integrating additional employees with the expertise and experience we will require;
- managing our internal development efforts effectively while complying with our contractual obligations to licensors, licensees, contractors and other third parties;
- manage additional relationships with various strategic partners, suppliers and other third parties;
- improving our managerial, development, operational and finance reporting systems and procedures; and
- expanding our facilities.

Our failure to accomplish any of these tasks could prevent us from successfully growing our company.

Our future success depends on our ability to attract, retain and motivate qualified personnel.

We may not be able to attract or retain qualified managerial, operational, sales, marketing, scientific and financial personnel in the future due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses. If we are not able to attract and retain necessary personnel to accomplish our business objectives, we may experience constraints that will significantly impede the achievement of our development objectives, our ability to raise additional capital and our ability to implement our business strategy.

Our industry has experienced a high rate of turnover of management personnel in recent years. We are highly dependent on the development, regulatory, commercialization and business development expertise of our executive officers identified in the section of this prospectus captioned "Management." If we lose one or more of our executive officers or key employees, particularly our President and Chief Executive Officer, David Main, our Vice President, Technical Operations and Planning, Lloyd Mackenzie, our Chief Financial Officer and Vice President, Finance, Kamran Alam, or our

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Chief Medical Officer and Senior Vice President, Clinical Development, Stephen Shrewsbury, M.B., ChB., our ability to implement our business strategy successfully could be seriously harmed. Replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to develop, gain regulatory approval of and commercialize products successfully. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these additional key personnel. Many of the other pharmaceutical companies that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do. They also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high-quality candidates than what we have to offer. Further, we do not maintain "key person" insurance for any of our executives or other employees. Our failure to retain key personnel could impede the achievement of our research, development and commercialization objectives.

We may engage in future acquisitions that could disrupt our business, cause dilution to our stockholders and harm our business, results of operations, financial condition and cash flows and future prospects.

While we currently have no specific plans to acquire any other businesses, we may, in the future, make acquisitions of, or investments in, companies that we believe have products or capabilities that are a strategic or commercial fit with AQX-1125 or our future product candidates and business or otherwise offer opportunities for our company. In connection with these acquisitions or investments, we may:

- ⁿ issue stock that would dilute our existing stockholders' percentage of ownership;
- ⁿ incur debt and assume liabilities; and
- ⁿ incur amortization expenses related to intangible assets or incur large and immediate write-offs.

We may not be able to complete acquisitions on favorable terms, if at all. If we do complete an acquisition, we cannot assure you that it will ultimately strengthen our competitive position or that it will be viewed positively by customers, financial markets or investors. Furthermore, future acquisitions could pose numerous additional risks to our operations, including:

- ⁿ problems integrating the purchased business, products or technologies;
- ⁿ increases to our expenses;
- ⁿ the failure to discover undisclosed liabilities of the acquired asset or company;
- ⁿ diversion of management's attention from their day-to-day responsibilities;
- ⁿ harm to our operating results or financial condition;
- ⁿ entrance into markets in which we have limited or no prior experience; and
- ⁿ potential loss of key employees, particularly those of the acquired entity.

We may not be able to complete any acquisitions or effectively integrate the operations, products or personnel gained through any such acquisition.

Our business and operations would suffer in the event of computer system failures.

Despite the implementation of security measures, our internal computer systems, and those of our CROs and other third parties on which we rely, are vulnerable to damage from computer viruses, unauthorized access, natural disasters, fire, terrorism, war and telecommunication and electrical failures. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. For example, the loss of clinical trial data from completed, ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach results in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development of AQX-1125 or our future product candidates could be delayed.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental, health and safety laws and regulations in the United States and Canada, including, as a result of our subleased laboratory space, those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous

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and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological or hazardous materials.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Business disruptions could seriously harm our future revenues and financial condition and increase our costs and expenses.

Our operations could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or manmade disasters or business interruptions, for which we are predominantly self-insured. We do not carry insurance for all categories of risk that our business may encounter. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. We rely on third-party manufacturers to produce our product candidates. Our ability to obtain clinical supplies of product candidates could be disrupted, if the operations of these suppliers are affected by a man-made or natural disaster or other business interruption. The ultimate impact on us, our significant suppliers and our general infrastructure of being consolidated in certain geographical areas is unknown, but our operations and financial condition could suffer in the event of a major earthquake, fire or other natural disaster. Further, any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our business, results of operations, financial condition and cash flows from future prospects.

Risks Related to Our Dependence on Third Parties

We rely on third parties to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, this could substantially harm our business because we may not be able to obtain regulatory approval for or commercialize AQX-1125 or our future product candidates in a timely manner or at all.

We have extensively relied upon and plan to continue to extensively rely upon third-party CROs to monitor and manage data for our ongoing preclinical and clinical programs. We rely on these parties for execution of our preclinical studies and clinical trials, and we control only some aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on the CROs does not relieve us of our regulatory responsibilities. We also rely on third parties to assist in conducting our preclinical studies in accordance with Good Laboratory Practices, or GLP, and the Animal Welfare Act requirements. We and our CROs are required to comply with federal regulations and current Good Clinical Practices, or GCP, which are international standards meant to protect the rights and health of patients that are enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area, or EEA, and comparable foreign regulatory authorities for all of our products in clinical development. Regulatory authorities enforce GCP through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs fail to comply with applicable GCP, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP requirements. In addition, our clinical trials must be conducted with product produced under cGMP requirements. Failure to comply with these regulations may require us to repeat preclinical studies and clinical trials, which would delay the regulatory approval process.

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Our CROs are not our employees, and except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our ongoing clinical, nonclinical and preclinical programs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize AQX-1125 or our future product candidates. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed.

Because we have relied on third parties, our internal capacity to perform these functions is limited. Outsourcing these functions involves risk that third parties may not perform to our standards, may not produce results in a timely manner or may fail to perform at all. In addition, the use of third-party service providers requires us to disclose our proprietary information to these parties, which could increase the risk that this information will be misappropriated. We currently have a small number of employees, which limits the internal resources we have available to identify and monitor our third-party providers. To the extent we are unable to identify and successfully manage the performance of third-party service providers in the future, our business may be adversely affected. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, results of operations, financial condition and cash flows and future prospects.

If we lose our relationships with CROs, our drug development efforts could be delayed.

We rely on third-party vendors and CROs for preclinical studies and clinical trials related to our drug development efforts. Switching or adding additional CROs would involve additional cost and requires management time and focus. Our CROs have the right to terminate their agreements with us in the event of an uncured material breach. In addition, some of our CROs have an ability to terminate their respective agreements with us if it can be reasonably demonstrated that the safety of the subjects participating in our clinical trials warrants such termination, if we make a general assignment for the benefit of our creditors or if we are liquidated. If any of our relationships with our third-party CROs terminate, we could experience a significant delay in identifying, qualifying and managing performance of a comparable third-party service provider, which could adversely affect our development programs. In addition, there is a natural transition period when a new CRO commences work and the new CRO may not provide the same type or level of services as the original provider. We may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms.

We have no experience manufacturing our product candidates on a large clinical or commercial scale and have no manufacturing facility. As a result, we are dependent on third-party manufacturers for the manufacture of our most advanced product candidate as well as on third parties for our supply chain, and if we experience problems with any third parties, the manufacturing of our product candidates or products could be delayed.

We do not own or operate facilities for the manufacture of our product candidates. We currently have no plans to build our own clinical or commercial scale manufacturing capabilities. We currently rely on a single source contract manufacturing organization, or CMO, for the chemical manufacture of active pharmaceutical ingredient for AQX-1125, and another CMO for the production of AQX-1125 final product formulation in a gelatin capsule and packaging for Phase 2 clinical trials. To meet our projected needs for clinical supplies to support our activities through regulatory approval and commercial manufacturing, the CMOs with whom we currently work will need to increase the scale of production. We may need to identify additional CMOs for continued production of supply for our product candidates. We have not yet identified alternate suppliers in the event the current CMOs we utilize are unable to scale production, or if we otherwise experience any problems with them. Although alternative third-party suppliers with the necessary manufacturing and regulatory expertise and facilities exist, it could be expensive and take a significant amount of time to arrange for alternative suppliers. We may encounter technical difficulties or delays in the transfer of AQX-1125 manufacturing on a commercial scale to additional third-party manufacturers. We may be unable to enter into agreements for commercial supply with third party manufacturers, or may be unable to do so on acceptable terms. If we are unable to arrange for alternative third-party manufacturing sources, or to do so on commercially reasonable terms or in a timely manner, we may not be able to complete development of our product candidates, or market or distribute them.

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Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured product candidates or products ourselves, including reliance on the third party for regulatory compliance and quality assurance, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control, including a failure to synthesize and manufacture our product candidates or any products we may eventually commercialize in accordance with our specifications, and the possibility of termination or nonrenewal of the agreement by the third party, based on its own business priorities, at a time that is costly or damaging to us. In addition, the FDA and other regulatory authorities require that our product candidates and any products that we may eventually commercialize be manufactured according to cGMP and similar foreign standards. Any failure by our third-party manufacturers to comply with cGMP or failure to scale up manufacturing processes, including any failure to deliver sufficient quantities of product candidates in a timely manner, could lead to a delay in, or failure to obtain, regulatory approval of any of our product candidates and could cause us to incur higher costs and prevent us from commercializing our product candidates successfully. In addition, such failure could be the basis for the FDA to issue a warning letter, withdraw approvals for product candidates previously granted to us, or take other regulatory or legal action, including recall or seizure of outside supplies of the product candidate, total or partial suspension of production, suspension of ongoing clinical trials, refusal to approve pending applications or supplemental applications, detention or product, refusal to permit the import or export of products, injunction, or imposing civil and criminal penalties.

Any significant disruption in our supplier relationships could harm our business. Any significant delay in the supply of a product candidate or its key materials for an ongoing clinical study could considerably delay completion of our clinical trials, product testing and potential regulatory approval of our product candidates. If our manufacturers or we are unable to purchase these key materials after regulatory approval has been obtained for our product candidates, the commercial launch of our product candidates would be delayed or there would be a shortage in supply, which would impair our ability to generate revenues from the sale of our product candidates. It may take several years to establish an alternative source of supply for our product candidates and to have any such new source approved by the FDA.

Risks Related to Intellectual Property

If we are unable to obtain or protect intellectual property rights, our competitive position could be harmed.

We depend on our ability to protect our proprietary technology. We rely on trade secret, patent, copyright and trademark laws, and confidentiality, licensing and other agreements with employees and third parties, all of which offer only limited protection. Our commercial success will depend in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our proprietary technology and products. Where we have the right to do so under our license agreements, we seek to protect our proprietary position by filing patent applications in the United States and abroad related to our novel technologies and products that are important to our business. The patent positions of biotechnology and pharmaceutical companies generally are highly uncertain, involve complex legal and factual questions and have in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patents, including those patent rights licensed to us by third parties, are highly uncertain.

The steps we have taken to protect our proprietary rights may not be adequate to preclude misappropriation of our proprietary information or infringement of our intellectual property rights, both inside and outside the United States. The rights already granted under any of our currently issued patents and those that may be granted under future issued patents may not provide us with the proprietary protection or competitive advantages we are seeking. If we are unable to obtain and maintain patent protection for our technology and products, or if the scope of the patent protection obtained is not sufficient, our competitors could develop and commercialize technology and products similar or superior to ours, and our ability to successfully commercialize our technology and products may be adversely affected.

With respect to patent rights, we do not know whether any of the pending patent applications for any of our discovered or licensed compounds will result in the issuance of patents that protect our technology or products, or if any of our issued patents will effectively prevent others from commercializing competitive technologies and products. Our pending applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. Further, the examination process may require us or our future potential licensor(s) to narrow the claims for our pending patent applications, which may limit the scope of patent protection that may be obtained if these applications issue. Because the issuance of a patent is not

conclusive as to its inventorship, scope, validity or enforceability, issued patents that we own or have licensed from third parties may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in the loss of patent protection, the narrowing of claims in such patents or the invalidity or unenforceability of such patents, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection for our technology and products. Protecting against the unauthorized use of our patented technology, trademarks and other intellectual property rights is expensive, difficult and may in some cases not be possible. In some cases, it may be difficult or impossible to detect third-party infringement or misappropriation of our intellectual property rights, even in relation to issued patent claims, and proving any such infringement may be even more difficult.

We could be required to incur significant expenses to strengthen our intellectual property rights, and our intellectual property rights may be inadequate to protect our competitive position.

The patent prosecution process is expensive and time-consuming, and we or our future potential licensors may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we or our future potential licensors will fail to identify patentable aspects of inventions made in the course of our development and commercialization activities before it is too late to obtain patent protection on them. Further, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours. We expect to seek extensions of patent terms in the United States and, if available, in other countries where we are prosecuting patents. In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent term extension of up to five years beyond the expiration of the patent. However, the applicable authorities, including the FDA in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. The laws of foreign countries may not protect our rights to the same extent as the laws of the United States, and these foreign laws may also be subject to change. For example, methods of treatment and manufacturing processes may not be patentable in certain jurisdictions. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing or in some cases not at all. Therefore we cannot be certain that we or our licensors were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we or our licensors were the first to file for patent protection of such inventions.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. In particular, under the Leahy-Smith Act, the United States transitioned in March 2013 to a "first to file" system in which the first inventor to file a patent application will be entitled to the patent. Third parties are allowed to submit prior art before the issuance of a patent by the U.S. Patent and Trademark Office, or the USPTO, and may become involved in opposition, derivation, reexamination, inter-partes review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, which could adversely affect our competitive position.

The USPTO is currently developing regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, did not become effective until March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the

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enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, results of operations, financial condition and cash flows and future prospects.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submissions, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our future potential licensors fail to maintain the patents and patent applications covering AQX-1125 or our future product candidates, our competitive position would be adversely affected.

We may be subject to claims by third parties asserting that our employees or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Many of our employees, including our senior management, were previously employed at universities or at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Some of these employees, including each member of our senior management, executed proprietary rights, non-disclosure and non-competition agreements, in connection with such previous employment. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we, or these employees, have used or disclosed confidential information or intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. We are not aware of any threatened or pending claims related to these matters or concerning the agreements with our senior management, but in the future litigation may be necessary to defend against such claims. If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or sustain damages. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to seeking patents for some of our technology and products, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, CMOs, consultants, advisors and other third parties. We also generally enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts both within and outside the United States may be less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position.

Although we expect all of our employees to assign their inventions to us, and all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information or technology to enter into confidentiality agreements, we cannot provide any assurances that all such agreements have been duly executed or that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and

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techniques. Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating the trade secret. In addition, others may independently discover our trade secrets and proprietary information. For example, the FDA, as part of its Transparency Initiative, is currently considering whether to make additional information publicly available on a routine basis, including information that we may consider to be trade secrets or other proprietary information, and it is not clear at the present time how the FDA's disclosure policies may change in the future, if at all.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on AQX-1125 and our future product candidates throughout the world would be prohibitively expensive. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we and our licensors or collaborators may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products, and may export otherwise infringing products to territories where we have patent protection, but where enforcement is not as strong as that in the United States. These products may compete with our products in jurisdictions where we do not have any issued patents and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful.

The requirements for patentability may differ in certain countries, particularly developing countries. For example, unlike other countries, China has a heightened requirement for patentability, and specifically requires a detailed description of medical uses of a claimed drug. In India, unlike the United States, there is no link between regulatory approval of a drug and its patent status. Furthermore, generic or biosimilar drug manufacturers or other competitors may challenge the scope, validity or enforceability of our or our licensors' or collaborators' patents, requiring us or our licensors or collaborators to engage in complex, lengthy and costly litigation or other proceedings. Generic or biosimilar drug manufacturers may develop, seek approval for, and launch biosimilar versions of our products. In addition to India, certain countries in Europe and developing countries, including China, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we and our licensors or collaborators may have limited remedies if patents are infringed or if we or our licensors or collaborators are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our and our licensors' or collaborators' efforts to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license.

Intellectual property rights do not necessarily address all potential threats to any competitive advantage we may have.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

- ⁿ Others may be able to make compounds that are the same as or similar to AQX-1125 or our future product candidates but that are not covered by the claims of the patents that we own or have exclusively licensed.
- ⁿ We or any of our licensors or strategic partners might not have been the first to make the inventions covered by the issued patent or pending patent application that we own or have exclusively licensed.
- ⁿ We or any of our licensors or strategic partners might not have been the first to file patent applications covering certain of our inventions.
- ⁿ Others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights.

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- ⁿ It is possible that our pending patent applications will not lead to issued patents.
- ⁿ Issued patents that we own or have exclusively licensed may not provide us with any competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges by our competitors.
- ⁿ Our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets.
- ⁿ We may not develop additional proprietary technologies that are patentable.
- ⁿ The patents of others may have an adverse effect on our business.

Risks Related to This Offering and Ownership of Our Common Stock

We do not know whether an active, liquid and orderly trading market will develop for our common stock or what the market price of our common stock will be and as a result it may be difficult for you to sell your shares of our common stock.

Prior to this offering there has been no market for shares of our common stock. An active trading market for our shares may never develop or be sustained following this offering. The initial public offering price for our common stock will be determined through negotiations with the underwriters, and the negotiated price may not be indicative of the market price of our common stock after this offering. The market value of our common stock may decrease from the initial public offering price. As a result of these and other factors, you may be unable to resell your shares of our common stock at or above the initial public offering price. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. The lack of an active market may also reduce the fair market value of your shares. Further, an inactive market may also impair our ability to raise capital by selling shares of our common stock and may impair our ability to enter into collaborations or acquire companies or products by using our shares of common stock as consideration. The market price of our stock may be volatile, and you could lose all or part of your investment.

The trading price of our common stock following this offering is likely to be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. In addition to the factors discussed in this "Risk Factors" section and elsewhere in this prospectus, these factors include:

- ⁿ the success of competitive products or technologies;
- ⁿ regulatory actions with respect to our products or our competitors' products;
- ⁿ actual or anticipated changes in our growth rate relative to our competitors;
- ⁿ announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- ⁿ results of clinical trials, including both safety and efficacy, of AQX-1125 or any of our future product candidates or those of our competitors;
- ⁿ regulatory or legal developments in the United States and other countries;
- ⁿ developments or disputes concerning patent applications, issued patents or other proprietary rights;
- ⁿ the recruitment or departure of key personnel;
- ⁿ the level of expenses related to AQX-1125 or any of our future product candidates or clinical development programs;
- ⁿ the results of our efforts to in-license or acquire additional product candidates or products;
- ⁿ actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- ⁿ variations in our financial results or those of companies that are perceived to be similar to us;
- ⁿ fluctuations in the valuation of companies perceived by investors to be comparable to us;
- ⁿ share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- ⁿ announcement or expectation of additional financing efforts;
- ⁿ sales of our common stock by us, our insiders or our other stockholders;

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- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors; and
- general economic, industry and market conditions.

In addition, the stock market in general, and pharmaceutical and biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. The realization of any of these risks or any of a broad range of other risks, including those described in this "Risk Factors" section and elsewhere in this prospectus, could have a dramatic and material adverse impact on the market price of our common stock.

We may be subject to securities litigation, which is expensive and could divert management attention.

The market price of our common stock may be volatile, and in the past companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Prior to this offering, our executive officers, directors, director nominees, holders of 5% or more of our capital stock and their respective affiliates together beneficially owned approximately 96.2% of our voting stock and, upon consummation of this offering, that same group will together hold approximately % of our outstanding voting stock, assuming no exercise of the underwriters' option to purchase additional shares of common stock, no exercise of outstanding options and after giving effect to the issuance of shares in this offering. However, certain of our directors, holders of 5% or more of our capital stock and their respective affiliates, including certain affiliates of our directors, have indicated an interest in purchasing up to an aggregate of \$ million of shares of common stock in this offering, or shares at an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus. If these directors, holders of 5% or more of our capital stock and their respective affiliates purchase all such shares of common stock in this offering, our executive officers, directors, director nominees holders, of 5% or more of our capital stock and their respective affiliates would beneficially own % of our outstanding voting stock, assuming no exercise of the underwriters' option to purchase additional shares of common stock, no exercise of outstanding options and after giving effect to the issuance of shares in this offering. These stockholders may be able to determine the outcome of all matters requiring stockholder approval. For example, these stockholders may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interest as one of our stockholders. The interests of this group of stockholders may not always coincide with your interests or the interests of other stockholders and they may act in a manner that advances their best interests and not necessarily those of other stockholders, including seeking a premium value for their common stock, and might affect the prevailing market price for our common stock.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

The initial public offering price is substantially higher than the net tangible book value per share of our common stock. Investors purchasing common stock in this offering will pay a price per share that substantially exceeds the book value of our tangible assets after subtracting our liabilities. As a result, investors purchasing common stock in this offering will incur immediate dilution of \$ per share, based on an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover of this prospectus. Further, investors purchasing common stock in this offering will contribute approximately % of the total amount invested by stockholders since our inception, but will own, as a result of such investment, only approximately % of the shares of common stock outstanding immediately following this offering.

The exercise of any of our outstanding options would result in additional dilution. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation. Further, because we may need to raise additional capital to

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fund our clinical development programs, we may in the future sell substantial amounts of common stock or securities convertible into or exchangeable for common stock. These future issuances of equity or equity-linked securities, together with the exercise of outstanding options and any additional shares issued in connection with acquisitions, if any, may result in further dilution to investors.

We are an “emerging growth company” as that term is used in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and we intend to take advantage of reduced disclosure and governance requirements applicable to emerging growth companies, which could result in our common stock being less attractive to investors and adversely affect the market price of our common stock or make it more difficult to raise capital as and when we need it.

We are an “emerging growth company” as that term is used in the JOBS Act, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved and exemptions from any rules that the Public Company Accounting Oversight Board may adopt requiring mandatory audit firm rotation or a supplement to the auditor’s report on the financial statements. We currently intend to take advantage of some, but not all, of the reduced regulatory and reporting requirements that will be available to us under the JOBS Act, so long as we qualify as an “emerging growth company.” For example, so long as we qualify as an “emerging growth company,” we may elect not to provide you with certain information, including certain financial information and certain information regarding compensation of our executive officers, that we would otherwise have been required to provide in filings we make with the Securities and Exchange Commission, or SEC, which may make it more difficult for investors and securities analysts to evaluate our company. We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company, which in certain circumstances could be for up to five years. See the section of this prospectus captioned “Prospectus Summary—Our Corporate Information.”

Because of the exemptions from various reporting requirements provided to us as an “emerging growth company” we may be less attractive to investors and it may be difficult for us to raise additional capital as and when we need it. Investors may be unable to compare our business with other companies in our industry if they believe that our financial accounting is not as transparent as other companies in our industry. If we are unable to raise additional capital as and when we need it, our business, results of operations, financial condition and cash flows and future prospects may be materially and adversely affected.

If we fail to maintain an effective system of internal control over financial reporting in the future, we may not be able to accurately report our business, results of operations, financial condition and cash flows and future prospects, which may adversely affect investor confidence in us and, as a result, the value of our common stock.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal controls for financial reporting and disclosure controls and procedures. Commencing with our annual report on Form 10-K for the year ending December 31, 2014, we will be required, under Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting that results in more than a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented or detected on a timely basis. Section 404 of the Sarbanes-Oxley Act also generally requires an attestation from our independent registered public accounting firm on the effectiveness of our internal control over financial reporting. However, for as long as we remain an emerging growth company as defined in the JOBS Act, we intend to take advantage of the exemption permitting us not to comply with the independent registered public accounting firm attestation requirement.

Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge, and

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compile the system and process documentation necessary to perform the evaluation needed to comply with Section 404. We may not be able to complete our evaluation, testing and any required remediation in a timely fashion. In connection with the audit of the combined financial statements of Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada as of December 31, 2012 and December 31, 2011, and for the years then ended and for the period from December 26, 2003 (inception) to December 31, 2012, included in this prospectus and registration statement, we identified certain significant deficiencies in our internal controls over financial reporting. A "significant deficiency" is a deficiency, or a combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of our financial reporting, including the audit committee of the board of directors. During the evaluation and testing process, if we fail to remediate the significant deficiencies identified, fail to identify and to remediate any significant deficiencies or material weaknesses that may be identified in the future, or encounter problems or delays in the implementation of internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting once that firm begins its Section 404 reviews, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by the NASDAQ Stock Market, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon consummation of this offering, we will become subject to the periodic reporting requirements of the Exchange Act of 1934, as amended, or the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company, and these expenses may increase even more after we are no longer an "emerging growth company." We will be subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Protection Act, as well as rules adopted, and to be adopted, by the SEC and NASDAQ Stock Market. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, we expect these rules and regulations to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. We estimate that we will incur approximately \$2.0 to \$3.0 million of incremental costs per year associated with being a publicly traded company, although it is possible that our actual incremental costs will be higher than we currently estimate. The increased costs will increase our combined net loss. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the sufficient coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make

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it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of any future debt agreements may preclude us from paying dividends. Under the SVB debt facility, AQXP Canada is not permitted to make any cash dividends or distributions. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. After this offering, we will have outstanding shares of common stock based on the number of shares outstanding as of September 30, 2013. This includes the shares that we are selling in this offering, which may be resold in the public market immediately without restriction, unless purchased by our affiliates. Of the remaining shares, shares of our common stock (or shares assuming certain of our existing stockholders, including certain of our directors, who have indicated an interest in purchasing up to an aggregate of \$ million of shares of our common stock in this offering, or shares at an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, purchase all of the shares they have indicated an interest in purchasing in this offering), will be restricted as a result of securities laws or lock-up agreements but will be able to be sold after the offering as described in the "Shares Eligible for Future Sale" section of this prospectus. Moreover, after this offering, holders of an aggregate of shares of our common stock will have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates and the lock-up agreements described in the "Underwriting" section of this prospectus.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We expect that significant additional capital will be needed in the future to continue our planned operations. To raise capital, we may sell substantial amounts of common stock or securities convertible into or exchangeable for common stock. These future issuances of common stock or common stock-related securities, together with the exercise of outstanding options and any additional shares issued in connection with acquisitions, if any, may result in material dilution to our investors. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to those of holders of our common stock, including shares of common stock sold in this offering.

Pursuant to our equity incentive plans, our compensation committee is authorized to grant equity-based incentive awards to our directors, executive officers and other employees and service providers, including officers, employees and service providers of our subsidiaries and affiliates. Effective immediately prior to the listing of our common stock on the NASDAQ Global Market, we will adopt a 2014 Equity Incentive Plan. Future option grants and issuances of common stock under our 2014 Equity Incentive Plan may have an adverse effect on the market price of our common stock.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Although we currently intend to use the net proceeds from this offering in the manner described in "Use of Proceeds" elsewhere in this prospectus, our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the market price of our common stock to decline and delay the development of AQX-1125 and our future product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value. If we

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do not invest the net proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause the price of our common stock to decline.

Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation, or certificate of incorporation, and amended and restated bylaws, or bylaws, that will become effective in connection with consummation of this offering, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders, or remove our current management. These include provisions that will:

- permit our board of directors to issue up to _____ shares of preferred stock, with any rights, preferences and privileges as they may designate;
- provide that all vacancies on our board of directors, including as a result of newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide advance notice in writing, and also specify requirements as to the form and content of a stockholder's notice;
- not provide for cumulative voting rights, thereby allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election; and
- provide that special meetings of our stockholders may be called only by the board of directors or by such person or persons requested by a majority of the board of directors to call such meetings.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, who are responsible for appointing the members of our management. Because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may discourage, delay or prevent someone from acquiring us or merging with us whether or not it is desired by or beneficial to our stockholders. Under Delaware law, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other things, the board of directors has approved the transaction. Any provision of our certificate of incorporation or bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us, or our business. Securities and industry analysts do not currently, and may never, publish research on our company. If no securities or industry analysts commence coverage of our company, the trading price for our stock would likely be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future financial condition, business strategy and plans and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “believe,” “will,” “may,” “estimate,” “continue,” “anticipate,” “intend,” “should,” “plan,” “might,” “approximately,” “expect,” “predict,” “could,” “potentially” or the negative of these terms or other similar expressions. Forward-looking statements appear in a number of places throughout this prospectus and include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things, our ongoing and planned preclinical development and clinical trials, the timing of and our ability to make regulatory filings and obtain and maintain regulatory approvals for AQX-1125 and our future product candidates, our intellectual property position, the degree of clinical utility of AQX-1125 and our future product candidates, particularly in specific patient populations, our ability to develop commercial functions, expectations regarding clinical trial data, our results of operations, cash needs, spending of the proceeds from this offering, financial condition, liquidity, prospects, growth and strategies, the industry in which we operate and the trends that may affect the industry or us.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions described in the section of this prospectus captioned “Risk Factors” and elsewhere in this prospectus, regarding, among other things:

- ⁂ our expected uses of the net proceeds to us from this offering;
- ⁂ the success and timing of our preclinical studies and clinical trials;
- ⁂ our ability to enroll patients in our clinical trials at the pace that we project;
- ⁂ the effectiveness of our clinical trial designs using EXACT-PRO as the primary endpoint;
- ⁂ the size and growth of the potential markets for AQX-1125 or any future product candidates and our ability to serve those markets;
- ⁂ our ability to obtain and maintain regulatory approval of AQX-1125 or any future product candidates, and the labeling under any approval we may obtain;
- ⁂ our expectations regarding the potential safety, efficacy or clinical utility of AQX-1125 or any future product candidates;
- ⁂ our plans and ability to develop and commercialize AQX-1125 or any future product candidates;
- ⁂ the rate and degree of market acceptance of our future products;
- ⁂ our reliance on third parties to conduct our preclinical studies and clinical trials;
- ⁂ regulatory developments in the United States and foreign countries;
- ⁂ the successful development of our commercialization capabilities, including sales and marketing capabilities;
- ⁂ our reliance on third-party contract manufacturers to manufacture and supply AQX-1125 or any future product candidates for us;
- ⁂ our ability to retain and recruit key scientific or management personnel or to retain our executive officers;
- ⁂ our ability to obtain and maintain intellectual property protection for AQX-1125 or any future product candidates and our proprietary technology;
- ⁂ our estimates of our expenses, ongoing losses, future revenue, capital requirements and our needs for or ability to obtain additional financing;
- ⁂ our ability to identify, develop, acquire and in-license any future product candidates;
- ⁂ recently enacted and future legislation regarding the healthcare system;
- ⁂ the performance of third parties, including contract research organizations and third-party manufacturers; and
- ⁂ developments and projections relating to our competitors or our industry.

These risks are not exhaustive. Other sections of this prospectus may include additional factors that could adversely impact our business and financial performance. Moreover, we operate in a very competitive and rapidly changing

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environment. New risk factors emerge from time to time, and it is not possible for our management to predict all risk factors nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in, or implied by, any forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. We cannot assure you that the events and circumstances reflected in the forward-looking statements will be achieved or occur. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance and achievements may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus or to conform these statements to actual results or to changes in our expectations.

You should also read carefully the factors described in the section of this prospectus captioned "Risk Factors" and elsewhere to better understand the risks and uncertainties inherent in our business and underlying and forward-looking statements.

This prospectus also contains industry, market and competitive position data from our own internal estimates and research as well as industry and general publications and research surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe that each of these studies and publications is reliable, we have not independently verified any third-party information.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of shares of our common stock in this offering will be approximately \$ _____ million, assuming an initial public offering price of \$ _____ per share, which is the midpoint of the range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise in full their option to purchase additional shares of common stock, we estimate that our net proceeds will be approximately \$ _____ million, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A \$1.00 increase (decrease) in the assumed initial public offering price of \$ _____ per share would increase (decrease) the net proceeds to us from this offering by \$ _____, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us. Each increase or decrease of shares by _____ shares in the number of shares offered by us would increase or decrease the net proceeds to us from this offering by approximately \$ _____, assuming that the assumed initial price to public remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We do not expect that a change in the initial price to the public or the number of shares by these amounts would have a material effect on uses of the proceeds from this offering, although it may accelerate the time at which we will need to seek additional capital.

The principal purposes of this offering are to obtain additional capital to support our operations, establish a public market for our common stock and to facilitate our future access to the public capital markets. We currently expect to use the net proceeds from this offering for the following purposes:

- approximately \$ _____ million to conduct additional Phase 2 clinical trials to evaluate AQX-1125 as a potential treatment in indications beyond COPD and BPS/IC;
- approximately \$ _____ million to conduct additional toxicology studies, dose ranging clinical trials, large batch manufacturing and process development, all in preparation for potential Phase 3 clinical development of AQX-1125;
- approximately \$ _____ million to advance one or more of our next generation SHIP1 activator compounds through preclinical development in preparation for a potential IND filing; and
- the remainder to fund working capital, capital expenditures and other general corporate purposes.

The expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures depend on numerous factors, including the progress of our preclinical development efforts, the ongoing status of and results of our clinical trials and other studies and any unforeseen cash needs. As a result, our management will have broad discretion in the application of the net proceeds, and investors will be relying on the judgment of our management regarding the application of the net proceeds of this offering. Although we may use a portion of the net proceeds from the offering for the acquisition or licensing, as the case may be, of product candidates, technologies, compounds, other assets or complementary businesses, we have no current understandings, agreements or commitments to do so. Pending these uses, we intend to invest the net proceeds from this offering in interest-bearing, investment-grade securities.

Although it is difficult to predict future liquidity requirements, we believe that the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities will fund our operations into the _____ quarter of 201_____.

DIVIDEND POLICY

We have never declared or paid dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support operations and to finance the growth and development of our business. We do not intend to declare or pay cash dividends on our capital stock in the foreseeable future. As a result, you will likely need to sell your shares of common stock to realize a return on your investment, and you may not be able to sell your shares at or above the price you paid for them. Any future determination to pay dividends will be made at the discretion of our board of directors subject to applicable laws, and will depend upon, among other factors, our results of operations, financial condition, contractual restrictions and capital requirements. Our future ability to pay cash dividends on our stock may be limited by the terms of any future debt or preferred securities.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of September 30, 2013 on:

- ⁿ an actual basis;
- ⁿ a pro forma basis to reflect (i) the issuance of our common stock upon the exchange of all of the outstanding common exchangeable shares of AQXP Canada, (ii) the issuance of our convertible preferred stock upon the exchange of all of the outstanding exchangeable preferred shares and (iii) the conversion of all of the outstanding shares of our convertible preferred stock including the convertible preferred stock issuable upon the exchange of all of the outstanding exchangeable preferred shares of AQXP Canada; and
- ⁿ a pro forma as adjusted basis to reflect (i) the sale of _____ shares of common stock in this offering at the initial public offering price of \$ _____ per share, which is the midpoint of the range set forth on the cover page of this prospectus, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, as if the sale of the shares in this offering had occurred on September 30, 2013 and (ii) the term loan facility with SVB AQXP Canada entered into on October 23, 2013 for up to \$4.0 million, of which \$2.5 million was advanced on October 30, 2013.

The information in this table is illustrative only and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with the sections of this prospectus captioned "Selected Combined Financial Data," "Description of Capital Stock" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus.

	SEPTEMBER 30, 2013		
	ACTUAL	PRO FORMA	PRO FORMA AS ADJUSTED ⁽¹⁾
Cash and cash equivalents	\$ 15,867,885	\$ 15,867,885	\$
Long-term debt	—	—	
Redeemable Convertible Preferred Stock			
AQXP Canada, Series A exchangeable preferred shares, no par value—authorized, unlimited as of September 30, 2013; issued and outstanding, 15,187,683 as of September 30, 2013, and 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted	\$ 13,078,888	\$ —	\$
Aquinox USA, Series A preferred stock, \$0.000001 par value— authorized, 27,914,951 as of September 30, 2013, and 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted; issued and outstanding, 12,727,628 as of September 30, 2013, and 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted	10,946,254	—	
AQXP Canada, Series B exchangeable preferred shares, no par value—authorized, unlimited as of September 30, 2013; issued and outstanding, 15,237,508 as of September 30, 2013, 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted	10,480,142	—	
Aquinox USA, Series B preferred stock, \$0.000001 par value—authorized, 45,454,535 as of September 30, 2013, and 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted; issued and outstanding, 30,217,027 as of September 30, 2013, and 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted	20,691,549	—	
AQXP Canada, Series C exchangeable preferred shares, no par value—authorized, unlimited as of September 30, 2013, September 30, 2013 Pro Forma, and September 30, 2013 Pro Forma, As Adjusted; issued and outstanding, 7,272,701 as of September 30, 2013, and 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted	3,724,960	—	

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	SEPTEMBER 30, 2013		
	ACTUAL	PRO FORMA	PRO FORMA AS ADJUSTED (1)
Aquinox USA, Series C preferred stock, \$0.000001 par value—authorized, 45,793,738 as of September 30, 2013, and 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted; issued and outstanding, 25,454,500 as of September 30, 2013, 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted	12,975,829	—	
Total redeemable convertible preferred stock	71,897,622	—	
Common stock			
AQXP Canada, new common share, no par value; authorized, 10 as of all dates presented; issued and outstanding, 1 as of all dates presented	—	—	
AQXP Canada, exchangeable common stock, no par value; authorized, unlimited as of all dates presented; issued and outstanding 5,793,776 as of September 30, 2013, 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted	534,729	—	
AQXP Canada, special voting common shares no par value; authorized, unlimited as of all dates presented; issued and outstanding 111,890,462 as of September 30, 2013, 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted	—	—	
Aquinox USA, special voting common stock, \$0.000001 par value; authorized, 69,027,955 as of September 30, 2013, 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted; issued and outstanding 43,491,667 as of September 30, 2013, 0 as of September 30, 2013 Pro Forma and September 30, 2013 Pro Forma, As Adjusted	44	—	
Aquinox USA, common stock, \$0.000001 par value - authorized, 139,266,037 as of September 30, 2013 and as of September 30, 2013 Pro Forma, and as of September 30, 2013 Pro Forma, As Adjusted; issued and outstanding, September 30, 2013, 111,890,463 as of September 30, 2013 Pro Forma and as of September 30, 2013 Pro Forma, As Adjusted	—	72	
Additional paid-in capital	—	72,432,317	
Deficit accumulated in the development stage	(61,041,518)	(58,585,314)	
Total stockholders' (deficit) equity	(60,506,745)	13,847,075	
Total capitalization	\$ 11,390,877	\$ 13,847,075	\$

- (1) A \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share would increase (decrease) the pro forma as adjusted stockholders' equity by \$ and our total capitalization by \$, or \$ if the underwriters exercise their option to purchase additional shares in full, assuming the number of shares set forth on the cover page of this prospectus remains the same and after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us. Each increase or decrease of shares in the number of shares offered by us would increase or decrease cash and cash equivalents, additional paid in capital, total stockholders' equity and total capitalization by approximately \$, assuming that the assumed initial price to public remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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The number of shares of our common stock to be outstanding after this offering is based on 111,890,463 shares of common stock outstanding as of September 30, 2013 and excludes:

- 9,872,184 shares of our common stock issuable upon the exercise of options outstanding under our 2006 Plan at a weighted average exercise price of \$0.3163 per share;
- shares of or common stock reserved for issuance under the 2014 Plan, which will become effective upon completion of this offering, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2014 Plan; and
- 339,287 shares of our common stock issuable upon the exercise of outstanding common stock warrants at a weighted average exercise price of \$0.01 per share.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the price per share of our common stock in this offering and the pro forma as adjusted net tangible book value per share of our common stock upon closing of this offering. Net tangible book value per share of our common stock is determined at any date by subtracting our total liabilities from the total book value of our tangible assets and dividing the difference by the number of shares of common stock deemed to be outstanding at that date.

Our historical net tangible book deficit as of September 30, 2013 was \$ _____ million, or \$ _____ per share, which does not give effect to:

- (1) the exchange of all of the common exchangeable and exchangeable preferred shares of AQXP Canada into our securities as described in the section of this prospectus captioned "Description of Capital Stock—Exchangeable Shares"; and
- (2) the conversion of all outstanding shares of our preferred stock into shares of our common stock immediately prior to the completion of this offering.

Our pro forma net tangible book deficit as of September 30, 2013 was \$ _____ million, or \$ _____ per share, which gives effect to:

- (1) the exchange of all of the common exchangeable and exchangeable preferred shares of AQXP Canada into our securities as described in the section of this prospectus captioned "Description of Capital Stock—Exchangeable Shares"; and
- (2) the conversion of all outstanding shares of our preferred stock into shares of our common stock immediately prior to the completion of this offering.

Investors participating in this offering will incur immediate and substantial dilution. After giving effect to the receipt of approximately \$ _____ million of estimated net proceeds (after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us) from our sale of shares of common stock in this offering at an assumed offering price of \$ _____ per share, which is the midpoint of the range set forth on the cover page of this prospectus, our pro forma as adjusted net tangible book value as of September 30, 2013 would have been \$ _____ million, or \$ _____ per share. This amount represents an immediate increase in net tangible book value of \$ _____ per share to existing stockholders and an immediate dilution of \$ _____ per share to new investors purchasing shares of common stock in the offering.

The following table illustrates this substantial and immediate per share dilution to new investors.

Assumed initial public offering price per share (the midpoint of the range set forth on the cover page of this prospectus)		\$ _____
Historical net tangible book deficit per share as of September 30, 2013	\$ _____	
Pro forma increase in net tangible book value per share attributable to pro forma transactions and other adjustments described above	\$ _____	
Pro forma net tangible book value per share at September 30, 2013	\$ _____	
Pro forma increase in net tangible book value per share attributable to new investors participating in this offering	\$ _____	
Pro forma as adjusted net tangible book value per share after giving effect to this offering		\$ _____
Dilution in pro forma as adjusted net tangible book value per share to new investors		\$ _____

A \$1.00 increase (decrease) in the assumed initial public offering price of \$ _____ per share, which is the midpoint of the range set forth on the cover page of this prospectus, would increase (decrease) our pro forma as adjusted net tangible book value by \$ _____, the pro forma as adjusted net tangible book value per share by \$ _____ per share

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and the dilution per share to new investors in this offering by \$ _____, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us.

We may also increase or decrease the number of shares we are offering. An increase of 1.0 million shares in the number of shares offered by us would increase our pro forma as adjusted net tangible book value (deficit) as of September 30, 2013, by approximately \$ _____ million or by \$ _____ per share and the dilution per share to new investors purchasing common stock in this offering by \$ _____, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Conversely, a decrease of 1.0 million shares in the number of shares offered by us would decrease our pro forma as adjusted net tangible book value (deficit) as of September 30, 2013, by approximately \$ _____ million or by \$ _____ per share and the dilution per share to new investors purchasing common stock in this offering by \$ _____, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise in full their option to purchase additional shares of common stock the pro forma as adjusted net tangible book value per share would be \$ _____ per share, which amount represents an immediate increase in pro forma net tangible book value of \$ _____ per share of our common stock to existing stockholders and an immediate dilution in net tangible book value of \$ _____ per share of our common stock to new investors purchasing shares of common stock in this offering.

The following table summarizes, as of September 30, 2013:

- the total number of shares of common stock purchased from us by our existing stockholders and by new investors purchasing shares in this offering;
- the total consideration paid to us by our existing stockholders and by new investors purchasing common stock in this offering, assuming an initial public offering of \$ _____ per share, which is the midpoint of the range set forth on the cover page of this prospectus (before deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us in connection with this offering); and
- the average price per share paid by existing stockholders and by new investors purchasing shares in this offering.

	SHARES PURCHASED		TOTAL CONSIDERATION		AVERAGE PRICE PER SHARE
	NUMBER	PERCENT	AMOUNT	PERCENT	
Existing stockholders		%	\$	%	\$
New investors					
Total		100%	\$	100%	\$

The tables and calculations above are based on 111,890,463 shares of our common stock outstanding as of September 30, 2013 and gives effect to the pro forma transactions above, but excludes:

- 9,872,184 shares of our common stock issuable upon the exercise of options outstanding under our 2006 Plan at a weighted average exercise price of \$0.3163 per share;
- _____ shares of our common stock reserved for issuance under our 2014 Plan, which will become effective upon completion of this offering, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2014 Plan; and
- 339,287 shares of our common stock issuable upon the exercise of outstanding common stock warrants at a weighted average exercise price of \$0.01 per share.

A \$1.00 increase (decrease) in the assumed initial public offering price of \$ _____ per share would increase (decrease) total consideration paid by existing stockholders, total consideration paid by new investors and the average price per share by \$ _____, \$ _____ and \$ _____, respectively, assuming the number of shares offered by

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us, as set forth on the cover page of this prospectus, remains the same and without deducting the estimated underwriting discounts and commissions and estimated expenses payable by us.

The foregoing table does not reflect the exercise by the underwriters of their option to purchase additional shares of common stock. If the underwriters exercise their option to purchase additional shares in full, the number of shares held by the existing stockholders after this offering would be reduced to _____, or _____% of the total number of shares of our common stock outstanding after this offering, and the number of shares held by new investors would increase to _____, or _____%, of the total number of shares of our common stock outstanding after this offering.

The shares reserved for future issuance under our 2014 Plan will be subject to automatic annual increases in accordance with the terms of the plan. To the extent that options are exercised, new options are issued under our equity incentive plans, or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering.

In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

SELECTED COMBINED FINANCIAL DATA

You should read the following selected combined financial data in conjunction with the sections of this prospectus captioned “Use of Proceeds,” “Capitalization,” “Summary Combined Financial Data,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” “Description of Capital Stock” and our combined financial statements and related notes, all included elsewhere in this prospectus.

Financial Statement Presentation

In 2007, AQXP Canada implemented a restructuring plan to facilitate investment in either AQXP Canada or Aquinox Pharmaceuticals (USA) Inc. Immediately prior to the completion of this offering, (i) each common exchangeable share of AQXP Canada will be transferred to Aquinox Pharmaceuticals (USA) Inc. in exchange for one share of common stock of Aquinox Pharmaceuticals (USA) Inc. and (ii) each exchangeable preferred share of AQXP Canada will be transferred to Aquinox Pharmaceuticals (USA) Inc. in exchange for one share of the corresponding series of preferred stock of Aquinox Pharmaceuticals (USA) Inc. (which, in turn, will be immediately converted into one share of common stock of Aquinox Pharmaceuticals (USA) Inc.). Following completion of these transactions, AQXP Canada will be a wholly owned subsidiary of Aquinox Pharmaceuticals (USA) Inc. Management has determined that AQXP Canada and Aquinox Pharmaceuticals (USA) Inc. are entities under common control as each of AQXP Canada and Aquinox Pharmaceuticals (USA) Inc. is owned beneficially by identical shareholders and as such the basis of presentation of the financial statements in this prospectus is on a combined basis. When, just prior to or contemporaneously with an initial public offering, a combination of companies under common control takes place, it is appropriate to present combined historical financial statements for all periods shown. The combined financial statements reflect the operations of both Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada and the historical results of Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada since inception. All intercompany transactions have been eliminated.

We have derived the combined statements of operations data for the fiscal years ended December 31, 2011 and December 31, 2012 and the combined balance sheet data as of December 31, 2011 and December 31, 2012 from our audited combined financial statements appearing elsewhere in this prospectus. The combined statements of operations data for the year to date period ended September 30, 2012 and September 30, 2013 and combined balance sheet data as of September 30, 2013 have been derived from our unaudited interim combined financial statements appearing elsewhere in this prospectus. We have prepared the unaudited combined financial statements on the same basis as the audited combined financial statements. Our historical results are not necessarily indicative of the results that should be expected in the future, and our interim results are not necessarily indicative of the results that should be expected for the full year or any other period.

Combined Statement of Operations Data

	YEAR ENDED DECEMBER 31, 2011	YEAR ENDED DECEMBER 31, 2012	DECEMBER 26, 2003 (INCEPTION) TO DECEMBER 31, 2012	NINE MONTH PERIOD ENDED SEPTEMBER 30, 2012	NINE MONTH PERIOD ENDED SEPTEMBER 30, 2013	DECEMBER 26, 2003 (INCEPTION) TO SEPTEMBER 30, 2013
Operating expenses						
Research and development	\$ 8,578,596	\$ 5,914,611	\$ 33,759,261	\$ 5,093,292	\$ 4,802,078	\$ 38,561,338
General and administrative	1,725,073	1,635,623	7,729,683	1,085,119	1,209,939	8,939,622
Amortization	125,598	130,784	551,601	99,823	45,198	596,799
Total operating expenses	<u>\$ 10,429,267</u>	<u>\$ 7,681,018</u>	<u>\$ 42,040,545</u>	<u>\$ 6,278,234</u>	<u>\$ 6,057,215</u>	<u>\$ 48,097,759</u>
Net loss and comprehensive loss incurred in the development stage	<u>\$ (10,507,008)</u>	<u>\$ (7,714,198)</u>	<u>\$ (38,545,538)</u>	<u>\$ (6,288,801)</u>	<u>\$ (5,189,256)</u>	<u>\$ (43,734,793)</u>
Total loss attributable to common stockholders	<u>\$ (14,319,278)</u>	<u>\$ (12,137,948)</u>	<u>\$ (52,558,728)</u>	<u>\$ (9,606,515)</u>	<u>\$ (9,660,864)</u>	<u>\$ (62,219,591)</u>
Basic and diluted loss per common stock	<u>\$ (2.47)</u>	<u>\$ (2.09)</u>	<u>\$ (9.07)</u>	<u>\$ (1.66)</u>	<u>\$ (1.67)</u>	<u>\$ (10.74)</u>
Basic and diluted weighted average common stock outstanding	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>
Net loss attributable to common stockholders—pro forma		<u>\$ (7,668,750)</u>			<u>\$ (6,048,894)</u>	
Pro forma net loss per common stock: (1)						
Basic and diluted		<u>\$ (0.10)</u>			<u>\$ (0.05)</u>	
Weighted average shares outstanding used to compute pro forma net loss per common stock:						
Basic and diluted		<u>79,163,262</u>			<u>111,890,463</u>	

Combined Balance Sheet Data

	DECEMBER 31, 2011	DECEMBER 31, 2012	SEPTEMBER 30, 2013	PRO FORMA SEPTEMBER 30, 2013 (2)
Cash and cash equivalents	\$ 9,239,188	\$ 2,000,539	\$ 15,867,885	\$ 15,867,885
Working capital	8,878,478	1,678,695	13,881,976	13,881,976
Total assets	9,883,905	2,341,990	16,155,453	16,155,453
Warrant liabilities	—	—	221,450	221,450
Redemption option on preferred stock	—	—	974,742	—
Accrued tax payable on preferred stock	664,579	1,059,487	1,481,462	—
Redeemable convertible preferred stock	47,900,948	51,975,238	71,897,622	—
Total stockholders' (deficit) equity	(39,314,587)	(51,101,213)	(60,506,751)	13,847,075
Total liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity	\$ 9,883,905	\$ 2,341,990	\$ 16,155,453	\$ 16,155,453

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- (1) Pro forma basic and diluted net loss per share represents net loss attributable to common stock holders divided by the pro forma weighted-average shares of common stock outstanding. The pro forma weighted-average shares outstanding reflects the conversion of our redeemable convertible preferred stock into our common stock as though the conversion had occurred on the first day of the relevant period. See Note 11 of the accompanying notes to our combined financial statements
- (2) Pro forma balance sheet represent reflects the conversion that gives effect to the conversion of our redeemable convertible preferred stock into our common stock. This exchange will result in the redemption option on preferred stock, and the accrued tax payable on preferred stock being derecognized. The pro forma balance sheet excludes any impact of the term loan facility with SVB AQXP Canada entered into on October 23, 2013 for up to \$4.0 million, of which \$2.5 million was advanced on October 30, 2013. This has been reflected in our pro forma as adjusted information included in the section of this prospectus captioned "Summary Combined Financial Data."

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the section of this prospectus captioned "Selected Combined Financial Data" and our combined financial statements and related notes appearing elsewhere in this prospectus. Our combined financial statements have been prepared in accordance with accounting principles generally accepted in the United States, or GAAP. This discussion contains forward-looking statements that involve risks and uncertainties. As a result of many factors, such as those set forth under the sections of this prospectus captioned "Risk Factors" and "Special Note Regarding Forward-Looking Statements and Industry Data" and elsewhere in this prospectus, our actual results may differ materially from those anticipated in these forward-looking statements.

Overview

We are a clinical-stage pharmaceutical company discovering and developing novel drug candidates to treat inflammation and cancer. Our primary focus is anti-inflammatory product candidates targeting SHIP1, which is a key regulator of an important cellular signaling pathway in immune cells, known as the PI3K pathway. Our lead product candidate, AQX-1125, is a SHIP1 activator and has demonstrated broad anti-inflammatory activity. AQX-1125 has successfully completed three clinical trials dosed as a once daily oral product with over 100 subjects having received AQX-1125 to date. We are currently investigating AQX-1125 in two Phase 2 clinical trials, one for Chronic Obstructive Pulmonary Disease, or COPD, and one for Bladder Pain Syndrome/Interstitial Cystitis, or BPS/IC. COPD and BPS/IC are debilitating chronic inflammatory diseases affecting millions of people worldwide. For AQX-1125, we retain full worldwide rights and hold patents with terms through at least 2024.

We use a proprietary screening approach to discover new drug candidates that selectively target SHIP1 to modulate activated immune cells while minimizing their toxicity to normal cells. Our intellectual property covers SHIP1 as a target, the C2 binding domain for screening and the composition of matter for our compounds.

We have an extensive chemical library and several candidate lead compounds that target SHIP1. These compounds have both similar and distinct properties from AQX-1125. We believe AQX-1125 is the only SHIP1 activator currently in clinical trials and that no SHIP1 activator has yet received marketing approval as a treatment for disease in humans.

We commenced operations as 6175813 Canada Inc., a corporation formed in December 2003 under the Canada Business Corporations Act. We subsequently changed the name of such entity to Aquinox Pharmaceuticals Inc. We incorporated Aquinox Pharmaceuticals (USA) Inc., a corporation under the laws of the State of Delaware, in May 2007. Upon completion of the exchange of the common exchangeable and exchangeable preferred shares of AQXP Canada, and the redemption of certain other outstanding shares of AQXP Canada, as further described in the section of this prospectus captioned "Description of Capital Stock—Exchangeable Shares", AQXP Canada will be a wholly owned subsidiary of Aquinox Pharmaceuticals (USA) Inc. Our operations to date have included our organization and staffing, business planning, raising capital, in-licensing technology from research institutions, identifying potential product candidates, developing AQX-1125 and future product candidates, as well as undertaking preclinical studies and clinical trials of our product candidates.

Since commencing operations we have dedicated a significant portion of our resources to development efforts for our clinical-stage product candidate AQX-1125. We incurred research and development expenses of \$8.6 million and \$5.9 million during the years ended December 31, 2011 and 2012, respectively, and \$4.8 million during the nine months ended September 30, 2013. We anticipate that a significant portion of our operating expenses will continue to be related to research and development as we continue to advance our preclinical programs and our clinical-stage product candidates. We have funded our operations primarily through the sale of preferred stock and debt financing. As of December 31, 2012 and September 30, 2013, we had \$2.0 million and \$15.9 million in cash and cash equivalents, respectively.

Since inception, we have incurred significant operating losses. Our net losses were \$10.5 million and \$7.7 million for the years ended December 31, 2011 and 2012, respectively, and \$5.2 million for the nine months ended September 30, 2013. As of September 30, 2013, we had an accumulated deficit of \$61.0 million. We expect to

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incur significant expenses and operating losses for the foreseeable future as we continue the development and clinical trials of, and seek regulatory approval for, AQX-1125 and any future product candidates we advance to clinical development. If we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses. For example, we do not currently have the infrastructure for the sales, marketing, manufacture and distribution of any products. We may enter into licensing and co-promotion agreements with strategic or collaborative partners for the commercialization of our products in the United States and other territories, but have not currently entered into any such arrangements. To develop a commercial infrastructure, we would have to invest financial and management resources, some of which would have to be deployed prior to having any certainty of marketing approval.

Following consummation of this offering, we expect to incur additional costs associated with operating as a public company. Unless and until we generate sufficient revenue to be profitable, we will seek to fund our operations primarily through public or private equity or debt financings or other sources. Other additional financing may not be available to us on acceptable terms, or at all. Our failure to raise capital as and when needed could have a material adverse effect on our business, results of operations, financial condition and cash flows and future prospects.

Financial Operations Overview

Revenue

To date, we have not generated any revenue. In the future, we may generate revenue from a combination of product sales, license fees, milestone payments and royalties from the sale of products developed under licenses of our intellectual property. Our ability to generate revenue and become profitable depends on our ability to successfully commercialize or partner AQX-1125 and any product candidates we may advance in the future. We expect that any revenue we may generate will fluctuate from quarter to quarter as a result of the timing and amount of license fees, milestone and other payments, and the amount and timing of payments that we receive upon the sale of our products, to the extent any are successfully commercialized. If we fail to complete the development of AQX-1125 or any future product candidates we advance in a timely manner or obtain regulatory approval for them, our ability to generate future revenue, and our business, results of operations, financial condition and cash flows and future prospects would be materially adversely affected.

Operating Expenses

The following table summarizes our operating expenses for the years ended December 31, 2011 and 2012 and for the nine months ended September 30, 2012 and 2013:

	YEAR ENDED DECEMBER 31,	
	2011	2012
Research and development	\$ 8,578,596	\$ 5,914,611
General and administrative	1,725,073	1,635,623
Amortization	125,598	130,784
Total operating expenses	<u>\$ 10,429,267</u>	<u>\$ 7,681,018</u>

	NINE MONTHS ENDED SEPTEMBER 30,	
	2012	2013
Research and development	\$ 5,093,292	\$ 4,802,078
General and administrative	1,085,119	1,209,939
Amortization	99,823	45,198
Total operating expenses	<u>\$ 6,278,234</u>	<u>\$ 6,057,215</u>

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Research and Development Expenses

Since our inception, we have focused our resources on our research and development activities. Our research and development expenses consist primarily of costs incurred for the development of AQX-1125 and our future product candidates, which include:

- costs associated with research, development and regulatory activities;
- employee-related expenses, including salaries, benefits, travel and stock-based compensation expense;
- expenses incurred under agreements with CROs and investigative sites that conduct our clinical trials and preclinical studies;
- the cost of acquiring and manufacturing our products, for preclinical studies and clinical trials; and
- facilities, and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, amortization of equipment and leasehold improvements, insurance and supplies.

Research and development costs are expensed as incurred. License fees and milestone payments we make related to in-licensed products and technology are expensed if it is determined that they have no alternative future use. We record costs for some development activities, such as clinical trials, based on an evaluation of the progress to completion of specific tasks using data such as patient enrollment, clinical site activations or information provided to us by our vendors.

Research and development activities are central to our business model. In November 2012, following completion of early-stage lead compound identification and screening, we began to decrease our internal research efforts to focus our resources on clinical development and on outsourced research activities. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect to increase our research and development expenses for the foreseeable future as we initiate further clinical trials.

To date, our research and development expenses have related primarily to the development of AQX-1125. In the years ended December 31, 2011 and 2012 our research and development expenses were approximately \$8.6 million and \$5.9 million respectively, and for the nine months ended September 30, 2012 and 2013, were approximately \$5.1 million and \$4.8 million, respectively. From our inception through September 30, 2013, we have incurred approximately \$13.3 million in external costs related to the development of AQX-1125.

The following table summarizes our research and development expenses by functional area for the years ended December 31, 2011 and 2012:

	YEAR ENDED DECEMBER 31,	
	2011	2012
Clinical development	\$ 2,859,177	\$ 1,993,341
Personnel related	2,099,085	1,834,172
Manufacture and formulation	663,317	174,114
Preclinical research	1,603,371	871,755
Facility and overhead	1,252,411	843,578
Consulting	42,113	21,990
Stock-based compensation	59,122	175,661
Total research and development expenses	<u>\$ 8,578,596</u>	<u>\$ 5,914,611</u>

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The following table summarizes our research and development expenses by functional area for the nine months ended September 30, 2012 and 2013:

	NINE MONTHS ENDED SEPTEMBER 30,	
	2012	2013
Clinical development	\$ 2,023,810	\$ 2,202,407
Personnel related	1,434,102	931,689
Manufacture and formulation	64,978	1,002,556
Preclinical research	867,047	103,958
Facility and overhead	654,095	399,122
Consulting	13,021	34,687
Stock-based compensation	36,239	127,659
Total research and development expenses	<u>\$ 5,093,292</u>	<u>\$ 4,802,078</u>

It is difficult to determine with certainty the duration and completion costs of our current or future preclinical programs and clinical trials of AQX-1125 and any of our future product candidates we may advance, or if, when or to what extent we will generate revenue from the commercialization and sale of any of our product candidates that obtain regulatory approval. We may never succeed in achieving regulatory approval for any of our product candidates. The duration, costs and timing of clinical trials and development of our product candidates will depend on a variety of factors, including the uncertainties of future clinical trials and preclinical studies, uncertainties in clinical trial enrollment rate and significant and changing government regulation. In addition, the probability of success for each product candidate will depend on numerous factors, including competition, manufacturing capability and commercial viability. A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those that we currently anticipate will be required for the completion of clinical development of a product candidate, or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time with respect to the development of that product candidate. We will determine which programs to pursue and how much to fund each program in response to the scientific and clinical success of each product candidate, as well as an assessment of each product candidate's commercial potential.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and related costs for executive and other administrative personnel, including stock-based compensation and travel expenses. Other general and administrative expenses include facility-related costs, communication expenses and professional fees for legal, patent review, consulting and accounting services.

For the years ended December 31, 2011 and 2012, our general and administrative expenses totaled approximately \$1.7 million and \$1.6 million, respectively, and for the nine months ended September 30, 2012 and 2013, were \$1.1 million and \$1.2 million, respectively. We anticipate that our general and administrative expenses will increase in the future with the continued research and development and potential commercialization of AQX-1125 and any of our future product candidates and as we operate as a public company. These increases will likely include increased costs for insurance, costs related to the hiring of additional personnel, increased stock-based compensation expense, and payments to outside consultants, investor relations, lawyers and accountants, among other expenses.

Additionally, if in the future we believe regulatory approval of AQX-1125 or any of our future product candidates appears likely, we anticipate that we would begin preparations for commercial operations, which would result in an increase in payroll and other expense, especially as it relates to the sales and marketing of our product candidates.

JOBS Act

In April 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an “emerging growth company” can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an “emerging growth company” can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other companies.

Internal Control Over Financial Reporting

Neither we nor our independent registered chartered accountants firm has performed an evaluation of our internal control over financial reporting during any period in accordance with the provisions of the Sarbanes-Oxley Act. However, in connection with the audit of the combined financial statements of Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada as of December 31, 2012 and December 31, 2011, and for the years then ended and for the period from December 26, 2003 (inception) to December 31, 2012, included in this prospectus and registration statement, we identified certain significant deficiencies in our internal controls over financial reporting. A “significant deficiency” is a deficiency, or a combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of our financial reporting, including the audit committee of the board of directors. As a result of the limited procedures performed, we believe that it is possible that, had we and our independent registered chartered accountants firm performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act, material weaknesses and additional significant control deficiencies may have been identified. However, for as long as we remain an “emerging growth company” as defined in the JOBS Act, we intend to take advantage of the exemption permitting us not to comply with the requirement that our independent registered public accounting firm provide an attestation on the effectiveness of our internal control over financial reporting. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least \$1.0 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th, or (2) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period.

Results of Operations

Comparison of the Nine Months Ended September 30, 2012 and 2013

	NINE MONTHS PERIOD ENDED SEPTEMBER 30,		CHANGE
	2012	2013	
Operating expenses:			
Research and development	\$ 5,093,292	\$ 4,802,078	\$ (291,214)
General and administrative	1,085,119	1,209,939	124,820
Amortization	99,823	45,198	(54,625)
Total operating expenses	<u>6,278,234</u>	<u>6,057,215</u>	<u>(221,019)</u>
Other income (expenses)			
Bank charges and financing costs	(7,509)	(5,246)	2,263
Interest income	9,003	17,845	8,842
Sale of equipment	—	124,353	124,353
Change in fair value of derivative liabilities	—	972,757	972,757
Amortization of discount on preferred stock	(34,025)	(265,650)	(231,625)
Foreign exchange gain (loss)	64,258	18,856	(45,402)
	<u>31,727</u>	<u>862,915</u>	<u>831,188</u>
Net loss before income taxes	(6,246,507)	(5,194,300)	1,052,207
Income tax (provision) recovery	(42,294)	5,044	47,338
Net loss and comprehensive loss incurred in the development stage	<u>\$ (6,288,801)</u>	<u>\$ (5,189,256)</u>	<u>\$ 1,099,545</u>
Accretion for liquidation preference on preferred stock	(2,895,102)	(3,953,595)	(1,058,493)
Accretion for share issuance costs on preferred stock	(126,430)	(96,039)	30,391
Tax expense on preferred stock	(296,182)	(421,974)	(125,792)
Total loss attributable to common stockholders	<u>\$ (9,606,515)</u>	<u>\$ (9,660,864)</u>	<u>\$ (54,349)</u>

Research and development expenses

Research and development expenses decreased by \$0.3 million, or 5.7%, from \$5.1 million for the nine months ended September 30, 2012 to \$4.8 million for the nine months ended September 30, 2013. This decrease was driven primarily by a decrease in preclinical research expenses of \$0.8 million. In November 2012, following completion of early-stage lead compound identification and screening, we began to decrease our internal research efforts to focus our resources on clinical development and on outsourced research activities. On February 15, 2013, we reduced number of research and development employees on a full-time equivalent basis, decreasing from 13 as of September 30, 2012 to nine as of September 30, 2013.

General and administrative expenses

General and administrative expenses increased by \$0.1 million, or 11.5%, from \$1.1 million for the nine months ended September 30, 2012 to \$1.2 million for the nine months ended September 30, 2013. The increase was primarily attributable to an increase in travel expenses related to our Series C financing.

Sale of equipment

We sold laboratory equipment during the nine month period ended September 30, 2013 for proceeds of \$0.2 million. The laboratory equipment had historical costs of \$0.2 million, and accumulated amortization of \$0.2 million. A gain of \$0.1 million was recognized for the nine month period ended September 30, 2013.

Change in fair value of derivative liabilities

These liabilities are re-measured at each balance sheet date with the corresponding change recorded within change in fair value of derivative liabilities. The fair value of the convertible preferred stock warrants and redemption option

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is determined using the Black-Scholes option pricing model which incorporates a number of assumptions and judgments to estimate the fair value of these warrants and redemption option including the fair value per share of the underlying stock, the remaining contractual term of the warrants and redeemable convertible preferred stock, risk-free interest rate, expected dividend yield, and expected volatility of the price of the underlying stock. During the nine months ended on September 30, 2013, we recorded an expense of \$1.0 million due to an increase in the fair value of our warrant liability as a result of the change in the fair value of our underlying common stock.

Amortization of discount on preferred stock

Amortization of discount on preferred stock increased from \$34,025 for the nine months ended September 30, 2012 to \$0.3 million due to the discount associated with the issuance of Series C preferred stock in March 2013.

Comparison of Years Ended December 31, 2011 and 2012

	YEAR ENDED DECEMBER 31,		CHANGE
	2011	2012	
Operating expenses:			
Research and development	\$ 8,578,596	\$ 5,914,611	\$ (2,663,985)
General and administrative	1,725,073	1,635,623	(89,450)
Amortization	125,598	130,784	5,186
Total operating expenses	<u>10,429,267</u>	<u>7,681,018</u>	<u>(2,748,249)</u>
Other income (expenses)			
Bank charges and financing costs	(9,404)	(9,470)	(66)
Interest income	19,747	10,804	(8,943)
Sale of equipment	—	—	—
Change in fair value of derivative liabilities	—	—	—
Amortization of discount on preferred stock	(45,325)	(45,448)	(123)
Foreign exchange gain (loss)	(197,227)	53,228	250,455
	<u>(232,209)</u>	<u>9,114</u>	<u>241,323</u>
Net loss before income taxes	(10,661,476)	(7,671,904)	2,989,572
Income tax recovery (provision)	154,468	(42,294)	(196,762)
Net loss incurred in the development stage	(10,507,008)	(7,714,198)	2,792,810
Accretion for liquidation preference on preferred stock	(3,303,200)	(3,860,140)	(556,940)
Accretion for share issuance costs on preferred stock	(163,483)	(168,702)	(5,219)
Tax expense on preferred stock	(345,587)	(394,908)	(49,321)
Total loss attributable to common stockholders	<u>\$ (14,319,278)</u>	<u>\$ (12,137,948)</u>	<u>\$ 2,181,330</u>

Research and development expenses

Research and development expenses decreased by \$2.7 million, or 31%, from \$8.6 million for the year ended December 31, 2011 to \$5.9 million for the year ended December 31, 2012. This decrease was driven primarily by a decrease in clinical development expenses of \$0.9 million in 2012 compared to 2011 as a result of a decrease in the number of clinical trials we were conducting in 2012. In 2011 we had three clinical trials underway, one Phase 1 trial and two proof-of-concept trials, and in 2012 we had two proof-of-concept trials underway. Preclinical research expenses decreased by \$0.7 million in 2012 compared with 2011 as fewer studies were underway. Furthermore, each of manufacturing and formulation related expenses and facility and overhead expenses decreased by \$0.4 million in 2012 as compared to 2011, as we commenced a manufacturing campaign in 2011 and costs associated with internal research supporting preclinical and manufacturing activities were higher in 2011 as we initiated our two Phase 2 proof-of-concept trials. In November 2012, following completion of early-stage lead compound identification and screening, we began to decrease our internal research efforts to focus our resources on clinical development and on outsourced research activities. Personnel costs declined by \$0.3 million in 2012 compared to 2011 as we reduced our research and development head-count from 18 to 12 full-time equivalents. Offsetting these decreases we recognized \$0.1 million higher stock-based compensation expenses in 2012 compared to 2011 related to option grants made to directors, management and employees in November 2011.

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General and administrative expenses

General and administrative expenses decreased by \$89,450, or 5.2%, from \$1.7 million for the year ended December 31, 2011 to \$1.6 million for the year ended December 31, 2012. The decrease was primarily attributable to a decline in market research expenses in 2012.

Bank charges and financing costs

Bank charges and financing costs consist of transfer fees, and normal course bank charges.

Interest (expense) income

Interest (expense) income, net consists primarily of interest earned on cash, cash equivalents and short-term investments held by us.

Foreign exchange gain (loss)

Foreign exchange gain (loss) increased by \$0.3 million, or 127%, from a loss of \$0.2 million at year ended December 31, 2011 to a gain of \$53,228 at year ended December 31, 2012, primarily due to changes in foreign exchange gains (losses) due to the greater amount of cash balances held in non-USD currencies as of December 31, 2011, which were more vulnerable to the unfavorable exchange rates for British Pounds, Euros and Canadian dollar relative to USD (our functional currency) at December 31, 2012, and the related effects of period end translation of cash balances and expenses incurred in these currencies.

Liquidity and Capital Resources

From inception through September 30, 2013, we have received gross proceeds of \$57.8 million from the issuance of preferred stock.

Since our inception, we have incurred net losses and negative cash flows from our operations. We incurred net losses of \$10.5 million and \$7.7 million for the years ended December 31, 2011 and 2012, respectively, and \$6.3 million and \$5.2 million for the nine months ended September 30, 2012 and 2013, respectively. Our operating activities used \$6.1 million and \$4.1 million of cash flows during the nine months ended September 30, 2012 and 2013, respectively. As of September 30, 2013, we had an accumulated deficit of \$61 million, working capital of \$13.9 million and cash and cash equivalents of \$15.9 million.

Cash Flows

The following table summarizes our cash flows for the years ended December 31, 2011 and 2012 and the nine months ended September 30, 2012 and 2013:

	YEAR ENDED DECEMBER 31,	
	2011	2012
Net cash (used in) provided by:		
Operating activities	\$ (9,798,301)	\$ (7,232,382)
Investing activities	(62,845)	(6,447)
Financing activities	12,119,976	—
Net increase (decrease) in cash and cash equivalents	<u>\$ 2,258,830</u>	<u>\$ (7,238,829)</u>

	NINE MONTHS ENDED SEPTEMBER 30,	
	2012	2013
Net cash (used in) provided by:		
Operating activities	\$ (6,113,737)	\$ (4,083,097)
Investing activities	(3,901)	174,385
Financing activities	—	17,776,058
Net (decrease) increase in cash and cash equivalents	<u>\$ (6,117,638)</u>	<u>\$ 13,867,346</u>

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Net cash (used in) provided by operating activities

The use of cash in all periods resulted primarily from our net losses adjusted for non-cash charges and changes in components of working capital. The significant decrease in cash used in operating activities for the year ended December 31, 2012 compared to the year ended December 31, 2011 is primarily due to in 2011 our having three clinical trials underway, one Phase 1 trial, and two proof-of-concept trials, and in 2012 we had two proof-of-concept trials underway. Furthermore, personnel costs declined in 2012 compared to 2011 as we reduced our research and development head-count from 18 to 12 full-time equivalents. The significant decrease in cash used in operating activities for the nine months ended September 30, 2013 compared to the nine months ended September 31, 2012 is primarily due to a decrease in preclinical research expenses and in November 2012, following completion of early-stage lead compound identification and screening, we began to decrease our internal research efforts to focus our resources on clinical development and on outsourced research activities. We reduced the number of research and development employees on a full-time equivalent basis, decreasing from 13 as of September 30, 2012 to nine as of September 30, 2013.

Net cash used in investing activities

Cash from investing activities for the years ended December 31, 2011 and 2012 and the nine months ended September 30, 2012 and 2013 primarily consisted of acquisitions and dispositions of fixed assets, and was immaterial.

Net cash provided by financing activities

Net cash provided by financing activities was \$12.1 million for the year ended December 31, 2011, which was due to \$12.1 million in proceeds from the issuance of Series B convertible preferred stock. These proceeds were offset by \$38,269 in share issue costs.

Net cash provided by financing activities was \$17.8 million for the nine months ended September 30, 2013, which was due to \$18.0 million in proceeds from the issuance of Series C convertible preferred stock. These proceeds were offset by \$223,910 in share issue costs.

Operating and Capital Expenditure Requirements

We have not achieved profitability since our inception and we expect to continue to incur net losses for the foreseeable future. We expect our cash expenditures to increase in the near term as we fund our Phase 2 clinical trials of AQX-1125, as well as our continuing preclinical activities. Following this offering, we will be a publicly traded company and will incur significant legal, accounting and other expenses that we were not required to incur as a private company. In addition, the Sarbanes-Oxley Act, as well as rules adopted by the SEC and the NASDAQ Stock Market, require public companies to implement specified corporate governance practices that are currently inapplicable to us as a private company. We expect these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. We estimate that we will incur approximately \$2.0 to \$3.0 million of incremental costs per year associated with being a publicly traded company, although it is possible that our actual incremental costs will be higher than we currently estimate.

We believe that our existing capital resources will be sufficient to fund our operations for at least the next 12 months. However, in addition to the proceeds from this offering, we anticipate that we will need to raise substantial financing in the future to fund our operations. In order to meet these additional cash requirements, we may seek to sell additional equity or convertible debt securities that may result in dilution to our stockholders. If we raise additional funds through the issuance of convertible debt securities, these securities could have rights senior to those of our common stock and could contain covenants that restrict our operations. There can be no assurance that we will be able to obtain additional equity or debt financing on terms acceptable to us, if at all. Our failure to obtain sufficient funds on acceptable terms when needed could have a negative impact on our business, results of operations, financial condition and cash flows and future prospects. Our future capital requirements will depend on many factors, including:

- the timing, receipt and amount of sales of, or royalties on, future approved products, if any;
- the timing to completion and the results of our Phase 2 clinical trials;
- the number and characteristics of any future product candidates we develop or may acquire;

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- ⁿ the scope, progress, results and costs of researching and developing our product candidates or any future product candidates, and conducting preclinical studies and clinical trials;
- ⁿ the timing of, and the costs involved in, obtaining regulatory approvals for AQX-1125 or any future product candidates;
- ⁿ the cost of manufacturing AQX-1125 and our future product candidates and any products that may achieve regulatory approval;
- ⁿ the cost of commercialization activities if AQX-1125 or any future product candidates are approved for sale, including marketing, sales and distribution costs;
- ⁿ our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of such agreements;
- ⁿ any product liability or other lawsuits related to our products;
- ⁿ the expenses needed to attract and retain skilled personnel;
- ⁿ the costs associated with being a public company; and
- ⁿ the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs and the outcome of such litigation.

Please see the section of this prospectus captioned "Risk Factors" for additional risks associated with our substantial capital requirements.

Contractual Obligations and Commitments

The following is a summary of our long-term contractual cash obligations as of December 31, 2012⁽¹⁾⁽²⁾:

	<u>TOTAL</u>	<u>LESS THAN ONE YEAR</u>	<u>1-3 YEARS</u>	<u>3-5 YEARS</u>	<u>MORE THAN 5 YEARS</u>
Operating lease obligations	\$632,000	\$ 232,000	\$400,000	\$ —	\$ —
Total contractual obligations	<u>\$632,000</u>	<u>\$ 232,000</u>	<u>\$400,000</u>	<u>\$ —</u>	<u>\$ —</u>

- Under the Asset Purchase Agreement dated August 19, 2009 between us and Biolipox AB, upon commencement by us of a Phase 3 trial of AQX-1125, a \$3 million milestone payment will be due to Biolipox. We cannot predict the likelihood or the timing of any such payment.
- On October 23, 2013, AQXP Canada entered into a Growth Capital Term Loan with Silicon Valley Bank, or SVB, for up to \$4.0 million to be advanced in two tranches as follows: Tranche 1—\$2.5 million advanced on October 30, 2013, and Tranche 2—\$1.5 million to be available through December 31, 2014 upon AQXP Canada receiving positive certain agreed-upon Phase IIA top-line data results from its COPD or BPS/C clinical trials. Aquinox Pharmaceuticals (USA) Inc. is a guarantor of AQXP Canada's obligations under the debt facility. In addition to principal, interest and other related payments due to SVB, Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada issued SVB warrants to purchase 218,181 shares of Series C preferred stock of Aquinox Pharmaceuticals (USA) Inc. and a corresponding number of special voting shares of AQXP Canada. Following the completion of the offering, the warrant will be exercisable for 218,181 shares of our common stock.

Legal Proceedings

In the ordinary course of business, we may be subject from time to time to various proceedings, lawsuits, disputes, or claims. Although we cannot predict with assurance the outcome of any litigation, we do not believe there are currently any such actions that, if resolved unfavorably, would have a material impact on our financial condition, results of operations or cash flows.

Purchase Commitments

We have no material non-cancelable purchase commitments with contract manufacturers or service providers as we have generally contracted on a cancelable purchase order basis.

Milestone, Royalty-Based and Other Commitments

On August 19, 2009, AQXP Canada entered into an asset purchase agreement with Biolipox AB of Sweden, or Biolipox, for the purchase of all assets, including patent rights and know-how, relating exclusively or principally to a compound library from which we ultimately identified and selected AQX-1125. Under the terms of the agreement, AQXP Canada paid Biolipox Canadian \$50,000 immediately upon closing. An additional Canadian \$250,000 by way

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of issuance of our common stock will become payable upon the first submission to the FDA of an IND for a compound from the acquired class. The terms of the agreement also require a one-time Canadian \$3.0 million milestone payment upon the commitment of financial resources by the Board of Directors of AQXP Canada to advance AQX-1125 into a Phase 3 clinical study. We will also be required to make certain other milestone payments totaling up to Canadian \$1.5 million in the aggregate upon the first commercial sale of the first compound covered by the acquired patent rights (which we expect will be triggered by the first commercial sale of AQX-1125) in each of the United States, Europe and Japan. There are no royalty payments due under this agreement. There were no expenses related to this agreement during the years ended December 31, 2011 and December 31, 2012 or the nine months ended September 30, 2013.

AQXP Canada entered into an exclusive license agreement with the University of British Columbia, or UBC, dated June 6, 2006, for certain patent rights and technology relating to small molecule compounds and pharmaceutical compositions as modulators of SHIP1 activity. This agreement was amended and restated on June 8, 2007, and subsequently amended in September 2008, April 2010 and June 2010. This agreement will expire at the last to expire issued patent covering the licensed technology. The agreement will terminate automatically upon our insolvency or may be terminated by either party for material breach by the other party. The terms of the agreement required AQXP Canada to pay an initial license fee of Canadian \$50,000, all of which was paid by the issuance of 100,000 common exchangeable shares of AQXP Canada. We do not currently have any product candidates under development that are covered by the agreement, nor have we sublicensed our rights under the licensed patents. However, if we develop products covered by the UBC technology in the future, we will be required to pay certain development and regulatory milestones up to an aggregate of Canadian \$2.2 million for the first drug product developed under the license and up to Canadian \$1.5 million for each subsequent drug product, which may be paid in cash or by issue of our shares. We must also pay UBC low single-digit royalties based on aggregate worldwide net sales of products covered by the licensed patents and a percentage of sublicensing revenue ranging from the low single digits to the mid double digits based on the stage of development at which such sublicense is granted. We are also required to reimburse costs incurred by UBC related to the prosecution and maintenance of the licensed patents, and to pay an annual license maintenance fee. There were annual license maintenance fees of Canadian \$1,000 related to this agreement during the years ended December 31, 2011 and December 31, 2012 and Canadian \$1,000 for the nine month period ended September 30, 2013.

In May 2005, AQXP Canada entered into an assignment agreement, which was subsequently amended in December 2005 and March 2006, with the British Columbia Cancer Agency ("BCCA") and StemCell Technologies, Inc. ("STI"), for the assignment to AQXP Canada of the 2002 exclusive license agreement between BCCA and STI to certain patents relating to technology relating to SHIP1. The license agreement between AQXP Canada and BCCA was amended and restated in August 2006 and June 2007. This agreement has subsequently been amended in June 2008 to revise the schedule of the technology licensed under this agreement, and further amended in February 2013. Pursuant to this agreement, as amended, BCCA has granted us an exclusive worldwide license to certain of its intellectual property relating to core SHIP1 technology, and screening of compounds for activity using SHIP1, including the C2 binding domain. The agreement is to expire at the later of 20 years from the effective date of the agreement or upon the expiration of the last patent covered by the license. The terms of the assignment agreement among STI, BCCA and AQXP Canada required AQXP Canada to pay an assignment license fee of Canadian \$150,000, paid in stages beginning May 2005 and ending March 2006. We do not currently have any product candidates under development that are covered by the BCCA license agreement, nor have we sublicensed our rights under the licensed patents. However, if we develop products covered by the BCCA technology in the future, we will be required to pay BCCA low single-digit royalties based on aggregate worldwide net sales of products covered by the licensed patents, and if we sublicense any rights to the technology, a low double digit percentage of sublicensing revenue. We are also required to reimburse BCCA's patent costs incurred in relation to the licensed technology, and pay an annual maintenance fee in the amount of Canadian \$5,000. Our license with BCCA will terminate automatically upon our insolvency, and may be terminated by either party for material breach by the other party. There were annual maintenance fees of Canadian \$5,000 related to this agreement during the years ended December 31, 2011 and December 31, 2012 and Canadian \$5,000 for the nine months period ended September 30, 2013.

Critical Accounting Policies and Significant Judgments and Estimates

This management's discussion and analysis of our financial condition and results of operations is based on our combined financial statements, which have been prepared in accordance with GAAP. The preparation of these

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financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses and the disclosure of contingent assets and liabilities in our combined financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to accrued liabilities, stock-based compensation and derivative liabilities. We base our estimates on historical experience, known trends and events and various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in the notes to our combined financial statements appearing elsewhere in this prospectus, we believe the following accounting policies to be most critical to the judgments and estimates used in the preparation of our combined financial statements.

Research and Development Expenses

Research and development costs are charged to expense as incurred and include, but are not limited to, employee-related expenses, including salaries and benefits, expenses incurred under agreements with CROs and investigative sites that conduct clinical trials and preclinical studies, the cost of acquiring, developing and manufacturing clinical trial materials, facilities, and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, and other supplies and costs associated with clinical trials, preclinical activities, and regulatory operations.

Development costs are expensed in the period incurred unless we believe a development project meets generally accepted accounting criteria for deferral and amortization. No product development expenditures have been deferred to date. We record costs for certain development activities, such as clinical trials, based on our evaluation of the progress to completion of specific tasks using data such as patient enrollment, clinical site activations, or information provided to us by our vendors on their actual costs incurred. Payments for these activities are based on the terms of the individual arrangements, which may differ from the pattern of costs incurred, and are reflected in the combined financial statements as prepaid or accrued liabilities, as the case may be.

Warrant Liabilities and Preferred Stock Embedded Derivative Liabilities

We account for detachable warrants to purchase redeemable convertible preferred stock or common stock as liabilities as they are freestanding derivative financial instruments. The warrants are recorded as liabilities at fair value, estimated using a Black-Scholes option pricing model, and marked to market at each combined balance sheet date, with changes in the fair value of the derivative liabilities recorded in the combined statements of operations. We allocate the total consideration received for issuing preferred stock and warrants based on the relative fair value of each security at the date of issuance. This allocation results in a discount to the initial carrying amount of the preferred stock at the date of issuance. This discount is amortized over the life of the preferred stock and is recorded as "amortization of discount of preferred stock" in the combined statements of operations.

We also evaluate and account for conversion and redemption options embedded in convertible instruments as they can be free standing derivative financial instruments depending on certain criteria. If they are determined to be free standing derivative financial instruments, we record these as preferred stock embedded derivatives on their combined balance sheets at fair value with changes in the fair values of these derivatives recorded in the combined statements of operations.

Stock-Based Compensation

We measure the cost of services received in exchange for an award of equity instruments based on the grant-date fair value of the award. The cost of such award will be recognized over the period during which services are provided in exchange for the award, generally the vesting period.

All share-based payments to employees are recognized in the financial statements based upon their respective grant-date fair values.

We estimate the fair value of options granted using the Black-Scholes option pricing model. This approximation uses assumptions regarding a number of inputs that required us to make significant estimates and judgments. Since prior to the completion of this offering, our common stock was not publicly traded, the expected volatility assumption was based on industry peer information. Additionally, because we have no significant history to calculate the expected term, the simplified method calculation was used.

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Stock-based compensation expense totaled \$118,243, \$351,322 and \$255,318 for the years ended December 31, 2011 and 2012 and for the nine months ended September 30, 2013, respectively. We record stock-based compensation expense as a component of research and development expenses or general and administrative expenses. For the years ended December 31, 2011 and 2012 and the nine months ended September 30, 2012 and 2013, we allocated stock-based compensation as follows:

	YEAR ENDED DECEMBER 31,	
	2011	2012
Research and development	\$ 59,122	\$ 175,661
General and administrative	59,121	175,661
Total	<u>\$ 118,243</u>	<u>\$ 351,322</u>

	NINE MONTHS PERIOD ENDED SEPTEMBER 30,	
	2012	2013
Research and development	\$ 36,239	\$ 127,659
General and administrative	36,238	127,659
Total	<u>\$ 72,477</u>	<u>\$ 255,318</u>

Fair Value Estimates

We are required to estimate the fair value of the common stock underlying our stock-based awards when performing the fair value calculations at each reporting date. We engaged an independent third-party valuation firm to assist our board of directors in determining the fair value of the common stock underlying our stock-based awards. All options to purchase shares of our common stock have been granted with an exercise price per share no less than the fair value per share of our common stock underlying those options on the date of grant, based on the information known to us on the date of grant.

In the absence of a public trading market for our common stock, on each grant date, we develop an estimate of the fair value of our common stock in order to determine an exercise price for the option grants based in part on input from the independent third-party valuation firm. We determined the fair value of our common stock using methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants, or AICPA, Audit and Accounting Practice Aid Series: *Valuation of Privately Held Company Equity Securities Issued as Compensation*, or the AICPA Practice Guide. In addition, our board of directors considered various objective and subjective factors, along with input from management and the independent third-party valuation firm, to determine the fair value of our common stock, including external market conditions affecting the pharmaceutical industry, trends within the pharmaceutical industry, the prices at which we sold shares of our different series of preferred stock, the superior rights and preferences of each series of preferred stock relative to our common stock at the time of each grant, our results of operations and financial position, the status of our research and development efforts, our stage of development and business strategy, the lack of an active public market for our common and our preferred stock, and the likelihood of achieving a liquidity event such as an initial public offering or sale of our company in light of prevailing market conditions.

The per share estimated fair value of common stock in the table below represents the determination by our board of directors of the fair value of our common stock as of the date of grant, taking into consideration the various objective and subjective factors described above, including the conclusions, if applicable, of contemporaneous valuations of

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our common stock as discussed below. The following table presents the grant dates and related exercise prices of stock options granted to employees and non-employees from January 1, 2011 through October 31, 2013 pursuant to our 2006 Plan:

DATE OF ISSUANCE	NUMBER OF SHARES UNDERLYING OPTION GRANTS	EXERCISE PRICE PER OPTION	PER SHARE ESTIMATED FAIR VALUE OF COMMON STOCK
January 1, 2011 to June 30, 2011	160,000	\$ 0.30	\$ 0.16
July 1, 2011 to June 30, 2012	6,290,000	\$ 0.30	\$ 0.20
July 1, 2012 to March 31, 2013	5,000	\$ 0.30	\$ n/a
April 1, 2013 to June 30, 2013	1,205,000	\$ 0.30	\$ 0.21
June 30, 2013 to September 30, 2013	—	\$ —	\$ 0.21
September 30 to October 31, 2013	2,512,500	\$ 0.66	\$ 0.66

Based on an assumed offering price of \$ _____ per share, which is the midpoint of the estimated offering price set forth on the cover page of this prospectus, the aggregate intrinsic value of options outstanding as of September 30, 2013 was \$ _____ million, of which \$ _____ million related to vested options and \$ _____ million related to unvested options.

In determining the exercise prices of the options set forth in the table above granted from January 1, 2011 through June 25, 2013, our board of directors considered the most recent valuations of our common stock, which were prepared as of June 30, 2010, June 30, 2011 and March 31, 2013, and based its determination in part on the analyses summarized below. On October 14, 2013, an independent third-party valuation was prepared as of June 30, 2013 and as of September 30, 2013 to assist our board of directors in determining the exercise price of options to be issued after that date and to calculate the liability for our outstanding vested stock awards as of September 30, 2013. The key assumptions from each of our third-party valuations are detailed below:

THIRD-PARTY VALUATION DATE	PER SHARE ESTIMATED FAIR VALUE OF COMMON STOCK	RISK-ADJUSTED DISCOUNT RATE	VOLATILITY	DIVIDEND YIELD	RISK-FREE RATE	DISCOUNT FOR LACK OF MARKETABILITY
June 30, 2010	\$ 0.16	n/a	97%	0%	0.61%	19.4%
June 30, 2011	\$ 0.20	45.6%	70%	0%	1.76%	30%
March 31, 2013	\$ 0.21	43.4%	70%	0%	0.77%	30%
June 30, 2013	\$ 0.21	44.1%	70%	0%	1.41%	30%
September 30, 2013	\$ 0.66	34.8%	70%	0%	0.04, 0.1, & 1.39%	30%

Stock option grants from January 1, 2011 to June 30, 2011

Our board of directors granted stock options from January 1, 2011 through June 30, 2011, with each having an exercise price of \$0.30 per share. In determining the fair value, our board of directors relied in part on an independent third-party valuation as of June 30, 2010. The specific facts and circumstances considered by our board of directors for the June 30, 2010 valuation included the following:

- ⁿ In March 31, 2010, we completed the first tranche of a financing through the issuance of our convertible preferred shares at a price of \$0.55 per share. We used the Option Pricing Model Backsolve (OPM Backsolve) method to estimate our equity value. This method sets the implied price of the most recent round of preferred stock to its original issuance price, and then uses the solver function in MS Excel to calculate our implied equity value. The implied equity value is then used to calculate the value per common share.

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- ⁿ The values derived from the OPM Backsolve method were then used to determine an initial estimated equity value. We then used an option-pricing model to allocate the calculated equity value between the shares of preferred stock and common stock outstanding, including estimated liquidation payments to the preferred stockholders for all series of preferred stock. A discount was then applied to reach the final valuation of the common stock based on the fact that, inasmuch as we are a private company, there are impediments to liquidity, including lack of publicly available information and the lack of a trading market. The discount was determined after considering a number of empirical studies related to discounts for lack of marketability, and by using a protective put option model that considered such variables as an estimated time to liquidity of two years, estimated volatility of 97%, expected dividend yield of 0% of the underlying stock and a risk-free rate of 0.61%. In addition, the current restrictions on the marketability of our common stock were considered. We estimated a 19.4% discount for the lack of marketability. The fair value of common shares determined at the June 30, 2010 valuation was \$0.16 per share.

Stock option grants from July 1, 2011 to June 30, 2012

Our board of directors granted stock options from July 1, 2011 through June 30, 2012, with each having an exercise price of \$0.30 per share. In determining the fair value, our board of directors relied in part on an independent third-party valuation as of June 30, 2011. The specific facts and circumstances considered by our board of directors for the June 30, 2011 valuation included the following:

- ⁿ From March 31, 2010 through September 21, 2011 we completed a financing with gross proceeds of \$25 million through the issuance of our convertible preferred shares at a price of \$0.55 per share. We used the income approach to estimate our equity value. The income approach involves applying an appropriate risk-adjusted discount rate to projected cash flows based on forecasted revenue and costs. We used a risk-adjusted discount rate of 45.6% to discount the projected cash flows to the valuation date within the income approach. This discount rate is based upon a market-derived weighted average cost of capital, which takes into account the required rate of return for equity investors.
- ⁿ We prepared financial forecasts used in the computation of the equity value for the income approach. The financial forecasts were based on assumed revenues and operating margin levels that took into account our future expectations. The risks associated with achieving these forecasts were assessed in selecting the appropriate cost of capital rates.
- ⁿ The values derived from the income approach were then used to determine an initial estimated equity value. We then used an option-pricing model to allocate the calculated equity value between the shares of preferred stock and common stock outstanding, including estimated liquidation payments to the preferred stockholders for all series of preferred stock. A discount was then applied to reach the final valuation of the common stock based on the fact that, inasmuch as we are a private company, there are impediments to liquidity, including lack of publicly available information and the lack of a trading market. The discount was determined after considering a number of empirical studies related to discounts for lack of marketability, and by using a protective put option model that considered such variables as an estimated time to liquidity of five years, estimated volatility of 70%, an expected dividend yield of 0% of the underlying stock and a risk-free rate of 1.76%. In addition, the current restrictions on the marketability of our common stock were considered. We estimated a 30% discount for the lack of marketability. The fair value of common shares determined at the June 30, 2011 valuation was \$0.20 per share.

Stock option grants from July 1, 2012 to March 31, 2013

Our board of directors granted stock options from July 1, 2012 through March 31, 2013, with each having an exercise price of \$0.30 per share. The fair value per share was supported by the aforementioned independent third-party valuation as of June 30, 2011. We concluded that during the period from July 1, 2012 to March 31, 2013, the value of our company remained relatively unchanged from June 30, 2011. In the board of directors making this conclusion, they considered feedback we received during on-going discussions with potential investors in our next round of financing, our cash position and our financial forecasts. This was confirmed by the results of a subsequent valuation as of March 31, 2013.

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Stock option grants from March 31, 2013 to June 30, 2013

Our board of directors granted stock options from March 31, 2013 through June 30, 2013, with each having an exercise price of \$0.30 per share. In determining the fair value, our board of directors relied in part on an independent third-party valuation as of March 31, 2013. The specific facts and circumstances considered by our board of directors for the March 31, 2013 valuation included the following:

- On March 19, 2013 we completed a financing with gross proceeds of \$18 million through the issuance of our convertible preferred shares at a price of \$0.55 per share. We used the income approach to estimate our equity value. The income approach involves applying an appropriate risk-adjusted discount rate to projected cash flows based on forecasted revenue and costs. We used a risk-adjusted discount rate of 43.4% to discount the projected cash flows to the valuation date within the income approach. This discount rate is based upon a market-derived weighted average cost of capital, which takes into account the required rate of return for equity investors.
- We prepared financial forecasts used in the computation of the equity value for the income approach. The financial forecasts were based on assumed revenues and operating margin levels that took into account our future expectations. The risks associated with achieving these forecasts were assessed in selecting the appropriate cost of capital rates.
- The values derived from the income approach were then used to determine an initial estimated equity value. We then used an option-pricing model to allocate the calculated equity value between the shares of preferred stock and common stock outstanding, including estimated liquidation payments to the preferred stockholders for all series of preferred stock. A discount was then applied to reach the final valuation of the common stock based on the fact that, inasmuch as we are a private company, there are impediments to liquidity, including lack of publicly available information and the lack of a trading market. The discount was determined after considering a number of empirical studies related to discounts for lack of marketability, and by using a protective put option model that considered such variables as an estimated time to liquidity of five years, estimated volatility of 70%, an expected dividend yield of 0% of the underlying stock and a risk-free rate of 0.77%. In addition, the current restrictions on the marketability of our common stock were considered. We estimated a 30% discount for the lack of marketability. The fair value of common shares determined at the March 31, 2013 valuation was \$0.21 per share.

Stock option grants from June 30, 2013 to September 30, 2013

No stock options were granted in the period from June 30, 2013 through September 30, 2013. An independent third-party valuation was conducted on October 14, 2013 as of June 30, 2013. The specific facts and circumstances considered by our board of directors for the June 30, 2013 valuation included the following:

- We used the income approach to estimate our equity value. The income approach involves applying an appropriate risk-adjusted discount rate to projected cash flows based on forecasted revenue and costs. We used a risk-adjusted discount rate of 44.1% to discount the projected cash flows to the valuation date within the income approach. This discount rate is based upon a market-derived weighted average cost of capital, which takes into account the required rate of return for equity investors.
- We prepared financial forecasts used in the computation of the equity value for the income approach. The financial forecasts were based on assumed revenues and operating margin levels that took into account our future expectations. The risks associated with achieving these forecasts were assessed in selecting the appropriate cost of capital rates.
- The values derived from the income approach were then used to determine an initial estimated equity value. We then used an option-pricing model to allocate the calculated equity value between the shares of preferred stock and common stock outstanding, including estimated liquidation payments to the preferred stockholders for all series of preferred stock. A discount was then applied to reach the final valuation of the common stock based on the fact that, inasmuch as we are a private company, there are impediments to liquidity, including lack of publicly available information and the lack of a trading market. The discount was determined after considering a number of empirical studies related to discounts for lack of marketability, and by using a protective put option model that considered such variables as an estimated time to liquidity of five years, estimated volatility of 70%, an expected dividend yield of 0% of the underlying stock and a risk-free rate of 1.41%. In addition, the current restrictions on the marketability of our common stock were considered. We

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estimated a 30% discount for the lack of marketability. The fair value of common shares determined at the June 30, 2013 valuation was \$0.21 per share.

Stock option grants from September 30, 2013 to October 31, 2013

Our board of directors granted stock options on October 31, 2013, with each having an exercise price of \$0.66 per share. In determining the fair value, our board of directors relied in part on an independent third-party valuation conducted on October 14, 2013 as of September 30, 2013. The fair value of common shares determined at the September 30, 2013 valuation was \$0.66 per share. The specific facts and circumstances considered by our board of directors for September 30, 2013 valuation included the following:

- We used the income approach to estimate our equity value. The income approach involves applying an appropriate risk-adjusted discount rate to projected cash flows based on forecasted revenue and costs. We used a risk-adjusted discount rate of 34.8% to discount the projected cash flows to the valuation date within the income approach. This discount rate is based upon a market-derived weighted average cost of capital, which takes into account the required rate of return for equity investors.
- We prepared financial forecasts used in the computation of the equity value for the income approach. The financial forecasts were based on assumed revenues and operating margin levels that took into account our future expectations. The risks associated with achieving these forecasts were assessed in selecting the appropriate cost of capital rates.
- The values derived from the income approach were then used to determine an initial estimated equity value. We then applied a scenario analysis in conjunction with an option-pricing model, to allocate the calculated equity value between the shares of preferred stock and common stock outstanding, including estimated liquidation payments to the preferred stockholders for all series of preferred stock. The three exit scenarios we included in the option-pricing model were (1) complete an initial public offering, or IPO, in the first quarter of 2014, (2) complete an IPO, in the second quarter of 2014, and (3) continue as a private company, while the related probabilities for each were estimated to be 30%, 30% and 40%, respectively. As an IPO began to become a possible near-term outcome, we began to factor an IPO as a possible exit scenario in our valuation calculations. A discount was then applied to reach the final valuation of the common stock based on the fact that, inasmuch as we are a private company, there are impediments to liquidity, including lack of publicly available information and the lack of a trading market. The discount was determined after considering a number of empirical studies related to discounts for lack of marketability, and by using a protective put option model that considered such variables as an estimated time to liquidity of, five months to Scenario 1, nine months to scenario 2, and five years to scenario 3. Furthermore, estimated volatility of 70% and an expected dividend yield of 0% of the underlying stock, as well as risk-free rates of 0.04% for Scenario 1, 0.10% for Scenario 2, and 1.39% for Scenario 2 were incorporated into the model. In addition, the current restrictions on the marketability of our common stock were considered. For the September 30, 2013 valuation, we estimated a 30% discount for the lack of marketability. The Probability Weighted Expected Return Method was not explicitly used; however, we did perform a scenario analysis with regards to allocating value to our securities, and such a scenario analysis may be considered to be part of the Probability Weighted Expected Return Method. The fair value of common shares determined at the September 30, 2013 valuation was \$0.66 per share.

There is inherent uncertainty in our forecasts and projections and, if we had made different assumptions and estimates than those described previously, the amount of our stock-based compensation expense, net loss and net loss per share amounts could have been materially different.

Basic and Diluted Net Loss Per Share of Common Stock

We calculated net loss per share in accordance with ASC 260, *Earning Per Share*. We had a net loss for all periods presented; accordingly, the inclusion of common stock options and warrants would be anti-dilutive. Dilutive common stock equivalents would include the dilutive effect of convertible securities, common stock options, warrants for convertible securities and warrants for common stock equivalents.

Potentially dilutive weighted average common stock equivalents totaled approximately 83 million and 84 million for the years ended December 31, 2011, and 2012, respectively, and 84 million and 116 million for the nine months ended September 30, 2012 and 2013, respectively. Potentially dilutive common stock equivalents were excluded

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from the diluted earnings per share denominator for all periods of net loss from continuing operations because of their anti-dilutive effect. Therefore, for the years ended December 31, 2011 and 2012 and for the nine months ended September 30, 2012 and 2013, the weighted average shares used to calculate both basic and diluted loss per share are the same.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as defined by applicable SEC regulations.

Quantitative and Qualitative Disclosure About Market Risk

We are exposed to market risks in the ordinary course of our business. The market risk inherent in our financial instruments and in our financial position represents the potential loss arising from adverse changes in interest rates.

We had cash and cash equivalents of \$2.0 million and \$15.9 million at December 31, 2012 and September 30, 2013, respectively, consisting primarily of funds in cash and guaranteed investment certificates. The primary objective of our investment activities is to preserve principal and liquidity while maximizing income without significantly increasing risk. We do not enter into investments for trading or speculative purposes. Due to the short-term nature of our investment portfolio, we do not believe an immediate 10% increase in interest rates would have a material effect on the fair market value of our portfolio, and accordingly we do not expect our operating results or cash flows to be materially affected by a sudden change in market interest rates.

We are exposed to foreign currency exchange rate fluctuations related to our Canadian operations. At the end of each reporting period, expenses of the Canadian company are remeasured into U.S. dollars using the average currency rate in effect for the period and assets and liabilities are remeasured into U.S. dollars using either historical rates or the exchange rate in effect at the end of the period. Additionally, we are exposed to foreign currency exchange rate fluctuations relating to payments we make to vendors and suppliers using foreign currencies. In addition, we are subject to currency risk for balances held in foreign currencies, including the Canadian Dollar and the Euro. We currently do not hedge against foreign currency risk. Fluctuations in exchange rates may impact our financial condition and results of operations. For the years ended December 31, 2011 and 2012, we incurred approximately \$4.1 million and \$5.7 million, respectively, of non-U.S. dollar expenses. As reported in U.S. dollars, we have recorded foreign currency losses and gains for the years ended December 31, 2011 and 2012, of \$0.2 million, and \$0.05 million, respectively.

We do not believe that inflation and changing prices had a significant impact on our results of operations for any periods presented herein.

Segment Reporting

We view our operations and manage our business in one segment, which is the identification and development of therapeutics for inflammatory diseases and cancer.

Recently Adopted Accounting Standards

In May 2011, the Financial Accounting Standards Board ("FASB") issued amendments to disclosure requirements for common fair value measurement. These amendments were effective for us for the year ended December 31, 2012.

In February 2013, the FASB issued ASU 2013-02 to improve the reporting of reclassifications out of accumulated other comprehensive income (loss). This ASU provides that companies must report the effect of significant reclassifications out of accumulated comprehensive income (loss) on the respective line items in net income (loss). For other amounts that are not required to be reclassified in their entirety to net income (loss), an entity may cross reference to the relevant note disclosure. We adopted this ASU on January 1, 2013.

In June 2011, the FASB issued amendments to disclosure requirements for the presentation of comprehensive income. These amendments were effective retrospectively for us for the year ended December 31, 2012 and it requires the presentation of total comprehensive income (loss), the components of net income (loss), and the

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components of other comprehensive income (loss) either in a single continuous statement of comprehensive income (loss) or in two separate but consecutive statements.

Recent Accounting Pronouncements

In March 2013, the FASB issued ASU 2013-05 to provide guidance on releasing cumulative translation adjustments when a reporting entity parent ceases to have a controlling financial interest in a subsidiary or group of assets that is a non-profit activity or a business within a foreign entity. We are required to adopt this ASU effective January 1, 2014.

In July 2013, the FASB issued ASU 2013-11 to clarify that an unrecognized tax benefit, or a portion thereof, should be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward, except to the extent that a net operating loss carryforward, a similar tax loss, or a tax credit carryforward is not available at the reporting date to settle any additional income taxes that would result from disallowance of a tax position, or the tax law does not require the entity to use, and the entity does not intend to use, the deferred tax asset for such purpose, then the unrecognized tax benefit should be presented as a liability. We are required to adopt this ASU effective January 1, 2014.

The adoption of the ASUs described above is not expected to have a significant impact on our disclosures, financial position or results of operations.

Factor Affecting Comparability

We anticipate that the following factors, which are described in greater detail in the section of this prospectus captioned "Description of Capital Stock—Exchangeable Shares", will affect the comparability of our historic and future financial performance. Our share exchange will result in our preferred stock being de-recognized from mezzanine equity, and recognition of common shares. After the share exchange AQXP Canada will be a wholly owned subsidiary of Aquinox Pharmaceuticals (USA) Inc.

BUSINESS

Overview

We are a clinical-stage pharmaceutical company discovering and developing novel drug candidates to treat inflammation and cancer. Our primary focus is anti-inflammatory product candidates targeting SHIP1, which is a key regulator of an important cellular signaling pathway in immune cells, known as the PI3K pathway. Our lead product candidate, AQX-1125, is a SHIP1 activator and has demonstrated broad anti-inflammatory activity. AQX-1125 has successfully completed three clinical trials dosed as a once daily oral product with over 100 subjects having received AQX-1125 to date. We are currently investigating AQX-1125 in two Phase 2 clinical trials, one for Chronic Obstructive Pulmonary Disease, or COPD, and one for Bladder Pain Syndrome/Interstitial Cystitis, or BPS/IC. COPD and BPS/IC are debilitating chronic inflammatory diseases affecting millions of people worldwide.

Inflammation can be reduced by activation of SHIP1, which is a natural modulator of the PI3K pathway. If the PI3K pathway is overactive, immune cells may produce an abundance of pro-inflammatory signaling molecules and migrate to and concentrate in tissues, resulting in excessive or chronic inflammation. Drugs activating SHIP1 may reduce the function and migration of immune cells and have an anti-inflammatory effect. In addition, because SHIP1 is predominantly present in immune cells, off-tissue toxicities may be minimized. Immune cells with lowered levels of SHIP1 cause abnormal inflammation at mucosal surfaces in response to inflammatory stimuli. Accordingly, we are targeting inflammatory diseases that occur at mucosal surfaces, including those of the respiratory, urinary and gastrointestinal tracts, for which we believe there is broad therapeutic and market potential.

Our longer-term strategy is to broaden our development activities for AQX-1125 and to advance next generation SHIP1 activators for the treatment of additional inflammatory diseases and cancer.

SHIP1 and the PI3K Pathway

Role and Regulation of the PI3K Pathway

The PI3K pathway is a cellular signaling pathway that has been linked to a diverse group of cellular functions and biological processes such as cell activation and migration, which are related to inflammation, and cell growth, proliferation and survival, which are related to cancer. As a result, the PI3K pathway is heavily researched by the academic community as well as pharmaceutical and biotechnology companies in the areas of immune disorders and cancer.

In the PI3K pathway, the key messenger molecule is phosphatidylinositol-3,4,5-trisphosphate, or PIP3, which initiates the signaling pathway. In cells derived from bone marrow tissues (e.g. immune cells), the key enzymes that control levels of PIP3 are the PI3 kinase, or PI3K, and the phosphatases, phosphatase and tensin homolog, or PTEN, and SH2-containing inositol-5'-phosphatase 1, or SHIP1. PI3K generates PIP3, thus initiating the signaling pathway. This signaling is reduced by degradation of PIP3 by PTEN and SHIP1. PTEN is generally considered to be constantly working in the pathway, whereas SHIP1 is activated when the cell is stimulated. In preclinical studies, PTEN has been shown to suppress cancer by controlling cell proliferation, whereas SHIP1, when functioning, has been demonstrated to control inflammation by reducing cell migration and activation.

If the PI3K pathway is overactive, immune cells can produce an abundance of pro-inflammatory signaling molecules and migrate to and concentrate in tissues, resulting in excessive or chronic inflammation. SHIP1 is predominantly expressed in cells derived from bone marrow tissues, which are mainly immune cells. Consequently, drugs that activate SHIP1 can reduce the function and migration of immune cells and have an anti-inflammatory effect.

SHIP1 as a Drug Target

Inflammation can be reduced by activation of SHIP1, taking advantage of the natural modulation of the PI3K pathway. When activated, SHIP1 redirects signaling in immune cells to reduce their activation and migration, thereby reducing inflammation while still allowing these cells to maintain cell growth and survival. Our scientific founders, based at the University of British Columbia, were the first to discover SHIP1 and show that small molecules could activate it, thereby making it a potential target for a new class of anti-inflammatory drugs. Additionally, academic scientists have shown that certain immune cell cancers have suppressed levels of SHIP1, making such cancers also potential targets for SHIP1 activators.

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SHIP1 is predominantly present in immune cells. Therefore SHIP1 activators target immune cells to cause an anti-inflammatory effect while minimizing effects in other tissues. We believe AQX-1125 is the only SHIP1 activator currently in clinical trials and that no SHIP1 activator has yet received marketing approval as a treatment for disease in humans.

Our approach also targets a unique activation site in SHIP1 called the C2 binding domain. We have demonstrated that targeting the C2 binding domain does not significantly activate or inhibit other enzymes, imparting target selectivity and further limiting potential off-target toxicities. Historically, phosphatases such as SHIP1 have been found to be poor drug targets based upon efforts to develop inhibitors of these enzymes, since the binding sites for inhibitors are similar across the family of phosphatases, resulting in poor selectivity and leading to undesired off-target toxicities. The unique activation site of SHIP1 enables this important phosphatase as a drug target.

The SHIP1 Knockout Mouse Provides a Roadmap for Clinical Development

Our scientific founders developed a strain of genetically modified mouse, which we refer to as the SHIP1 knockout mouse, with an immune system that lacks the presence of SHIP1. This knockout mouse has been useful for determining which diseases develop when the PI3K pathway is unregulated by SHIP1. A SHIP1 knockout mouse is viable and fertile and does not exhibit abnormal inflammation if raised under sterile conditions. However, if exposed to environmental inflammatory challenges like allergens or bacteria, a SHIP1 knockout mouse develops severe progressive inflammation and fibrosis of its airways, similar to respiratory diseases seen in humans. In addition, a SHIP1 knockout mouse, when exposed, develops inflammation of the urinary bladder and gastrointestinal lining.

Abnormal inflammation observed in a SHIP1 knockout mouse occurs at mucosal surfaces, including those of the respiratory, urinary and gastrointestinal tracts. The mucosal surfaces are important barriers between the body and the external environment. Chronic inflammation at the mucosal surface reduces the effectiveness of this barrier and may lead to a variety of diseases.

Potential Clinical Indications

Given our findings with respect to the SHIP1 knockout mouse, we are focused on diseases characterized by inflammation at mucosal surfaces. There is a broad range of diseases characterized by mucosal inflammation and we believe there is broad therapeutic and market potential for drugs that can activate SHIP1. Inflammatory diseases of the mucosal surfaces of the respiratory, urinary and gastrointestinal tracts are increasing worldwide in both number and incidence.

A number of diseases are characterized by mucosal inflammation and include:

DISEASE	ESTIMATED U.S. PREVALENCE	ESTIMATED WORLDWIDE PREVALENCE
Lung/Airway		
Moderate-Severe COPD	13M	65M to 200M
Chronic Rhinosinusitis	51M	538M
Severe Asthma	5M	95M
Non-CF Bronchiectasis	0.2M	4M
Churg-Strauss Syndrome	15K	0.3M
Idiopathic Pulmonary Fibrosis	0.2M	3M
Urinary Tract		
BPS/IC	15M	323M
Glomerulonephritis	50K	0.8M
Gastrointestinal Tract		
Eosinophilic Esophagitis	0.2M	4M
Crohn's Disease	1.0M	18M
Ulcerative Colitis	0.8M	19M

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We are conducting two Phase 2 clinical trials, one in COPD and one in BPS/IC, and in the future expect to expand our clinical development into other inflammatory diseases. We have selected these initial indications based on the following criteria:

- sizeable patient populations with generally inadequate therapy to facilitate rapid enrollment in clinical trials;
- an attractive commercial opportunity with limited competition; and
- an acute phase of the disease or an endpoint that could reasonably be affected in three months of treatment to match our completed toxicology studies.

Our Discovery Platform

We believe our discovery platform enables us to discover new drug candidates that selectively target SHIP1 to modulate activated immune cells while minimizing their toxicity to normal cells. Our discovery platform includes:

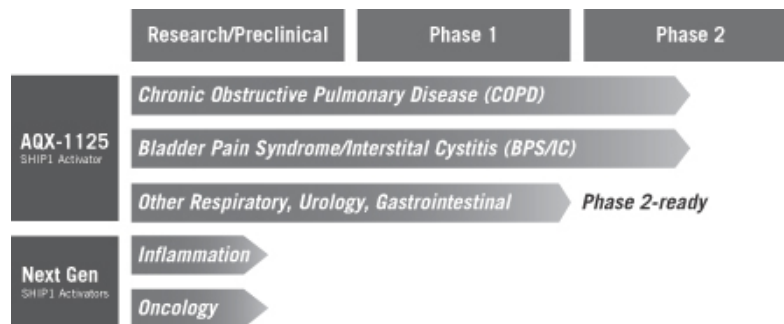
- a novel *in vitro*, high throughput assay to screen SHIP1 activators;
- a patented approach to screening drugs against the C2 binding domain;
- the use of the SHIP1 knockout mouse to produce cells for *in vitro* experiments or for *in vivo* studies to determine the selectivity and specificity of our compounds; and
- an extensive library of chemical compounds that are known to be SHIP1 activators.

Our discovery platform was initially applied to the screening of a natural product library of compounds to identify potential SHIP1 activators, which SHIP1 activators were covered by an exclusive license from the University of British Columbia. We chemically modified these initial compounds to improve on their activity and drug-like properties, which resulted in several SHIP1 activator compound classes being developed. From these compound classes, we developed a key understanding of the chemical structure characteristics of SHIP1 activators. With this understanding of what a SHIP1 activator structure should look like, we identified additional compound classes in other libraries of interest. We acquired one proprietary compound library of interest from Biolipox AB, with all patents transferred to us without any future royalty obligations. We screened compounds from this acquired library and confirmed that it contained SHIP1 activators, including a compound that was the basis for AQX-1125.

Our Pipeline

AQX-1125 is our clinical-stage product candidate. In addition, we have several other candidates that also target SHIP1 and that have both similar and distinct properties from AQX-1125, with some showing preliminary evidence of enhanced anti-inflammatory properties.

The development status of AQX-1125 and our next generation product candidates is summarized below:



AQX-1125

AQX-1125 is our lead product candidate and has generated positive clinical data from three completed clinical trials, including two proof-of-concept trials, one in COPD and one in allergic asthma, demonstrating a favorable safety profile and anti-inflammatory activity. Importantly, our clinical trial results were consistent with the drug-like

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properties and anti-inflammatory activities demonstrated in our preclinical studies. AQX-1125 is a once daily oral capsule with many desirable drug-like properties. We are currently investigating AQX-1125 in two Phase 2 clinical trials, one in COPD and one in BPS/IC. For AQX-1125, we retain full worldwide rights and hold patents with terms through at least 2024.

AQX-1125 Activates SHIP1, Reducing Inflammation

AQX-1125 is an activator of SHIP1, which controls the PI3K cellular signaling pathway. If the PI3K pathway is overactive, immune cells can produce an abundance of pro-inflammatory signaling molecules and migrate to and concentrate in tissues, resulting in excessive or chronic inflammation. SHIP1 is predominantly expressed in cells derived from bone marrow tissues, which are mainly immune cells. Therefore drugs that activate SHIP1 can reduce the function and migration of immune cells and have an anti-inflammatory effect. By controlling the PI3K pathway, AQX-1125 reduces immune cell function and migration by targeting a mechanism that has evolved in nature to maintain homeostasis of the immune system.

AQX-1125 has Desirable Pharmaceutical Properties

In addition to demonstrating strong *in vitro* and *in vivo* activity, AQX-1125 was also selected as a lead candidate based on its many desirable drug-like properties. The drug candidate is highly water soluble and does not require complex formulation for oral administration. AQX-1125 has low plasma protein binding, is not metabolized and is excreted unmetabolized in both urine and feces. After oral or intravenous dosing, AQX-1125 reaches high concentrations in respiratory, urinary and gastrointestinal tracts, all of which have mucosal surfaces of therapeutic interest. In humans, AQX-1125 has shown pharmacokinetic properties suitable for once-a-day dosing. In addition, the absorption of the drug candidate is equivalent whether taken with or without food.

AQX-1125 is Active in a Broad Range of Preclinical Inflammatory Studies

We have demonstrated compelling preclinical activity in a broad range of relevant inflammatory studies including preclinical models of COPD, asthma, pulmonary fibrosis, BPS/IC and inflammatory bowel disease (IBD). In these studies we have seen a meaningful reduction in the relevant immune cells that are the cells that cause inflammation, such as neutrophils, eosinophils and macrophages, and a reduction in the symptoms of inflammation, such as pain and swelling. The following table summarizes these results from our preclinical *in vivo* studies with AQX-1125:

CLINICAL INDICATION	ANIMAL MODEL	PRIMARY ENDPOINT
COPD/Respiratory	LPS Airway Inflammation (Rat)	Reduction of neutrophils
	Ovalbumin Airway Inflammation (Rat)	Reduction of eosinophils
	Smoke Airway Inflammation (Mouse)	Reduction of neutrophils
	Bleomycin Fibrosis (Mouse)	Reduction of fibrosis and increase in survival
BPS/IC	Cyclophosphamide Bladder Cystitis (Rat)	Reduction of inflammation, pain and hemorrhage
	Carrageenan Paw Edema (Mouse)	Reduction of edema
IBD	TNBS IBD (Rat)	Reduction of adhesions/strictures and inflammation

The activity, efficacy and potency seen with AQX-1125 in most preclinical studies compare favorably to published results with corticosteroids. In addition, AQX-1125 demonstrated compelling activity in the smoke airway inflammation and Bleomycin Fibrosis models, which are known to be steroid refractory, or in other words, do not respond to corticosteroids. We believe this broad anti-inflammatory profile is not typical amongst drugs in development and supports the therapeutic potential for AQX-1125.

AQX-1125 has Demonstrated Desirable Properties in Three Completed Clinical trials

Overall, more than 100 subjects have received AQX-1125 in three separate trials. An overview of these clinical trials is described below.

Phase 1 Safety Trial

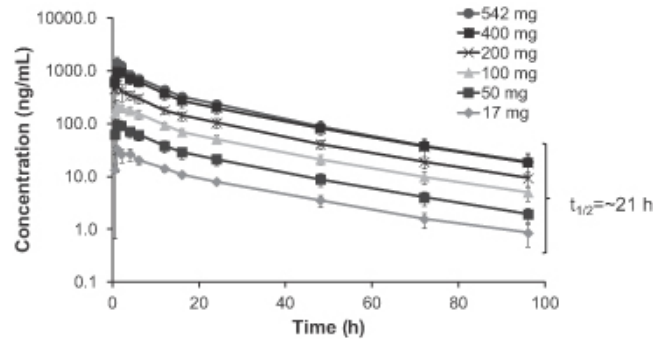
We conducted a Phase 1, three-part, randomized, placebo-controlled, dose escalation trial of the safety, tolerability, pharmacokinetics and food effect of AQX-1125 in normal healthy subjects. This trial investigated single doses of

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AQX-1125 ranging from 17 mg to 542 mg (single ascending dose, or SAD, part, n = 16), daily doses ranging from 100 mg to 542 mg for up to ten days (multiple ascending dose, or MAD, part, n = 18) and daily dose of 200 mg for seven days in fasted or fed subjects (food effect part, n = 12).

In the SAD part of our Phase 1 trial, AQX-1125 demonstrated desirable drug-like properties: it is rapidly and nearly completely absorbed; it has dose proportional pharmacokinetics; and it has a consistent plasma half-life of approximately 21 hours. The results of the SAD part of our Phase 1 trial are shown below.

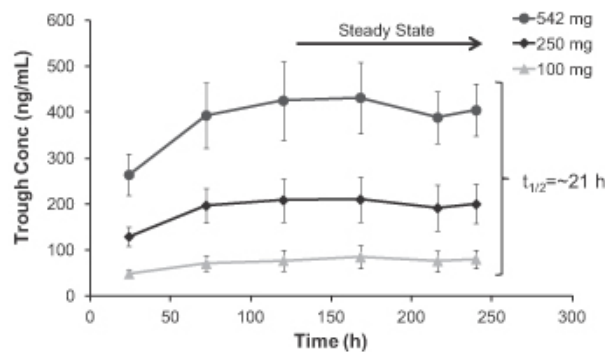
Phase I: SAD PK



From a safety perspective, there were no drug-related adverse events reported in the SAD part.

In the MAD part of our Phase 1 trial, which studied AQX-1125 for ten days, AQX-1125 reached steady state levels after the first four days of dosing and again had dose proportional pharmacokinetics and a consistent half-life. The results of the MAD part of our Phase 1 trial are shown below.

Phase I: MAD PK



The most frequently reported drug-related and dose-related adverse events in the MAD part were related to gastrointestinal upset. All other adverse events were at a similar level to those reported with placebo. All adverse events were short-lived, observed in the first seven days of dosing, and resolved without treatment or long-term effects. Based on these data, treatment with single daily doses of either 100 mg, 250 mg or 542 mg AQX-1125 for ten days was generally well tolerated in healthy subjects. The maximum tolerated dose was considered not to be reached. In the food effect part, the absorption of the drug was considered equivalent whether taken with or without food.

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Overall, our Phase 1 safety trial demonstrated that AQX-1125 has many desirable drug-like properties. AQX-1125's consistent pharmacokinetics and safety profile combined with its high level of bioavailability, low protein binding and lack of metabolism all contribute to the consistent results to date from subject to subject, which we believe are positive attributes for future clinical trials and commercialization.

Following the completion of the Phase 1 safety trial, we initiated two proof-of-concept clinical trials of inflammation to demonstrate the first evidence of AQX-1125 activity, and importance of SHIP1 as a target, in humans.

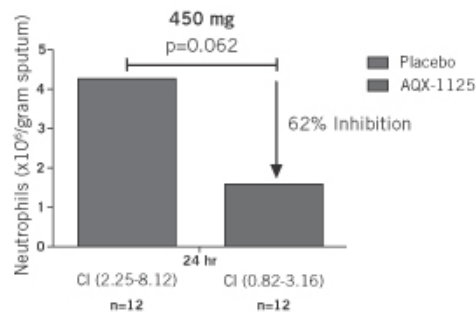
Phase 1b COPD Proof-of-Concept Trial

The first proof-of-concept trial was conducted to evaluate the anti-inflammatory properties, safety and pharmacokinetics of AQX-1125 following a lipopolysaccharide (LPS) challenge in healthy subjects. In the LPS challenge, patients inhale aerosolized LPS, the inhalation of which induces an acute inflammatory response that is characterized by the activation and migration of neutrophils into the lung and results in a mild and transient impairment in pulmonary function. The inflammatory response induced by LPS inhalation is considered a model of the inflammatory mechanisms seen in patients with COPD. This type of proof-of-concept trial has been undertaken by other pharmaceutical companies to evaluate other anti-inflammatory therapies for COPD. This type of trial must be done in healthy volunteers whose normal lungs can tolerate the inflammatory response to LPS, as exposing COPD patients to LPS could induce a dangerous exacerbation.

Our trial was designed to investigate two doses of AQX-1125, 450 mg and 200 mg, in a crossover format where each subject received either drug for seven days, followed by placebo for seven days, or vice versa. The 450 mg part of the trial was successfully completed. Following seven days of once-daily treatment with 450 mg AQX-1125 or placebo, subjects (n = 18) were challenged with 50 µg of LPS at two hours following the last dose on day seven. AQX-1125 met its primary endpoint in the 450 mg dose part by reducing sputum neutrophils by approximately 62% (p=0.062) compared to placebo. AQX-1125 also showed a reduction in sputum IL-6 and, although not statistically significant, showed a trend towards a reduction in sputum IL-8, both of which are important cytokines in the activation and recruitment of neutrophils. The reduction of sputum neutrophil levels compares favorably to published results for anti-inflammatory drugs that are in development, or have been approved, for the treatment of COPD. The results of the 450 mg dose part of our trial are shown below.

Primary Endpoint: Sputum Neutrophils

Powered to detect a 50% reduction (p<0.1)



The results of the 200 mg dose (n = 18) part of the trial were limited to safety and pharmacokinetic measurements. Due to a technical processing error at a third-party laboratory, we were unable to measure the magnitude of sputum neutrophil inhibition.

From a safety perspective, adverse events reported were mild to moderate. The majority of adverse events experienced was similar to reports from other published LPS challenge trials and relate to the administration of LPS (fever, chills, malaise, cough, chest tightness, headache and muscle pain). The most frequently reported dose-related adverse event was gastrointestinal upset. All adverse events resolved without treatment or long-term effects.

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Overall, the results for AQX-1125 compare favorably with published results for other oral drugs studied in similar LPS challenge trials that are in development, or have been approved, for the treatment of COPD. We believe this proof-of-concept trial supports development of AQX-1125 in COPD.

Phase 2a Allergic Asthma Inflammation Proof-of-Concept Trial

The second proof-of-concept trial evaluated the anti-inflammatory properties, safety and pharmacokinetics of AQX-1125 following an inhaled allergen challenge in mild to moderate asthmatics. Allergen, when inhaled, is a pro-inflammatory stimulus and in general can be used to evaluate the effects of anti-inflammatory compounds on allergic inflammation. Following inhalation of allergen, asthmatics develop an acute asthmatic attack, which peaks at 20 to 30 minutes. Even if initially treated with bronchodilators, approximately 50% of these subjects develop secondary airway inflammation, known as late asthmatic response (LAR), between four and ten hours after inhalation. This type of proof-of-concept trial has been undertaken by other pharmaceutical companies to evaluate the ability of other anti-inflammatory therapies to prevent or reduce the LAR.

AQX-1125 (450 mg) was investigated in a randomized, double-blind, placebo-controlled crossover format. Steroid-naïve asthmatics (n = 22) were randomized to AQX-1125 followed by placebo or placebo followed by AQX-1125 for seven days each. The primary efficacy measure was the LAR as measured by the forced exhalation volume in one second (FEV1) from four to ten hours after allergen challenge (AUC₄₋₁₀). The trial met its primary endpoint by demonstrating an approximate 20% improvement in the LAR by 450 mg of AQX-1125 versus placebo (p = 0.027).

From a safety perspective, all of the adverse events reported were mild to moderate, with the most frequently reported adverse events related to headaches and gastrointestinal upset, with no gastrointestinal upset in the placebo group. All adverse events resolved without treatment or long-term effects.

Overall, the results for AQX-1125 compare favorably with published results for other drugs studied in similar allergic challenge trials that are in development or have been approved. More importantly, this proof-of-concept trial provides evidence of AQX-1125's ability to modulate allergic responses at a mucosal surface after exposure to an allergen. We believe this may imply AQX-1125's potential ability to be useful in a range of diseases characterized by allergic inflammation such as chronic rhinosinusitis, eosinophilic esophagitis and diseases that have an allergic component, such as BPS/IC.

AQX-1125 Safety Profile

Safety data have been obtained from over 100 subjects from our three completed trials who have been exposed to doses of AQX-1125 ranging from 17 mg to 542 mg for up to ten consecutive days. All of the treatment-related adverse events reported to date have been mild to moderate in intensity. There have been no deaths, no withdrawals due to treatment-related adverse events and no serious adverse events or suspected unexpected serious adverse events (SUSAR) reported from the completed trials. In addition, there have been no drug-related, clinically significant, adverse changes in any laboratory parameter. The most frequent dose-related adverse events that increased with increasing dose were gastrointestinal disorder, which were intermittent and resolved without treatment or long-term effects. Frequency of gastrointestinal adverse events decreased with lower dose and with reduced fasting time, consistent with the adverse events being associated with irritation of the gastrointestinal lining from the rapid dissolution and absorption of AQX-1125. For the current and future trials, AQX-1125 will be administered with food with the goal of avoiding gastrointestinal events. The adverse events noted for AQX-1125 have been consistent across all trials conducted to date.

Clinical Trial Summary

Based on our three completed clinical trials, we have demonstrated that AQX-1125:

- ⁱ has desirable pharmacokinetic, absorption and excretion properties that make it suitable for once daily oral administration;
- ⁱ is generally well tolerated, exhibiting mild to moderate adverse events primarily related to gastrointestinal upset that resolve without treatment or long-term effects and are reduced by taking the drug candidate with food; and
- ⁱ has anti-inflammatory properties consistent with those exhibited in preclinical studies and exhibited activity in two trials using two distinct inflammatory challenges.

Development Plan

Based upon the supportive preclinical and clinical data generated to date, we have advanced AQX-1125 to two Phase 2 trials. In general, the factors we considered most important in selecting our Phase 2 trials were:

- sizeable patient populations with generally inadequate therapy to facilitate rapid enrollment in clinical trials;
- an attractive commercial opportunity with limited competition; and
- an acute phase of the disease or an endpoint that could reasonably be affected in three months of treatment to match our completed toxicology studies.

While we believe there is an expansive list of potential clinical indications that could potentially benefit from treatment with AQX-1125, we selected COPD and BPS/IC for further Phase 2 evaluation based on the preceding factors.

Dose Selection for Phase 2

We selected 200 mg once daily as the most appropriate dose for our Phase 2 COPD and BPS/IC trials based upon preclinical efficacy/target coverage experiments, regulatory considerations and human dosing/activity results from Phase 1 and 2a. Human doses as low as 70 mg daily would provide blood levels of AQX-1125 equal or greater than the average blood levels needed to achieve maximum efficacy in animal models. From our preclinical pharmacodynamic/pharmacokinetic (PK/PD) studies the observed maximal efficacy occurs in animal models at an average plasma concentration of 90 ng/ml (40-140 ng/ml). We believe 200 mg daily will provide excess target coverage (281 ng/ml) and an appropriate safety margin for extended duration dosing (e.g. six weeks or greater in current Phase 2 trials). From a safety perspective, in our completed trials a 200 mg dose was demonstrated to have a side effect profile equivalent to placebo and the plasma drug concentration in humans at this dose corresponds with a dose in animals that caused no toxicity for up to 13 weeks. We expect that future development of AQX-1125 will include clinical trials that will explore lower doses of AQX-1125 as establishing the minimally effective dose is an important endpoint for drugs that are intended for extended or chronic dosing.

Chronic Obstructive Pulmonary Disease

COPD is a lung disease frequently associated with cigarette smoking and air pollution. COPD is characterized by progressive loss of lung function and chronic inflammation of the airways. The disease is estimated to affect up to 600 million people worldwide with estimates of the number of people suffering from the moderate and severe forms that most frequently require treatment ranging from 65 million to over 200 million. It is the third leading cause of death in the United States and the fourth leading cause of death worldwide. COPD affects almost 25 million people in the United States alone, at an estimated annual economic burden of \$50 billion. COPD is the leading cause of urgent hospitalization in developed countries.

COPD Exacerbations — COPD patients suffer periodic episodes with severe worsening of symptoms, known as exacerbations. Exacerbations are characterized by severe airway inflammation triggered by various factors, such as viral or bacterial infection, or environmental irritants. Symptoms include cough, difficulty breathing, elevated mucous production, reduced tolerance to exertion and fatigue, and these symptoms typically worsen over time and often cause feelings of suffocation, panic and anxiety. Exacerbations can be so severe that they lead to respiratory failure and death. These exacerbations have a profoundly negative impact on the quality of life and long-term survival of patients and cause significant challenges for healthcare systems and the global economy. Each year on average, patients experience one to two exacerbations, which may be classified as mild, moderate or severe (requiring hospitalization). Of COPD patients, 22-40% die within one year of a severe exacerbation and 66% die within three years. Since exacerbations involve severe increased airway inflammation, treatment with potent anti-inflammatories that reduces the recruitment of immune cells (especially neutrophils) to the lungs is potentially a promising strategy to reduce exacerbations.

A 2009 study by Hurst, et al, of COPD patients demonstrated that there are generally two categories of patients with COPD exacerbations: those with infrequent exacerbations (stable) and those with frequent exacerbations (unstable). This was the first study to document the major finding that in unstable patients, exacerbations tend to cluster together; therefore patients that have had an exacerbation are most at risk of having secondary exacerbations within the next eight weeks. The unstable COPD patients tend to have clusters of exacerbations on an annual basis, often having a second or even third exacerbation within eight to 12 weeks of their first. The study reported that

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approximately 27% of patients on study had a second discrete exacerbation within eight weeks of their most recent exacerbation. This is consistent with a United Kingdom national audit of COPD outcomes, in which 34% of 1,221 hospitalized patients with exacerbations of COPD were readmitted in the subsequent three months. In contrast, the stable population is characterized by effective treatment and resolution of their first exacerbation and typically no further worsening of their symptoms for at least 12 weeks.

A medical editorial that reviewed the results of the Hurst study suggested that it may be particularly important, regardless of exacerbation frequency, to target patients after an initial exacerbation. It would be clinically important to prevent a second exacerbation in a COPD patient who has had a recent first exacerbation. However, clinical trials to date of preventive medications have, by virtue of their exclusion criteria, not addressed this issue. Most COPD clinical trials with bronchodilators, either alone or in combination with inhaled corticosteroids, have intentionally excluded patients that experienced a recent COPD exacerbation. The data presented by Hurst and colleagues suggest that this is an incorrect approach, because it is these very patients who are most at risk for recurrent exacerbations and who can be expected to drive clinical trial outcomes. We believe that a trial design that intentionally enrolls patients that have experienced a recent exacerbation to prevent a recurrent exacerbation represents an important opportunity for anti-inflammatory therapy.

COPD Current Therapy — Most marketed therapies for COPD are inhaled drugs directed towards managing symptoms by dilating narrowed airways (bronchodilators) often in combination with inhaled corticosteroids intended to open the airways as much possible to improve the ease of breathing. These inhaled therapies have modest effects on slowing the progression of COPD or reducing exacerbations. With over two decades of innovation and incremental improvement from new bronchodilator approvals, the majority of moderate and severe COPD patients still suffer from periodic exacerbations and approximately two-thirds of these patients have multiple exacerbations per year. The scientific literature also questions the value of inhaled corticosteroids in the treatment of COPD and links their use to increased risk of pneumonia and yeast infections of the mouth and throat.

The standard treatment following an exacerbation is a combination of antibiotics and/or oral corticosteroids, both of which can only be used for short durations, typically ten to 14 days due to toxicities or risk of resistance from prolonged use. Following treatment and withdrawal from oral corticosteroids, unstable COPD patients frequently have a re-emergence of exacerbation symptoms within a two-month period that can lead to hospitalization or urgent care.

The recently approved phosphodiesterase-4 or PDE4 inhibitor, roflumilast (Daliresp), for the treatment of severe COPD, is the only approved oral therapy indicated as a treatment to reduce the risk of COPD exacerbations in patients with severe COPD associated with chronic bronchitis and a history of exacerbations. Roflumilast has demonstrated some ability in reducing exacerbations but its clinical use is limited due to its side effect profile. Despite their limitations and restricted use, the evidence that both oral corticosteroids and roflumilast can reduce and treat exacerbations provide the precedent that oral anti-inflammatory therapy is an important strategy for improving the management of COPD. We believe that there is a significant medical need for new oral therapies to treat the acute and chronic lung inflammation that COPD patients experience, to reduce the severity, duration and reoccurrence of exacerbations and to slow or prevent disease progression. We believe that the anti-inflammatory properties that we have demonstrated for AQX-1125 to date compare favorably with roflumilast and oral corticosteroids while having a safety profile potentially more suitable for prolonged use.

The FLAGSHIP Trial: AQX-1125 in COPD Patients with Frequent Exacerbations — Our Phase 2 trial, known as the FLAGSHIP trial, will evaluate the effect of AQX-1125 compared to placebo in approximately 350-400 unstable moderate to severe COPD patients who have experienced a recent exacerbation and at least two other exacerbations in the prior 18 months. We believe this trial targets the COPD patients in greatest need and with the highest likelihood of responding to anti-inflammatory therapy. Enrolling patients who are expected to have frequent exacerbations permits the trial design to allow fewer patients and shorter required dosing to see a positive outcome compared to historical trials of bronchodilators. The primary endpoint is the change in the severity, duration and reoccurrence of exacerbations in patients treated with AQX-1125 versus placebo, as measured by EXACT-PRO, a patient-reported tool that measures symptoms. We are evaluating AQX-1125 administered as once daily oral 200 mg capsules for 12 weeks in a multi-center, randomized, double-blind, placebo-controlled Phase 2 trial to reduce the severity, duration and reoccurrence of exacerbations on top of standard of care. This trial will be conducted in Northern and Central Europe, and regulatory approval for the trial has been obtained in four countries as of

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October 31, 2013. We commenced enrollment in December 2013. The patients will be randomized to receive either AQX-1125 or placebo in addition to the current standard of care. The FLAGSHIP trial will be conducted at outpatient clinics and is anticipated to complete with full enrollment and initial results in the first quarter of 2015. Full results are expected to be submitted for publication and presented at a leading medical conference in 2015. If we achieve positive results in this trial, we intend to meet with the FDA and other regulatory authorities to determine the most appropriate path to marketing approval for AQX-1125.

We believe the selection of COPD as a targeted clinical indication matches well with AQX-1125's demonstrated ability, in both preclinical studies and clinical trials, to reduce inflammation, in particular neutrophils, in the airways in response to environmental inflammatory stimuli. By focusing the trial to include COPD patients with frequent exacerbations, a population with frequent clinical events, allows for shorter trial duration and number of patients needed to see sufficient clinical events to detect the effects of AQX-1125 in a 12 week trial. This novel trial design utilizes the recently developed EXACT-PRO measurement tool, which is a highly sensitive patient reported questionnaire utilizing electronic diaries for accurate and reliable capture of data on the daily symptoms affecting COPD patients.

The EXacerbations of Chronic pulmonary disease Tool (EXACT), a patient-reported outcome (PRO), or EXACT-PRO, is a recent development for research of exacerbations in COPD patients. EXACT-PRO was designed to standardize the method for evaluating the frequency, severity and duration of exacerbations. The EXACT-PRO initiative was spearheaded by United Biosource Corporation, an Express Scripts Company, with input from the FDA and was funded by a consortium of pharmaceutical companies, including AstraZeneca plc, Almirall S.A., Bayer AG, Boehringer Ingelheim Corporation, Forest Pharmaceuticals, Inc., GlaxoSmithKline plc, Merck & Co., Inc., Novartis AG, Ortho-McNeil Pharmaceutical, a division of Johnson & Johnson, Pfizer, Inc. and Sunovion Pharmaceuticals, Inc. It is available in more than 40 languages and has been tested in a number of validation studies in approximately 50 countries, with a comprehensive evidence dossier submitted to the FDA and EMA for qualification of this tool for use in Phase 3 trials.

EXACT-PRO provides data and quantification of numerous symptoms on a daily basis, thereby providing more robust and continuous measure of the effects of AQX-1125 on COPD exacerbations. We believe EXACT scores may be particularly useful in studying an exacerbation patient's recovery pattern allowing a more sensitive measure of a patient's progress, rather than simply whether a patient has experienced another exacerbation or deteriorated to the point where the patient requires hospitalization, which was a typical endpoint prior to the development of EXACT-PRO. We are not aware of any other clinical trial utilizing EXACT scores as a primary endpoint in a Phase 2 or Phase 3 trial. We have not discussed our use of EXACT-PRO as a primary endpoint in our ongoing Phase 2 clinical trials with the FDA, and we do not know if the FDA will agree with our use of EXACT-PRO as a primary endpoint instead of more traditional COPD trial endpoints. Overall, we believe that we will collect substantially more data by using EXACT-PRO compared to traditional COPD trial endpoints that will be beneficial in guiding our marketing approval strategy for AQX-1125, but we have not discussed this approach with the FDA.

Bladder Pain Syndrome/Interstitial Cystitis

BPS/IC is a chronic urinary bladder disease characterized by erosion of the lining and chronic inflammation of the bladder, pelvic pain and increased urinary urgency and/or frequency. Stress or a change in diet has been known to trigger symptoms. BPS/IC affects men and women of all ages. BPS/IC currently affects an estimated 14 million people in the United States. BPS/IC is accepted to be one of the most challenging urological conditions without effective therapy.

Chronic inflammation within the bladder wall can lead to damage and fibrotic changes in the bladder. There have been several studies linking allergic sensitivity to worsening BPS/IC symptoms. Furthermore, the inflammation leads to the release of mediators that irritate and trigger surrounding nerve tissue and causes radiating pain. For many BPS/IC sufferers, their symptoms of constant pain and urinary frequency are severe and adversely affect all major aspects of their lives, including overall physical and emotional health, employment, social and intimate relationships, and leisure activities.

The diagnosis of BPS/IC is often challenging and is based on exclusion of other diseases, including bladder cancer, kidney stones, vaginitis, endometriosis, sexually transmitted diseases and prostate infections. BPS/IC is generally

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diagnosed through cystoscopy or hydrodistention under anesthesia; however, many cases are overlooked. Sometimes patients have to see a number of doctors and specialists over a period of several years to obtain a correct diagnosis.

BPS/IC Current Therapies — There is no known cure for BPS/IC, although a number of therapies can relieve symptoms. The only approved oral therapy is an agent, pentosan polysulfate (Elmiron), first approved in 1996, which helps to temporarily restore the bladder lining. Other therapies include such approaches as antihistamines, low dose antidepressants to fight neurogenic pain and analgesics. Most BPS/IC patients continue to suffer this debilitating condition, despite treatment with existing therapies. Most current therapies and those in development are focused solely on symptomatic relief of BPS/IC.

In addition to oral therapies, direct instillation of drugs into the bladder via catheter (intravesical therapy) has been shown to provide temporary relief of symptoms. Dimethylsulfoxide (DMSO; RIMSO-50) is the only drug approved by the FDA for bladder instillation for BPS/IC. It offers anti-inflammatory, muscle relaxant and analgesic effects. DMSO is used alone or in combination with heparin, corticosteroids, bicarbonate and a local anesthetic (lidocaine) for intravesical administration.

Corticosteroids have also been reported to work via transurethral injection into the bladder wall or instillation into the bladder. Prolonged use of corticosteroids by BPS/IC patients is associated with bladder wall scarring. The American Urological Association guidelines for BPS/IC specifically state that corticosteroids are not recommended and should be avoided for chronic treatment of BPS/IC. Nonetheless, there is supporting evidence that achieving sufficient concentration of an anti-inflammatory compound in the bladder can reduce the pain and urinary symptoms associated with BPS/IC.

Instillation therapies are invasive and inconvenient, and oral therapies can offer significant potential advantages for BPS/IC patients. However, despite precedents for BPS/IC anti-inflammatory therapies, there are no satisfactory oral therapies currently available. We believe there is a significant medical need for new and innovative treatments that target the underlying inflammatory disease process.

The LEADERSHIP Trial: AQX-1125 in BPS/IC patients — Our Phase 2 trial, known as the LEADERSHIP trial, is investigating AQX-1125's ability compared to placebo to reduce pain and urinary symptoms in approximately 70 BPS/IC patients. We believe AQX-1125 is a candidate for evaluation in BPS/IC due to the fact that it has demonstrated activity in both preclinical studies and clinical trials relevant to BPS/IC and is delivered to the bladder via the bloodstream and excreted unmetabolized into the urine thereby achieving high concentrations proximate to the inflamed bladder wall. We are currently conducting a multi-center randomized, double-blind, placebo-controlled Phase 2 trial of AQX-1125 once daily oral 200 mg capsules for six weeks in women suffering from chronic pain associated with BPS/IC. The primary endpoint is to measure the difference in the change from baseline in the mean daily bladder pain score based on an 11-point numeric rating scale at two, four and six weeks recorded by electronic diary. The trial is being conducted at community and academic sites across Canada and is anticipated to complete with full enrollment and initial results before the end of 2014. Full results are expected to be submitted for publication and presented at a leading medical conference in 2015. We had enrolled five patients as of October 31, 2013. If we achieve positive results in this trial, we intend to meet with the FDA and other regulatory authorities to determine the most appropriate path to marketing approval for AQX-1125.

We believe that we have incorporated strategies into our Phase 2 trial for AQX-1125 in BPS/IC that address the shortcomings of prior published trials by other companies, and capitalize on the properties of our product candidate. We have designed our LEADERSHIP trial to:

- require cystoscopic confirmation of inflammation of a patient's bladder for entry in the trial to ensure the enrollment of the proper patient population;
- measure patients over a six-week period, which we believe will provide a measure of therapeutic activity of AQX-1125 over a period that should both be sufficient to see improvement in pain and urinary symptoms but also long enough to minimize the risk that placebo effects could confound the trial results;
- utilize a trial size sufficient to detect a change in pain, which is our primary endpoint, as measured by electronic diaries; and
- administer a once daily oral 200 mg capsule dose that we expect to achieve concentrations both in the blood stream and in the urine that are significantly higher than required to activate SHP1 in affected tissues.

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Expanded Clinical Indications for AQX-1125

We have demonstrated compelling preclinical efficacy with AQX-1125 in a broad range of relevant inflammatory and fibrotic models of inflammation including models of respiratory, urinary and gastrointestinal tract inflammation. We believe our preclinical data and clinical proof-of-concept trial results support AQX-1125's potential to treat a range of diseases characterized by mucosal inflammation such as, chronic rhinosinusitis, nephritis, eosinophilic esophagitis and inflammatory bowel disease.

We intend to use a portion of the proceeds from this offering to initiate additional Phase 2 trials with AQX-1125 focusing on diseases of the respiratory, urinary and/or gastrointestinal tracts that would complement our ongoing evaluation of AQX-1125 in COPD and BPS/IC both from a market and risk-diversification perspective.

We are currently evaluating a range of clinical indications for inclusion into our near-term development plan for AQX-1125. In addition to the relevance of SHIP1 as a target, and the properties of AQX-1125, each disease and patient population must also be considered based on its relative unmet medical need, market opportunity, the competitive environment and feasibility of clinical/regulatory pathway. We believe that there are multiple value creating opportunities in further expanding the clinical indications for which AQX-1125 is being evaluated.

Next Generation SHIP1 Activators

We have several next generation product candidates in preclinical development that are also SHIP1 activators and intend to advance these through additional preclinical evaluation.

We believe there are anti-inflammatory diseases that would be better addressed by next generation SHIP1 activators that have different properties from AQX-1125 such as concentrating in different tissues, having a different duration of action or being more suitable for different routes of administration.

We also intend to explore the role of SHIP1 activators in the treatment of cancer. Academic scientists have shown that in certain immune cell cancers the suppressed activity of SHIP1 could play a central role in the deregulation of PI3K pathway and tumor growth. Restoration of the SHIP1 activity by activators may make immune cell cancers more susceptible to chemotherapy. In addition, there is evidence that activating SHIP1 can reduce the chronic inflammation surrounding solid tumors, making these tumors more susceptible to chemotherapy. The treatment of cancer by modulating the PI3K pathway via SHIP1 offers a potentially promising new approach to improve the treatment of either immune cell cancers or solid tumors.

We believe next generation product candidates in the treatment of inflammation and cancer offer significant market potential.

Strategy

We intend to maintain and strengthen our leadership position in the development of small molecule drugs that target SHIP1. We have a management team with broad-based experience and expertise that span drug discovery through Phase 3 trials and regulatory filings. The key components of our strategy are to:

- ⁿ **Target large, underserved markets with limited competition and an attractive path to approval.** We prioritize clinical indications that are characterized by significant economic burden and are currently under invested by the pharmaceutical industry thereby limiting potential competition. We believe our current product candidate offers an innovative treatment option with an attractive approval pathway in both COPD and BPS/IC. COPD, for example, is estimated to affect up to 600 million people worldwide, with current inhaled therapies having modest effects on slowing progression or reducing exacerbations. Our FLAGSHIP trial targets unstable COPD patients in greatest need and with the highest likelihood of responding to anti-inflammatory therapy. We believe enrolling those who experience frequent exacerbations creates the opportunity to demonstrate effect with fewer patients and shorter required dosing.
- ⁿ **Focus on successfully developing AQX-1125 for a range of inflammatory diseases.** We are focused on successfully executing the completion of our current Phase 2 trials for COPD and BPS/IC. We will undertake additional work necessary for regulatory approval that may reduce the transition time between clinical trials. Some of these activities are already underway and others will be undertaken with proceeds from this

offering. These activities include: chronic toxicity studies in rat and dog, reproductive toxicity studies and carcinogenicity studies; chemistry, manufacturing and control, or CMC activities, including final dosage form development, process development, additional active pharmaceutical ingredient, or API, and final drug product manufacturing, and process validation; and supportive clinical trial work, including dose ranging studies to establish minimally effective dose. We also intend to initiate multiple Phase 2 trials with AQX-1125 focusing on additional diseases of the respiratory, urinary and gastrointestinal tracts that would complement our ongoing evaluation of AQX-1125 in COPD and BPS/IC.

- ⁿ **Advance our next generation compounds in indications not covered by AQX-1125.** We believe there are anti-inflammatory diseases that would be better addressed by our next generation SHIP1 activators that have different properties from AQX-1125 such as concentrating in different tissues, having a different duration of action or being more suitable for different routes of administration. We already have a significant library of candidate compounds and will advance these through additional preclinical evaluation. We also intend to explore the role of SHIP1 activators in the treatment of cancer. Each of these applications offers significant market potential. We intend to advance one next generation product candidate for either an inflammatory disease or for the treatment of cancer to clinical trials by 2016.
- ⁿ **Evaluate on a selective basis strategic partnerships to maximize the commercial potential of AQX-1125 and actively pursue partnerships for our next generation and other non-core assets.** From a commercialization strategy perspective, we have intentionally maintained full commercial rights to our product candidates to date. The decision on partnering will be made at the time when our available data supports a well defined path to approval and market as this timing will enable us to capture maximum value from our product candidates. We intend to explore a variety of alternatives for the potential commercialization of AQX-1125 on a global basis, including direct commercialization, co-promotion or selective territorial out-licensing of rights to a third party. By retaining worldwide rights to AQX-1125 through early development, we have maintained flexibility for any future commercialization of AQX-1125. We intend to pursue a similar strategy for our next generation product candidates except for those that require expertise outside our core-areas or require resources beyond those available to us. For non-core assets, as we advance our next generation product candidates, we intend to seek early partnerships to defray the cost, risk and infrastructure requirements in order to further their commercial development.

Research and Development

Since commencing operations, we have dedicated a significant portion of our resources to the development of product candidates, particularly AQX-1125. We incurred research and development expenses of \$8.6 million, \$5.9 million and \$4.8 million during the years ended December 31, 2011 and 2012 and the nine months ended September 30, 2013, respectively. We anticipate that a significant portion of our operating expenses will continue to be related to research and development as we continue to advance AQX-1125 and our future product candidates.

Intellectual Property

Our commercial success depends in part on our ability to obtain and maintain patent and other proprietary protection for AQX-1125 and our future product candidates, novel biological discoveries, screening and drug development technologies such as our SHIP1 discovery platform, manufacturing and process discoveries, and other inventions that are important to our business, as well as to operate without infringing the proprietary rights of others and to prevent others from infringing our proprietary rights. We strive to protect our intellectual property through a combination of patent, copyright, trademark and trade secrets laws, as well as through confidentiality provisions in our contracts.

With respect to AQX-1125 and our future product candidates, we endeavor to obtain and maintain patent protection in the United States and internationally on all patentable aspects of AQX-1125 and our other pipeline products, as it is critical to our global business strategy. Our patenting strategy is initially to pursue patent protection covering both compositions of matter and methods of use of AQX-1125 and our future product candidates and then seek to obtain additional patent protection throughout the development process on other aspects of our technology that would potentially enhance our competitive exclusivity and commercial success. Such additional means of protection may include filing applications with claims to additional methods of use, processes of manufacture, methods of screening,

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biomarkers, and companion diagnostic. We also rely on continuing technological innovation, know-how and trade secrets relating to our discovery platform and product candidates and seek to protect and maintain the confidentiality of proprietary information to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

The patent positions of biotechnology companies like ours are generally uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted, or the patent held invalid after issuance. Consequently, we may not be able to obtain or maintain adequate patent protection for AQX-1125 or any of our future product candidates. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. Any patents that we hold may be challenged, circumvented or invalidated by third parties. For a more comprehensive discussion of the risks related to our intellectual property, please see the section of this prospectus captioned "Risk Factors—Risks Related to Intellectual Property."

Our patent estate on a worldwide basis includes approximately 31 issued patents and approximately 23 pending patent applications that we are actively prosecuting and/or maintaining. These figures include patents and patent applications to which we hold exclusive commercial rights under our licenses from third parties. Our solely owned issued patents include seven U.S. patents and nine foreign patents and our solely owned patent applications include four U.S. applications and 12 foreign patent applications.

Intellectual Property Relating to AQX-1125

We are the sole owner of a patent portfolio that includes issued patents and pending patent applications covering compositions of matter and methods of use of AQX-1125. We acquired these patents and applications relating to AQX-1125 by way of an asset purchase from Biolipox AB in August 2009. This patent portfolio includes three issued United States patents and nine foreign patents issued in Europe, Japan, Canada, Korea, Mexico, Russia, Australia and New Zealand. Our issued patents cover the composition of matter of both the class of compounds to which AQX-1125 belongs, and also AQX-1125 specifically, and methods for using AQX-1125. The foreign patents will expire in 2024, while the U.S. patents will expire in 2024-28, excluding patent term extensions that may be available in the United States under the Hatch-Waxman Act or in foreign countries under similar statutes. The expiration dates of the issued U.S. patents relating to AQX-1125 include patent term adjustment (PTA) under the provisions of 35 U.S.C. §154; namely, we have received a PTA extension of 1,379 days for U.S. Patent 7,601,874, which covers the composition of matter of AQX-1125, and a PTA extension of 58 days for U.S. Patent 8,084,503 which covers the method of using AQX-1125.

Patent Terms

The term of individual patents and patent applications listed in previous sections will depend upon the legal term of the patents in the countries in which they are obtained. In most countries, the patent term is 20 years from the date of filing of the patent application (or parent application, if applicable). For example, if an international Patent Cooperation Treaty, or PCT, application is filed, any patent issuing from the PCT application in a specific country expires 20 years from the filing date of the PCT application. In the United States, however, if a patent was in force on June 8, 1995, or issued on an application that was filed before June 8, 1995, that patent will have a term that is the greater of 20 years from the filing date or 17 years from the date of issue.

In the United States, the Hatch-Waxman Act permits the patent term of a patent that covers an FDA-approved drug to be eligible for patent term extension, or PTE, of up to five years beyond the original expiration of the patent. This patent term restoration acts as compensation for the patent term lost during product development and the FDA regulatory review process if approval of the application for the product is the first permitted commercial marketing of a drug or biological product containing the active ingredient. The length of the patent term extension is related to the length of time the drug is under regulatory review, and is generally one-half the time between the effective date of an IND and the submission date of a NDA plus the time between the submission date of a NDA and the approval of that application. Patent term extension under the Hatch-Waxman Act cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Similar provisions are available in Europe and other foreign jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our products receive FDA approval, we expect to

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apply for patent term extensions on patents covering those products. We plan to seek patent term extensions to any of our issued patents in any jurisdiction where these are available, however there is no guarantee that the applicable authorities, including the FDA in the United States, will agree with our assessment of whether such extensions should be granted, and if granted, the length of such extensions.

Trade Secrets

In addition to patents, we also rely upon proprietary know-how (including trade secrets) to protect our technology and maintain and develop our competitive position. In some situations, maintaining information as a trade secret may be more appropriate to protect the type of technology than filing a patent application. We seek to protect our confidential and proprietary information in part by confidentiality agreements and it is our policy to require employees, consultants, scientific advisors, outside scientific collaborators, sponsored researchers, and contractors to execute such agreements upon the commencement of a relationship with us. These agreements provide that all confidential information concerning our business or financial affairs developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. We also employ invention assignment clauses in our agreements to grant us ownership of technologies that are developed through a relationship with a third party. Our agreements with employees also provide that all inventions conceived by the employee in the course of employment with us or from the employee's use of our confidential information are our exclusive property. We also seek to preserve our trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems.

While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached, and we may not have adequate remedies for any breach. Although we take steps to protect our proprietary information and trade secrets, third parties may independently develop substantially equivalent proprietary information or otherwise gain access to, or disclose, our trade secrets. To the extent that our employees, consultants, scientific advisors, contractors, or any future collaborators use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions. For this and more comprehensive risks related to our proprietary technology and processes, please see the section of this prospectus captioned "Risk Factors—Risks Related to Intellectual Property."

Contractual Obligations Related to Intellectual Property

On August 19, 2009, AQXP Canada entered into an asset purchase agreement with Biolipox AB of Sweden, or Biolipox, for the purchase of all assets, including patent rights and know-how, relating exclusively or principally to a compound library from which we ultimately identified and selected AQX-1125. Under the terms of the agreement, AQXP Canada paid Biolipox Canadian \$50,000 immediately upon closing. An additional Canadian \$250,000 by way of issuance of our common stock will become payable upon the first submission to the FDA of an IND for a compound from the acquired class. The terms of the agreement also require a one-time Canadian \$3 million milestone payment upon the commitment of financial resources by the Board of Directors of AQXP Canada to advance AQX-1125 into a Phase 3 clinical study. We will also be required to make certain other milestone payments totaling up to Canadian \$1.5 million in the aggregate upon the first commercial sale of the first compound covered by the acquired patent rights (which we expect will be triggered by the first commercial sale of AQX-1125) in each of the United States, Europe and Japan.

AQXP Canada entered into an exclusive license agreement with the University of British Columbia, or UBC, in June 2006, for certain patent rights and technology relating to small molecule compounds and pharmaceutical compositions as modulators of SHIP1 activity. This agreement was amended and restated in June 2007, and subsequently amended in September 2008, April 2010, and June 2010. This agreement will expire at the last to expire issued patent covering the licensed technology. The agreement will terminate automatically upon our insolvency or may be terminated by either party for material breach by the other party. The terms of the agreement required AQXP Canada to pay an initial license fee of Canadian \$50,000, all of which was paid by the issuance of 100,000 common exchangeable shares of AQXP Canada. We do not currently have any product candidates under development that are covered by the agreement, nor have we sublicensed our rights under the licensed patents. However, if we develop products covered by the UBC technology in the future, we will be required to pay certain development and regulatory milestones up to an aggregate of Canadian \$2.2 million for the first drug product developed under the license and up to Canadian \$1.5 million for each subsequent drug product, which may be paid

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in cash or by issue of our shares. We must also pay UBC low single-digit royalties based on aggregate worldwide net sales of products covered by the licensed patents and a percentage of sublicensing revenue ranging from the low single digits to the mid double digits based on the stage of development at which such sublicense is granted. We are also required to reimburse costs incurred by UBC related to the prosecution and maintenance of the licensed patents, and to pay an annual license maintenance fee.

In May 2005, AQXP Canada entered into an assignment agreement, which was subsequently amended in December 2005 and March 2006, with the British Columbia Cancer Agency ("BCCA") and StemCell Technologies, Inc. ("STI"), for the assignment to AQXP Canada of the 2002 exclusive license agreement between BCCA and STI to certain patents relating to technology relating to SHIP1. The license agreement between AQXP Canada and BCCA was amended and restated on August 9, 2006 and on June 8, 2007. This agreement has subsequently been amended in June 2008 to revise the schedule of the technology licensed under this agreement, and further amended in February 2013. Pursuant to this agreement, as amended, BCCA has granted us an exclusive worldwide license to certain of its intellectual property relating to core SHIP1 technology, and screening of compounds for activity using SHIP1, including the C2 binding domain. The agreement is to expire at the later of 20 years from the effective date of the agreement or upon the expiration of the last patent covered by the license. The terms of the assignment agreement among STI, BCCA and AQXP Canada required AQXP Canada to pay an assignment license fee of Canadian \$150,000, paid in stages beginning May 2005 and ending March 2006. We do not currently have any product candidates under development that are covered by the BCCA license agreement, nor have we sublicensed our rights under the licensed patents. However, if we develop products covered by the BCCA technology in the future, we will be required to pay BCCA low single-digit royalties based on aggregate worldwide net sales of products covered by the licensed patents, and if we sublicense any rights to the technology, a low double digit percentage of sublicensing revenue. We are also required to reimburse BCCA's patent costs incurred in relation to the licensed technology, and pay an annual maintenance fee in the amount of Canadian \$5,000. Our license with BCCA will terminate automatically upon our insolvency, and may be terminated by either party for material breach by the other party.

General Considerations

As with other biotechnology and pharmaceutical companies, our ability to maintain and solidify a proprietary position for our product candidates will depend upon our success in obtaining effective patent claims and enforcing those claims once granted.

Our commercial success will depend in part upon not infringing upon the proprietary rights of third parties. It is uncertain whether the issuance of any third-party patent would require us to alter our development or commercial strategies, or our product candidates or processes, obtain licenses or cease certain activities. The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights. If a third party commences a patent infringement action against us, or our collaborators, it could consume significant financial and management resources, regardless of the merit of the claims or the outcome of the litigation.

Competition

The biotechnology and pharmaceutical industries are characterized by rapid innovation, intense competition and a strong emphasis on proprietary products. While we believe that our SHIP1 and related technologies, product candidates, intellectual property, knowledge, experience and scientific resources provide us with competitive advantages, we face competition from other pharmaceutical and biotechnology companies, academic institutions, governmental agencies, and public and private research institutions, among others. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

Key product features that would affect our ability to effectively compete with other therapeutics include the efficacy, safety and convenience of our products and the ease of use and effectiveness of any companion diagnostics. The level of generic competition and the availability of reimbursement from government and other third-party payors will also significantly affect the pricing and competitiveness of our products.

COPD

Inhaled bronchodilators, such as long-acting beta-2 adrenergic agonists (LABAs) and long-acting muscarinic antagonists (LAMAs), alone or in combination with each other or with inhaled corticosteroids (ICSs), are central to the symptomatic treatment of COPD. Companies competing in this space with inhaled bronchodilators include GlaxoSmithKline (fluticasone/salmeterol—LABA/ICS combination (Advair)), Boehringer Ingelheim/Pfizer (tiotropium—LAMA (Spiriva)) and AstraZeneca (formoterol/budesonide—LABA/ICS (Symbicort)). Recent inhaled bronchodilator approvals include GlaxoSmithKline/Theravance's once-daily LABA/ICS combination fluticasone/vilanterol (Breo Ellipta), Almirall SA's twice-daily LAMA aclidinium (Tudorza Pressair) and Novartis AG's once-daily LABA indacaterol (Onbrez Breezhaler). Companies with inhaled products in Phase 3 clinical trials or pending approval in the United States include GlaxoSmithKline/Theravance (umeclidinium, vilanterol—LAMA (Anoro)), Novartis (glycopyrrolate/indacaterol—LABA/LAMA (Ultibro Breezhaler)) and Boehringer Ingelheim (olodaterol—LABA).

Currently, the only oral anti-inflammatory approved by the FDA for the treatment of COPD is Takeda Pharmaceuticals International GmbH's Phosphodiesterase-4 (PDE4) inhibitor, roflumilast, marketed in the United States by Forest Laboratories, Inc. as DALIRESP. Roflumilast's success has been limited by its modest efficacy, safety and tolerability profile. To our knowledge, there are no Phase 3 trials being conducted for any new anti-inflammatory therapies. We are aware of several other companies developing novel oral anti-inflammatory therapies that are in various stages of clinical development for the treatment of COPD including Pfizer (PH-797804), Pfizer/Revotar (TBC-1269), AstraZeneca (AZD-5069), GlaxoSmithKline (GW-856553) and Novartis (BCT-197). However, we believe our novel anti-inflammatory therapy, AQX-1125, remains one of the most advanced in clinical development.

BPS/IC

Few treatments exist for BPS/IC and bladder instillations remain the mainstay therapy for symptomatic relief of BPS/IC with intravesical administration of analgesics, DMSO, sodium hyaluronate, heparin and cocktails of the same being typical. There are no oral anti-inflammatories approved by the FDA for the treatment of BPS/IC; however, the leading oral therapy approved by the FDA is Janssen Pharmaceuticals Inc.'s pentosan polysulfate sodium, marketed in the United States as Elmiron. We are aware of several other companies developing competing therapies that are in various stages of development for the treatment of BPS/IC. Companies competing in this space include AbbVie (Humira), Pfizer (tanezumab), Urogen (URG101), TARIS (LiRIS) and Afferent (AF219).

We believe that AQX-1125 offers key potential advantages over competitive products that could enable, if approved, to capture meaningful market share from our competitors. However, many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also compete with us, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Our competitors may also obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market.

Manufacturing

We conduct our manufacturing activities for our clinical development of our product candidates under individual purchase orders with third-party contract manufacturing organizations (CMOs) as we currently have no manufacturing facilities and do not intend to develop one. We have in place quality agreements with our key CMOs. We have also established an internal quality management system, which audits and qualifies CMOs. Our third-party manufacturers, their facilities and all lots of drug substance and drug products used in our clinical trials are required to be in compliance with current Good Manufacturing Practices, or cGMP.

AQX-1125 is a small molecule and capable of being manufactured in reliable and reproducible synthetic processes from readily available starting materials. We believe the chemistry used to manufacture AQX-1125 is amenable to scale up and does not require unusual equipment in the manufacturing process. One of our CMOs is currently

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manufacturing active pharmaceutical ingredient (API) on multi-kilogram scale, for use in preclinical and clinical development of AQX-1125. A second CMO produces AQX-1125 final drug product for use in our ongoing clinical trials. We believe that the manufacturing processes for AQX-1125 API and final drug product have been developed to adequately support current development. For future development and commercial demands, additional CMO activities will be required for API process development, API manufacturing validation, and final drug product formulation. We believe that our existing suppliers of AQX-1125 API and drug products would be capable of providing sufficient quantities of the AQX-1125 API and drug products to meet anticipated commercial demands.

The FDA regulates and inspects equipment, facilities and processes used in manufacturing pharmaceutical products prior to approval. If we fail to comply with applicable cGMP requirements and conditions of product approval, the FDA may seek sanctions, including fines, civil penalties, injunctions, suspension of manufacturing operations, operating restrictions, withdrawal of FDA approval, seizure or recall of products and criminal prosecution. Although we periodically monitor the FDA compliance of our third-party CMOs, we cannot be certain that our present or future third-party CMOs will consistently comply with cGMP and other applicable FDA regulatory requirements.

Commercial Operations

We do not currently have an organization for the sales, marketing and distribution of pharmaceutical products. We may rely on licensing and co-promotion agreements with strategic partners for the commercialization of our products in the United States and other territories. If we choose to build a commercial infrastructure to support marketing in the United States, such commercial infrastructure could be expected to include a targeted, sales force supported by sales management, internal sales support, an internal marketing group and distribution support. To develop the appropriate commercial infrastructure internally, we would have to invest financial and management resources, some of which would have to be deployed prior to any confirmation that AQX-1125 will be approved.

Government Regulation

As a pharmaceutical company that operates and anticipates seeking approval for pharmaceutical product candidates in the United States, we are subject to extensive regulation by the FDA, and other federal, state, and local regulatory agencies. The Federal Food, Drug, and Cosmetic Act, or the FDC Act, and its implementing regulations set forth, among other things, requirements for the research, testing, development, manufacture, quality control, safety, effectiveness, approval, labeling, storage, record keeping, reporting, distribution, import, export, advertising and promotion of our products. Our pharmaceutical product candidates must be approved by the FDA before we can commence clinical trials or market those products in the United States.

Although the discussion below focuses on regulation in the United States, we conduct research activities and anticipate seeking approval for, and marketing of, our products in other countries and regions, such as Canada and Europe. Generally, our activities in other countries will be subject to regulation that is similar in nature and scope as that imposed in the United States, although there can be important differences. Additionally, some significant aspects of regulation in Europe are addressed in a centralized way through the EMA, but country-specific regulation remains essential in many respects. The process of obtaining regulatory marketing approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources.

FDA Regulation

The FDA is the main regulatory body that controls pharmaceuticals in the United States, and its regulatory authority is based in the FDC Act. Pharmaceutical products are also subject to other federal, state and local statutes. A failure to comply with any requirements during the product development, approval, or post-approval periods, may lead to administrative or judicial sanctions. These sanctions could include the imposition by the FDA or an institutional review board, or IRB, of a hold on clinical trials, refusal to approve pending marketing applications or supplements, withdrawal of approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties or criminal prosecution.

The steps required before a new drug may be marketed in the United States generally include:

- ⁿ Completion of preclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's Good Laboratory Practices regulations;

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- ⁿ Submission to the FDA of an IND, which must become effective before human clinical studies may begin;
- ⁿ Approval by an IRB at each clinical site before each trial may be initiated;
- ⁿ Performance of adequate and well-controlled clinical trials in accordance with federal regulations and with current good clinical practices, or GCPs, to establish the safety and efficacy of the investigational drug product for each targeted indication;
- ⁿ Submission of a New Drug Application, or NDA, to the FDA;
- ⁿ Satisfactory completion of an FDA Advisory Committee review, if applicable;
- ⁿ Satisfactory completion of an FDA inspection of the manufacturing facilities at which the investigational product is produced to assess compliance with cGMP, and to assure that the facilities, methods and controls are adequate; and
- ⁿ FDA review and approval of the NDA.

Clinical Trials

An IND is a request for authorization from the FDA to administer an investigational drug product to humans. This authorization is required before interstate shipping and administration of any new drug product to humans that is not the subject of an approved NDA. A 30-day waiting period after the submission of each IND is required prior to the commencement of clinical testing in humans. If the FDA has neither commented on nor questioned the IND within this 30-day period, the clinical trial proposed in the IND may begin. Clinical trials involve the administration of the investigational drug to patients under the supervision of qualified investigators following GCPs, an international standard meant to protect the rights and health of patients and to define the roles of clinical trial sponsors, administrators and monitors. Clinical trials are conducted under protocols that detail the parameters to be used in monitoring safety, and the efficacy criteria to be evaluated. Each protocol involving testing on U.S. patients and subsequent protocol amendments must be submitted to the FDA as part of the IND. The informed written consent of each participating subject is required. The clinical investigation of an investigational drug is generally divided into three phases. Although the phases are usually conducted sequentially, they may overlap or be combined. The three phases of an investigation are generally described as follows:

- ⁿ *Phase 1* — Phase 1 includes the initial introduction of an investigational drug into humans. Phase 1 clinical trials may be conducted in patients with the target disease or condition or healthy volunteers. These studies are designed to evaluate the safety, metabolism, pharmacokinetics and pharmacologic actions of the investigational drug in humans, the side effects associated with increasing doses, and if possible, to gain early evidence on effectiveness. During Phase 1 clinical trials, sufficient information about the investigational product's pharmacokinetics and pharmacological effects may be obtained to permit the design of Phase 2 clinical trials. The total number of participants included in Phase 1 clinical trials varies, but is generally in the range of 20 to 80.
- ⁿ *Phase 2* — Phase 2 includes the controlled clinical trials conducted to evaluate the effectiveness of the investigational product for a particular indication(s) in patients with the disease or condition under study, to determine dosage tolerance and optimal dosage, and to identify possible adverse side effects and safety risks associated with the drug. Phase 2 clinical trials are typically well-controlled, closely monitored, and conducted in a limited patient population, usually involving no more than several hundred participants.
- ⁿ *Phase 3* — Phase 3 clinical trials are controlled clinical trials conducted in an expanded patient population at geographically dispersed clinical trial sites. They are performed after preliminary evidence suggesting effectiveness of the investigational product has been obtained, and are intended to further evaluate dosage, clinical effectiveness and safety, to establish the overall benefit-risk relationship of the product, and to provide an adequate basis for product approval. Phase 3 clinical trials usually involve several hundred to several thousand participants. In most cases, the FDA requires two adequate and well controlled Phase 3 clinical trials to demonstrate the efficacy of the drug. A single Phase 3 trial with other confirmatory evidence may be sufficient in rare instances where the trial is a large multicenter trial demonstrating internal consistency and a statistically very persuasive finding of a clinically meaningful effect on mortality, irreversible morbidity or prevention of a disease with a potentially serious outcome and confirmation of the result in a second trial would be practically or ethically impossible.

Progress reports detailing the results of the clinical studies must be submitted at least annually to the FDA and safety reports must be submitted to the FDA and the investigators for serious and unexpected adverse events.

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Phase 1, Phase 2 and Phase 3 testing may not be completed successfully within any specified period, if at all. The decision to terminate development of an investigational drug product may be made by either a health authority body, such as the FDA or IRB/ethics committees, or by a company for various reasons. The FDA may order the temporary, or permanent, discontinuation of a clinical trial at any time, or impose other sanctions, if it believes that the clinical trial either is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients. Similarly, an IRB can suspend or terminate approval of a clinical study at its institution if the clinical study is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. In some cases, clinical trials are overseen by an independent group of qualified experts organized by the trial sponsor, or the clinical monitoring board. This group provides authorization for whether or not a trial may move forward at designated check points. These decisions are based on the limited access to data from the ongoing trial. The suspension or termination of development can occur during any phase of clinical trials if it is determined that the participants or patients are being exposed to an unacceptable health risk. In addition, there are requirements for the registration of ongoing clinical trials of drugs on public registries and the disclosure of certain information pertaining to the trials as well as clinical trial results after completion.

Concurrent with clinical studies, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the product and finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, detailed investigational drug product information is submitted to the FDA in the form of a NDA to request market approval for the product in specified indications.

New Drug Applications

In order to obtain approval to market a drug in the United States, a marketing application must be submitted to the FDA that provides data establishing the safety and effectiveness of the drug product for the proposed indication. The application includes all relevant data available from pertinent preclinical studies and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls and proposed labeling, among other things. Data can come from company-sponsored clinical trials intended to test the safety and effectiveness of a product, or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and effectiveness of the investigational drug product to the satisfaction of the FDA.

In most cases, the NDA must be accompanied by a substantial user fee; there may be some instances in which the user fee is waived. The FDA will initially review the NDA for completeness before it accepts the NDA for filing. The FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. After the NDA submission is accepted for filing, the FDA begins an in-depth review. The FDA has agreed to certain performance goals in the review of NDAs. Most such applications for standard review drug products are reviewed within ten to 12 months of filing. The FDA can extend this review by three months to consider certain late-submitted information or information intended to clarify information already provided in the submission. The FDA does not always achieve its performance goal and its review of NDAs can take significantly longer. The FDA reviews the NDA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured in accordance with cGMP. The FDA may refer applications for novel drug products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

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Before approving an NDA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. After the FDA evaluates the NDA and the manufacturing facilities, it issues either an approval letter or a complete response letter. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If, or when, those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included. The approval process is lengthy and difficult and notwithstanding the submission of any requested additional information, the FDA ultimately may refuse to approve an NDA if applicable regulatory criteria are not satisfied or if the FDA believes additional clinical data or other data and information are required. Data obtained from clinical studies are not always conclusive and the FDA may interpret data differently than a company interprets the same data.

An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. FDA's approval of a product may be significantly limited to specific disease and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings, or precautions be included in the product labeling. In addition, as a condition of NDA approval, the FDA may require a risk evaluation and mitigation strategy, or REMS, to help ensure that the benefits of the drug outweigh the potential risks. REMS can include medication guides, communication plans for healthcare professionals, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patient registries. The requirement for a REMS can materially affect the potential market and profitability of the drug. Moreover, product approval may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

Changes to some of the conditions established in an approved application, including changes in indications, labeling, or manufacturing processes or facilities, require submission and FDA approval of a new NDA or NDA supplement before the change can be implemented. An NDA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA supplements as it does in reviewing NDAs.

Advertising and Promotion

The FDA and other federal regulatory agencies closely regulate the marketing and promotion of drugs through, among other things, standards and regulations for direct-to-consumer advertising, communications regarding unapproved uses, industry-sponsored scientific and educational activities, and promotional activities involving the Internet. A product cannot be commercially promoted before it is approved. After approval, product promotion can include only those claims relating to safety and effectiveness that are consistent with the labeling approved by the FDA. Healthcare providers are permitted to prescribe drugs for "off-label" uses—that is, uses not approved by the FDA and therefore not described in the drug's labeling—because the FDA does not regulate the practice of medicine. However, FDA regulations impose stringent restrictions on manufacturers' communications regarding off-label uses. Broadly speaking, a manufacturer may not promote a drug for off-label use, but may engage in non-promotional, balanced communication regarding off-label use under specified conditions. Failure to comply with applicable FDA requirements and restrictions in this area may subject a company to adverse publicity and enforcement action by the FDA, the DOJ, or the Office of the Inspector General of HHS, as well as state authorities. This could subject a company to a range of penalties that could have a significant commercial impact, including civil and criminal fines and agreements that materially restrict the manner in which a company promotes or distributes drug products.

Post-Approval Regulations

After regulatory approval of a drug is obtained, a company is required to comply with a number of post-approval requirements. For example, as a condition of approval of an NDA, the FDA may require post-marketing testing, including Phase 4 clinical trials, and surveillance to further assess and monitor the product's safety and effectiveness after commercialization. In addition, as a holder of an approved NDA, a company would be required to report adverse

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reactions and production problems to the FDA, to provide updated safety and efficacy information, and to comply with requirements concerning advertising and promotional labeling for any of its products. Also, quality control and manufacturing procedures must continue to conform to cGMP after approval to assure and preserve the long term stability of the drug or biological product. The cGMP requirements apply all stages of the manufacturing process, including the production, processing, sterilization, packaging, labeling, storage and shipment of the drug product. The FDA periodically inspects manufacturing facilities to assess compliance with cGMP, which imposes extensive procedural and substantive record keeping requirements. In addition, changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon a company and any third-party manufacturers that a company may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our product candidates. Future FDA and state inspections may identify compliance issues at our facilities or at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct.

The FDA may withdraw a product approval if compliance with regulatory standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved NDA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could delay or prohibit further marketing. Further, the failure to maintain compliance with regulatory requirements may result in administrative or judicial actions, such as fines, warning letters, holds on clinical studies, product recalls or seizures, product detention or refusal to permit the import or export of products, refusal to approve pending applications or supplements, restrictions on marketing or manufacturing, injunctions or civil or criminal penalties.

Newly discovered or developed safety or effectiveness data may require changes to a product's approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of other risk management measures. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

Compliance

During all phases of development (pre- and post-marketing), failure to comply with applicable regulatory requirements may result in administrative or judicial sanctions. These sanctions could include the FDA's imposition of a clinical hold on trials, refusal to approve pending applications, withdrawal of an approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, product detention or refusal to permit the import or export of products, injunctions, fines, civil penalties or criminal prosecution. Any agency or judicial enforcement action could have a material adverse effect on us.

Comparable European, Canadian and Other International Government Regulation

In addition to FDA regulations in the United States, we will be subject to a variety of comparable regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries.

Some countries outside of the United States have a similar process that requires the submission of a clinical trial application, or CTA, much like the IND prior to the commencement of human clinical trials. In Europe, for example, a CTA must be submitted to each country's national health authority and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is approved in accordance with a country's requirements, clinical trial development may proceed. To obtain regulatory approval to commercialize a new drug under European Union regulatory systems, we must submit a marketing authorization application, or MAA. The MAA is similar to the NDA, with the exception of, among other things, country-specific document requirements.

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In Canada, biopharmaceutical product candidates are regulated by the Food and Drugs Act and the rules and regulations promulgated thereunder, which are enforced by the Therapeutic Products Directorate of Health Canada, or TPD. Before commencing clinical trials in Canada, an applicant must complete preclinical studies and file a CTA with the TPD. After filing a CTA, the applicant must receive different clearance authorizations to proceed with Phase 1 clinical trials, which can then lead to Phase 2 and Phase 3 clinical trials. To obtain regulatory approval to commercialize a new drug in Canada, a new drug submission, or NDS, must be filed with the TPD. If the NDS demonstrates that the product was developed in accordance with the regulatory authorities' rules, regulations and guidelines and demonstrates favorable safety and efficacy and receives a favorable risk/benefit analysis, the TPD issues a notice of compliance which allows the applicant to market the product.

For other countries outside of the European Union and Canada, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

Other Healthcare Laws and Compliance Requirements

In the United States, our activities are potentially subject to additional regulation and oversight under other healthcare laws by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare & Medicaid Services, or CMS, other divisions of the United States Department of Health and Human Services (e.g., the Office of Inspector General), the United States Department of Justice, or the DOJ, and individual U.S. Attorney offices within the DOJ, and state and local governments. These laws include the federal Anti-Kickback Statute, which prohibits, among other things, any person or entity, from knowingly and willfully offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any item or service reimbursable under Medicare, Medicaid or other federal healthcare programs. The term remuneration has been interpreted broadly to include anything of value. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution. The exceptions and safe harbors are drawn narrowly and practices that involve remuneration that may be alleged to be intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exception or safe harbor. Our practices may not in all cases meet all of the criteria for protection under a statutory exception or regulatory safe harbor from federal Anti-Kickback Statute liability. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor, however, does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. In addition, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the Affordable Care Act, further strengthened these laws by amending the intent standard under the Anti-Kickback Statute and the criminal health care fraud statutes (discussed below) to a stricter standard such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, the Affordable Care Act codified case law that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act (discussed below).

The federal False Claims Act prohibits, among other things, any person or entity from knowingly presenting, or causing to be presented, a false claim for payment to, or approval by, the federal government or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes "any request or demand" for money or property presented to the U.S. government. Recently, several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies' marketing of the product for off-label, and thus, non-covered, uses.

The civil monetary penalties statute imposes penalties against any person or entity who, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or

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should know is for an item or service that was not provided as claimed or is false or fraudulent. HIPAA created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud or to obtain, by means of false or fraudulent pretenses, representations or promises, any money or property owned by, or under the control or custody of, any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up by trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Also, many states have similar fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

We may also be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by HITECH, and its implementing regulations, imposes requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to business associates—independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Additionally, the federal Physician Payments Sunshine Act within the Affordable Care Act, and its implementing regulations, require that certain manufacturers of drugs, devices, biological and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) report information related to certain payments or other transfers of value made or distributed to physicians and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals and to report annually certain ownership and investment interests held by physicians and their immediate family members and payments or other "transfers of value" to such physician owners and their immediate family members.

In order to distribute products commercially, we must comply with state laws that require the registration of manufacturers and wholesale distributors of pharmaceutical products in a state, including, in some states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states have enacted legislation requiring pharmaceutical companies to, among other things, establish compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing specified physician prescribing data to pharmaceutical companies for use in sales and marketing, and to prohibit other specified sales and marketing practices. In addition, our future commercial activities may also be subject to federal and state consumer protection and unfair competition laws.

If our operations are found to be in violation of any of the federal and state healthcare laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including without limitation, civil, criminal and administrative penalties, damages, fines, disgorgement, exclusion from participation in government programs, such as Medicaid and Medicare, injunctions, reputational harm, administrative burdens, diminished profits and future earnings and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our products are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

Coverage, Reimbursement and Pricing

Significant uncertainty exists as to the coverage and reimbursement status of any drug products for which we obtain regulatory approval. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend, in part, on the extent that third-party payors provide coverage, and establish adequate reimbursement levels for such drug products. In the United States, third-party payors include federal healthcare programs, state healthcare programs, managed care providers, private health insurers and other organizations. The process for determining whether a third-party payor will provide coverage for a drug product may be separate from the process for setting the price of a drug product or for establishing the reimbursement rate that such a payor will pay for the drug product. Third-party payors may limit coverage to specific drug products on an approved list, also known as a formulary, which might not include all of the FDA-approved drugs for a particular indication. Third-party payors are increasingly challenging the price, examining the medical necessity and reviewing the cost-effectiveness of drug products and medical services, in addition to questioning their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain FDA approvals. AQX-1125 or our future product candidates may not be considered medically necessary or cost-effective. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a drug product does not assure that other payors will also provide coverage for the drug product. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development. If a drug product is reimbursed under a governmental healthcare program, such as Medicare, Medicaid or TRICARE, additional laws and program requirements will apply.

Different pricing and reimbursement schemes exist in other countries. In the European Union, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed upon. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for drugs, but monitor and control company profits. The downward pressure on healthcare costs in general, particularly prescription drugs, has become more intense. As a result, increasingly high barriers are being erected to the entry of new products. The European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. We may face competition for our product candidates from lower-priced products in foreign countries that have placed price controls on pharmaceutical products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

The marketability of any products for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, an increasing emphasis on managed care in the United States has increased and will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Healthcare Reform

In March 2010, President Obama signed the Affordable Care Act, which has the potential to substantially change healthcare financing and delivery by both governmental and private insurers, and significantly impact the pharmaceutical industry. The Affordable Care Act impacts existing government healthcare programs and requires the development of new programs. For example, the Affordable Care Act provides for Medicare payment for performance initiatives and improvements to the physician quality reporting system and feedback program.

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Among the Affordable Care Act's provisions of importance to the pharmaceutical industry are the following:

- ⁿ an annual, nondeductible fee on any entity that manufactures or imports certain specified branded prescription drugs and biologic agents apportioned among these entities according to their market share in some government healthcare programs, that began in 2011;
- ⁿ an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program, retroactive to January 1, 2010, to 23.1% and 13% of the average manufacturer price for most branded and generic drugs, respectively and capped the total rebate amount for innovator drugs at 100% of AMP;
- ⁿ expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for noncompliance;
- ⁿ a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D;
- ⁿ extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- ⁿ expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals beginning in 2014 and by adding new mandatory eligibility categories for individuals with income at or below 133% of the Federal Poverty Level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- ⁿ expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- ⁿ new requirements to report annually specified financial arrangements with physicians and teaching hospitals, as defined in the Affordable Care Act and its implementing regulations, including reporting information related to "payments or other transfers of value" made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to HHS ownership and investment interests held by physicians (as defined above) and their immediate family members and payments or other "transfers of value" to such physician owners and their immediate family members; a new requirement to annually report drug samples that manufacturers and distributors provide to licensed practitioners, pharmacies of hospitals and other healthcare entities; and
- ⁿ a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

The Affordable Care Act also establishes an Independent Payment Advisory Board, or IPAB, to reduce the per capita rate of growth in Medicare spending. Beginning in 2014, IPAB is mandated to propose changes in Medicare payments if it determines that the rate of growth of Medicare expenditures exceeds target growth rates. The IPAB has broad discretion to propose policies to reduce expenditures, which may have a negative impact on payment rates for pharmaceutical products. A proposal made by the IPAB is required to be implemented by CMS unless Congress adopts a proposal with savings greater than those proposed by the IPAB. IPAB proposals may impact payments for physician and free-standing services beginning in 2015 and for hospital services beginning in 2020.

In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. On August 2, 2011, the President signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend proposals in spending reductions to Congress. The Joint Select Committee did not achieve its targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, triggering the legislation's automatic reductions to several government programs. These reductions include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, which went into effect on April 1, 2013. On January 2, 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on our future customers and accordingly, our financial operations.

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We anticipate that the Affordable Care Act will result in additional downward pressure on coverage and the price that we receive for any approved product, and could seriously harm our business. Any reduction in reimbursement from Medicare and other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products. In addition, it is possible that there will be further legislation or regulation that could harm our business, financial condition, and results of operations.

Anti-Corruption Legislation

The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering, or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring us to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

The Corruption of Foreign Public Officials Act, or CFPOA, prohibits Canadian businesses and individuals from giving or offering to give a benefit of any kind to a foreign public official, or any other person for the benefit of the foreign public official, where the ultimate purpose is to obtain or retain a business advantage. Under the CFPOA, companies may be liable for the actions of their employees or third-party agents, even if such persons operate outside of Canada.

Employees

As of December 20, 2013, we had 13 employees, of whom five hold Ph.D. degrees or M.D. degrees. We have no collective bargaining agreements with our employees and have not experienced any work stoppages. We believe that relations with our employees are good.

Facilities

Our corporate headquarters are located in Richmond, Canada, where we lease approximately 15,000 square feet of office and laboratory space pursuant to a lease agreement which expires in August 2015. Approximately 10,000 square feet of this space has been subleased to other technology companies as we elected to alter our strategy to greater reliance on sub-contracting of activities requiring laboratory facilities. This facility houses our research, clinical, regulatory, commercial and administrative personnel.

We believe that our existing facilities are adequate for our near-term needs. We believe that suitable additional or alternative space would be available if required in the future on commercially reasonable terms.

MANAGEMENT

Executive Officers and Directors

The following table sets forth certain information with respect to our executive officers and directors as of November 30, 2013:

<u>NAME</u>	<u>AGE</u>	<u>POSITION</u>
David J. Main	49	Co-Founder, President and Chief Executive Officer and Director
Kamran Alam	39	Chief Financial Officer, Vice President, Finance
Stephen Shrewsbury, M.B. ChB.	57	Chief Medical Officer, Senior Vice President, Clinical Development
Lloyd Mackenzie	46	Vice President, Technical Operations and Planning
Gary Bridger, Ph.D.	50	Director
Elaine Jones	58	Director
Daniel Levitt, M.D., Ph.D.	66	Director
Robert Pelzer	60	Director

(1) Member of the audit committee.

(2) Member of the compensation committee.

(3) Member of the nominating and corporate governance committee.

Executive Officers

David J. Main, one of our co-founders, has served as our President, Chief Executive Officer, and a member of our board of directors since December 2005. From September 1996 to June 2005, Mr. Main held various positions at INEX Pharmaceuticals Corp., a biopharmaceutical company, serving as President and Chief Executive Officer from July 1999 to June 2005 and as Vice President, Corporate Development from September 1996 to July 1999. While President and Chief Executive Officer, Mr. Main led the transformation of INEX from a research driven to a product focused biopharmaceutical company, advancing product development to the NDA stage and securing several significant pharmaceutical partnerships and over \$100 million in equity financings. From 1990 to 1996, Mr. Main held various positions at QLT Inc., a pharmaceutical company, most recently serving as Vice President. Mr. Main was formerly a licensed pharmacist at the Royal Columbian Hospital in New Westminster, B.C. Mr. Main holds a B.Sc. in Pharmacy and an M.B.A. from the University of British Columbia. Mr. Main previously served on the board of directors of LifeSciences BC, a non-profit industry association. Mr. Main also serves on the board of directors for BIOTECCanada, a Canadian industry association, and Discovery Parks Trust, a not-for-profit association.

Mr. Main was selected to serve on our board of directors because he is a co-founder, our Chief Executive Officer and has extensive experience in the pharmaceutical industry.

Kamran Alam has served as our Chief Financial Officer and Vice President, Finance since August 2011. From June 2010 to August 2011, Mr. Alam served as Senior Director, Business Development of Sirius Genomics Inc., a biotechnology company. From October 2008 to June 2010, Mr. Alam served as Director, Business Development of the Centre for Drug Research and Development, a drug development and commercialization center. From January 2007 to October 2008, Mr. Alam served as Senior Manager, Business Development of Angiotech Pharmaceuticals, Inc., a pharmaceutical company. From 2004 to 2007, Mr. Alam served as Manager, Business Development of AnorMED Inc., a chemistry-based biopharmaceutical company. From 1998 to 2000, Mr. Alam served worked in the life sciences practice group of PriceWaterhouseCoopers LLP, a global accounting and auditing firm where he obtained his Chartered Accountant designation, and gained valuable experience in the financing, auditing and tax structuring of a number of biotechnology and technology companies. Mr. Alam holds a B.Sc. in Cell Biology and Genetics from the University of British Columbia and an M.B.A. in International Business and Strategy from the University of Victoria and is a Chartered Accountant.

Stephen Shrewsbury, M.B. ChB., has served as our Chief Medical Officer and Senior Vice President, Clinical Development since April 2013. From August 2011 to March 2013, Dr. Shrewsbury served as founder, principal and sole member of Shrewd Consulting LLC, a consulting company. During that time he also served as Acting Chief

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Medical Officer of LifeSplice Pharma LLC, a biotechnology company. From February 2009 to August 2011, Dr. Shrewsbury served as Senior Vice President, Preclinical & Clinical Development and Chief Medical Officer of Sarepta Therapeutics, Inc., formally known as AVI BioPharma, Inc., a medical research and drug development company. From July 2008 to February 2009, Dr. Shrewsbury served as a consultant in the biotechnology and biopharmaceutical industry. From March to July 2008, Dr. Shrewsbury served as Senior Vice President of Clinical Development and Regulatory Affairs of Adamas Pharmaceuticals, Inc., a clinical stage pharmaceutical company. From 2005 to 2008, Dr. Shrewsbury served as Vice President of Clinical Development and Regulatory Affairs and then Vice President and Chief Medical Officer of MAP Pharmaceuticals, Inc., a pharmaceutical company, which was acquired by Allergan, Inc., a global healthcare company, in 2013. While at MAP, Dr. Shrewsbury lead four inhaled drug programs and took two lead candidates (in asthma and migraine) from preclinical stage to Phase III in 18 months. Prior to his experience in biotechnology, Dr. Shrewsbury spent ten years with Glaxo and Chiron launching notable respiratory programs such as Seretide in Europe and Flovent and Advair in the United States. Dr. Shrewsbury holds an M.B. ChB. from the University of Liverpool. Dr. Shrewsbury serves on the board of directors of BioXpertz LLC, an online educational company.

Lloyd Mackenzie has served as our Vice President, Technical Operations and Planning since May 2013 and prior to that had served as our Senior Director, Technical Operations since May 2008. From 2007 to 2008, Mr. Mackenzie served as a Research Scientist of Pharmaceutical Development at QLT. From 1999 to 2007, Mr. Mackenzie served as a Research Scientist of Inflazyme Pharmaceuticals Inc., a biotechnology company. Mr. Mackenzie is the author of 15 scientific publications and is an inventor on four patents. Mr. Mackenzie holds a B.Sc. in Chemistry and Biochemistry from Simon Fraser University.

Non-Employee Directors

Gary Bridger, Ph.D., has served as a member of our board of directors since October 2013. Since January 2013, Dr. Bridger has served as the Executive Vice President of Research and Development of Xenon Pharmaceuticals Inc., a biopharmaceutical company. From June 2010 to June 2012, Dr. Bridger served as a partner at Venture West Capital Management, a venture capital firm. From November 2006 to December 2007, Dr. Bridger served as Senior Vice President of Research and Development of Genzyme Corporation, a biotechnology company, which was acquired by Sanofi, S.A. In June 1996, Dr. Bridger co-founded AnorMED Inc., a biopharmaceutical company, and was its Vice President of Research and Development and Chief Scientific Officer from 2000 until its acquisition by Genzyme in November 2006. Dr. Bridger holds a Ph.D. in Organic Chemistry from the University of Manchester Institute of Science and Technology. Dr. Bridger also serves on the scientific advisory board of Alectos Therapeutics Inc., a biopharmaceutical company.

Dr. Bridger was selected to serve on our board of directors based on his extensive experience with biopharmaceutical companies and the venture capital industry.

Elaine Jones, Ph.D., has served as a member of our board of directors since June 2010. Since December 2008, Dr. Jones has served as Executive Director, Venture Capital of Pfizer Venture Investments, the venture capital arm of Pfizer, Inc., a pharmaceutical company. From 2003 to November 2008, Dr. Jones served as a general partner of Euclid SR Partners, a venture capital firm. From 1999 to 2003, Dr. Jones held various positions at S.R. One, the venture fund of GlaxoSmithKline plc, a global pharmaceuticals company. Dr. Jones holds a B.S. in Biology from Juniata College and a Ph.D. in Microbiology from the University of Pittsburgh.

Dr. Jones was selected to serve on our board of directors based on her extensive experience with the life sciences and pharmaceutical industries, pharmaceutical science and the venture capital industry.

Daniel Levitt, M.D., Ph.D., has served as a member of our board of directors since July 2008. Since October 2009, Dr. Levitt has served as Executive Vice President and Chief Medical Officer of CytRx Corporation, a biopharmaceutical research and development company. From January 2007 to February 2009, Dr. Levitt served as Executive Vice President, Research and Development of Cerimon Pharmaceuticals, Inc., a biopharmaceutical company. From 2003 to 2006, Dr. Levitt served as Chief Medical Officer and Head of Clinical and Regulatory Affairs of Dynavax Technologies Corporation, a biopharmaceutical. Dr. Levitt has received ten major research awards and authored or co-authored nearly 200 papers and abstracts. Dr. Levitt holds a B.A. from Brandeis University and an M.D. and a Ph.D. in Biology from the University of Chicago.

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Dr. Levitt was selected to serve on our board of directors based on his extensive experience with biopharmaceutical companies and research and product development.

Robert Pelzer has served as a member of our board of directors since June 2013. From September 2008 to December 2013, Mr. Pelzer served as President of Novartis Corporation, a pharmaceutical company. Prior to 2002, Mr. Pelzer held various positions at DuPont, a chemical company, including serving as General Counsel and Senior Vice President at DuPont Pharmaceuticals from 1998 to 2001. Mr. Pelzer holds a B.A. in Commerce and an LL.B. from the University of Alberta. Mr. Pelzer previously served on the board of directors of Idenix Pharmaceuticals, Inc., a biotechnology company.

Mr. Pelzer was selected to serve on our board of directors based on his extensive experience with the healthcare industry.

Composition of the Board of Directors

Certain members of our board of directors were elected pursuant to the provisions of our shareholders' agreement, as amended. Under the shareholders' agreement, our stockholders who are party to the shareholders' agreement agreed to vote their shares to elect to our board of directors

- ⁿ one director designated by Ventures West 8 Limited Partnership (Dr. Bridger);
- ⁿ one director designated by Johnson & Johnson Development Corporation (vacant);
- ⁿ one director designated by Pfizer, Inc. (Dr. Jones);
- ⁿ the person serving as Chief Executive Officer (Mr. Main); and
- ⁿ two directors designated by the holders of our preferred stock and special voting stock, voting together as a single class (Dr. Levitt and Mr. Pelzer).

The shareholders' agreement will terminate upon the completion of this offering and none of our stockholders will have any special rights regarding the election or designation of members of our board of directors.

Our amended and restated bylaws provide that the size of our board of directors will be determined from time to time by resolution of our board of members. Our board of directors currently consist of _____ directors, _____ of whom qualify as independent directors under the rules and regulations of the SEC and the NASDAQ Stock Market LLC, or NASDAQ.

Election of Directors

Our board of directors will consist of five members upon completion of this offering. In accordance with our certificate of incorporation to be filed in connection with this offering, immediately after this offering, our board of directors will be divided into three classes with staggered three-year terms. At each annual general meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

- ⁿ The Class I directors will be _____ and _____, and their terms will expire at the annual meeting of stockholders to be held in 2015;
- ⁿ The Class II directors will be _____ and _____, and their terms will expire at the annual meeting of stockholders to be held in 2016; and
- ⁿ The Class III directors will be _____, and their terms will expire at the annual meeting of stockholders to be held in 2017.

We expect that any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control.

Director Independence

Rule 5605 of the NASDAQ Marketplace Rules, or the NASDAQ Listing Rules, requires that independent directors compose a majority of a listed company's board of directors within one year of listing. In addition, the NASDAQ Listing Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation, and nominating and corporate governance committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act of 1934. Under NASDAQ Listing Rule 5605(a)(2), a director will only qualify as an "independent director" if, in the opinion of our board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3 under the Exchange Act, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries. Beginning in 2014, in addition to satisfying general independence requirements under the NASDAQ Listing Rules, members of the compensation committee must also satisfy additional independence requirements set forth in NASDAQ Listing Rule 5605(d)(2). In order to be considered independent for purposes of NASDAQ Listing Rule 5605(d)(2), a member of a compensation committee of a listed company may not, other than in his or her capacity as a member of the compensation committee, the board of directors, or any other board committee, accept, directly or indirectly any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries. Additionally, the board of directors of the listed company must consider whether the compensation committee member is an affiliated person of the listed company or any of its subsidiaries and if so, must determine whether such affiliation would impair the director's judgment as a member of the compensation committee.

In _____, 2014 our board of directors undertook a review of its composition, the composition of its committees and the independence of each director. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, our board of directors determined that _____ do not have any relationships that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the applicable rules and regulations of the SEC and the NASDAQ Listing Rules. In making those determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

Lead Independent Director

Our corporate governance guidelines provide that one of our independent directors shall serve as a lead independent director at any time when an independent director is not serving as the Chairman of the board of directors. Our board of directors has appointed _____ to serve as our lead independent director. As lead independent director, _____ will preside over periodic meetings of our independent directors, coordinate activities of the independent directors and perform such additional duties as our board of directors may otherwise determine and delegate.

Role of the Board in Risk Oversight

We face a number of risks, including those described in the section of this prospectus captioned "Risk Factors." Our board of directors believes that risk management is an important part of establishing, updating and executing on our business strategy. Our board of directors, as a whole and at the committee level, has oversight responsibility relating to risks that could affect the corporate strategy, business objectives, compliance, operations, and the financial condition and our performance. Our board of directors focuses its oversight on our most significant risks and on our processes to identify, prioritize, assess, manage and mitigate those risks. Our board of directors and its committees receive regular reports from members of our senior management on areas of material risk to the company, including strategic, operational, financial, legal and regulatory risks. While our board of directors has an oversight role, management is principally tasked with direct responsibility for management and assessment of risks and the implementation of processes and controls to mitigate their effects on us.

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The audit committee, as part of its responsibilities, oversees the management of financial risks, including accounting matters, liquidity and credit risks, corporate tax positions, insurance coverage, and cash investment strategy and results. The audit committee is also responsible for overseeing the management of risks relating to the performance of our internal audit function, if required, and its independent registered public accounting firm, as well as our systems of internal controls and disclosure controls and procedures. The compensation committee is responsible for overseeing the management of risks relating to our executive compensation and overall compensation and benefit strategies, plans, arrangements, practices and policies. The nominating and corporate governance committee oversees the management of risks associated with our overall compliance and corporate governance practices, and the independence and composition of our board of directors. These committees provide regular reports, on at least a quarterly basis, to the full board of directors.

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee. Our board of directors may establish other committees to facilitate the management of our business. The composition and functions of each committee are described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors.

Audit Committee

Our audit committee will consist of _____ and _____. Our board of directors will determine that _____ and _____ are independent under the NASDAQ Listing Rules and Rule 10A-3(b)(1) of the Exchange Act. The chair of our audit committee will be _____, whom our board of directors will determine is an "audit committee financial expert" within the meaning of the SEC regulations. Our board of directors will also determine that each member of our audit committee can read and understand fundamental financial statements in accordance with applicable requirements. In arriving at these determinations, the board of directors will examine each audit committee member's scope of experience and the nature of their employment in the corporate finance sector. The functions of this committee will include:

- direct responsibility for the appointment, compensation, retention (including termination) and oversight of our independent auditors (our independent auditors report directly the audit committee);
- helping to ensure the independence and performance of the independent registered public accounting firm;
- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent accountants, our interim and year-end operating results;
- developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviewing our policies on risk assessment and risk management;
- reviewing related party transactions;
- preparation of the audit committee report that the SEC requires to be included in our annual proxy statement;
- obtaining and reviewing a report by the independent registered public accounting firm at least annually, that describes our internal quality-control procedures, any material issues with such procedures, and any steps taken to deal with such issues when required by applicable law; and
- approving (or, as permitted, pre-approving) all audit and all permissible non-audit services, other than de minimis non-audit services, to be performed by the independent registered public accounting firm.

Compensation Committee

Our compensation committee will consist of _____ and _____. Our board of directors will determine that _____ and _____ are independent under the NASDAQ Listing Rules, are "non-employee directors" as defined in Rule 16b-3 promulgated under the Exchange Act and are "outside directors" as that term is defined in Section 162(m) of the Internal Revenue Code of 1986, as amended, or Section 162(m). The chair of our compensation committee will be _____. The functions of this committee will include:

- reviewing and approving, or recommending that our board of directors approve, the compensation of our chief executive officer and other executive officers including in all cases base salary, bonus, benefits and other perquisites;

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- ⁿ reviewing and recommending to our board of directors the compensation of our directors;
- ⁿ reviewing and approving, or recommending that our board of directors approve, the terms of compensatory arrangements with our executive officers;
- ⁿ administering our stock and equity incentive plans;
- ⁿ selecting independent compensation consultants and assessing conflict of interest compensation advisers;
- ⁿ reviewing and approving, or recommending that our board of directors approve, incentive compensation and equity plans; and
- ⁿ reviewing and establishing general policies relating to compensation and benefits of our employees and reviewing our overall compensation philosophy and objectives.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee will consist of _____ and _____. Our board of directors will determine that _____ and _____ are independent under the NASDAQ Listing Rules. The chair of our nominating and corporate governance committee will be _____. The functions of this committee will include:

- ⁿ identifying, evaluating and selecting, or recommending that our board of directors approve, nominees for election to our board of directors and its committees;
- ⁿ evaluating the performance of our board of directors and of individual directors;
- ⁿ considering and making recommendations to our board of directors regarding the composition and structure of our board of directors and its committees;
- ⁿ reviewing developments in corporate governance practices;
- ⁿ evaluating the adequacy of our corporate governance practices and reporting;
- ⁿ reviewing management succession plans;
- ⁿ developing and making recommendations to our board of directors regarding corporate governance guidelines and matters; and
- ⁿ overseeing an annual evaluation of the board of directors' performance.

Code of Business Conduct and Ethics

We expect to adopt a Code of Business Conduct and Ethics that will apply to all of our employees, officers, including our principal executive officer, principal financial officer and principal accounting officer or controller, or persons performing similar functions and agents and representatives, including directors, officers and consultants responsible for financial reporting. The full text of our Code of Business Conduct and Ethics will be posted on our website at www.aqxpharma.com. We intend to disclose future amendments to certain provisions of our Code of Business Conduct and Ethics, or waivers of such provisions applicable to any principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, and our directors, on our website identified above.

Compensation Committee Interlocks and Insider Participation

None of the members of the compensation committee is currently or has been at any time an officer or an employee of our company. None of our executive officers currently serves, or has served during the last three years, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

Non-Employee Director Compensation

Cash Compensation

Other than as set forth in the table below, in 2012 we did not pay any fees to or pay any other compensation to the members of our board of directors who served as members during 2012. Although we do not have a written policy, we generally reimburse our directors for their reasonable out-of-pocket expenses incurred in attending board of directors and committee meetings.

<u>DIRECTOR NAME</u>	<u>FEES EARNED OR PAID IN CASH (\$)</u>
Daniel Levitt	11,500

Equity Incentive Compensation

No equity incentive compensation was paid to our non-employee directors in 2012. The following table provides information regarding outstanding equity awards held by each of our non-employee directors as of December 31, 2012.

<u>NAME</u>	<u>AGGREGATE OPTION AWARDS OUTSTANDING (#)</u>
Daniel Levitt	150,000 (1)

- (1) The option securities subject to these stock options vest as follows: 1/3 of the option securities underlying the options vest on the grant date, 1/36th of the option securities vest on the one year anniversary of the grant date and thereafter 1/36th of the option securities vest monthly over the next 24 months, subject to continued service with us through each vesting date. Following the closing of this offering, each option security will represent a share of our common stock. As of December 31, 2012, 16,667 shares subject to such options were fully vested.

In May 2013, in consideration for Dr. Levitt's service as a director, we granted to Dr. Levitt an option to acquire 75,000 option securities with an exercise price of \$0.30 per option security. Following the closing of this offering, each option security will represent a share of common stock. Dr. Levitt's option vests and becomes exercisable over three years; 25,000 shares vested and were exercisable immediately, 2,084 of the remaining shares vest on May 30, 2014 and the remaining shares vest and become exercisable in 24 monthly installments, subject to Dr. Levitt's continued service. For a description of our option securities, please see the section of this prospectus captioned "Executive Compensation—Employee Benefit Plans—Joint Canadian Stock Option Plan."

In May 2013, in consideration for Mr. Pelzer's service as a director, we granted to Mr. Pelzer an option to acquire 125,000 option securities with an exercise price of \$0.30 per option security. Following the closing of this offering, each option security will represent a share of common stock. Mr. Pelzer's option vests and becomes exercisable over three years; 41,667 shares vested and were exercisable immediately, 3,472 of the remaining shares vest on June 25, 2014 and the remaining shares vest and become exercisable in 24 monthly installments, subject to Mr. Pelzer's continued service. For a description of our option securities, please see the section of this prospectus captioned "Executive Compensation—Employee Benefit Plans—Joint Canadian Stock Option Plan."

Future Director Compensation

Following the closing of this offering, we may implement a formal policy pursuant to which our non-employee directors will be eligible to receive compensation for service on our board of directors and committees of our board of directors.

EXECUTIVE COMPENSATION

Our named executive officers, or NEOs, for 2012, which consist of our principal executive officer and the next two most highly compensated executive officers, are:

- ⁿ David J. Main, President and Chief Executive Officer;
- ⁿ Thomas MacRury, Former Executive Vice President and Chief Operating Officer; and
- ⁿ Kamran Alam, Vice President, Finance and Chief Financial Officer.

2012 Summary Compensation Table

The following table sets forth all of the compensation awarded to, earned by or paid to our NEOs during the fiscal year ended December 31, 2012.

NAME AND PRINCIPAL POSITION	YEAR	SALARY (\$) ^{(1) (2)}	BONUS (\$) ^{(2) (3)}	OPTION AWARDS (\$) ^{(2) (4) (5)}	ALL OTHER COMPENSATION (\$) ^{(2) (6)}	TOTAL (\$) ⁽²⁾
David J. Main <i>President and Chief Executive Officer</i>	2012	356,659	48,698	106,707	618	512,682
Thomas MacRury ⁽⁷⁾ <i>Former Executive Vice President and Chief Operating Officer</i>	2012	220,370 ⁽⁸⁾	32,884	38,110		291,364
Kamran Alam <i>Vice President, Finance and Chief Financial Officer</i>	2012	155,124	—	60,975	618	216,717

(1) Our NEOs are employed and compensated by our affiliate, AQXP Canada.

(2) The dollar amounts shown in these columns reflect the US\$ equivalent of the amounts paid to our NEOs. The amounts were converted to U.S. dollars from Canadian dollars using the average of the closing monthly average exchange rates for the 12 months ended December 31, 2012. Applying this formula to fiscal year ended December 31, 2012, Canadian \$1.00 was equal to US\$1.0008.

(3) Amounts represent annual discretionary bonuses earned pursuant to the NEO's employment agreement.

(4) Amounts shown in this column do not reflect dollar amounts actually received by our NEOs. Instead, these amounts reflect the aggregate grant date fair value of each stock option granted in the fiscal year ended December 31, 2012, computed in accordance with the provisions of FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 9 to our combined financial statements included in this prospectus. As required by SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. Our NEOs will only realize compensation to the extent the trading price of our common stock is greater than the exercise price of such stock options.

(5) For a description of our option awards, please see the "—Employee Benefit Plans—Joint Canadian Stock Option Plan."

(6) Amounts in this column include life insurance premiums paid by us for the benefit of such NEO.

(7) Dr. MacRury retired on November 15, 2013.

(8) Dr. MacRury provided less than full-time service in 2012.

Outstanding Equity Awards at December 31, 2012

The following table provides information regarding outstanding equity awards held by each of our NEOs as of December 31, 2012.

NAME	VESTING COMMENCEMENT DATE	OPTION AWARDS ⁽¹⁾			
		NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS (#) EXERCISABLE	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS (#) UNEXERCISABLE ⁽²⁾	PER SHARE OPTION EXERCISE PRICE (\$)	OPTION EXPIRATION DATE
David J. Main	6/8/2007	300,000	—	0.50	6/7/2017
	6/11/2010	904,166	495,834 ⁽³⁾	0.30	6/10/2020
	11/11/2011	525,000	1,275,000 ⁽³⁾	0.30	11/20/2021
	5/30/2012	—	700,000 ⁽⁴⁾	0.30	1/31/2013
Thomas MacRury	— ⁽⁵⁾	250,000	—	0.0001 ⁽⁶⁾	2/14/2016
	6/21/2006	350,000	—	0.2232 ⁽⁶⁾	2/14/2016
	6/21/2006	250,000	—	0.4465 ⁽⁶⁾	2/14/2016
	6/11/2010	274,479	150,521 ⁽³⁾	0.30	2/13/2014
	11/11/2011	145,833	354,167 ⁽³⁾	0.30	2/13/2014
Kamran Alam	5/30/2012	—	250,000 ⁽⁴⁾	0.30	1/31/2013
	8/22/2011	141,666	258,334 ⁽³⁾	0.30	8/22/2021
	5/30/2012	—	200,000 ⁽³⁾	0.30	5/29/2022
	5/30/2012	—	200,000 ⁽⁴⁾	0.30	1/31/2013

⁽¹⁾ All stock options listed above were granted from our 2006 Plan. For a description of our option awards, please see “—Employee Benefit Plans—Joint Canadian Stock Option Plan.”

⁽²⁾ The option securities subject to the stock options vest as follows: 25% of the option securities underlying the options vest on the one-year anniversary of the vesting commencement date and thereafter 1/48th of the option securities vest each month, subject to continued service with us through each vesting date. Following the closing of this offering, each option security will represent one share of our common stock.

⁽³⁾ Option is subject to accelerated vesting upon a change in control, as described under “—Potential Payments and Benefits upon Termination or Change of Control.”

⁽⁴⁾ This option was subject to vesting upon the signing of a definitive agreement to effect a transaction meeting certain criteria, including a change in control transaction of us or AQXP Canada, or a license transaction meeting certain criteria, on or prior to January 31, 2013, as approved by our board of directors. This option expired by its terms on January 31, 2013 since no such definitive agreement was signed on or prior to such date.

⁽⁵⁾ The option securities subject to this option were fully vested on the date of grant.

⁽⁶⁾ Per share option exercise price reflects the US\$ equivalent. The amounts were converted to U.S. dollars from Canadian dollars using the closing exchange rate on the date of grant. On the date of grant, Canadian \$1.00 was equal to US\$0.8929.

Employment Agreements

We have entered into employment agreements with our all of our NEOs. These arrangements set forth the terms and conditions of employment of each executive officer, including base salary, annual bonus opportunity, employee benefit plan participation, and equity awards. Each of our NEOs is also entitled to certain severance and change in control benefits pursuant to their employment agreements, the terms of which are described below under the heading “—Potential Payments and Benefits upon Termination or Change in Control.” The following is a summary of the material terms of each employment agreement. For complete terms, please see the respective employment agreements attached as exhibits to the registration statement of which this prospectus forms a part. The salary dollar amounts reflect the US\$ equivalent of the amounts paid to our NEOs. For 2012 base salary, the amounts were converted to U.S. dollars as described in footnote 2 under “—2012 Summary Compensation Table.” For 2013 base salary, the amounts were converted to U.S. dollars from Canadian dollars using the average of the closing monthly average exchange rates for the nine months ended September 30, 2013. Applying this formula for the nine months ended September 30, 2013, Canadian \$1.00 was equal to US\$0.9773.

David J. Main

AQXP Canada entered into an employment agreement with Mr. Main, dated March 1, 2007 setting forth the terms of Mr. Main's employment as our President and Chief Executive Officer. Mr. Main's annual base salary for 2012 was \$356,659, his current annual base salary for 2013 is \$358,661, and he is eligible to receive an annual bonus of up to 20% of such base salary, as determined by our board of directors in its discretion and based on the achievement of corporate and individual performance goals.

Thomas MacRury

AQXP Canada entered into an employment agreement with Dr. MacRury on June 6, 2007 setting forth the terms of Dr. MacRury's employment as our Executive Vice President and Chief Operating Officer. Dr. MacRury's annual base salary for 2012 was \$220,370, his current annual base salary for 2013 is \$208,988, and he is eligible to receive an annual bonus of up to 20% of such base salary, as determined by our board of directors in its discretion and based on the achievement of corporate and individual performance goals. Dr. MacRury retired from his position on November 15, 2013.

Kamran Alam

AQXP Canada entered into an employment agreement with Mr. Alam on July 18, 2011 setting forth the terms of Mr. Alam's employment as our Vice President, Finance and Chief Financial Officer. Mr. Alam's annual base salary for 2012 was \$155,124, his current annual base salary for 2013 is \$156,364, and he is eligible to receive an annual bonus of up to 20% of such base salary, as determined by our board of directors in its discretion and based on the achievement of corporate and individual performance goals.

Potential Payments and Benefits upon Termination or Change in Control

Each of our NEOs may voluntarily resign for any reason by providing us with three months prior notice. We may elect to waive all or a portion of such notice period by paying to such executive his base salary that he would have earned if he had remained employed by us for the full duration of such notice period.

In addition, the section below describes the payments that we would have made to our NEOs in connection with certain terminations of employment on certain corporate transactions, if such events had occurred on December 31, 2012. If we terminate one of our NEOs without cause, or if such executive resigns for good reason in connection with a change in control, such executive will be entitled to receive the following benefits:

- If Mr. Main is terminated without cause, he will continue to receive his base salary, benefits and continued vesting and extended exercisability of options for a period of 18 months following his termination date, and 150% of his bonus compensation based on the average annual bonus paid over the prior three-year period. If Mr. Main secures employment prior to the end of such severance period, his salary continuation payments will be reduced by 50% for the remainder of such period. In addition, if Mr. Main resigns his employment for good reason within 12 months following a change in control, he will continue to receive his base salary and benefits for a period of 18 months following his termination date, and 100% of his then-unvested options will vest as of his termination date.
- If Dr. MacRury is terminated without cause, he will continue to receive his base salary, benefits for a period of 12 months following his termination date. In addition, if Dr. MacRury resigns his employment for good reason within 12 months following a change in control, he will continue to receive his base salary and benefits for a period of 12 months following his termination date, and 100% of his then-unvested options will vest as of his termination date.
- If Mr. Alam is terminated without cause, we must either provide Mr. Alam with six months notice or, in lieu of notice, he will be entitled to receive his base salary and benefits for a period of six months following his termination date. In addition, if Mr. Alam resigns his employment for good reason within 12 months following a change in control, he will continue to receive his base salary and benefits for a period of six months following his termination date, and 100% of his then-unvested options will vest as of his termination date.

Employee Benefit Plans

The principal features of our equity incentive plans are summarized below. These summaries are qualified in their entirety by reference to the actual text of the plans, which are filed as exhibits to the registration statement of which this prospectus is a part.

2014 Equity Incentive Plan

We expect that our board of directors will adopt and our stockholders will approve prior to the closing of this offering our 2014 Equity Incentive Plan, or 2014 Plan. The 2014 Plan will become effective on the date the registration statement of which this prospectus forms a part is declared effective by the SEC. The 2014 Plan is the successor to and continuation of our Joint Canadian Stock Option Plan, or 2006 Plan. Once the 2014 Plan becomes effective, no further grants will be made under our 2006 Plan. Our 2014 Plan provides for the grant of stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance stock awards, performance cash awards, and other forms of equity awards to our employees, directors, and consultants.

Authorized Shares. The maximum number of shares of our common stock that may be issued under our 2014 Plan is , which number includes a number of shares of common stock equal to (i) the number of shares reserved for issuance under our 2006 Plan at the time our 2014 Plan became effective and (ii) any shares subject to stock options or other stock awards granted under the 2006 Plan that would have otherwise returned to our 2006 Plan, such as upon the expiration or termination of a stock award prior to vesting, not to exceed shares. Additionally, the number of shares of our common stock reserved for issuance under our 2014 Plan will automatically increase on January 1 of each year for a period of up to 10 years, beginning on January 1, 2015 and ending on and including January 1, 2024, by % of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors.

Shares subject to stock awards granted under our 2014 Plan that expire or terminate without being exercised in full, or that are paid out in cash rather than in shares, do not reduce the number of shares available for issuance under our 2014 Plan. Additionally, shares issued pursuant to stock awards under our 2014 Plan that we repurchase or that are forfeited, as well as shares used to pay the exercise price of a stock award or to satisfy the tax withholding obligations related to a stock award, become available for future grant under our 2014 Plan.

Plan Administration. Our board of directors, or a duly authorized committee of our board of directors, will administer our 2014 Plan. Our board of directors may also delegate to one or more of our officers the authority to (i) designate employees (other than officers) to receive specified stock awards, and (ii) determine the number of shares subject to such stock awards. Subject to the terms of our 2014 Plan, the board of directors has the authority to determine the terms of awards, including recipients, the exercise, purchase or strike price of stock awards, if any, the number of shares subject to each stock award, the fair market value of a share of our common stock, the vesting schedule applicable to the awards, together with any vesting acceleration, and the form of consideration, if any, payable upon exercise or settlement of the award and the terms of the award agreements for use under our 2014 Plan.

The board of directors has the power to modify outstanding awards under our 2014 Plan. The board of directors has the authority to reprice any outstanding option or stock appreciation right, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Corporate Transactions. Our 2014 Plan provides that in the event of certain specified significant corporate transactions, as defined under our 2014 Plan, each outstanding award will be treated as the administrator determines. The administrator may (i) arrange for the assumption, continuation or substitution of a stock award by a successor corporation; (ii) arrange for the assignment of any reacquisition or repurchase rights held by us to a successor corporation; (iii) accelerate the vesting, in whole or in part, of the stock award and provide for its termination prior to the transaction; (iv) arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by us; or (v) cancel or arrange for the cancellation of the stock award prior to the transaction in exchange for a cash payment, if any, determined by the board. The plan administrator is not obligated to treat all stock awards or portions of stock awards, even those that are of the same type, in the same manner.

Transferability. A participant may not transfer stock awards under our 2014 Plan other than by will, the laws of descent and distribution, or as otherwise provided under our 2014 Plan.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend, or terminate our 2014 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. No awards may be granted after the tenth anniversary of the date our board of directors adopted our 2014 Plan. No stock awards may be granted under our 2014 Plan while it is suspended or after it is terminated.

Joint Canadian Stock Option Plan

The board of directors of AQXP Canada initially adopted, and its shareholders approved, the 2006 Plan in June 2006. The 2006 Plan was amended in June 2007, with the approval of the board of directors and shareholders of each of AQXP Canada and Aquinox Pharmaceuticals (USA) Inc., to be a joint stock option plan of both corporations. Our 2006 Plan was amended most recently in March 2013. The 2006 Plan provides for the discretionary grant of stock options. Each option granted under the 2006 Plan is exercisable for one "option security". Prior to completion of the offering, an option security is comprised of one common exchangeable share and one special voting share of AQXP Canada. Following completion of the offering, an option security will be comprised of one share of our common stock.

The 2006 Plan will be terminated following the date the 2014 Plan becomes effective. However, any outstanding options granted under the 2006 Plan will remain outstanding, subject to the terms of our 2006 Plan and stock option agreements, until such outstanding options are exercised or until they terminate or expire by their terms.

Authorized Shares. The maximum number of shares of our common stock that may be issued directly or indirectly under our 2006 Plan is 12,809,037.

Plan Administration. Our board of directors administers our 2006 Plan. Subject to the terms of our 2006 Plan, the board of directors has the authority to determine, amend and rescind rules and regulations of the Plan.

Corporate Transactions. Our 2006 Plan provides that in the event of certain specified significant corporate transactions, as defined under our 2006 Plan, each outstanding award will become exercisable for securities or other property that the optionholder would have received in the corporate transaction if the optionholder had exercised such holder's option prior to the closing of such transaction.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend or terminate our 2006 Plan, provided that such action is approved by our stockholders to the extent stockholder approval is necessary and that such action does not impair the existing rights of any participant without such participant's written consent. As described above, our 2006 Plan will be terminated upon the date of the prospectus and no future stock awards will be granted thereunder.

Pension Benefits

Our NEOs did not participate in, or otherwise receive any benefits under, any pension or retirement plan sponsored by us during 2012.

Nonqualified Deferred Compensation

None of our NEOs participate in or have account balances in any nonqualified deferred contribution plan or arrangement maintained by us.

Limitations on Liability and Indemnification Matters

Upon the completion of this offering, our certificate of incorporation will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- ⁿ any breach of the director's duty of loyalty to the corporation or its stockholders;
- ⁿ any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- ⁿ unlawful payments of dividends or unlawful stock repurchases or redemptions; or
- ⁿ any transaction from which the director derived an improper personal benefit.

These limitations of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

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Our certificate of incorporation and our bylaws will provide that we are required to indemnify our directors to the fullest extent permitted by Delaware law. Our bylaws will also provide that, upon satisfaction of certain conditions, we shall advance expenses incurred by a director in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. Our certificate of incorporation and bylaws will also provide our board of directors with discretion to indemnify our officers and employees when determined appropriate by the board. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by the board of directors. With certain exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain customary directors' and officers' liability insurance pursuant to which our directors and officers are insured against liability for actions taken in their capacities as directors and officers.

The limitation of liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or the Securities Act, may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions or otherwise, we have been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought and we are not aware of any threatened litigation that may result in claims for indemnification.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from them. The director or officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan at any time. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material nonpublic information subject to compliance with the terms of our insider trading policy. Prior to 180 days after the date of this offering (subject to early termination), the sale of any shares under such plan would be subject to the lock-up agreement that the director or officer has entered into with the underwriters.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a summary of transactions since January 1, 2010 to which we have been a participant in which the amount involved exceeded or will exceed \$120,000, and in which any of our directors, executive officers or holders of more than five percent of our capital stock, or any member of the immediate family of the foregoing persons, had or will have a direct or indirect material interest.

Private Placements of Securities

Series B-1 Preferred Stock, Series B-1 Special Voting Stock and Series B-1 Exchangeable Shares

In March 2010, we issued an aggregate of 8,777,361 shares of our Series B-1 preferred stock to five accredited investors at a per share price of \$0.55. Purchasers of Series B-1 preferred stock also received one special voting share of AQXP Canada for each share of Series B-1 preferred stock. In connection with this financing, we also issued an aggregate of 8,150,408 Series B-1 exchangeable preferred shares of AQXP Canada to two accredited investors at a per share price of \$0.55. Purchasers of Series B-1 exchangeable preferred shares were also issued one share of our Series B-1 special voting stock and one special voting share of AQXP Canada for each Series B-1 exchangeable preferred share. The Series B-1 exchangeable preferred shares are exchangeable into our Series B-1 preferred stock on a one for one basis. In connection with the foregoing, we received aggregate consideration of \$9.3 million.

In June 2010, we issued an aggregate of 6,420,879 shares of our Series B-1 preferred stock to one accredited investor at a per share price of \$0.55, for aggregate consideration of \$3.5 million. The purchaser received a corresponding number of special voting shares of AQXP Canada.

Series B-2 Preferred Stock, Series B-2 Special Voting Stock and Series B-2 Exchangeable Shares

In January 2011, we issued an aggregate of 8,589,632 shares of our Series B-2 preferred stock to six accredited investors at a per share price of \$0.55. Purchasers of Series B-2 preferred stock also received one special voting share of AQXP Canada for each share of Series B-2 preferred stock. In connection with this financing, we also issued an aggregate of 4,425,348 Series B-2 exchangeable preferred shares of AQXP Canada to two accredited investors at a per share price of \$0.55. Purchasers of Series B-2 exchangeable preferred shares were also issued one share of our Series B-2 special voting stock and one special voting share of AQXP Canada for each Series B-2 exchangeable preferred share. The Series B-2 exchangeable preferred shares are exchangeable into our Series B-2 preferred stock on a one for one basis. In connection with the foregoing, we received aggregate consideration of \$7.1 million.

In September 2011, we issued an aggregate of 6,429,155 shares of our Series B-2 preferred stock at a per share price of \$0.55 to six accredited investors. Purchasers of Series B-2 preferred stock also received one special voting share of AQXP Canada for each share of Series B-2 preferred stock. In connection with this financing, we also issued an aggregate of 2,661,752 Series B-2 exchangeable shares of AQXP Canada to one accredited investors at a per share price of \$0.55. Purchasers of Series B-2 exchangeable preferred shares were also issued one share of our Series B-2 special voting stock for each Series B-2 exchangeable preferred share. The Series B-2 exchangeable preferred shares are exchangeable into our Series B-2 preferred stock on a one for one basis. In connection with the foregoing, we received aggregate consideration of \$5.0 million.

Series C Preferred Stock and Series C Special Voting Stock and Class C Exchangeable Shares

In March 2013, we issued an aggregate of 25,454,500 shares of our Series C preferred stock to seven accredited investors at a per share price of \$0.55. Purchasers of Series C preferred stock also received one special voting share of AQXP Canada for each share of Series C preferred stock. In connection with this financing, we also issued an aggregate of 7,272,701 Series C exchangeable preferred shares of AQXP Canada to one accredited investor at a per share price of \$0.55. Purchasers of Series C exchangeable preferred shares were also issued one share of our Series C special voting stock for each share of Series C exchangeable preferred share. The Series C exchangeable preferred shares are exchangeable into our Series C preferred stock on a one for one basis. In connection with the foregoing, we received aggregate consideration of \$18.0 million.

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In March 2013, we issued a warrant to purchase 339,287 shares of our Series C preferred stock to one accredited investor.

STOCKHOLDER	SERIES B-1 (SHARES)	SERIES B-1 EXCHANGEABLE (SHARES) (1)	SERIES B-2 (SHARES)	SERIES B-2 EXCHANGEABLE (SHARES) (2)	SERIES C (SHARES)	CLASS C EXCHANGEABLE (SHARES) (3)	SERIES C WARRANTS (SHARES)	TOTAL PURCHASE PRICE (4)
Ventures West 8 Limited Partnership (5)	—	6,269,545	—	6,240,691	—	7,272,701	—	\$ 10,880,635
Johnson & Johnson Development Corporation (6)	5,642,590	—	5,616,622	—	7,287,227	—	—	\$ 10,200,541
Pfizer, Inc (7)	6,420,879	—	6,281,822	—	5,440,023	—	339,287	\$ 9,978,498
B.C. Advantage Fund (VCC) Inc.	—	1,880,863	—	846,409	—	—	—	\$ 1,500,002
Entities affiliated with Baker Brothers (8)	3,134,771	—	3,120,343	—	3,636,357	—	—	\$ 5,440,309
Augment Investments Ltd.	—	—	—	—	9,090,893	—	—	\$ 4,999,991

- (1) Holders of Series B-1 exchangeable shares also hold an equal number of Series B-1 special voting stock and the Series B-1 exchangeable shares are exchangeable into our Series B-1 preferred stock on a one for one basis.
- (2) Holders of Series B-2 exchangeable shares also hold an equal number of Series B-2 special voting stock and the Series B-2 exchangeable shares are exchangeable into our Series B-2 preferred stock on a one for one basis.
- (3) Holders of Series C exchangeable shares also hold an equal number of Series C special voting stock and the Series C exchangeable shares are exchangeable into our Series C preferred stock on a one for one basis.
- (4) Total purchase price includes the purchase price of the special voting stock described in footnotes (1), (2) and (3) above.
- (5) Dr. Bridger, a member of our board of directors, is a managing director of Five Corners Capital Inc., the general partner of Ventures West 8 Limited Partnership. Dr. Bridger may be deemed to voting and investment power with respect to shares held by Ventures West 8 Limited Partnership. Dr. Bridger disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein.
- (6) A member of our board of directors at the time of these transactions was affiliated with Johnson & Johnson Development Corporation.
- (7) Dr. Elaine Jones, a member of our board of directors, is affiliated with Pfizer, Inc.
- (8) Affiliates of the Baker Brothers holding our securities whose shares are aggregated for purposes of reporting share ownership information include Baker Brothers Life Sciences, L.P., 667, L.P. (successor to Baker Biotech Fund I, L.P.), 14159, L.P. and Baker Bros. Investments II, L.P.

Qualification and Registration Rights Agreement

On March 19, 2013, we entered into an amended and restated qualification and registration rights agreement with the holders of our outstanding preferred stock, including entities with which certain of our directors are affiliated. We expect that this qualification and registration rights agreement will be amended and restated in connection with this offering. As of September 30, 2013, the holders of 111,890,463 shares of our common stock, including common stock issuable upon (1) the exchange of common exchangeable shares of AQXP Canada, and (2) the conversion of our preferred stock (including any preferred stock issuable upon the exchange of preferred exchangeable shares of AQXP Canada), are entitled to rights with respect to the registration of their shares following the completion of this offering. For a more detailed description of these registration rights, see the section of the prospectus captioned "Description of Capital Stock—Stockholder Registration Rights."

Shareholders' Agreement

On March 19, 2013, we entered into an amended and restated shareholders' agreement with the holders of our outstanding preferred stock, including entities with which certain of our directors are affiliated. Pursuant to this agreement, certain stockholders have agreed to vote in a certain way on certain matters, including with respect to the election of directors. Upon the closing of this offering, the board election voting provisions contained in the shareholder agreement will be terminated and none of our stockholders will have any special rights regarding the election or designation of members of our board of directors. In addition, this agreement gives the stockholders that are parties thereto the right to participate in new issuances of equity securities by us, subject to certain exceptions. The amended and restated shareholders' agreement and all rights thereunder, including the right to participate in new issuances of equity securities, will be terminated upon the completion of this offering.

Exchange Agreement

On March 19, 2013, we entered into an amended and restated exchange agreement with our shareholders, including entities with which certain of our directors are affiliated. Pursuant to the exchange agreement, holders of exchangeable shares of AQXP Canada can require us, upon the occurrence of a liquidation event or in other limited circumstances, to purchase from such stockholder all or any part of the exchangeable shares of AQXP Canada held by such stockholder in exchange for an equal number of shares of the corresponding series or class of Aquinox Pharmaceuticals (USA) Inc. We also have a right to redeem at nominal cost, all special preferred voting stock. This agreement will terminate in connection with this offering. For more information regarding the exchange of exchangeable shares of AQXP Canada, see the section of this prospectus captioned "Description of Capital Stock—Exchangeable Shares."

Indemnification Agreements

Our amended and restated certificate of incorporation, which will be effective upon the completion of this offering, will contain provisions limiting the liability of directors, and our amended and restated bylaws will provide that we will indemnify each of our directors and officers, and may indemnify our employees and other agents, to the fullest extent permitted under Delaware law. In addition, we have entered into an indemnification agreement with each of our directors and our executive officers. For more information regarding these agreements, see the section of this prospectus captioned "Executive Compensation—Limitations on Liability and Indemnification Matters."

Participation in this Offering

Certain of our directors and existing stockholders, or their affiliates, have indicated an interest in purchasing in the aggregate between \$ million and \$ million of shares of our common stock in this offering. The shares will be offered and sold on the same terms as the other shares that are being offered and sold in this offering to the public. Although we anticipate that these parties will purchase all of the shares of common stock that these parties have indicated an interest in purchasing, indications of interest are not binding agreements or commitments to purchase and any of these parties may determine to purchase more, less or no shares in this offering.

Employment Agreements

We have entered into employment agreements with our executive officers. For more information regarding these agreements, see the section of the prospectus captioned "Executive Compensation—Employment Agreements."

Policy on Future Related Party Transactions

All future transactions between us and our officers, directors, principal stockholders and their affiliates will be approved by the audit committee, or a similar committee consisting of entirely independent directors, according to the terms of our Code of Business Conduct and Ethics.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our capital stock as of November 30, 2013, as adjusted to reflect the sale of common stock offered by us in this offering, for:

- ⁿ each of our named executive officers;
- ⁿ each of our directors;
- ⁿ all of our directors and executive officers as a group; and
- ⁿ each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock.

We have based our calculation of beneficial ownership prior to this offering on 111,890,463 shares of common stock outstanding on November 30, 2013. We have based our calculation of beneficial ownership after this offering on _____ shares of our common stock outstanding immediately following the completion of this offering, which gives effect to the issuance of _____ shares of common stock in this offering.

Certain of our directors and existing stockholders, or their affiliates, have indicated an interest in purchasing in the aggregate between \$ _____ million and \$ _____ million of shares of our common stock in this offering. However, since such purchases have been neither confirmed nor allocated, any amounts that may be purchased by these existing stockholders in this offering have not been included in the following table. However, if such stockholders purchase all shares they have indicated interests in purchasing, the number of shares beneficially owned by all directors and executive officers as a group will increase to between _____ and _____, and the percentage of common stock beneficially owned by them after this offering will increase to between _____ % and _____ %.

Information with respect to beneficial ownership has been furnished to us by each director, executive officer and stockholder who holds more than 5% of any class of our voting securities, as the case may be. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes any shares over which a person exercises sole or shared voting or investment power. Shares of common stock issuable under options or warrants that are exercisable within 60 days after November 30, 2013 are deemed beneficially owned and such shares are used in computing the percentage ownership of the person holding the options or warrants, but are not deemed outstanding for the purpose of computing the percentage ownership of any other person. The information contained in the following table is not necessarily indicative of beneficial ownership for any other purpose, and the inclusion of any shares in the table does not constitute an admission of beneficial ownership of those shares.

Unless otherwise indicated below, to our knowledge, all persons named in the table have sole voting and dispositive power with respect to their shares of common stock, except to the extent authority is shared by spouses under community property laws. Unless otherwise indicated below, the address of each beneficial owner listed in the table below is c/o Aquinox Pharmaceuticals (USA) Inc. 430-5600 Parkwood Way, Richmond, B.C., Canada V6V 2M2.

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The number of shares of common stock deemed outstanding after this offering includes the shares of common stock being offered for sale by us in this offering.

NAME OF BENEFICIAL OWNER	SHARES BENEFICIALLY OWNED PRIOR TO THIS OFFERING		SHARES BENEFICIALLY OWNED FOLLOWING THIS OFFERING	
	SHARES	%	SHARES	%
Named Executive Officers and Directors:				
David J. Main (1)	4,084,166	3.6	4,084,166	
Thomas MacRury (2)	1,463,020	1.3	1,463,020	
Kamran Alam (3)	320,832	*	320,832	
Gary Bridger (4)	28,943,845	25.9	28,943,845	
Elaine Jones	—	—	—	
Daniel Levitt (5)	168,750	*	168,750	
Robert Pelzer(6)	41,667	*	41,667	
All executive officers and directors as a group (total of 9 persons) (7)	35,493,113	30.4	35,493,113	
Other 5% Stockholders:				
Ventures West 8 Limited Partnership (4)	28,943,845	25.9	28,943,845	
Johnson & Johnson Development Corporation (8)	26,728,256	23.9	26,728,256	
Pfizer, Inc. (9)	18,482,011	16.5	18,482,011	
B.C. Advantage Fund (VCC) Ltd. (10)	8,213,230	7.3	8,213,230	
Entities affiliated with Baker Brothers, Inc. (11)	14,436,922	12.9	14,436,922	
Augment Investments Ltd. (12)	9,090,893	8.1	9,090,893	

* Represents beneficial ownership of less than one percent (1%) of the outstanding common stock.

- (1) Consists of (a) 1,555,000 shares held by David J. Main and (b) 2,529,166 shares issuable pursuant to stock options exercisable within 60 days of November 30, 2013.
- (2) Consists of 1,463,020 shares issuable pursuant to stock options exercisable within 60 days of November 30, 2013.
- (3) Consists of 320,832 shares issuable pursuant to stock options exercisable within 60 days of November 30, 2013.
- (4) Consists of 28,943,845 shares held by Ventures West 8 Limited Partnership. Five Corners Capital Inc., the general partner of Ventures West 8 Limited Partnership, has sole voting and investment power with respect to the shares held by Ventures West 8 Limited Partnership. The directors of Five Corners Capital Inc. are Dr. Bridger and Kenneth Galbraith. Dr. Bridger and Kenneth Galbraith disclaim beneficial ownership of all shares except to the extent of their pecuniary interest. The address for each of these entities is Suite 2500—700 West Georgia Street, Vancouver, BC, V7Y 1B3.
- (5) Consists of 168,750 shares issuable pursuant to stock options exercisable within 60 days of November 30, 2013.
- (6) Consists of 41,667 shares issuable pursuant to stock options exercisable within 60 days of November 30, 2013.
- (7) Consists of (a) 30,498,845 shares held by the directors and executive officers as of November 30, 2013 and (b) 4,994,268 shares issuable pursuant to stock options exercisable within 60 days of November 30, 2013.
- (8) The address for this entity is 410 George Street, New Brunswick, NJ 08901.
- (9) Consists of (a) 18,142,724 shares held by Pfizer, Inc. and (b) 339,287 shares issuable pursuant to warrants exercisable within 60 days of November 30, 2013. The address for this entity is 235 East 42nd Street, New York, NY 10017.
- (10) The address for this entity is Suite 1280, 885 W. Georgia St., Vancouver BC, V6C 3E8.
- (11) Consists of (a) 10,206,909 shares held by Baker Brothers Life Sciences, L.P., (b) 3,869,095 shares held by 667, L.P. (successor to Baker Biotech Fund I, L.P.), (c) 332,047 shares held by 14159, L.P. and (d) 28,871 shares held by Baker Bros. Investments II, L.P. Baker Bros. Advisor LP is the Investment Advisor of each of these funds and has sole voting and investment power with respect to the shares held by such entities. Baker Bros. Advisors (GP) LLC is the sole general partner of Baker Bros. Advisors LP. The managing members of Baker Bros. Advisors (GP) LLC are Julian C. Baker and Felix J. Baker. Julian C. Baker and Felix J. Baker disclaim beneficial ownership of all shares except to the extent of their pecuniary interest. The address for each of these entities is 667 Madison Avenue, 17th Floor, New York, NY 10021.
- (12) The directors of Augment Investments Ltd. are Maria Christina Stephanou and Pantelitsa Sofokleous and they have sole voting and investment power with respect to the shares held by Augment Investments Ltd. The directors of Augment Investments Ltd. act in accordance with instructions issued by Mr. Viktor Kharitonin. The address for this entity is 15 Dimokritou, Panaretos Eliana Complex, office/flat 104, 4041 Potamos Germasogeias, Limassol, Cyprus.

DESCRIPTION OF CAPITAL STOCK

The description below of our capital stock and provisions of our certificate of incorporation and bylaws that will be in effect upon completion of the offering are summaries and are qualified by reference to the certificate of incorporation and the bylaws, which are filed as exhibits to the registration statement of which this prospectus is part, and by the applicable provisions of Delaware law.

General

Upon the completion of this offering, our amended and restated certificate of incorporation will authorize us to issue up to _____ shares of common stock, \$0.000001 par value per share, and _____ shares of preferred stock, \$0.000001 par value per share.

Assuming the exchange of all the outstanding exchangeable shares of AQXP Canada for shares of Aquinox Pharmaceuticals (USA) Inc. and the conversion of all outstanding shares of our convertible preferred stock (including such preferred stock issuable upon the exchange of the exchangeable preferred shares of AQXP Canada) into shares of common stock, as of September 30, 2013, there were outstanding:

- 111,890,463 shares of common stock held by 43 stockholders; and
- 9,872,184 shares of common stock issuable upon exercise of outstanding options.

Our shares of common stock are not redeemable and, following the completion of this offering, will not have preemptive rights.

As of September 30, 2013, there were warrants outstanding that, after completion of the offering, will be exercisable for an aggregate of 339,287 shares of common stock. For further details regarding outstanding warrants, see the section of this prospectus captioned “—Warrants” below.

Common Stock

Voting Rights

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Under our amended and restated certificate of incorporation and amended and restated bylaws, our stockholders will not have cumulative voting rights. Because of this, the holders of a majority of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose.

Dividends

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of common stock are entitled to receive ratably those dividends, if any, as may be declared from time to time by the board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

Rights and Preferences

Holders of common stock have no preemptive, conversion or subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Preferred Stock

As of September 30, 2013, there were 106,096,687 shares of our preferred stock outstanding, which will be converted into 106,096,687 shares of common stock immediately prior to the completion of this offering.

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Upon the completion of this offering, our board of directors may, without further action by our stockholders, fix the rights, preferences, privileges and restrictions of up to an aggregate of _____ shares of preferred stock in one or more series and authorize their issuance. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of our common stock. The issuance of our preferred stock could adversely affect the voting power of holders of our common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change of control or other corporate action. Upon the completion of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Exchangeable Shares

Prior to the completion of this offering, Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada are related entities that have established an exchangeable share structure which ensures that investors in Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada have equivalent voting and economic rights. As of the date of this prospectus, stockholders resident outside Canada hold series preferred stock of Aquinox Pharmaceuticals (USA) Inc. and stockholders resident in Canada hold common exchangeable shares and exchangeable preferred shares of AQXP Canada. Under this structure, Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada are entities under common control, as each of Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada is owned beneficially by identical shareholders having equivalent voting and economic rights in both entities. The purpose of this structure was to facilitate investment from both Canadian and U.S. investors while permitting AQXP Canada to continue to benefit from favorable tax treatment in Canada so long as it remained a "Canadian controlled private corporation" for purposes of Canadian tax law.

The equity ownership of Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada prior to the completion of this offering is as follows:

	<u>AQUINOX PHARMACEUTICALS (USA) INC.</u>	<u>AQXP CANADA</u>
<i>Preferred shareholders</i>		
Non-Canadian	68,398,795 shares of Series Preferred Stock(1)	68,398,795 Special Voting Shares
Canadian	37,697,892 shares of Series Special Voting Stock(2)	37,697,892 Exchangeable Preferred Shares(3) 37,697,892 Special Voting Shares
<i>Common shareholders</i>		
Non-Canadian	—	—
Canadian	5,793,776 shares of Common Special Voting Stock	5,793,776 Common Exchangeable Shares(4) 5,793,776 Special Voting Shares

(1) Series preferred stock consists of Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series B-1 Preferred Stock, Series B-2 Preferred Stock and Series C Preferred Stock of Aquinox Pharmaceuticals (USA) Inc. Holders of series preferred stock have voting rights in Aquinox Pharmaceuticals (USA) Inc. In order to ensure that all stockholders have equivalent voting rights in each entity, each holder of one share of series preferred stock also holds one special voting share of AQXP Canada, as indicated in the table above.

(2) Series special voting stock consists of Series A-1 Special Voting Stock, Series A-2 Special Voting Stock, Series B-1 Special Voting Stock, Series B-2 Special Voting Stock and Series C Special Voting Stock of Aquinox Pharmaceuticals (USA) Inc.

(3) Exchangeable preferred shares consist of Series A-1 Exchangeable Shares, Series A-2 Exchangeable Shares, Series B-1 Exchangeable Shares, Series B-2 Exchangeable Shares and Class C Exchangeable Shares of AQXP Canada, each of which is exchangeable for series preferred stock of the corresponding series. While exchangeable preferred shares do not have voting rights, each holder of exchangeable preferred shares also holds an equivalent number of special voting shares of AQXP Canada. In order to ensure that all stockholders have equivalent voting rights in each entity, each holder of exchangeable preferred share also holds an equivalent number of shares of the corresponding series of series special voting Stock of Aquinox Pharmaceuticals (USA) Inc., as indicated in the table above.

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- (4) While common exchangeable shares do not have voting rights, each holder of common exchangeable shares also holds an equivalent number of special voting shares of AQXP Canada. In order to ensure that all stockholders have equivalent voting rights in each entity, each holder of common exchangeable shares also holds an equivalent number of shares of common special voting stock of Aquinox Pharmaceuticals (USA) Inc., as indicated in the table above.

In addition to the above equity ownership, Aquinox Pharmaceuticals (USA) Inc. holds one new common share and 32,774,029 non-voting preferred shares of AQXP Canada. The 32,774,029 non-voting preferred shares were issued to facilitate the transfer of funds between the two entities.

Immediately prior to the completion of this offering, (i) each common exchangeable share of AQXP Canada will be transferred to Aquinox Pharmaceuticals (USA) Inc. in exchange for one share of common stock of Aquinox Pharmaceuticals (USA) Inc. and (ii) each exchangeable preferred share of AQXP Canada will be transferred to Aquinox Pharmaceuticals (USA) Inc. in exchange for one share of the corresponding series of preferred stock of Aquinox Pharmaceuticals (USA) Inc. (which, in turn, will be immediately converted into one share of common stock of Aquinox Pharmaceuticals (USA) Inc.). Following completion of such exchange and conversion, (a) all special voting shares of AQXP Canada and all special voting stock of Aquinox Pharmaceuticals (USA) Inc. will be redeemed for a nominal amount and (b) all exchangeable preferred shares of AQXP Canada (all of which will be held by Aquinox Pharmaceuticals (USA) Inc.) will be converted into common exchangeable shares of AQXP Canada.

Following completion of such exchange and conversion, and the subsequent redemption of the special voting shares of AQXP Canada and special voting stock of Aquinox Pharmaceuticals (USA) Inc., AQXP Canada will be a wholly owned subsidiary of Aquinox Pharmaceuticals (USA) Inc. and the equity ownership of Aquinox Pharmaceuticals (USA) Inc. and AQXP Canada (without giving effect to the sale of shares in this offering) will be as follows:

	<u>AQUINOX PHARMACEUTICALS (USA) INC.</u>	<u>AQXP CANADA</u>
<i>Former preferred shareholders</i>		
Non-Canadian	68,398,795 shares of Common Stock	—
Canadian	37,697,892 shares of Common Stock	—
<i>Common shareholders</i>		
Non-Canadian	—	—
Canadian	5,793,776 shares of Common Stock	—

In addition, Aquinox Pharmaceuticals (USA) Inc. will hold one new common share, 32,744,029 non-voting preferred shares and 43,491,668 common exchangeable shares of AQXP Canada, (after completing the conversion of all exchangeable preferred shares of AQXP Canada for common exchangeable shares of AQXP Canada) which will represent all of the outstanding equity of AQXP Canada.

Options

As of September 30, 2013, options to purchase an aggregate of 9,872,184 option securities were outstanding under the 2006 Plan. An additional 2,976,853 option securities were available for future grants. For additional information regarding the terms of the 2006 Plan, see the section of this prospectus captioned "Management — Employee Benefit Plans."

Warrants

As of September 30, 2013, we had the following warrant outstanding:

- ⁿ Warrant to purchase an aggregate of 339,287 option securities, at an exercise price of \$0.01 per option security, with an expiration date of March 19, 2023. Prior to completion of this offering, the warrant is

exercisable for 339,287 shares of our Series C preferred stock and one special voting share of AQXP Canada. After completion of the offering, the warrant will be exercisable for 339,287 shares of our common stock.

Stockholder Registration Rights

After our initial public offering, certain holders of shares of our common stock, including certain holders of 5% of our capital stock and entities affiliated with certain of our directors, will be entitled to certain rights with respect to registration of such shares under the Securities Act. These shares are referred to as registrable securities. The holders of these registrable securities possess registration rights pursuant to the terms of the qualification and registration rights agreement and are described in additional detail below.

The registration of shares of our common stock pursuant to the exercise of registration rights described below would enable the holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We will pay the registration expenses, other than underwriting discounts, selling commissions and stock transfer taxes, of the shares registered pursuant to the demand, piggyback and Form S-3 registrations described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions, to limit the number of shares the holders may include. The demand, piggyback and Form S-3 registration rights described below will expire three years after the effective date of the registration statement, of which this prospectus forms a part, or, with respect to any particular holder, at such time that such holder can sell its shares under Rule 144 of the Securities Act during any three month period.

Demand Registration Rights

The holders of the registrable securities will be entitled to certain demand registration rights. At any time beginning on the earlier of March 19, 2016 and 180 days following the completion of this offering, the holders of at least 20% of the registrable securities, on not more than two occasions, may request that we register all or a portion of their shares, subject to certain specified exceptions. Such request for registration must cover securities the aggregate offering price of which, before payment of underwriting discounts and commissions, exceeds \$7,500,000.

Piggyback Registration Rights

In connection with this offering, the holders of the registrable securities were entitled to, and the necessary percentage of holders waived, their rights to notice of this offering and to include their shares of registrable securities in this offering. If we propose to register for offer and sale any of our securities under the Securities Act in another offering, either for our own account or for the account of other security holders, the holders of these shares will be entitled to certain "piggyback" registration rights allowing them to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, including a registration statement on Form S-3 as discussed below, other than with respect to a demand registration or a registration statement on Forms S-4 or S-8 or related to stock issued upon conversion of debt securities, the holders of these shares are entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of shares included in the registration, to include their shares in the registration.

Form S-3 Registration Rights

The holders of the registrable securities will be entitled to certain Form S-3 registration rights. Any holder of these shares can make a request that we register for offer and sale their shares on Form S-3 if we are qualified to file a registration statement on Form S-3, subject to certain specified exceptions. Such request for registration on Form S-3 must cover securities the aggregate offering price of which, before payment of the underwriting discounts and commissions, equals or exceeds \$500,000. We will not be required to effect more than six registrations on Form S-3.

Anti-Takeover Provisions

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- ⁿ before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- ⁿ upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (1) by persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- ⁿ on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66²/₃% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a “business combination” to include the following:

- ⁿ any merger or consolidation involving the corporation and the interested stockholder;
- ⁿ any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- ⁿ subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- ⁿ any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- ⁿ the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an “interested stockholder” as an entity or person who, together with the person’s affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Certificate of Incorporation and Bylaws to be in Effect upon the Completion of this Offering

Our certificate of incorporation to be in effect upon the completion of this offering will provide for our board of directors to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the shares of common stock outstanding will be able to elect all of our directors. Our certificate of incorporation and our bylaws to be effective upon the completion of this offering will also provide that directors may be removed by the stockholders only for cause upon the vote of 66 ²/₃% of our outstanding common stock. Furthermore, the authorized number of directors may be changed only by resolution of the board of directors, and vacancies and newly created directorships on the board of directors may, except as otherwise required by law or determined by the board, only be filled by a majority vote of the directors then serving on the board, even though less than a quorum.

Our certificate of incorporation and bylaws will also provide that all stockholder actions must be effected at a duly called meeting of stockholders and will eliminate the right of stockholders to act by written consent without a meeting. Our bylaws will also provide that only our chairman of the board, chief executive officer or the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors may call a special meeting of stockholders.

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Our bylaws will also provide that stockholders seeking to present proposals before a meeting of stockholders to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and will specify requirements as to the form and content of a stockholder's notice.

Our certificate of incorporation and bylaws will provide that the stockholders cannot amend many of the provisions described above except by a vote of 66²/₃% or more of our outstanding common stock.

The combination of these provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Choice of Forum

Our certificate of incorporation will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for; any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. However, several lawsuits involving other companies have been brought challenging the validity of choice of forum provisions in certificates of incorporation, and it is possible that a court could note such provision is inapplicable or unenforceable.

Listing

We intend to apply to list our common stock on the NASDAQ Global Market under the trading symbol "AQXP."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent's address is 6201 15th Avenue, Brooklyn, New York 11219.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, no public market existed for our common stock. Future sales of shares of our common stock in the public market after this offering, and the availability of shares for future sale, could adversely affect the market price of our common stock prevailing from time to time. As described below, only a limited number of shares will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nonetheless, sales of substantial amounts of our common stock, or the perception that these sales could occur, could adversely affect prevailing market prices for our common stock and could impair our future ability to raise equity capital.

Based on the number of shares outstanding on September 30, 2013, upon completion of this offering, _____ shares of common stock will be outstanding, assuming no outstanding options or warrants are exercised. All of the shares of common stock sold in this offering will be freely tradable without restrictions or further registration under the Securities Act, except for any shares sold to our “affiliates,” as that term is defined under Rule 144 under the Securities Act. The remaining _____ shares of common stock held by existing stockholders are “restricted securities,” as that term is defined in Rule 144 under the Securities Act. Restricted securities may be sold in the public market only if registered or if their resale qualifies for exemption from registration described below under Rule 144 or 701 promulgated under the Securities Act.

Additionally, of the options to purchase 9,872,184 shares and warrants to purchase 339,287 shares of our common stock outstanding as of September 30, 2013, options and warrants exercisable for approximately _____ shares of common stock will be vested and eligible for sale 180 days after the date of this prospectus, which period is subject to potential extension under specified circumstances.

Under the lock-up and market stand-off agreements described below and the provisions of Rules 144 and 701 under the Securities Act, and assuming no extension of the lock-up period and no exercise of the underwriters’ option to purchase additional shares of common stock, these restricted securities will be available for sale in the public market as follows:

- “ _____ no shares of common stock will be eligible for immediate sale on the date of this prospectus; and
- “ _____ shares of our common stock will be eligible for sale upon the expiration of the lock-up and market stand-off agreements 180 days after the date of this prospectus, provided that shares held by our affiliates will remain subject to volume, manner of sale, and other resale limitations set forth in Rule 144, as described below.

We may issue shares of common stock from time to time as consideration for future acquisitions, investments or other corporate purposes. In the event that any such acquisition, investment or other transaction is significant, the number of shares of common stock that we may issue may in turn be significant. We may also grant registration rights covering those shares of common stock issued in connection with any such acquisition and investment.

Rule 144

In general, persons who have beneficially owned restricted shares of our common stock for at least six months, and any affiliate of ours who owns either restricted or unrestricted shares of our common stock, are entitled to sell their securities without registration with the SEC under an exemption from registration provided by Rule 144 under the Securities Act.

In general, a person who has beneficially owned restricted shares of our common stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale and (ii) we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned restricted shares of our common stock for at least six months, but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

- “ 1% of the number of shares of our common stock then outstanding, which will equal approximately _____ shares immediately after the completion of this offering based on the number of common shares outstanding as of September 30, 2013; or

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- ⁿ the average weekly trading volume of our common stock on the NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale;

provided, in each case, that we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Such sales both by affiliates and by non-affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144.

Rule 701

Rule 701 under the Securities Act, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. However, all Rule 701 shares are subject to lock-up agreements as described below and in the section of this prospectus captioned "Underwriting" and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Form S-8 Registration Statements

As soon as practicable after the completion of this offering, we intend to file with the SEC one or more registration statements on Form S-8 under the Securities Act to register the shares of our common stock that are issuable pursuant to our 2006 Plan and 2014 Plan. These registration statements will become effective immediately upon filing. Shares covered by these registration statements will then be eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements described below and Rule 144 limitations applicable to affiliates.

Lock-Up Agreements

We and all of our directors and officers, as well as holders of substantially all our common stock, have agreed with the underwriters that, for a period of 180 days following the date of this prospectus, subject to certain exceptions, we and they will not, directly or indirectly, offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale, or otherwise dispose of or hedge any of our shares of common stock, any options or warrants to purchase shares of our common stock, or any securities convertible into, or exchangeable for or that represent the right to receive shares of our common stock. Jefferies LLC and Cowen and Company, in their sole discretion, may at any time release all or any portion of the shares from the restrictions in such agreements.

The lock-up agreements do not contain any pre-established conditions to the waiver by the representatives on behalf of the underwriters of any terms of the lock-up agreements. Any determination to release shares subject to the lock-up agreements would be based on a number of factors at the time of determination, including but not necessarily limited to the market price of the common stock, the liquidity of the trading market for the common stock, general market conditions, the number of shares proposed to be sold, contractual obligations to release certain shares subject to the lock-up agreements in the event any such shares are released, subject to certain specific limitations and thresholds, and the timing, purpose and terms of the proposed sale.

Registration Rights

Upon the completion of this offering, the holders of 111,890,463 shares of our common stock (including 339,287 shares of our common stock issuable upon the exercise of outstanding warrants as of September 30, 2013), or their transferees, will be entitled to certain rights with respect to the registration of their shares under the Securities Act. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See the section of this prospectus captioned "Description of Capital Stock—Stockholder Registration Rights" for additional information.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following is a discussion of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. All prospective non-U.S. holders of our common stock should consult their own tax advisors with respect to the U.S. federal income tax consequences of the purchase, ownership and disposition of our common stock, as well as any consequences arising under the laws of any other taxing jurisdiction, including any state, local and non-U.S. tax consequences and any U.S. federal non-income tax consequences. In general, a non-U.S. holder means a beneficial owner of our common stock (other than a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes:

- ⁿ an individual who is a citizen or resident of the United States;
- ⁿ a corporation, or an entity treated as a corporation for U.S. federal income tax purposes, created or organized in the United States or under the laws of the United States or of any state thereof or the District of Columbia;
- ⁿ an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- ⁿ a trust if (1) a U.S. court can exercise primary supervision over the trust's administration and one or more U.S. persons have the authority to control all of the trust's substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, which we refer to as the Code, existing U.S. Treasury Regulations promulgated thereunder, published administrative rulings and judicial decisions, all as in effect as of the date of this prospectus. These laws are subject to change and to differing interpretation, possibly with retroactive effect. Any change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus.

This discussion is limited to non-U.S. holders that hold shares of our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, for investment). This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances, nor does it address any aspects of U.S. estate or gift tax, or any state, local or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as holders that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below), corporations that accumulate earnings to avoid U.S. federal income tax, tax-exempt organizations, banks, financial institutions, insurance companies, brokers, dealers or traders in securities, commodities or currencies, tax-qualified retirement plans, holders subject to the alternative minimum tax or Medicare contribution tax, holders who hold or receive our common stock pursuant to the exercise of employee stock options or otherwise as compensation, holders holding our common stock as part of a hedge, straddle or other risk reduction strategy, conversion transaction or other integrated investment, holders deemed to sell our common stock under the constructive sale provisions of the Code, controlled foreign corporations, passive foreign investment companies and U.S. expatriates and certain former citizens or long-term residents of the United States.

In addition, this discussion does not address the tax treatment of partnerships (or entities or arrangements that are treated as partnerships for U.S. federal income tax purposes) or persons that hold their common stock through such partnerships or such entities or arrangements. If a partnership, including any entity or arrangement treated as a partnership for U.S. federal income tax purposes, holds shares of our common stock, the U.S. federal income tax treatment of a partner in such partnership will generally depend upon the status of the partner, the activities of the partnership and certain determinations made at the partner level. Such partners and partnerships should consult their own tax advisors regarding the tax consequences of the purchase, ownership and disposition of our common stock.

There can be no assurance that the Internal Revenue Service, which we refer to as the IRS, will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, a ruling with respect to the U.S. federal income tax consequences with respect to the matters discussed below.

Distributions on Our Common Stock

Distributions, if any, on our common stock generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to such holder's adjusted tax basis in the common stock. Any remaining excess will be treated as capital gain from the sale or exchange of such common stock, subject to the tax treatment described below in "Gain on Sale, Exchange or Other Disposition of Our Common Stock."

Subject to the discussion below regarding backup withholding and foreign accounts, dividends paid to a non-U.S. holder will generally be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty generally will be required to provide a properly executed IRS Form W-8BEN (or successor form) and satisfy relevant certification and other requirements. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. To claim the exemption, the non-U.S. holder must furnish to us or our paying agent a valid IRS Form W-8ECI (or applicable successor form), certifying that the dividends are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code), unless a specific treaty exemption applies. Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty.

Gain on Sale, Exchange or Other Disposition of Our Common Stock

Subject to the discussion below regarding backup withholding and foreign accounts, in general, a non-U.S. holder will not be subject to any U.S. federal income tax on any gain realized upon such holder's sale, exchange or other disposition of shares of our common stock unless:

- ⁿ the gain is effectively connected with a U.S. trade or business of the non-U.S. holder and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed base maintained in the United States by such non-U.S. holder, in which case the non-U.S. holder generally will be taxed at the graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in "Distributions on Our Common Stock" may also apply;
- ⁿ the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the net gain derived from the disposition, which may be offset by U.S. source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States) provided the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- ⁿ our common stock constitutes a U.S. real property interest because we are, or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation." Even if we are or become a U.S. real property holding corporation, provided that our common stock is regularly traded on an established securities market, our common stock will be treated as a U.S. real property interest only with respect to a non-U.S. holder that holds more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, during the shorter of

the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. In such case, such non-U.S. holder generally will be taxed on its net gain derived from the disposition at the graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code). Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a U.S. real property holding corporation, or that we are likely to become one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

Backup Withholding and Information Reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the dividends on our common stock paid to such holder and the tax withheld, if any, with respect to such dividends. Non-U.S. holders will have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. U.S. backup withholding generally will not apply to a Non-U.S. holder who provides a properly executed IRS Form W-8BEN or otherwise establishes an exemption.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder may be allowed as a credit against the non-U.S. holder's U.S. federal income tax liability, if any, and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS.

Foreign Accounts

The Code generally imposes a U.S. federal withholding tax of 30% on dividends and the gross proceeds of a disposition of our common stock paid to a "foreign financial institution" (as specifically defined for this purpose), unless such institution enters into an agreement with the U.S. government to, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which may include certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these withholding and reporting requirements may be subject to different rules. This U.S. federal withholding tax of 30% also applies to dividends and the gross proceeds of a disposition of our common stock paid to a non-financial foreign entity, unless such entity provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or provides information regarding substantial direct and indirect U.S. owners of the entity. The withholding tax described above will not apply if the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from the rules. The withholding provisions described above will generally apply to dividends on our common stock paid on or after July 1, 2014 and with respect to gross proceeds of a sale or other disposition of our common stock on or after January 1, 2017. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. Non-U.S. holders are encouraged to consult with their own tax advisors regarding the possible implications of the legislation on their investment in our common stock.

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EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAW, AS WELL AS TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, NON-U.S. OR U.S. FEDERAL NON-INCOME TAX LAWS.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated _____, 2014, among us and Jefferies LLC and Cowen and Company LLC, as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of shares of common stock shown opposite its name below:

UNDERWRITERS	NUMBER OF SHARES
Jefferies LLC	
Cowen and Company, LLC	
Canaccord Genuity Inc.	
Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the shares of common stock subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. In addition, the underwriters have advised us that they do not intend to confirm sales to any account over which they exercise discretionary authority.

Although our common stock will not be offered to the public in Canada, certain of our directors and existing stockholders, including directors and stockholders resident in Canada, have expressed an interest in participating in this offering. As our shares of common stock have not been and will not be qualified for distribution pursuant to a prospectus filed with securities regulatory authorities in any of the provinces or territories in Canada, shares of our common stock may not be offered or sold in Canada except pursuant to an exemption from the prospectus requirements of applicable Canadian securities laws. The underwriters have agreed that, except as permitted by the underwriting agreement and as expressly permitted by applicable Canadian securities laws, they will not offer or sell any shares of our common stock within Canada. This registration statement does not constitute an offer to sell any shares of our common stock in any province or territory of Canada.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of \$ _____ per share of common stock. The underwriters may allow, and certain dealers may reallow, a discount from the concession not in excess of \$ _____ per share of

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common stock to certain brokers and dealers. After the offering, the initial public offering price, concession and reallowance to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	PER SHARE		TOTAL	
	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES
Public offering price	\$	\$	\$	\$
Underwriting discounts and commissions paid by us	\$	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$	\$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$.

Determination of Offering Price

Prior to this offering, there has not been a public market for our common stock. Consequently, the initial public offering price for our common stock will be determined by negotiations between us and the representatives. Among the factors to be considered in these negotiations will be prevailing market conditions, our financial information, market valuations of other companies that we and the underwriters believe to be comparable to us, estimates of our business potential, the present state of our development and other factors deemed relevant.

We offer no assurances that the initial public offering price will correspond to the price at which the common stock will trade in the public market subsequent to the offering or that an active trading market for the common stock will develop and continue after the offering.

Listing

We intend to have our common stock approved for listing on NASDAQ Global Market under the trading symbol "AQXP".

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of _____ shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter's initial purchase commitment as indicated in the table above. This option may be exercised only if the underwriters sell more shares than the total number set forth on the cover page of this prospectus.

No Sales of Similar Securities

We, our officers, directors and holders of all or substantially all our outstanding capital stock and other securities have agreed, subject to specified exceptions, not to directly or indirectly:

- ⁿ sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Exchange Act, or

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- ⁿ otherwise dispose of any shares of common stock, options or warrants to acquire shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock currently or hereafter owned either of record or beneficially, or
- ⁿ publicly announce an intention to do any of the foregoing for a period of 180 days after the date of this prospectus without the prior written consent of the representatives.

This restriction terminates after the close of trading of the common stock on and including the 180th day after the date of this prospectus.

The representatives may, in their sole discretion and at any time or from time to time before the termination of the 180-day period release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our shareholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Stabilization

The underwriters have advised us that, pursuant to Regulation M under the Exchange Act, certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either "covered" short sales or "naked" short sales.

"Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

"Naked" short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriter's purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we, nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

The underwriters may also engage in passive market making transactions in our common stock on The NASDAQ Global Market in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However,

if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on the web sites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters' web sites and any information contained in any other web site maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriter and certain of its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriter and certain of its affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriter and certain of its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Disclaimers About Non-U.S. Jurisdictions

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State") an offer to the public of any shares which are the subject of the offering contemplated by this prospectus may not be made in that Relevant Member State except that an offer to the public in that Relevant Member State of any shares may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- ⁱ to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- ⁱ to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;
- ⁱ to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the representatives for any such offer; or
- ⁱ in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of the shares shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

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Each person in a Relevant Member State who receives any communication in respect of, or who acquires any shares under, the offers contemplated in this prospectus will be deemed to have represented, warranted and agreed to and with each underwriter and us that:

- ⁿ it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive; and
- ⁿ in the case of any shares acquired by it as a financial intermediary, as that term is used in Article 3(2) of the Prospectus Directive, (i) the shares acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Relevant Member State, other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives has been given to the offer or resale; or (ii) where shares have been acquired by it on behalf of persons in any Relevant Member State other than qualified investors, the offer of those shares to it is not treated under the Prospectus Directive as having been made to such persons.

For the purposes of this provision, the expression an “offer to the public” in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase any shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression “Prospectus Directive” means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

United Kingdom

Each underwriter has represented, warranted and agreed that:

- ⁿ it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, or the FSMA) to persons who are investment professionals falling within Article 19(5) of the FSMA (Financial Promotion) Order 2005 or in circumstances in which Section 21(1) of the FSMA does not apply to us; and
- ⁿ it has complied with and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

Canada

The common stock has not been and will not be qualified under the securities laws of any province or territory of Canada. The common stock is not being offered or sold, directly or indirectly, in Canada to or for the account of any resident of Canada in contravention of the securities laws of any province or territory thereof. The common stock may be sold in Canada only to purchasers purchasing as principal that are “accredited investors” as defined in National Instrument 45-106 – Prospectus and Registration Exemptions and in accordance with the requirements of National Instrument 31-103 – Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the common stock must be made in accordance with an exemption from the prospectus requirements and in compliance with the registration requirements of applicable securities laws.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Cooley LLP, Seattle, Washington. Latham & Watkins LLP is acting as counsel to the underwriters.

EXPERTS

The combined financial statements of Aquinox Pharmaceuticals (USA) Inc. and Aquinox Pharmaceuticals Inc. as of December 31, 2012 and December 31, 2011, and for the years then ended and for the period from December 26, 2003 (inception) to December 31, 2012, included in this prospectus and registration statement have been audited by Deloitte LLP, independent registered chartered accountants, as stated in their report appearing herein. Such financial statements have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of our common stock offered under this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement and the exhibits. For further information about us and our common stock, you should refer to the registration statement and the exhibits and schedules filed with the registration statement. With respect to the statements contained in this prospectus regarding the contents of any agreement or any other document, in each instance, the statement is qualified in all respects by the complete text of the agreement or document, a copy of which has been filed as an exhibit to the registration statement.

Upon completion of this offering, we will be required to file annual, quarterly and current reports, proxy statements and other information with the SEC pursuant to the Exchange Act. You may read and copy this information at the SEC at its public reference facilities located at 100 F Street N.E., Room 1580, Washington, D.C. 20549, at prescribed rates. You may obtain information on the operation of the public reference rooms by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains periodic reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that site is www.sec.gov.

We intend to furnish our stockholders with annual reports containing audited financial statements and to file with the SEC quarterly reports containing unaudited interim financial data for the first three quarters of each fiscal year. We also maintain a website on the Internet at www.aqxpharma.com. However, the information contained in or accessible through our website is not part of this prospectus or the registration statement of which this prospectus forms a part, and investors should not rely on such information in making a decision to purchase our common stock in this offering.

INDEX TO COMBINED FINANCIAL STATEMENTS

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REPORT OF INDEPENDENT REGISTERED CHARTERED ACCOUNTANTS

To the Boards of Directors and Stockholders of
Aquinox Pharmaceuticals (USA) Inc. and Aquinox Pharmaceuticals Inc.
(the development stage companies)

We have audited the accompanying combined balance sheets of Aquinox Pharmaceuticals (USA) Inc. and Aquinox Pharmaceuticals Inc. (the development stage companies) (the "Companies") as of December 31, 2012 and 2011, and the related combined statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit, and cash flows for the years then ended, and for the period from December 26, 2003 (inception) to December 31, 2012. These financial statements are the responsibility of the Companies' management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Companies are not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Companies' internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the combined financial position of the Companies as of December 31, 2012 and 2011, and the results of their operations and their cash flows for the years then ended, and for the period from December 26, 2003 (inception) to December 31, 2012, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 2 to the combined financial statements, the Companies are a development stage enterprise and successful completion of the Companies' development program and, ultimately, the attainment of profitable operations, are dependent upon future events, including obtaining adequate financing to fulfill the Companies' development activities, obtaining regulatory approval, and achieving a level of revenues adequate to support the Companies' cost structure.

/s/ Deloitte LLP

Independent Registered Chartered Accountants
November 15, 2013

**AQUINOX PHARMACEUTICALS (USA) INC. AND
AQUINOX PHARMACEUTICALS INC.**
(the development stage companies)

Combined statements of operations and comprehensive loss
(Expressed in U.S. dollars)

	YEAR ENDED DECEMBER 31, 2011	YEAR ENDED DECEMBER 31, 2012	DECEMBER 26, 2003 (INCEPTION) TO DECEMBER 31, 2012	NINE MONTH PERIOD ENDED SEPTEMBER 30, 2012 (unaudited)	NINE MONTH PERIOD ENDED SEPTEMBER 30, 2013 (unaudited)	DECEMBER 26, 2003 (INCEPTION) TO SEPTEMBER 30, 2013 (unaudited)
Operating expenses						
Research and development	\$ 8,578,596	\$ 5,914,611	\$ 33,759,261	\$ 5,093,292	\$ 4,802,078	\$ 38,561,338
General and administrative	1,725,073	1,635,623	7,729,683	1,085,119	1,209,939	8,939,622
Amortization	125,598	130,784	551,601	99,823	45,198	596,799
Total operating expenses	10,429,267	7,681,018	42,040,545	6,278,234	6,057,215	48,097,759
Other income (expenses)						
Bank charges and financing costs	(9,404)	(9,470)	(93,292)	(7,509)	(5,246)	(98,535)
Interest income	19,747	10,804	336,724	9,003	17,845	354,569
Sale of equipment	—	—	—	—	124,353	124,352
Change in fair value of derivative liabilities	—	—	226,624	—	972,757	1,199,381
Amortization of discount on preferred stock	(45,325)	(45,448)	(124,922)	(34,025)	(265,650)	(390,574)
Foreign exchange gain (loss)	(197,227)	53,228	4,511	64,258	18,856	23,367
	(232,209)	9,114	349,645	31,727	862,915	1,212,560
Net loss before income taxes	(10,661,476)	(7,671,904)	(41,690,900)	(6,246,507)	(5,194,300)	(46,885,199)
Income tax (provision) recovery	154,468	(42,294)	3,145,362	(42,294)	5,044	3,150,406
Net loss and comprehensive loss incurred in the development stage	\$ (10,507,008)	\$ (7,714,198)	\$ (38,545,538)	\$ (6,288,801)	\$ (5,189,256)	\$ (43,734,793)
Accretion for liquidation preference on preferred stock	(3,303,200)	(3,860,140)	(12,081,657)	(2,895,102)	(3,953,595)	(16,035,252)
Accretion for share issuance costs on preferred stock	(163,483)	(168,702)	(872,045)	(126,430)	(96,039)	(968,084)
Tax expense on preferred stock	(345,587)	(394,908)	(1,059,488)	(296,182)	(421,974)	(1,481,462)
Total loss attributable to common stockholders	\$ (14,319,278)	\$ (12,137,948)	\$ (52,558,728)	\$ (9,606,515)	\$ (9,660,864)	\$ (62,219,591)
Basic and diluted loss per common stock	\$ (2.47)	\$ (2.09)	\$ (9.07)	\$ (1.66)	\$ (1.67)	\$ (10.74)
Basic and diluted weighted average common stock outstanding	5,793,776	5,793,776	5,793,776	5,793,776	5,793,776	5,793,776
Net loss attributable to common stockholders—pro forma (unaudited, Note 11)		\$ (7,668,873)			\$ (6,048,894)	
Pro forma net loss per common stock (unaudited, Note 11):						
Basis and diluted		\$ (0.10)			\$ (0.05)	
Weighted average shares outstanding used to compute pro forma net loss per common stock (unaudited, Note 11):		79,163,262			111,890,463	

The accompanying notes form an integral part of these combined financial statements

AQUINOX PHARMACEUTICALS (USA) INC. AND AQUINOX PHARMACEUTICALS INC.
(the development stage companies)
Combined statements of convertible preferred stock and stockholders' deficit
(Expressed in U.S. dollars)

	AQXP CANADA EXCHANGEABLE PREFERRED SHARES		AQUINOX USA PREFERRED STOCK		AQXP CANADA NEW COMMON SHARES		AQXP CANADA EXCHANGEABLE COMMON SHARES		AQXP CANADA SPECIAL VOTING COMMON SHARES		AQUINOX USA SERIES SPECIAL COMMON STOCK		AQUINOX USA COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' DEFICIT
	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT			
Issued for cash on inception, net of share issue costs	—	\$ —	—	\$ —	8,000,000	\$ 800	—	\$ —	—	\$ —	—	\$ —	—	\$ —	—	\$ —	\$ 800
Net loss and comprehensive loss incurred in the development stage for the period from December 26, 2003 (inception) to December 31, 2004	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(12,188)	(12,188)
Balances, December 31, 2004	—	—	—	—	8,000,000	800	—	—	—	—	—	—	—	—	—	(12,188)	(11,388)
Repurchase of common stock	—	—	—	—	(3,500,000)	(350)	—	—	—	—	—	—	—	—	—	—	(350)
Net loss and comprehensive loss incurred in the development stage	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(19,275)	(19,275)
Balances, December 31, 2005	—	—	—	—	4,500,000	450	—	—	—	—	—	—	—	—	—	(31,463)	(31,013)
Issued for cash, net of share issue costs	—	—	—	—	1,193,776	489,451	—	—	—	—	—	—	—	—	—	—	489,451
Issued for intangible assets	—	—	—	—	100,000	44,834	—	—	—	—	—	—	—	—	—	—	44,834
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	50,488	—	—	50,488
Net loss and comprehensive loss incurred in the development stage	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(543,052)	(543,052)
Balances, December 31, 2006	—	—	—	—	5,793,776	534,735	—	—	—	—	—	—	—	50,488	—	(574,515)	10,708
Share reorganization	—	—	—	—	(5,793,775)	(534,735)	5,793,776	534,729	5,793,776	—	5,793,776	6	—	—	—	—	—
Issued for cash, net of share issue costs	9,733,139	4,992,710	7,636,361	3,886,892	—	—	—	—	17,369,500	—	9,733,139	10	—	—	—	—	10
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	78,255	—	—	78,255
Net loss and comprehensive loss incurred in the development stage	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(2,008,534)	(2,008,534)
Accretion for liquidation preference on preferred stock	—	245,162	—	196,000	—	—	—	—	—	—	—	—	—	(128,743)	(312,419)	(441,162)	
Accretion for deferred share issuance costs on preferred stock	—	34,800	—	30,224	—	—	—	—	—	—	—	—	—	—	(65,024)	(65,024)	
Balances, December 31, 2007	9,733,139	5,272,672	7,636,361	4,113,116	1	—	5,793,776	534,729	23,163,276	—	15,526,915	16	—	—	(2,960,492)	(2,425,747)	
Issued for cash, net of share issue costs	2,727,271	1,482,936	2,545,453	1,384,073	—	—	—	—	5,272,724	—	2,727,271	3	—	—	—	—	3
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	103,518	—	—	103,518
Net loss and comprehensive loss incurred in the development stage	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(5,459,460)	(5,459,460)
Accretion for liquidation preference on preferred stock	—	553,807	—	454,346	—	—	—	—	—	—	—	—	—	(103,518)	(904,635)	(1,008,153)	

The accompanying notes form an integral part of these combined financial statements

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	AQXP CANADA EXCHANGEABLE PREFERRED SHARES		AQUINOX USA PREFERRED STOCK		AQXP CANADA NEW COMMON SHARES		AQXP CANADA EXCHANGEABLE COMMON SHARES		AQXP CANADA SPECIAL VOTING COMMON SHARES		AQUINOX USA SERIES SPECIAL COMMON STOCK		AQUINOX USA COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' DEFICIT
	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT			
Accretion for deferred share issuance costs on preferred stock	—	\$ 74,650	—	\$ 65,108	—	\$ —	—	\$ —	—	\$ —	—	\$ —	—	\$ —	\$ —	\$ (139,758)	\$ (139,758)
Balances, December 31, 2008	12,460,410	7,384,066	10,181,814	6,016,643	1	—	5,793,776	534,729	28,436,000	—	18,254,186	19	—	—	—	(9,464,345)	(8,929,597)
Issued for cash, net of share issue costs	2,727,273	1,467,508	2,545,454	1,369,675	—	—	—	—	5,272,727	—	2,727,273	3	—	—	—	—	3
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111,673	—	111,673
Net loss and comprehensive loss incurred in the development stage	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(3,752,070)	(3,752,070)
Accretion for liquidation preference on preferred stock	—	708,037	—	593,363	—	—	—	—	—	—	—	—	—	—	(111,673)	(1,189,727)	(1,301,400)
Accretion for deferred share issuance costs on preferred stock	—	84,954	—	74,657	—	—	—	—	—	—	—	—	—	—	—	(159,611)	(159,611)
Accrual of tax payable on preferred stock	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(74,743)	(74,743)
Balances, December 31, 2009	15,187,683	9,644,565	12,727,268	8,054,338	1	—	5,793,776	534,729	33,708,727	—	20,981,459	22	—	—	—	(14,640,496)	(14,105,745)
Issued for cash, net of share issue costs	8,150,408	4,335,318	15,198,240	8,084,158	—	—	—	—	23,348,648	—	8,150,408	8	—	—	—	—	8
Warrant discount of \$226,624 on issuance of preferred shares	—	(109,115)	—	(117,509)	—	—	—	—	—	—	—	—	—	—	—	—	—
Stock based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	109,256	—	109,256
Net loss and comprehensive loss incurred in the development stage	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(8,529,753)	(8,529,753)
Accretion for liquidation preference on preferred stock	—	1,053,645	—	1,113,956	—	—	—	—	—	—	—	—	—	—	(109,256)	(2,058,345)	(2,167,601)
Accretion for deferred share issuance costs on preferred stock	—	78,179	—	97,288	—	—	—	—	—	—	—	—	—	—	—	(175,467)	(175,467)
Amortization of warrant discount on preferred stock	—	16,442	—	17,706	—	—	—	—	—	—	—	—	—	—	—	—	—
Accrual of tax payable on preferred stock	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(244,251)	(244,251)
Balances, December 31, 2010	23,338,091	15,019,034	27,925,508	17,249,937	1	—	5,793,776	534,729	57,057,375	—	29,131,867	30	—	—	—	(25,648,312)	(25,113,553)
Issued for cash, net of share issue costs	7,087,100	3,885,636	15,018,787	8,234,333	—	—	—	—	22,105,887	—	7,087,100	7	—	—	—	—	7
Stock based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	118,243	—	118,243
Net loss and comprehensive loss incurred in the development stage	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(10,507,008)	(10,507,008)
Accretion for liquidation preference on preferred stock	—	1,445,120	—	1,858,080	—	—	—	—	—	—	—	—	—	—	(118,243)	(3,184,957)	(3,303,200)
Accretion for deferred share issuance costs on preferred stock	—	70,509	—	92,974	—	—	—	—	—	—	—	—	—	—	—	(163,483)	(163,483)
Amortization of warrant discount on preferred stock	—	21,823	—	23,502	—	—	—	—	—	—	—	—	—	—	—	—	—
Accrual of tax payable on preferred stock	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(345,587)	(345,587)
Balances, December 31, 2011	30,425,191	20,442,122	42,944,295	27,458,826	1	—	5,793,776	534,729	79,163,262	—	36,218,967	37	—	—	—	(39,849,347)	(39,314,581)

The accompanying notes form an integral part of these combined financial statements

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	AQXP CANADA EXCHANGEABLE PREFERRED SHARES		AQUINOX USA PREFERRED STOCK		AQXP CANADA NEW COMMON SHARES		AQXP CANADA EXCHANGEABLE COMMON SHARES		AQXP CANADA SPECIAL VOTING COMMON SHARES		AQUINOX USA SERIES SPECIAL COMMON STOCK		AQUINOX USA COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' DEFICIT
	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT			
Stock based compensation	—	\$ —	—	\$ —	—	\$ —	—	\$ —	—	\$ —	—	\$ —	—	\$ —	\$ 351,322	\$ —	\$ 351,322
Net loss and comprehensive loss incurred in the development stage	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(7,714,198)	(7,714,198)
Accretion for liquidation preference on preferred stock	—	1,647,432	—	2,212,708	—	—	—	—	—	—	—	—	—	—	(351,322)	(3,508,818)	(3,860,140)
Accretion for deferred share issuance costs on preferred stock	—	72,296	—	96,406	—	—	—	—	—	—	—	—	—	—	—	(168,702)	(168,702)
Amortization of warrant discount on preferred stock	—	21,882	—	23,566	—	—	—	—	—	—	—	—	—	—	—	—	—
Accrual of tax payable on preferred stock	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(394,908)	(394,908)
Balances, December 31, 2012	30,425,191	22,183,732	42,944,295	29,791,506	1	—	5,793,776	534,729	79,163,262	—	36,218,967	37	—	—	—	(51,635,973)	(51,101,207)
Issued for cash, net of share issue costs (unaudited)	7,272,701	3,950,228	25,454,500	13,825,822	—	—	—	—	32,727,201	—	7,272,701	7	—	—	—	—	7
Warrant discount of \$68,920 on issuance of Aquinox USA preferred shares (unaudited)	—	—	—	(68,920)	—	—	—	—	—	—	—	—	—	—	—	—	—
Redemption discount of \$466,673 for AQXP Canada and \$1,633,358 for Aquinox USA on issuance of preferred shares (unaudited)	—	(466,673)	—	(1,633,357)	—	—	—	—	—	—	—	—	—	—	—	—	—
Stock based compensation (unaudited)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	255,318	—	255,318
Net loss and comprehensive loss incurred in the development stage (unaudited)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(5,189,255)	(5,189,255)
Accretion for liquidation preference on preferred stock (unaudited)	—	1,513,996	—	2,439,599	—	—	—	—	—	—	—	—	—	—	(255,318)	(3,698,277)	(3,953,595)
Accretion for deferred share issuance costs on preferred stock (unaudited)	—	36,522	—	59,517	—	—	—	—	—	—	—	—	—	—	—	(96,039)	(96,039)
Amortization of warrant discount on preferred stock (unaudited)	—	16,322	—	24,942	—	—	—	—	—	—	—	—	—	—	—	—	—
Amortization of redemption option on preferred stock (unaudited)	—	49,863	—	174,523	—	—	—	—	—	—	—	—	—	—	—	—	—
Accrual of tax payable on preferred stock (unaudited)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(421,974)	(421,974)
Balances, September 30, 2013 (unaudited)	<u>37,697,892</u>	<u>\$ 27,283,990</u>	<u>68,398,795</u>	<u>\$ 44,613,632</u>	<u>1</u>	<u>\$ —</u>	<u>5,793,776</u>	<u>534,729</u>	<u>111,890,463</u>	<u>\$ —</u>	<u>43,491,668</u>	<u>\$ 44</u>	<u>—</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (61,041,518)</u>	<u>\$ (60,506,745)</u>
Conversion of preferred stock into Aquinox USA common stock (unaudited)	<u>(37,697,892)</u>	<u>\$ (27,283,990)</u>	<u>(68,398,795)</u>	<u>\$ (44,613,632)</u>	<u>—</u>	<u>—</u>	<u>(5,793,776)</u>	<u>(534,729)</u>	<u>(111,890,463)</u>	<u>—</u>	<u>(43,491,668)</u>	<u>(44)</u>	<u>111,890,463</u>	<u>72</u>	<u>72,432,317</u>	<u>2,456,204</u>	<u>74,353,820</u>
Pro Forma Stockholders' (deficit) equity September 30, 2013 (unaudited)	<u>—</u>	<u>\$ —</u>	<u>—</u>	<u>\$ —</u>	<u>1</u>	<u>\$ —</u>	<u>—</u>	<u>\$ —</u>	<u>—</u>	<u>\$ —</u>	<u>—</u>	<u>\$ —</u>	<u>111,890,463</u>	<u>\$ 72</u>	<u>\$ 72,432,317</u>	<u>\$ (58,585,314)</u>	<u>\$ 13,847,075</u>

The accompanying notes form an integral part of these combined financial statements

**AQUINOX PHARMACEUTICALS (USA) INC. AND
AQUINOX PHARMACEUTICALS INC.**
(the development stage companies)

Combined balance sheets
(Expressed in U.S. dollars)

	<u>DECEMBER 31, 2011</u>	<u>DECEMBER 31, 2012</u>	<u>SEPTEMBER 30, 2013 (unaudited)</u>	<u>PRO FORMA (NOTE 2) SEPTEMBER 30, 2013 (unaudited)</u>
Assets				
Current assets				
Cash and cash equivalents (Note 3)	\$ 9,239,188	\$ 2,000,539	\$ 15,867,885	\$ 15,867,885
Accounts and other amounts receivable (Note 4)	39,736	28,545	34,092	34,092
Investment tax credit receivable	179,814	—	—	—
Prepayments	27,629	34,998	51,568	51,568
Total current assets	9,486,367	2,064,082	15,953,545	15,953,545
Intangible assets (Note 6)				
Property and equipment (Note 5)	108,022	85,264	68,195	68,195
Other	259,381	157,801	79,639	79,639
	30,135	34,843	54,074	54,074
Total assets	\$ 9,883,905	\$ 2,341,990	\$ 16,155,453	\$ 16,155,453
Liabilities				
Current liabilities				
Accounts payable and accrued liabilities (Note 7)	598,487	371,428	2,054,660	2,054,660
Other	9,402	13,959	16,909	16,909
Total current liabilities	607,889	385,387	2,071,569	2,071,569
Warrant liabilities (Note 9)				
	—	—	221,450	221,450
Redemption option on preferred stock (Note 8)				
	—	—	974,742	—
Accrued tax payable on preferred stock (Note 12)				
	664,579	1,059,487	1,481,462	—
Other	25,070	23,085	15,359	15,359
Total liabilities	\$ 1,297,538	\$ 1,467,959	\$ 4,764,582	\$ 2,308,378
Redeemable convertible preferred stock (Note 8)				
AQXP Canada, Series A exchangeable preferred shares, no par value - authorized unlimited as of all dates presented (unaudited as of September 30, 2013 and as of September 30, 2013 Pro Forma); issued and outstanding, 15,187,683 as of December 31, 2011, December 31, 2012, September 30, 2013 (unaudited), and 0 as of September 30, 2013 Pro Forma (unaudited)				
	11,365,296	12,320,298	13,078,888	—
Aquinox USA, Series A preferred stock, \$0.000001 par value - authorized 28,213,224 as of December 31, 2011, December 31, 2012, 27,914,951 as of September 30, 2013 (unaudited), and 0 as of September 30, 2013 Pro Forma (unaudited); issued and outstanding, 12,727,628 as of December 31, 2011, December 31, 2012, September 30, 2013 (unaudited), and 0 as of September 30, 2013 Pro Forma (unaudited)				
	9,503,860	10,308,032	10,946,254	—
AQXP Canada, Series B exchangeable preferred shares, no par value - authorized unlimited as of all dates presented (unaudited as of September 30, 2013 and September 30, 2013 Pro Forma); issued and outstanding, 15,237,508 as of December 31, 2011, December 31, 2012, September 30, 2013 (unaudited), 0 as of September 30, 2013 Pro Forma (unaudited)				
	9,076,826	9,863,434	10,480,142	—
Aquinox USA, Series B preferred stock, \$0.000001 par value - authorized 46,912,440 as of December 31, 2011 and December 31, 2012, 45,454,535 as of September 30, 2013 (unaudited), and 0 as of September 30, 2013 Pro Forma (unaudited); issued and outstanding, 30,217,027 as of December 31, 2011, December 31, 2012, September 30, 2013 (unaudited), and 0 as of September 30, 2013 Pro Forma (unaudited)				
	17,954,966	19,483,474	20,691,549	—

The accompanying notes form an integral part of these combined financial statements

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	<u>DECEMBER 31, 2011</u>	<u>DECEMBER 31, 2012</u>	<u>SEPTEMBER 30, 2013</u> (unaudited)	<u>PRO FORMA (NOTE 2) SEPTEMBER 30, 2013</u> (unaudited)
AQXP Canada, Series C exchangeable preferred shares, no par value - authorized 0 as of December 31, 2011 and December 31, 2012, unlimited as of September 30, 2013 (unaudited), September 30, 2013 Pro Forma (unaudited); issued and outstanding, 0 as of December 31, 2011, December 31, 2012, 7,272,701 as of September 30, 2013 (unaudited), and 0 as of September 30, 2013 Pro Forma (unaudited)	—	—	3,724,960	—
Aquinox USA, Series C preferred stock, \$0.000001 par value - authorized 0 as of December 31, 2011, December 31, 2012, 45,793,738 as of September 30, 2013 (unaudited), and 0 as of September 30, 2013 Pro Forma (unaudited); issued and outstanding, 0 as of December 31, 2011, December 31, 2012, 25,454,500 as of September 30, 2013 (unaudited), 0 as of September 30, 2013 Pro Forma (unaudited)	—	—	12,975,829	—
	<u>\$ 47,900,948</u>	<u>\$ 51,975,238</u>	<u>\$ 71,897,622</u>	<u>\$ —</u>
Commitments and contingencies (Notes 6 and 14)				
Subsequent events (Note 15)				
Stockholders' deficit				
Share capital				
Common stock (Note 10)				
AQXP Canada, new common shares, no par value; authorized, 10 as of all dates presented (unaudited as of September 30, 2013 and as of September 30, 2013 Pro Forma); issued and outstanding, 1 as of all dates presented (unaudited as of September 30, 2013 and as of September 30, 2013 Pro Forma)	—	—	—	—
AQXP Canada, exchangeable common stock, no par value; authorized, unlimited as of all dates presented (unaudited as of September 30, 2013 and as of September 30, 2013 Pro Forma); issued and outstanding 5,793,776 as of December 31, 2011, December 31, 2012, and September 30, 2013 (unaudited), 0 as of September 30, 2013 Pro forma (unaudited)	534,729	534,729	534,729	—
AQXP Canada, special voting common shares no par value; authorized, unlimited as of all dates presented (unaudited as of September 30, 2013 and as of September 30, 2013 Pro Forma); issued and outstanding 79,163,262 as of December 31, 2011, December 31, 2012, 111,890,463 as of September 30, 2013 (unaudited), 0 as of September 30, 2013 Pro Forma (unaudited)	—	—	—	—
Aquinox USA, special voting common stock, \$0.000001 par value; authorized, 69,027,955 as of December 31, 2011, December 31, 2012, September 30, 2013, 0 (unaudited) as of September 30, 2013 Pro Forma (unaudited); issued and outstanding 36,218,966 as of December 31, 2011, December 31, 2012, 43,491,667 as of September 30, 2013 (unaudited), 0 as of September 30, 2013 Pro Forma (unaudited)	37	37	44	—
Aquinox USA, common stock, \$0.000001 par value - authorized, 92,855,418 as of December 31, 2011 and December 31, 2012, 139,266,037 as of September 30, 2013 (unaudited), and as of September 30, 2013 Pro Forma (unaudited); issued and outstanding, 0 as of December 31, 2011, December 31, 2012, and September 30, 2013 (unaudited), 111,890,463 as of September 30, 2013 Pro Forma (unaudited)	—	—	—	72
Additional paid-in capital	—	—	—	72,432,317
Deficit accumulated in the development stage	(39,849,347)	(51,635,973)	(61,041,518)	(58,585,314)
Total stockholders' (deficit) equity	<u>(39,314,581)</u>	<u>(51,101,207)</u>	<u>(60,506,745)</u>	<u>13,847,075</u>
Balance	<u>\$ 9,883,905</u>	<u>\$ 2,341,990</u>	<u>\$ 16,155,453</u>	<u>\$ 16,155,453</u>

The accompanying notes form an integral part of these combined financial statements

**AQUINOX PHARMACEUTICALS (USA) INC. AND
AQUINOX PHARMACEUTICALS INC.**
(the development stage companies)

Combined statements of cash flows
(Expressed in U.S. dollars)

	YEAR ENDED DECEMBER 31, 2011	YEAR ENDED DECEMBER 31, 2012	DECEMBER 26, 2003 (INCEPTION) TO DECEMBER 31, 2012	NINE MONTH PERIOD ENDED SEPTEMBER 30, 2012 (unaudited)	NINE MONTH PERIOD ENDED SEPTEMBER 30, 2013 (unaudited)	DECEMBER 26, 2003 (INCEPTION) TO SEPTEMBER 30, 2013 (unaudited)
Operating activities						
Net loss and comprehensive loss incurred in the development stage	\$ (10,507,008)	\$ (7,714,198)	\$ (38,545,538)	\$ (6,288,801)	\$ (5,189,256)	\$ (43,734,793)
Non-cash items						
Amortization	125,598	130,784	551,601	99,823	45,198	596,799
Gain on sale of equipment	—	—	—	—	(124,353)	(124,352)
Amortization of discount on preferred stock	45,325	45,448	124,922	34,025	265,650	390,574
Change in fair value of derivative liabilities	—	—	(226,624)	—	(972,757)	(1,199,381)
Stock-based compensation	118,243	351,322	922,755	72,477	255,318	1,178,073
Change in non-cash working capital						
Accounts and other amounts receivable	120,699	10,831	(28,543)	6,988	(5,547)	(34,093)
Investment tax credit receivable	523,987	179,814	—	174,877	—	—
Prepayments	3,860	(12,076)	(69,726)	(106,562)	(35,801)	(105,527)
Accounts payable and accrued liabilities	(229,005)	(224,307)	408,551	(106,564)	1,678,451	2,087,179
Cash (used in) operating activities	<u>(9,798,301)</u>	<u>(7,232,382)</u>	<u>(36,862,602)</u>	<u>(6,113,737)</u>	<u>(4,083,097)</u>	<u>(40,945,521)</u>
Investing activities						
Purchase of property and equipment	(62,845)	(6,447)	(532,799)	(3,901)	(7,233)	(539,748)
Sale of property and equipment	—	—	—	—	181,618	181,618
Purchase of intangible assets	—	—	(183,629)	—	—	(183,629)
Cash (used in) provided by investing activities	<u>(62,845)</u>	<u>(6,447)</u>	<u>(716,428)</u>	<u>(3,901)</u>	<u>174,385</u>	<u>(541,759)</u>
Financing activities						
Bank indebtedness	—	—	(289)	—	—	(289)
Issuance of promissory notes	—	—	720,863	—	—	720,863
Repayment of promissory notes	—	—	(255,775)	—	—	(255,775)
Common stock issued	—	—	490,176	—	—	490,176
Repurchase of common stock	—	—	(350)	—	—	(350)
Preferred stock issued	12,158,238	—	39,832,555	—	17,999,961	57,832,516
Special voting common stock issued	7	—	37	—	7	44
Share issue costs	(38,269)	—	(1,207,648)	—	(223,910)	(1,432,020)
Cash provided by financing activities	<u>12,119,976</u>	<u>—</u>	<u>39,579,569</u>	<u>—</u>	<u>17,776,058</u>	<u>57,355,165</u>
Increase (decrease) in cash and cash equivalents during the period	2,258,830	(7,238,829)	2,000,539	(6,117,638)	13,867,346	15,867,885
Cash and cash equivalents, beginning of period	6,980,358	9,239,188	—	9,239,188	2,000,539	—
Cash and cash equivalents, end of period	<u>\$ 9,239,188</u>	<u>\$ 2,000,359</u>	<u>\$ 2,000,539</u>	<u>\$ 3,121,550</u>	<u>\$ 15,867,885</u>	<u>\$ 15,867,885</u>

The accompanying notes form an integral part of these combined financial statements

**AQUINOX PHARMACEUTICALS (USA) INC. AND
AQUINOX PHARMACEUTICALS INC.**
(the development stage companies)

Notes to the combined financial statements
(Expressed in U.S. dollars)

1. Nature of operations

Aquinox Pharmaceuticals (USA) Inc. and Aquinox Pharmaceuticals Inc. (combined the “Companies”—see note 2 basis of presentation) are a clinical stage pharmaceutical company discovering and developing oral drug candidates to treat inflammation and cancer. The Companies’ primary focus is anti-inflammatory product candidates targeting SHIP1 which is a key regulator of a cellular signaling pathway in immune cells.

2. Basis of presentation and summary of significant accounting policies

The accompanying financial statements are presented in United States (“U.S.”) dollars and have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”).

Aquinox Pharmaceuticals Inc. (“AQXP Canada”), formerly 6175813 Canada Inc., was incorporated under the Canada Business Corporations Act on December 26, 2003 and operates in Richmond, British Columbia, Canada. Aquinox Pharmaceuticals (USA) Inc. (“Aquinox USA”) was incorporated on May 31, 2007 in the State of Delaware, United States. On June 8, 2007, AQXP Canada implemented a restructuring plan to facilitate investment in either AQXP Canada or Aquinox USA. Management has determined that AQXP Canada and Aquinox USA are entities under common control as each of AQXP Canada and Aquinox USA is owned beneficially by identical shareholders and as such the basis of presentation of these financial statements is on a combined basis. These combined financial statements reflect the operations of both Aquinox USA and AQXP Canada and the historical results of Aquinox USA and AQXP Canada since inception. All intercompany transactions have been eliminated.

For the period from inception on December 26, 2003 through September 30, 2013, the Companies are a development stage enterprise, as planned principal operations had not yet begun to generate revenues. In its development stage, all pre-operating costs are being expensed as incurred. The statements of operations and comprehensive loss, convertible preferred stock and stockholders’ deficit, and cash flows present the cumulative combined financial information of the Companies for the period from inception on December 26, 2003 through December 31, 2012, and for the period from inception on December 26, 2003 through September 30, 2013 (unaudited).

These combined financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business for a reasonable period of time. Successful completion of the Companies’ development program and, ultimately, the attainment of profitable operations, are dependent upon future events, including obtaining adequate financing to fulfill the Companies’ development activities, obtaining regulatory approval, and achieving a level of revenues adequate to support the Companies’ cost structure. Since inception, the Companies have not been profitable and have incurred operating losses each year. The Companies have not generated revenue from any product sales or partnerships to date and expect operating losses and negative cash flows to continue as costs and expenses are incurred during clinical trials and product development. The Companies have funded their operations primarily through the sale and issuance of preferred stock (see note 8 redeemable convertible preferred stock) and the issuance of debt (see note 15); the preferred stock is redeemable in 2018 or automatically converts in the event of a qualified IPO or upon preferred shareholder approval.

The accompanying combined balance sheet as of September 30, 2013, the combined statements of operations and comprehensive loss, and cash flows for the nine months period ended September 30, 2012, September 30, 2013 and for the period from December 26, 2003 (inception) to September 30, 2013, and the combined statement of convertible preferred stock and stockholders’ deficit for the nine months ended September 30, 2013 are unaudited. The unaudited interim combined financial statements have been prepared on the same basis as the annual combined financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to present fairly the Companies’ combined financial position as of September 30, 2013 and results of operations and cash flows for the nine months ended September 30, 2012,

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September 30, 2013 and for the period from December 26, 2003 (inception) to September 30, 2013. The financial data and the other information disclosed in these notes to the combined financial statements related to these nine month periods are unaudited.

The unaudited pro forma balance sheet gives effect to the share exchange to take place prior to the consummation of the initial public offering contemplated by the Companies. Each outstanding common exchangeable share of AQXP Canada will be exchanged for one share of common stock of Aquinox USA and each outstanding exchangeable preferred share of AQXP Canada will be exchanged for one redeemable convertible preferred stock of Aquinox USA. Immediately following this exchange, all of the outstanding shares of redeemable convertible preferred stock of Aquinox USA will convert to shares of common stock of Aquinox USA. This exchange will also result in the non-cash accrued tax payable and the redemption option on preferred stock being derecognized. The September 30, 2013 unaudited pro forma balance sheet gives effect to these exchanges as if they had occurred on September 30, 2013. As a result of the exchange, AQXP Canada will become a 100% owned subsidiary of Aquinox USA.

The following is a summary of significant accounting policies used in the preparation of these combined financial statements.

(a) Foreign currency translation and transactions

The functional currency of the Companies is the U.S. dollar. As such, monetary assets and liabilities of the Companies' operations denominated in a currency other than the U.S. dollar are re-measured into U.S. dollars at the exchange rate prevailing as at the balance sheet date. Non-monetary assets and liabilities are translated at historical exchange rates prevailing at each transaction date. Revenue and expenses are re-measured at the average exchange rates prevailing during the period, with the exception of amortization which is translated at historical exchange rates. Exchange gains and losses on translation are included the statement of operations and comprehensive loss.

(b) Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Significant areas requiring management estimates are assessment that the going concern assumption is appropriate, valuation of intangible assets, valuation of redeemable preferred stock, valuation of stock options and warrants, amortization and depreciation, valuation allowance for deferred income taxes, and contingencies. Actual results could differ from those estimates.

(c) Cash equivalents

Cash equivalents are comprised of general investment certificates, money market funds, and term deposits purchased with an original maturity of three months or less.

(d) Property and equipment

Property and equipment are recorded at cost less accumulated amortization. Amortization of property and equipment has been provided using the straight-line basis over a range of five to seven years, except for leasehold improvements which are amortized over the lesser of useful life and term of lease.

The Companies review the carrying value of property and equipment for impairment whenever events and circumstances indicate that the carrying value of an asset may not be recoverable from the estimated future cash flows expected to result from its use and eventual disposition. In cases where undiscounted expected future cash flows are less than the carrying value, an impairment loss is recognized equal to an amount by which the carrying value exceeds the fair value of assets. The factors considered by management in performing this assessment include current operating results, trends and prospects, the manner in which the property is used, and the effects of obsolescence, demand, competition, and other economic factors. Based on management's assessment there was no impairment of property and equipment as of December 31, 2011 and 2012, and September 30, 2013.

(e) Intangible assets

License costs represent the fair value of the consideration paid to acquire the exclusive rights to certain technology and is being amortized on a straight-line basis over their estimated useful lives which range between 10 and 20 years. Intangible assets with finite lives are tested for impairment whenever events or circumstances indicate that their carrying amounts may not be recoverable.

(f) Taxes

The Companies account for income taxes using ASC 740, *Income Taxes* which is an asset and liability approach that requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Companies' financial statements or tax returns. In estimating future tax consequences, ASC 740 generally considers all expected future events other than enactments of and changes in the tax law or rates. The measurement of deferred tax assets is reduced, if necessary, by the amount of any tax benefits that, based on available evidence, are not expected to be realized. Valuation allowances are provided if, after considering other available evidence it is more likely than not that deferred tax assets will not be realized. ASC 740 clarifies the criteria that must be met prior to recognition of the financial statement benefit of a position taken in a tax return. ASC 740 provides a benefit recognition model with a two-step approach consisting of a "more-likely-than-not" recognition criteria, and a measurement attribute that measures a given tax position as the largest amount of tax benefits that are more than 50% likely of being realized upon ultimate settlement. ASC 740 also requires the recognition of liabilities created by differences between tax positions taken in a tax return and amounts recognized in the financial statements.

Investment tax credits relating to scientific research and experimental development are accounted for in operations. To the extent there is reasonable assurance the credits will be realized, they are recorded in the period the related expenditure is made as an income tax (provision) recovery. If investment tax credit amounts subsequently received are less or more than originally recorded, the difference is treated as a change in estimate.

Canadian tax rules impose a tax with respect to Canadian corporation taxable preferred stock and their liquidation rights. AQXP Canada records this tax on preferred stock as a non-current accrued tax payable on its balance sheet and also records it as part of total loss attributable to common stockholders, the same basis as it records the accretion of preferred stock.

(g) Derivative liabilities and fair value of financial instruments

The Companies account for currently outstanding detachable warrants to purchase preferred stock or common stock as liabilities as they are freestanding derivative financial instruments. The warrants are recorded as liabilities at fair value, estimated using a Black-Scholes option pricing model, and marked to market at each balance sheet date, with changes in the fair value of the derivative liabilities recorded in the combined statements of operations. The Companies allocate the total consideration received for issuing preferred stock and warrants based on the relative fair value of each security at the date of issuance. This allocation results in a discount to the initial carrying amount of the preferred stock at the date of issuance. This discount is amortized over the life of the preferred stock and is recorded as "amortization of discount of preferred stock" in the combined statements of operations.

The Companies also evaluate and account for conversion and redemption options embedded in convertible instruments as they can be free standing derivative financial instruments depending on certain criteria. If they are determined to be free standing derivative financial instruments, the Companies record these as preferred stock embedded derivatives on their combined balance sheets at fair value with changes in the fair values of these derivatives recorded in the combined statements of operations.

ASC 820, *Fair Value Measurements* requires disclosures about transfers into and out of Levels 1 and 2 and separate disclosures about purchases, sales, issuances, and settlements relating to Level 3 measurements. It also clarifies existing fair value disclosures regarding the level of disaggregation and the inputs and valuation techniques used to measure fair value. ASC 820 defines fair value as the amounts that would be received upon sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). The guidance also established a fair value hierarchy that prioritizes the use of inputs used in valuation techniques into the following three levels:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

(h) Redeemable convertible preferred stock

The Companies classify redeemable convertible preferred stock that is redeemable outside of the Companies' control as mezzanine equity. The Companies record such redeemable convertible preferred stock at fair value upon issuance (see note 2(g)), net of any issuance costs or discounts. The carrying value of the redeemable convertible preferred stock is increased by periodic accretion to its redemption value.

In the absence of retained earnings, the Companies accretion is recorded within additional paid-in capital to the extent there is a sufficient balance, rather than accumulated deficit. Only after exhausting the balance of accumulated paid-in capital, is the accretion recorded to accumulated deficit.

(i) Research and development costs

Research and development costs are charged to expense as incurred and include, but are not limited to, employee related expenses, including salaries and benefits, expenses incurred under agreements with contract research organizations and investigative sites that conduct clinical trials and preclinical studies, the cost of acquiring, developing and manufacturing clinical trial materials, facilities, and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, and other supplies and costs associated with clinical trials, preclinical activities, and regulatory operations.

Development costs are expensed in the period incurred unless management believes a development project meets generally accepted accounting criteria for deferral and amortization. No product development expenditures have been deferred to date. The Companies record costs for certain development activities, such as clinical trials, based on management's evaluation of the progress to completion of specific tasks using data such as patient enrollment, clinical site activations, or information provided to the Companies by vendors on their actual costs incurred. Payments for these activities are based on the terms of the individual arrangements, which may differ from the pattern of costs incurred, and are reflected in the combined financial statements as prepaid or accrued expense, as the case may be.

(j) Accounting for stock-based compensation

The Companies measure the cost of services received in exchange for an award of equity instruments based on the grant-date fair value of the award. The cost of such award will be recognized over the period during which services are provided in exchange for the award, generally the vesting period. All share-based payments to employees are recognized in the financial statements based upon their respective grant date fair values.

The Companies estimate the fair value of options granted using the Black-Scholes option pricing model. This approximation uses assumptions regarding a number of inputs that requires management to make significant estimates and judgments. Since prior to the completion of this offering, the Companies' common stock was not publicly traded, the expected volatility assumption was based on industry peer information. Additionally, because the Companies have no significant history to calculate the expected term, the simplified method calculation was used.

(k) Segment reporting

Management has determined that the Companies' operation, and how they manage the business, is one segment being the identification and development of therapeutics for inflammatory diseases and cancer. All of the Companies' operations are performed in Canada. Total assets held in the U.S., comprised primarily of cash and cash equivalents, are \$689,666 as of December 31, 2011, \$691,122 as of December 31, 2012 and \$4,196,556 as of September 30, 2013.

(l) Loss per share

The Companies present their loss per share on a combined basis. Aquinox USA may not issue dividends, shares, rights, options or warrants without the prior approval of AQXP Canada, or engage in subdivisions, consolidations, reclassifications, or the like, without equivalent economic provisions for AQXP Canada shares, therefore a combined basis of presentation is used.

Basic and diluted net loss per common share is presented using the two-class method required for participating securities. If a dividend is paid on common stock, the holders of preferred stock are entitled to a proportionate

share of any such dividend as if they were holders of common stock (on an if-converted basis). The Companies consider their preferred stock to be participating securities and, in accordance with the two-class method, earnings allocated to participating securities and the related number of outstanding shares of participating securities have been excluded from the computation of basic and diluted net loss per common share.

Basic loss per common share is computed by dividing loss by the weighted-average number of common shares outstanding during the period. Diluted net earnings per common share is determined using the weighted-average number of common shares outstanding during the period, adjusted for the dilutive effect of common stock equivalents, consisting of shares that might be issued upon exercise of common stock options, warrants, and preferred stock. In periods where losses are reported, the weighted-average number of common shares outstanding excludes common stock equivalents because their inclusion would be anti-dilutive.

The unaudited pro forma net loss per share, and the unaudited pro forma basic and diluted net loss per share for the year ended December 31, 2012 and for the nine month period ended September 30, 2013 reflects the effective conversion as described above, of all outstanding shares into common stock of Aquinox USA. The unaudited pro forma basic and diluted net loss per share has been presented in accordance with SEC Staff Accounting Bulletin Topic I.B.3. The numerator in the pro forma basic and diluted net loss per share calculation has been adjusted to remove gains and losses resulting from the exchange.

(m) Recently adopted accounting standards

In May 2011, the Financial Accounting Standards Board ("FASB") issued amendments to disclosure requirements for common fair value measurement. These amendments were effective for the Companies for the year ended December 31, 2012.

In February 2013, the FASB issued ASU 2013-02 to improve the reporting of reclassifications out of accumulated other comprehensive income (loss). This ASU provides that companies must report the effect of significant reclassifications out of accumulated comprehensive income (loss) on the respective line items in net income (loss). For other amounts that are not required to be reclassified in their entirety to net income (loss), an entity may cross reference to the relevant note disclosure. The Companies adopted this ASU on January 1, 2013.

In June 2011, the FASB issued amendments to disclosure requirements for the presentation of comprehensive income. These amendments were effective retrospectively for the Companies for the year ended December 31, 2012 and it requires the presentation of total comprehensive income (loss), the components of net income (loss), and the components of other comprehensive income (loss) either in a single continuous statement of comprehensive income (loss) or in two separate but consecutive statements.

(n) Recent accounting pronouncements

In March 2013, the FASB issued ASU 2013-05 to provide guidance on releasing cumulative translation adjustments when a reporting entity parent ceases to have a controlling financial interest in a subsidiary or group of assets that is a non-profit activity or a business within a foreign entity. The Companies are required to adopt this ASU effective January 1, 2014.

In July 2013, the FASB issued ASU 2013-11 to clarify that an unrecognized tax benefit, or a portion thereof, should be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward, except to the extent that a net operating loss carryforward, a similar tax loss, or a tax credit carryforward is not available at the reporting date to settle any additional income taxes that would result from disallowance of a tax position, or the tax law does not require the entity to use, and the entity does not intend to use, the deferred tax asset for such purpose, then the unrecognized tax benefit should be presented as a liability. The Companies are required to adopt this ASU effective January 1, 2014.

The adoption of the ASUs described above is not expected to have a significant impact on the Companies' disclosure, financial position, and results of operations.

3. Cash and cash equivalents

	DECEMBER 31, 2011	DECEMBER 31, 2012	SEPTEMBER 30, 2013
Cash	\$ 8,550,527	\$ 1,330,322	\$ 2,315,199
Cash equivalents	688,661	670,217	13,552,686
	<u>\$ 9,239,188</u>	<u>\$ 2,000,539</u>	<u>\$ 15,867,885</u>

4. Accounts and other amounts receivable

	DECEMBER 31, 2011	DECEMBER 31, 2012	SEPTEMBER 30, 2013
Refundable goods and services tax	\$ 39,736	\$ 28,302	\$ 33,091
Other	—	243	1,001
	<u>\$ 39,736</u>	<u>\$ 28,545</u>	<u>\$ 34,092</u>

5. Property and equipment

	DECEMBER 31, 2011		
	COST	ACCUMULATED AMORTIZATION	NET BOOK VALUE
Laboratory equipment	\$295,409	\$ 168,547	\$126,862
Leasehold improvements	94,217	28,220	65,997
Office computers and operating systems	81,809	40,409	41,400
Office furniture and equipment	74,456	49,334	25,122
	<u>\$545,891</u>	<u>\$ 286,510</u>	<u>\$259,381</u>

	DECEMBER 31, 2012		
	COST	ACCUMULATED AMORTIZATION	NET BOOK VALUE
Laboratory equipment	\$295,409	\$ 226,923	\$ 68,486
Leasehold improvements	94,217	46,257	47,960
Office computers and operating systems	88,256	59,514	28,742
Office furniture and equipment	74,456	61,843	12,613
	<u>\$552,338</u>	<u>\$ 394,537</u>	<u>\$157,801</u>

	SEPTEMBER 30, 2013		
	COST	ACCUMULATED AMORTIZATION	NET BOOK VALUE
Laboratory equipment	\$ 59,523	\$ 48,302	\$ 11,221
Leasehold improvements	94,217	59,785	34,432
Office computers and operating systems	95,489	70,074	25,415
Office furniture and equipment	74,456	65,885	8,571
	<u>\$323,685</u>	<u>\$ 244,046</u>	<u>\$ 79,639</u>

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AQXP Canada sold laboratory equipment during the 9 month period ended September 30, 2013 for proceeds of \$181,628. The laboratory equipment had historical costs of \$235,898, and accumulated amortization of \$178,623. A gain of \$124,353 was recognized and recorded under Sale of equipment on the combined statement of operations and comprehensive loss for the nine months period ended September 30, 2013.

6. Intangible assets

	DECEMBER 31, 2011	DECEMBER 31, 2012	SEPTEMBER 30, 2013
License costs	\$ 228,464	\$ 228,464	\$ 228,464
Less: Accumulated amortization	(120,442)	(143,200)	(160,269)
	<u>\$ 108,022</u>	<u>\$ 85,264</u>	<u>\$ 68,195</u>

Intangible assets relating to SHIP1 product candidates

In June 2006, AQXP Canada entered into an exclusive license agreement with the University of British Columbia ("UBC"), which was subsequently amended in October 2006, June 2007, September 2008, April 2010, and June 2010. Pursuant to this agreement, UBC granted AQXP Canada a worldwide license to certain small molecule compounds and pharmaceutical compositions that are modulators of SHIP1 activity. The agreement expires at the earlier of the last expiry of any patent obtained related to the technology or through enactment of one of the termination clauses stipulated in the agreement.

The terms of the agreement required AQXP Canada to pay an initial license fee of Canadian \$50,000 which was settled by the issuance of 100,000 common exchangeable shares of AQXP Canada as consideration. Under the terms of the agreement, UBC will be paid low single-digit royalties in respect to any future revenues on aggregate worldwide net sales of products covered by the licensed patents, a percentage of sublicensing revenue, reimbursement of patent costs incurred by UBC related to the technology, an annual maintenance fee, and contingent payments subject to achieving certain development milestones totaling up to Canadian \$2,200,000 for the first drug product and Canadian \$1,500,000 for each subsequent drug product paid in cash or shares. AQXP Canada paid annual maintenance fees of Canadian \$1,000 related to this agreement during the years ended December 31, 2011 and 2012 and Canadian \$1,000 for the nine month periods ended September 30, 2012 and 2013. AQXP Canada does not currently have any product candidates under development that are covered by the UBC license agreement.

Intangible assets relating to the SHIP1 enzyme and screening of product candidates

In May 2005, AQXP Canada entered into an assignment agreement, which was subsequently amended in December 2005 and March 2006, with the British Columbia Cancer Agency ("BCCA") and StemCell Technologies, Inc. ("STI"), for the assignment to AQXP Canada of the 2002 exclusive license agreement between BCCA and STI to certain patents relating to technology relating to SHIP1. The license agreement between AQXP Canada and BCCA was amended and restated on August 9, 2006 and on June 8, 2007. This agreement has subsequently been amended in June 2008 to revise the schedule of the technology licensed under this agreement, and further amended in February 2013. Pursuant to this agreement, as amended, BCCA has granted AQXP Canada an exclusive worldwide license to certain of its intellectual property relating to core SHIP1 technology, and screening of compounds for activity using SHIP1, including the C2 binding domain. The agreement is to expire at the later of 20 years from the effective date of the agreement or upon the expiration of the last patent covered by the license. The terms of the assignment agreement among STI, BCCA and AQXP Canada required AQXP Canada to pay an assignment license fee of Canadian \$150,000, paid in stages beginning May 2005 and ending March 2006. AQXP Canada does not currently have any product candidates under development that are covered by the BCCA license agreement, nor have AQXP Canada sublicensed its rights under the licensed patents. However, if AQXP Canada develops products covered by the BCCA technology in the future, AQXP Canada will be required to pay BCCA low single-digit royalties based on aggregate worldwide net sales of products covered by the licensed patents, and if AQXP Canada sublicenses any rights to the technology, a low double digit percentage of sublicensing revenue. AQXP Canada is also required to reimburse BCCA's patent costs incurred in relation to the licensed technology, and pay an annual maintenance fee in the amount of Canadian \$5,000. The AQXP Canada license with BCCA will terminate

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automatically upon the Companies' insolvency, and may be terminated by either party for material breach by the other party. There were annual maintenance fees of Canadian \$5,000 related to this agreement during the twelve-month periods ended December 31, 2011 and December 31, 2012 and Canadian \$5,000 for the nine months ended September 30, 2012 and September 30, 2013.

Intangible assets relating to patent rights

In August 2009, AQXP Canada entered into an asset purchase agreement with Biolipox AB of Sweden for the purchase of certain assets, including patent rights relating exclusively or principally to a specific class of compounds, which include AQX-1125.

The terms of the agreement required AQXP Canada to pay Canadian \$50,000 immediately. Upon the first submission to the FDA of an IND for a compound from the acquired class of compounds, AQXP Canada will be required to pay an additional Canadian \$250,000 in common exchangeable shares, Canadian special voting shares, and U.S. common special voting shares. A further one-time Canadian \$3,000,000 milestone payment is payable within 30 days of the commitment of financial resources by the Boards of Directors to advance one of the compound from the acquired class of compounds into a Phase 3 clinical trial. Certain other milestone payments, totaling Canadian \$1,500,000 are payable upon the first commercial sale following regulatory approval of the first compound in each of the United States, Europe and Japan. The development of the technology is actively proceeding. There are no royalty payments due under this agreement. There were no expenses incurred by AQXP Canada relating to this agreement during the years ended December 31, 2011 and 2012 and the nine months periods ended September 30, 2012 and 2013.

7. Accounts payable and accrued liabilities

	DECEMBER 31, 2011	DECEMBER 31, 2012	SEPTEMBER 30, 2013
Trade accounts payable	\$ 317,498	\$ 188,541	\$ 1,138,717
Accrued clinical study fees	—	—	872,068
Accrued compensation and vacation	117,134	80,585	5,565
Accrued professional fees	40,000	40,000	25,000
Other accruals	123,855	62,302	13,310
	<u>\$ 598,487</u>	<u>\$ 371,428</u>	<u>\$ 2,054,660</u>

8. Redeemable convertible preferred stock

Authorized

Aquinox USA is authorized to issue the following preferred stock as of December 31, 2012 and September 30, 2013 with \$0.000001 par value as follows:

TYPE	DECEMBER 31, 2011 AND 2012 NUMBER	SEPTEMBER 30, 2013 NUMBER
Series A Preferred Stock	28,213,224	27,914,951
Series B Preferred Stock	46,912,440	45,454,535
Series C Preferred Stock	—	45,793,738

AQXP Canada is authorized to issue the following preferred stock as of December 31, 2012 and September 30, 2013 with no par value as follows:

TYPE	DECEMBER 31, 2011 AND 2012 NUMBER	SEPTEMBER 30, 2013 NUMBER
Series A Exchangeable Preferred Shares	Unlimited	Unlimited
Series B Exchangeable Preferred Shares	Unlimited	Unlimited
Series C Exchangeable Preferred Shares	None	Unlimited
Non-Voting Preferred Shares	Unlimited	Unlimited

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The Series A, B and C preferred stock have the following attributes:

- (i) Dividends: Preferred stock will receive a dividend simultaneously to common stockholders on an as-converted to common stock basis. These are non-cumulative and at the discretion of directors.
- (ii) Voting rights: Series preferred and common stockholders vote together as a single class on an as-converted to common stock basis.
- (iii) Liquidation preference: The Series C preferred stock is senior to Series A and Series B preferred stock with respect to dividend and redemption rights. In voluntary or involuntary liquidation, dissolution, change of control or winding up of the Companies, the Series C preferred stockholders will receive two times the original issue price of the preferred stock, plus 8% per annum of the original issue price compounded annually, and all declared but unpaid dividends on preferred stock. After payment of the Series C preference, the Series A and Series B stockholders will receive the original issue price per share of such series of preferred stock, plus 8% per annum of the original issue price compounded annually, and all declared but unpaid dividends on preferred stock. Assets and funds are then distributed pro rata to preferred stockholders and common stockholders until the holders of preferred stock have received total payments equal to three times the applicable original issue price. Any remaining assets and funds are distributed to the common stockholders.
- (iv) Conversion options:
 - a. Optional Conversion: Preferred stock are convertible at any time at the option of the holder at a per share conversion price of \$0.55 per share; or
 - b. Automatic Conversion: automatic conversion occurs in the event of (1) a qualified IPO; or (2) upon preferred stockholder approval.
- (v) Redemption options:
 - a. Optional redemption: Preferred stock can be redeemed at the written request of holders of at least 65% of the preferred stock and preferred special voting stock at the liquidation preference as defined above. Redemption must be at least 5 years after the closing date of each Series. Upon any subsequent issuance of Series A, B, or C the redemption date of all issued series is automatically reset to 5 years from the latest issuance date. If shares subject to redemption are not redeemed due to funds being unavailable, these continue to be outstanding and entitled to all dividends, liquidation, conversion, and other preferences of series preferred shares until converted or redeemed; and
 - b. Mandatory redemption: Preferred stock shall be redeemed in the case of a liquidating event such as voluntary or involuntary liquidation, dissolution, or sale of the Companies.

On June 8, 2007, AQXP Canada implemented a share reorganization to facilitate investment in either AQXP Canada or Aquinox USA. As a result of the reorganization, the holders of 5,793,776 AQXP Canada new common shares exchanged these shares for 5,793,776 AQXP Canada common exchangeable shares, and an equal number of Aquinox USA common special voting stock and AQXP Canada special voting shares.

Issuances of Series A preferred stock

In June and July 2007, AQXP Canada issued 9,733,139 of Series A preferred stock at \$0.55 and \$0.495 per share, respectively, for total consideration of \$5,353,227 before issue costs of \$360,515. In addition to the Series A preferred stock, in June and July 2007 Aquinox USA also issued 9,733,139 of Series A Aquinox USA special voting stock and AQXP Canada also issued 9,733,139 of Series A AQXP Canada special voting shares.

In June and July 2007, Aquinox USA issued 7,636,361 of Series A preferred stock at \$0.55 and \$0.495 per share, respectively, for total consideration of \$4,200,000 before issue costs of \$313,068. In addition to the Series A preferred stock, in June and July 2007 AQXP also issued 7,636,361 of Series A AQXP Canada special voting shares.

In February 2008, AQXP Canada issued 2,727,271 of Series A preferred stock at \$0.55 per share for total consideration of \$1,500,000 before issue costs of \$17,064. In addition to the Series A preferred stock, in February 2008 Aquinox USA also issued 2,727,271 of Series A Aquinox USA special voting stock and AQXP Canada also issued 2,727,271 of Series A AQXP Canada special voting shares.

In February 2008, Aquinox USA issued 2,545,453 of Series A preferred stock at \$0.55 per share for total consideration of \$1,400,000 before issue costs of \$15,927. In addition to the Series A preferred stock, in February 2008 AQXP Canada also issued 2,545,453 of Series A AQXP Canada special voting shares.

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In February 2009, AQXP Canada issued 2,727,723 of Series A preferred stock at \$0.55 per share for total consideration of \$1,500,000 before issue costs of \$32,492. In addition to the Series A preferred stock, in February 2009 Aquinox USA also issued 2,727,273 of Series A Aquinox USA special voting stock and AQXP Canada also issued 2,727,273 of Series A AQXP Canada special voting shares.

In February 2009, Aquinox USA issued 2,545,454 of Series A preferred stock at \$0.55 per share for total consideration of \$1,400,000 before issue costs of \$30,325. In addition to the Series A preferred stock, in February 2009 AQXP Canada also issued 2,545,454 of Series A AQXP Canada special voting shares.

Issuances of Series B preferred stock

In March and June 2010, AQXP Canada issued 8,150,408 of Series B preferred stock at \$0.55 per share for total consideration of \$4,482,726 before issue costs of \$147,408. In addition to the Series B preferred stock, in 2010 Aquinox USA also issued 8,150,408 of Series B Aquinox USA special voting stock and AQXP Canada also issued 8,150,408 of Series B AQXP Canada special voting shares.

In March and June 2010, Aquinox USA issued 15,198,240 of Series B preferred stock at \$0.55 per share for total consideration of \$8,359,033 before issue costs of \$274,875. In addition to the Series B preferred stock, in 2010 AQXP Canada also issued 15,198,240 of Series B AQXP Canada special voting shares.

In January and September 2011, AQXP Canada issued 7,087,100 of Series B preferred stock at \$0.55 per share for total consideration of \$3,897,905 before issue costs of \$12,269. In addition to the Series B preferred stock, in 2011 Aquinox USA also issued 7,087,100 of Series B Aquinox USA special voting stock and AQXP Canada also issued 7,087,100 of Series B AQXP Canada special voting shares.

In January and September 2011, Aquinox USA issued 15,018,787 of Series B preferred stock at \$0.55 per share for total consideration of \$8,260,333 before issue costs of \$26,000. In addition to the Series B preferred stock, in 2011 AQXP Canada also issued 15,018,787 of Series B AQXP Canada special voting shares.

Issuances of warrants associated with the issuances of Series B preferred stock

Concurrent with the issuance of Series B preferred stock in March 2010, the Companies also issued warrants to holders of the Series B preferred stock. The warrants were exercisable into the Companies' common stock and were recorded as liabilities with their fair value estimated using a Black-Scholes option-pricing model which was recorded in the combined financial statements as change in fair value of derivative liabilities. The warrants expired in June 2010.

Issuances of Series C preferred stock

On March 19, 2013, AQXP Canada issued 7,272,701 of Series C preferred stock at \$0.55 per share for total consideration of \$3,999,986 before issue costs of \$49,758. In addition to the Series C preferred stock, in 2013 Aquinox USA also issued 7,272,701 of Series C Aquinox USA special voting stock, and AQXP Canada also issued 7,272,701 of Series C AQXP Canada special voting shares. Upon issuance of Series C the redemption date of Series A and B was reset to March 19, 2018.

On March 19, 2013, Aquinox USA issued 25,454,500 of Series C preferred stock at \$0.55 per share for total consideration of \$13,999,975 before issue costs of \$174,153. In addition to the Series C preferred stock, in 2013 AQXP Canada also issued 25,454,500 of Series C AQXP Canada special voting shares. Upon issuance of Series C the redemption date of Series A and B was reset to March 19, 2018. Concurrent with the issuance of Series C preferred stock in March 2013, Aquinox USA also issued 339,287 warrants to holders of the Series C preferred stock. The warrants are exercisable into Series C preferred stock and the expiration date of the warrants is the earliest of the date of conversion of Series C preferred stock or March 2023.

Accounting for Series A, B and C preferred stock

The Series A, Series B and Series C preferred stock and Series A, Series B and Series C exchangeable preferred shares, collectively, the "preferred stock" are redeemable convertible preferred stock which are convertible into the Companies' common stock and are classified as mezzanine equity for accounting purposes as they are redeemable on contingent events, and are redeemable at the option of the holder. The preferred stock are labeled within the convertible preferred stock and stockholders' deficit as AQXP Canada non-voting exchangeable preferred shares, and Aquinox USA exchangeable preferred stock.

The special voting shares associated with the preferred stock and the "special voting stock" do not in management's judgment meet the definition of mezzanine equity and accordingly are labeled within the combined statements of convertible preferred stock and stockholders' deficit as AQXP Canada special voting shares and Aquinox USA special voting shares.

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The common exchangeable shares associated with the preferred stock the “non-voting shares” do not in management’s judgment meet the definition of mezzanine equity and accordingly are labeled within the combined statements of convertible preferred stock and stockholders’ deficit as AQXP Canada common exchangeable shares.

Management evaluated the Series A and Series B preferred stock agreements and determined that there are no embedded conversion features and redemption options that are required to be bifurcated and accounted for separately as derivative financial instruments in the combined financial statements. The Companies recorded the Series A, Series B and Series C preferred stock at fair value upon issuance, with their carrying value increased by periodic accretion to their redemption value. The accretion is calculated using the liquidation preference of 8% per annum of the original issue price compounded annually over the period through the respective redemption dates.

Concurrent with the issuance of Series C preferred stock in March 2013, the Companies also amended their respective certificates of incorporation, revising the terms, rights, and liquidation preferences for Series A and B preferred stock which required management to re-assess their previous embedded derivative analyses with respect to previous preferred stock offerings. As a result the Companies bifurcated the embedded mandatory redemption option based on contingent events in Series A, Series B and Series C preferred stock as it was determined the redemption option was no longer clearly and closely related to preferred stock host contract on March 19, 2013. The Companies recorded the fair value of the embedded redemption options for Series A, Series B and Series C as derivative liabilities with changes in fair value of the liabilities reflected in the combined statement of operations as changes in fair value of derivative liabilities.

The table below discloses the accounting values assigned to the Series A, Series B and Series C preferred stock from their respective inceptions to September 30, 2013. The Companies recorded the Series A, Series B and Series C redeemable convertible stock at fair value upon issuance, with their carrying value increased by periodic accretion to their redemption value.

	SERIES A PREFERRED STOCK			
	AQXP CANADA EXCHANGEABLE PREFERRED SHARES		AQUINOX USA PREFERRED STOCK	
	NUMBER	AMOUNT	NUMBER	AMOUNT
BALANCES—December 31, 2006	—	\$ —	—	\$ —
Issuance of preferred stock, net of issuance costs of \$360,517 for AQXP Canada and \$313,108 for Aquinox USA	8,792,634	4,472,042	7,636,361	3,886,892
Issuance of preferred stock on conversion of convertible promissory note	940,505	520,668	—	—
Accretion for liquidation preference on preferred stock	—	245,162	—	196,000
Accretion for share issuance costs on preferred stock	—	34,800	—	30,224
BALANCES—December 31, 2007	9,733,139	5,272,672	7,636,361	4,113,116
Issuance of preferred stock, net of issuance costs of \$17,064 for AQXP Canada and \$15,927 for Aquinox USA	2,727,271	1,482,936	2,545,453	1,384,073
Accretion for liquidation preference on preferred stock	—	553,808	—	454,346
Accretion for share issuance costs on preferred stock	—	74,650	—	65,108
BALANCES—December 31, 2008	12,460,410	7,384,066	10,181,814	6,016,643
Issuance of preferred stock, net of issuance costs of \$32,492 for AQXP Canada and \$30,325 for Aquinox USA	2,727,273	1,467,508	2,545,454	1,369,675
Accretion for liquidation preference on preferred stock	—	708,037	—	593,363
Accretion for share issuance costs on preferred stock	—	84,954	—	74,657
BALANCES—December 31, 2009	15,187,683	9,644,566	12,727,268	8,054,338
Accretion for liquidation preference on preferred stock	—	784,681	—	659,500
Accretion for share issuance costs on preferred stock	—	49,090	—	43,046
BALANCES—December 31, 2010	15,187,683	10,478,337	12,727,268	8,756,884
Accretion for liquidation preference on preferred stock	—	847,455	—	712,256
Accretion for share issuance costs on preferred stock	—	39,504	—	34,720
BALANCES—December 31, 2011	15,187,683	11,365,296	12,727,268	9,503,860
Accretion for liquidation preference on preferred stock	—	915,252	—	769,236
Accretion for share issuance costs on preferred stock	—	39,751	—	34,936
BALANCES—December 31, 2012	15,187,683	\$ 12,320,298	12,727,268	\$ 10,308,032
Accretion for liquidation preference on preferred stock	—	741,354	—	623,079
Accretion for share issuance costs on preferred stock	—	17,236	—	15,143
BALANCES—September, 2013	15,187,683	\$ 13,078,888	12,727,268	\$ 10,946,254

	SERIES B PREFERRED STOCK			
	AQXP CANADA EXCHANGEABLE PREFERRED SHARES		AQUINOX USA PREFERRED STOCK	
	NUMBER	AMOUNT	NUMBER	AMOUNT
BALANCES—December 31, 2009	—	—	—	—
Issuance of preferred stock, net of issuance costs of \$147,408 for AQXP Canada and \$274,875 for Aquinox USA	8,150,408	\$ 4,335,318	15,198,240	\$ 8,084,158
Warrant discount of \$226,624	—	(109,115)	—	(117,509)
Accretion for liquidation preference on preferred stock	—	268,964	—	454,456
Accretion for share issuance costs on preferred stock	—	29,089	—	54,242
Amortization of warrant discount	—	16,442	—	17,706
BALANCES—December 31, 2010	8,150,408	4,540,698	15,198,240	8,493,053
Issuance of preferred stock, net of issuance costs of \$12,269 for AQXP Canada and \$26,000 for Aquinox USA	7,087,100	3,885,636	15,018,787	8,234,333
Accretion for liquidation preference on preferred stock	—	597,665	—	1,145,824
Accretion for share issuance costs on preferred stock	—	31,005	—	58,254
Amortization of warrant discount	—	21,822	—	23,501
BALANCES—December 31, 2011	15,237,508	9,076,826	30,217,027	17,954,966
Accretion for liquidation preference on preferred stock	—	732,180	—	1,443,472
Accretion for share issuance costs on preferred stock	—	32,545	—	61,470
Amortization of warrant discount	—	21,882	—	23,566
BALANCES—December 31, 2012	15,237,508	\$ 9,863,434	30,217,027	\$ 19,483,474
Accretion for liquidation preference on preferred stock	—	585,975	—	1,163,187
Accretion for share issuance costs on preferred stock	—	14,411	—	27,310
Amortization of warrant discount	—	16,322	—	17,578
BALANCES—September 30, 2013	15,237,508	\$ 10,480,142	30,217,027	\$ 20,691,549

	SERIES C PREFERRED STOCK			
	AQXP CANADA EXCHANGEABLE PREFERRED SHARES		AQUINOX USA PREFERRED STOCK	
	NUMBER	AMOUNT	NUMBER	AMOUNT
BALANCES—December 31, 2012	—	\$ —	—	\$ —
Issuance of preferred stock, net of issuance costs of \$49,758 for AQXP Canada and \$174,153 for Aquinox USA	7,272,701	3,950,228	25,454,500	13,825,822
Warrant discount of \$68,920 for Aquinox USA	—	—	—	(68,920)
Redemption discount of \$466,673 for AQXP Canada and \$1,633,358 for Aquinox USA	—	(466,673)	—	(1,633,357)
Accretion for liquidation preference on preferred stock	—	186,667	—	653,333
Accretion for share issuance costs on preferred stock	—	4,875	—	17,064
Amortization of warrant discount	—	—	—	7,364
Amortization of redemption option discount	—	49,863	—	174,523
BALANCES—September 30, 2013	<u>7,272,701</u>	<u>\$ 3,724,960</u>	<u>25,454,500</u>	<u>\$ 12,975,829</u>

9. Warrants

The Companies issued 339,287 preferred stock purchase warrants in their Series C offering, exercisable at \$0.01 per warrant. The companies account for these warrants to purchase preferred stock or common stock as liabilities. The warrants are recorded at fair value, estimated using the Black-Scholes option pricing model, and marked to market at each combined balance sheet date with changes in the fair value of the liability recorded in the combined statements of operations. These warrants expire in 2023. A summary of warrants as at December 31, 2011, 2012 and September 30, 2013 is as follows:

	DECEMBER 31, 2011	DECEMBER 31, 2012	SEPTEMBER 30, 2013
Derivative warrant liabilities	\$ —	\$ —	\$ 68,919
Changes in fair value of warrant liabilities	—	—	152,501
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 221,420</u>

10. Common shares

(a) Authorized

On June 8, 2007, AQXP Canada implemented a share reorganization to facilitate investment in either AQXP Canada or Aquinox USA. As a result of the reorganization, there is one new common share issued by AQXP Canada and common shares of AQXP Canada were exchanged for common exchangeable shares and special voting shares of AQXP Canada and special voting stock of Aquinox USA.

AQXP CANADA	AUTHORIZED	AQUINOX USA	AUTHORIZED
(1) New Common Shares	10	(1) Common stock	139,266,037
(2) Exchangeable Common Shares	unlimited	(2) Special Voting common stock	69,027,955
(3) Special Voting Common Shares	unlimited	(3) Series A Special Voting common stock	15,187,683
		(4) Series B Special Voting common stock	15,237,508
		(5) Series C Special Voting common stock	19,999,951

(b) Stock option plan

In June 2006, the shareholders of AQXP Canada approved a stock option plan ("Original Plan") providing for the granting of options to directors, employees, and consultants. Under the terms of the Original Plan, AQXP Canada was authorized to grant options to purchase up to 1,500,000 common shares. Upon closing of a private placement on June 8, 2007, the Original Plan was amalgamated into the newly implemented Joint Canadian Stock Plan ("2006 Plan") and the number of shares that may be reserved for issuance increased to 2,750,000.

In conjunction the first closing of Series B financing on March 31, 2010, the Companies increased the maximum number of common shares which may be directly or indirectly issuable pursuant to options granted under the 2006 Plan to 7,233,785. Furthermore, the Companies provided that the maximum number of common shares be automatically increased on (a) each date on which additional Series B shares are issued, in each case by the number of common shares necessary to ensure that, immediately following the issuance of Series B, the maximum number of common shares directly or indirectly issuable upon exercise of the options granted pursuant to the 2006 Plan equal the product of X times Y, where:

X = 0.125 divided by 0.875; and

Y = the number of common shares issued and outstanding on a fully converted basis (as defined in the Subscription Agreement) following such issuance.

As at December 31, 2012 the maximum number of common shares which may be directly or indirectly issuable pursuant to options granted under the 2006 Plan is 11,309,037. As part of the Series C financing closed in March 2013, 1,500,000 additional common shares, which may be directly or indirectly issuable pursuant to options granted under the 2006 Plan, were added to the pool. As at September 30, 2013 the maximum number of common shares which may be directly or indirectly issuable pursuant to options granted under the 2006 Plan is 12,809,037.

The terms of the options issued may not exceed ten years. Each option granted generally vests over a four-year period, unless otherwise approved by the Boards of Directors and may be subject to certain additional terms and conditions. At December 31, 2012, the number of options available to be granted is 718,621 (December 31, 2011—2,046,121). At September 30, 2013, the number of options available to be granted is 2,936,853.

On May 30, 2012, pursuant to the 2006 Plan, 1,500,000 stock options were issued to certain employees as bonus options that vest upon the occurrence of a triggering transaction approved by the Board of Directors. These stock options resulted in a compensation expense of \$51,654 for the year ended December 31, 2012. These bonus stock options expired on January 31, 2013.

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Stock option transactions and the number of stock options outstanding are summarized below:

	NUMBER OF OPTIONED COMMON SHARES	WEIGHTED AVERAGE EXERCISE PRICE	WEIGHTED AVERAGE REMAINING VESTING PERIOD	REMAINING CONTRACTUAL LIFE IN YEARS	NUMBER OF OPTIONED COMMON SHARES	WEIGHTED AVERAGE EXERCISE PRICE	WEIGHTED AVERAGE REMAINING VESTING PERIOD	REMAINING CONTRACTUAL LIFE IN YEARS
	Cdn	\$ Cdn	Cdn	Cdn	US	\$ US	US	US
December 31, 2005 and prior	—	\$ —	—	—	—	\$ —	—	—
Options Granted	1,330,000	0.31	2.08	—	—	—	—	—
December 31, 2006	1,330,000	0.31	2.08	9.13	—	—	—	—
Options Granted	—	—	—	—	360,000	0.50	—	—
Options Forfeited	(75,000)	0.40	—	—	—	—	—	—
December 31, 2007	1,255,000	0.30	1.08	8.13	360,000	0.50	2.46	9.48
Options Granted	—	—	—	—	575,000	0.55	—	—
Options Forfeited	—	—	—	—	(100,000)	0.55	—	—
December 31, 2008	1,255,000	0.30	0.41	7.13	835,000	0.53	3.05	7.07
Options Granted	—	—	—	—	85,000	0.55	—	—
December 31, 2009	1,255,000	0.30	—	6.13	920,000	0.54	2.46	6.92
Options Granted	—	—	—	—	2,775,000	0.30	—	—
Options Forfeited	—	—	—	—	(107,188)	0.43	—	—
December 31, 2010	1,255,000	0.30	—	5.13	3,587,812	0.35	3.34	6.55
Options Granted	—	—	—	—	4,710,000	0.30	—	—
Options Forfeited	—	—	—	—	(289,896)	0.35	—	—
December 31, 2011	1,255,000	0.30	—	4.13	8,007,916	0.32	3.48	7.40
Options Granted	—	—	—	—	1,745,000	0.30	—	—
Options Forfeited	—	—	—	—	(417,500)	0.30	—	—
December 31, 2012	1,255,000	0.30	—	3.12	9,335,416	0.32	2.82	5.74
Options Granted	—	—	—	—	1,205,000	0.30	—	—
Options Forfeited	—	—	—	—	(1,923,232)	0.30	—	—
September 30, 2013	<u>1,255,000</u>	<u>\$ 0.30</u>	<u>—</u>	<u>2.38</u>	<u>8,617,184</u>	<u>\$ 0.32</u>	<u>2.42</u>	<u>6.83</u>

The following table summarizes information about options outstanding and exercisable as of December 31, 2012:

RANGE OF EXERCISE PRICE	CANADIAN DOLLAR DENOMINATED OPTIONS				
	OUTSTANDING			OUTSTANDING AND VESTED	
	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	REMAINING CONTRACTUAL LIFE (IN YEARS)	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE
0.0001-0.25	600,000	\$0.15	3.12	600,000	\$0.15
0.26-0.5	655,000	\$0.44	3.12	655,000	\$0.44

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RANGE OF EXERCISE PRICE	U.S. DOLLAR DENOMINATED STOCK OPTIONS				
	OUTSTANDING			OUTSTANDING AND VESTED	
	WEIGHTED AVERAGE			OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE
	OPTIONS	EXERCISE PRICE	REMAINING CONTRACTUAL LIFE (IN YEARS)		
0.30-0.50	8,935,416	\$ 0.31	5.77	3,293,438	\$ 0.32
0.51-0.55	400,000	\$ 0.55	5.11	389,583	\$ 0.55

The following table summarizes information about options outstanding at September 30, 2013:

RANGE OF EXERCISE PRICE	CANADIAN DOLLAR DENOMINATED STOCK OPTIONS				
	OUTSTANDING			OUTSTANDING AND VESTED	
	WEIGHTED AVERAGE			OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE
	OPTIONS	EXERCISE PRICE	REMAINING CONTRACTUAL LIFE (IN YEARS)		
0.0001-0.25	600,000	\$ 0.15	2.38	600,000	\$ 0.15
0.26-0.5	655,000	\$ 0.44	2.37	655,000	\$ 0.44

RANGE OF EXERCISE PRICE	U.S. DOLLAR DENOMINATED STOCK OPTIONS				
	OUTSTANDING			OUTSTANDING AND VESTED	
	WEIGHTED AVERAGE			OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE
	OPTIONS	EXERCISE PRICE	REMAINING CONTRACTUAL LIFE (IN YEARS)		
0.30-0.50	8,217,184	\$ 0.31	6.95	4,395,623	\$ 0.30
0.51-0.55	400,000	\$ 0.55	4.36	398,959	\$ 0.55

(c) Stock-based compensation

The fair value of stock options granted is estimated using the Black-Scholes option pricing model with the following weighted average assumptions:

	DECEMBER 31, 2012	DECEMBER 31, 2011	DECEMBER 26, 2003 (INCEPTION) TO DECEMBER 31, 2012	SEPTEMBER 30, 2012	SEPTEMBER 30, 2013	DECEMBER 26, 2003 (INCEPTION) TO SEPTEMBER 30, 2013
Expected volatility	90%	89%	89%	90%	93%	89%
Expected dividends	0	0	0	0	0	0
Expected terms (years)	6.25	6.25	6.25	6.25	6.25	6.25
Risk free rate	1.79%	2.51%	2.93%	1.79%	2.21%	3.12%
Weighted average grant-date fair value of stock options	0.14	0.14	0.14	0.14	0.14	0.14

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Fair Value of Common Stock. Stock options are granted with exercise prices as determined by the Boards of Directors at the date of grant. In the absence of a public trading market for the Companies' common stock, on each grant date, the Companies developed an estimate of the fair value of the common stock utilizing methodologies, approaches, and assumptions consistent with the framework of the American Institute of Certified Public Accountants Technical Practice Aid, *Valuation of Privately-Held Company Equity Securities Issued as Compensation*. These valuations were performed with the assistance of a third-party valuation specialist. In conducting these valuations, management and the Boards of Directors considered all objective and subjective factors that it believed to be relevant in each valuation conducted, including external market conditions affecting the pharmaceutical industry, trends within the pharmaceutical industry, the prices at which the Companies sold shares of different series of preferred stock, the superior rights and preferences of each series of preferred stock relative to common stock at the time of each grant, results of operations and financial position, the status of research and development efforts, stage of development and business strategy, the lack of an active public market for the common and preferred stock, and the likelihood of achieving a liquidity event such as an initial public offering or sale of the business in light of prevailing market conditions. Significant changes to the key assumptions used in the valuations could result in different fair values of common stock at each valuation date.

Expected Term. The expected term represents the period that the Companies' stock-based awards are expected to be outstanding. As the Companies do not have sufficient historical experience for determining the expected term of the stock option awards granted, the Companies have based its expected term for awards issued to employees on the simplified method, which represents the average period from vesting to the expiration of the stock option

Expected Volatility. As the Companies have been private Companies and do not have a trading history for the Companies' common stock, the expected stock price volatility for the Companies' common stock was estimated by taking the average historical price volatility for industry peers, which the Companies have designated, based on daily price observations over a period equivalent to the expected term of the stock option grants. Industry peers, which the Companies have designated, consist of several public companies in the industry similar in size, stage of life cycle and financial leverage. These industry peers were also utilized in the Companies' common stock valuations.

Expected Dividend Yield. The Companies have never declared or paid any cash dividends to common stockholders and does not presently plan to pay cash dividends in the foreseeable future. Consequently, the Companies used an expected dividend yield of zero.

Risk-free Interest Rate. The risk-free interest rate is based on the yields of treasury securities with maturities similar to the expected term of the options for each option group.

During 2006, the Companies granted options to purchase 245,000 shares of common stock to non-employees for services provided. Such options were fully vested on the date of grant and had an exercise price ranging from \$0.40 to \$0.50 per share, which was greater than the estimated fair market value of the underlying stock on the date of grant, as determined by the Board of Directors. The resulting stock-based compensation expense was measured at the date when the performance obligation was met, which was on the date of grant, and was immediately recognized as expense within operating expenses in the amount of \$64,000.

In April 2008, the Companies granted an option to purchase 150,000 shares of common stock to one non-employee for services provided. This option fully vested on the date of grant and had an exercise price of \$0.55 per share, which was greater than the estimated fair market value of the underlying stock on the date of grant, as determined by the Board of Directors. The resulting stock-based compensation expense was measured at the date when the performance obligation was met, which was on the date of grant, and was immediately recognized as expense within operating expenses in the amount of \$28,000.

In November 2011, the Companies granted an option to purchase 150,000 shares of common stock to one non-employee for services provided. This option fully vested on the date of grant and had an exercise price of \$0.30 per share, which was greater than the estimated fair market value of the underlying stock on the date of grant, as determined by the Board of Directors. The resulting stock-based compensation expense was measured at the date when the performance obligation was met, which was on the date of grant, and was immediately recognized as expense within operating expenses in the amount of \$21,000.

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The Companies amortize the fair value of the stock options on a straight-line basis over the applicable requisite service periods of the awards, which is generally the vesting period. The weighted average grant date fair value of stock options granted for the years ended December 31, 2011 was \$0.14, December 31, 2012 was \$0.14 and for the nine months period ended September 30, 2012 was \$0.14 and September 30, 2013 was \$0.14 per option.

As of December 31, 2012 and September 30, 2013, the Companies had total unrecognized compensation costs related to unvested stock options for the 2006 Plan of \$970,330, and \$715,018, respectively.

11. Net loss per share

Basic and diluted net loss per common share is presented using the two-class method required for participating securities. If a dividend is paid on common stock, the holders of preferred stock are entitled to a proportionate share of any such dividend as if they were holders of common stock (on an if-converted basis). The Companies consider its preferred stock to be participating securities and, in accordance with the two-class method, earnings allocated to participating securities and the related number of outstanding shares of participating securities have been excluded from the computation of basic and diluted net loss per common share.

The Companies consider their AQXP Canada exchangeable common shares to be their participating stock that is subordinate to all other stock or shares of the Companies. These shares are used by the Companies when computing their loss per share. Upon the exchange, as discussed within the unaudited pro forma net loss per common share, see below, the AQXP Canada exchangeable common shares will be converted along with our preferred stock into new common shares. The Companies do not consider their AQXP Canada special voting shares and Aquinox USA series special stock to be participating securities as these shares do not have any rights to participate in the any undistributed earnings, either through liquidation or any form of dividend.

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Under the two-class method, net loss attributable to common stockholders is determined by allocating undistributed loss between common stock and participating securities. Undistributed loss is calculated as net loss less distributed loss, accretion of liquidation preference on preferred stock, accretion of share issuance costs on preferred stock, and tax expense on preferred stock. As holders of preferred stock, holders of stock options and holders of common stock warrants do not have contractual obligations to share in the losses of the Companies, the net loss attributable to common stockholders for each period is not allocated between common stock and participating securities. Accordingly, outstanding stock options, common stock warrants and preferred stock are excluded from the calculation of basic and diluted net loss per share as the effect would have been antidilutive.

	YEAR ENDED		DECEMBER 26, 2003 (INCEPTION) TO	NINE MONTHS ENDED		DECEMBER 26, 2003 (INCEPTION) TO
	DECEMBER 31, 2011	DECEMBER 31, 2012	DECEMBER 31 2012	SEPTEMBER 30 2012	SEPTEMBER 30 2013	SEPTEMBER 30 2013
Numerator						
Net loss and comprehensive loss incurred in the development stage	\$ (10,507,008)	\$ (7,714,198)	\$ (38,545,538)	\$ (6,288,801)	\$ (5,189,256)	\$ (43,734,793)
Less: Accretion of liquidation preference on preferred stock	(3,303,200)	(3,860,140)	(12,081,657)	(2,895,102)	(3,953,595)	(16,035,252)
Less: Accretion of share issuance costs on preferred stock	(163,483)	(168,702)	(872,045)	(126,430)	(96,039)	(968,084)
Less: Tax expense on preferred stock	(345,587)	(394,908)	(1,059,488)	(296,182)	(421,974)	(1,481,462)
Net loss attributable to common stockholders	<u>\$ (14,319,278)</u>	<u>\$ (12,137,948)</u>	<u>\$ (52,558,728)</u>	<u>\$ (9,606,515)</u>	<u>\$ (9,660,864)</u>	<u>\$ (62,219,591)</u>
Denominator						
Weighted average shares used to compute basic net loss per common share	5,793,776	5,793,776	5,793,776	5,793,776	5,793,776	5,793,776
Effect of potentially dilutive securities:						
Stock options	—	—	—	—	—	—
Common stock warrants	—	—	—	—	—	—
Convertible preferred stock	—	—	—	—	—	—
Weighted average shares used to compute diluted net loss per common share	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>	<u>5,793,776</u>
Net loss per share attributable to common stockholders—basic	<u>\$ (2.47)</u>	<u>\$ (2.09)</u>	<u>\$ (9.07)</u>	<u>\$ (1.66)</u>	<u>\$ (1.67)</u>	<u>\$ (10.74)</u>
Net loss per share attributable to common stockholders—diluted	<u>\$ (2.47)</u>	<u>\$ (2.09)</u>	<u>\$ (9.07)</u>	<u>\$ (1.66)</u>	<u>\$ (1.67)</u>	<u>\$ (10.74)</u>

The following have been excluded from the computation of basic and diluted net loss per share attributable to common stockholders as their effect would have been antidilutive:

	YEAR ENDED		NINE MONTHS ENDED	
	DECEMBER 31, 2011	DECEMBER 31, 2012	SEPTEMBER 30, 2012	SEPTEMBER 30, 2013
Convertible preferred stock	73,369,486	73,369,486	73,369,486	106,096,687
Outstanding stock options	9,262,916	10,590,416	10,607,082	9,872,184
Common stock warrants	—	—	—	339,287
Total	<u>82,632,402</u>	<u>83,959,902</u>	<u>83,976,568</u>	<u>116,308,158</u>

Unaudited pro forma net loss per common share

Pro forma basic and diluted net loss per common share were computed to give effect to the conversion of the preferred stock using the if-converted method into common shares as though the conversion had occurred as of the beginning of the first period presented or the original date of issuance, if later. After giving effect to the conversion of the preferred stock, only stock options and common stock warrants are considered participating securities in applying the two-class method to calculate basic and diluted net loss per share.

For the year ended December 31, 2012, as the participating securities do not have a contractual obligation to share in the losses of the Companies, the net loss attributable to common stockholders is not allocated between the common stock and the participating securities. Accordingly, outstanding stock options and common stock warrants are excluded from the calculation of basic and diluted net loss per share as the effect would have been antidilutive.

For the nine months ended September 30, 2013, as the participating securities do not have a contractual obligation to share in the losses of the Companies, the net loss attributable to common stockholders is not allocated between the common stock and the participating securities. Accordingly, outstanding stock options and common stock warrants are excluded from the calculation of basic and diluted net loss per share as the effect would have been antidilutive.

For the year ended December 31, 2012 and the nine months ended September 30, 2013, common stock warrants amounting to zero and 339,287, respectively, and outstanding stock options totaling 10,590,416 and 9,872,184 respectively, were excluded from the computation of diluted net loss per common share attributable to common stockholders because their effect would have been antidilutive.

	PRO FORMA YEAR ENDED DECEMBER 31, 2012 <u>(unaudited)</u>	PRO FORMA NINE MONTHS ENDED SEPTEMBER 30, 2013 <u>(unaudited)</u>
Numerator		
Total loss attributable to common stockholders	\$ (12,137,948)	\$ (9,660,864)
Less: Accretion for liquidation preference on preferred stock	3,860,140	3,953,595
Less: Accretion for share issuance costs on preferred stock	168,702	96,039
Less: Tax expense on preferred stock	394,908	421,974
Less: Amortization taken of discount on preferred stock expensed, in period	45,448	265,650
Less: Change in fair value of derivative liabilities associated with preferred stock (Note 13)	—	(1,125,288)
Net loss attributable to common stockholders—pro forma	<u>\$ (7,668,750)</u>	<u>\$ (6,048,894)</u>
Denominator		
Basic and diluted weighted average common stock outstanding	5,793,776	5,793,776
Pro forma adjustment to reflect assumed conversion of preferred stock to occur upon consummation of the Companies' expected initial per common stock	73,369,486	106,096,687
Weighted average stock outstanding used to compute basic pro forma net loss per common stock	<u>79,163,262</u>	<u>111,890,463</u>
Pro forma net loss per common stock—basic and diluted	<u>\$ (0.10)</u>	<u>\$ (0.05)</u>

12. Income taxes

- a) Income tax expense (recovery) varies from the amounts that would be computed by applying the expected combined Canadian and U.S. income tax rates of 25.1% (2011—25.1%) to loss before income taxes as shown in the following table:

	2012	2011
Computed taxes at combined Canadian and U.S. tax rates	\$ (1,936,264)	\$ (2,637,259)
Non-deductible expenses	119,829	40,731
Investment tax credits (i)	42,294	(154,468)
Change in valuation allowance	1,719,347	2,734,985
Other reconciling items	97,088	(138,457)
Income tax expense (recovery)	<u>\$ 42,294</u>	<u>\$ (154,468)</u>

- (i) For periods prior to June 2010, AQXP Canada was able to claim Canadian refundable investment tax credits. As described in note 2(f), when investment tax credits subsequently received are less or more than originally recorded, the difference is treated as a change in estimate and recorded as part of current income tax expense (recovery); in 2012 claims received were less than originally recorded and accordingly AQXP Canada recognized an income tax expense for this difference.
- b) Deferred income tax assets and liabilities result from the temporary differences between the amount of assets and liabilities recognized for financial statement and income tax purposes. The significant components of the deferred income tax assets are as follows:

	DECEMBER 31, 2012	DECEMBER 31, 2011
Canadian net operating losses	\$ 7,985,817	\$ 6,273,618
U.S. net operating losses	396,827	320,765
Research and development deductions and credits	3,909,680	3,033,666
Other	323,528	320,639
Less: valuation allowance	(12,615,852)	(9,948,688)
Net deferred income tax assets	<u>\$ —</u>	<u>\$ —</u>

- c) At December 31, 2012, AQXP Canada has net operating losses carried forward for tax purposes which are available to reduce taxable income of future years of approximately \$27,300,000 (December 31, 2011—approximately \$21,900,000) expiring commencing in 2026 through 2032. Aquinox U.S. has net operating losses carried forward for tax purposes which are available to reduce taxable income of future years of approximately \$1,133,000 (December 31, 2011—approximately \$916,000).
At December 31, 2012, AQXP Canada also has unclaimed tax deductions for scientific research and experimental development expenditures of approximately \$9,300,000 (December 31, 2011—approximately \$7,700,000) with no expiry. At December 31, 2012, AQXP Canada has approximately \$2,200,000 (December 31, 2011—approximately \$1,400,000) of investment tax credits available to offset Canadian federal and provincial taxes payable expiring commencing in 2027 through 2032.
- d) At December 31, 2012, AQXP Canada has accrued a non-current tax payable on preferred stock of \$1,100,000 (December 31, 2011—\$700,000). Canadian tax rules impose a tax with respect to Canadian corporation taxable preferred shares and their liquidation rights (note 8). Upon the stock converting into common shares in the event of a qualified IPO or preferred shareholder approval, this accrued tax payable amount would be derecognized in the financial statements.
- e) Under ASC No. 740, the benefit of an uncertain tax position that is more likely than not of being sustained upon audit by the relevant taxing authority must be recognized at the largest amount that is more likely than not to be sustained. No portion of the benefit of an uncertain tax position may be recognized if the position

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has less than a 50% likelihood of being sustained. The Companies currently do not have any unrecognized tax benefits of uncertain tax positions. The Companies do not expect any significant increases to their unrecognized tax benefits within twelve months of the reporting date. The Companies currently file income tax returns in the United States and Canada, the jurisdictions in which the Companies believe that they are subject to tax. Further, while the statute of limitations in each jurisdiction where an income tax return has been filed generally limits the examination period, as a result of loss carry-forwards, the limitation period for examination generally does not expire until several years after the loss carry-forwards are utilized. Other than routine audits by tax authorities for tax credits and tax refunds that the Companies have claimed, management is not aware of any other material income tax examination currently in progress by any taxing jurisdiction.

13. Financial instruments

Fair value of financial instruments

The carrying amounts of certain of the Companies' financial instruments including cash, cash equivalents, accounts and other amounts receivable, prepayments, and accounts payable and accrued liabilities, approximate their fair values because of their short maturities.

The Companies preferred stock embedded feature and warrants are accounted for as derivative liabilities. The Companies used Level 3 inputs for the valuation methodology of the derivative liabilities. The estimated fair values were computed using Black-Scholes option pricing model. The derivative liabilities are adjusted to reflect estimated fair value at each period end, with any decrease or increase in the estimated fair value being recorded in other income (expense):

Fair value of significant unobservable inputs (Level 3)

	DERIVATIVE WARRANT LIABILITIES	PREFERRED STOCK EMBEDDED DERIVATIVE LIABILITIES	TOTAL
Balance at December 31, 2011 and 2012	\$ —	—	\$ —
Issuances in 2013	68,920	2,100,030	2,168,950
Adjustments to estimated fair value	152,501	(1,125,288)	(972,787)
Balance as of September 30, 2013	<u>\$ 221,421</u>	<u>974,742</u>	<u>\$ 1,196,163</u>

14. Other commitments and contingencies

AQXP Canada has combined its office and research laboratory into one location and entered into a lease agreement expiring August 31, 2015. Future minimum annual lease payments under the leases are as follows as at December 31, 2012:

2013	\$232,000
2014	240,000
2015	160,000
	<u>\$632,000</u>

Legal Proceedings – In the ordinary course of business, the Companies may be subject from time to time to various proceedings, lawsuits, disputes, or claims. Although the Companies cannot predict with assurance the outcome of any litigation, they do not believe there are currently any such actions that, if resolved unfavorably, would have a material impact on the Companies' financial condition, results of operations or cash flows.

15. Subsequent events

On October 23, 2013, AQXP Canada entered into a term loan facility with Silicon Valley Bank (“SVB”) for up to \$4 million, of which \$2.5 million was received on October 30, 2013 and a further \$1.5 million is available to AQXP Canada through December 31, 2014 upon AQXP Canada receiving certain agreed-upon Phase 2 top-line data results from its COPD or BPS/IC clinical trials. Aquinox USA is a guarantor of AQXP Canada’s obligations under the term loan facility. In addition to principal, interest and other related payments due to SVB, Aquinox USA and AQXP Canada issued SVB warrants to purchase 218,181 shares of Series C preferred stock and a corresponding number of shares in Canadian special voting of AQXP Canada. Following the completion of the offering, the warrant will be exercisable for 218,181 shares of our common stock. The term loan has an interest rate of the greater of (i) the prime rate in effect on the funding date plus 2.00% or (ii) 5.25%, and is collateralized by the Companies’ corporate assets, excluding intellectual property, but including all proceeds thereof.

In October 2013, the Board of Directors approved the issuance of 2,512,500 options under the Joint Canadian Stock Plan to certain employees at an exercise price of \$0.66 per share.

The Companies have evaluated all events that occurred after the balance sheet date through November 15, 2013, the date when the combined financial statements were issued, to determine if they must be reported. Management determined that the subsequent events noted in Note 15 represents a complete list of subsequent events.

Shares



Aquinox Pharmaceuticals (USA) Inc.

Common Stock

PRELIMINARY PROSPECTUS

Joint Book-Running Managers

**Jefferies
Cowen and Company**

Co-Manager

Canaccord Genuity

, 2014

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth all expenses, other than the underwriting discounts and commissions, payable by us in connection with the sale of the common stock being registered. All the amounts shown are estimates except the SEC registration fee, the FINRA filing fee and the NASDAQ listing fee.

	AMOUNT TO BE PAID
SEC registration fee	\$ *
FINRA filing fee	*
NASDAQ listing fee	*
Printing and engraving	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees	*
Miscellaneous fees and expenses	*
Total	<u>\$ *</u>

* To be filed by Amendment.

Item 14. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the Securities Act of 1933, as amended, or the Securities Act.

Our amended and restated certificate of incorporation that will be in effect upon the completion of this offering provides for indemnification of our directors, officers, employees and other agents to the maximum extent permitted by the Delaware General Corporation Law, and our amended and restated bylaws that will be in effect upon the completion of this offering provide for indemnification of our directors, officers, employees and other agents to the maximum extent permitted by the Delaware General Corporation Law.

We have entered into indemnification agreements with our directors and officers whereby we have agreed to indemnify our directors and officers to the fullest extent permitted by law, including indemnification against expenses and liabilities incurred in legal proceedings to which the director or officer was, or is threatened to be made, a party by reason of the fact that such director or officer is or was a director, officer, employee or agent of Aquinox, provided that such director or officer acted in good faith and in a manner that the director or officer reasonably believed to be in, or not opposed to, the best interest of Aquinox. At present, there is no pending litigation or proceeding involving a director or officer of Aquinox regarding which indemnification is sought, nor is the registrant aware of any threatened litigation that may result in claims for indemnification.

We maintain insurance policies that indemnify our directors and officers against various liabilities arising under the Securities Act and the Exchange Act of 1934, as amended, that might be incurred by any director or officer in his capacity as such.

The underwriters are obligated, under certain circumstances, pursuant to the underwriting agreement to be filed as Exhibit 1.1 hereto, to indemnify us, our officers, directors against liabilities under the Securities Act.

Item 15. Recent Sales of Unregistered Securities

Since January 1, 2010, we have made sales of the following unregistered securities:

- (1) From January 1, 2010 to date, we have granted stock options under our Joint Canadian Stock Option Plan to purchase an aggregate of 12,997,500 option securities at an exercise price ranging between \$0.30 and \$0.66 per share to a total of 30 employees, directors and consultants. Of these, option securities to purchase an aggregate of 2,737,816 have been cancelled without being exercised, none have been exercised and 10,259,684 option securities remain outstanding. The offers, sales and issuances of the securities described in this paragraph were exempt from registration under (a) Section 4(2) of the Securities Act in that the transactions were by an issuer not involving any public offering; (b) compensatory benefit plans and contracts relating to compensation as provided under Rule 701 promulgated under the Securities Act; or (c) Regulation S promulgated under the Securities Act.
- (2) In March 2010, we issued an aggregate of 8,777,361 shares of our Series B-1 preferred stock to five accredited investors at a per share price of \$0.55. In connection with this financing, we also issued an aggregate of 8,150,408 shares of our Series B-1 exchangeable shares of AQXP Canada to two accredited investors at a per share price of \$0.55. Purchasers of Series B-1 exchangeable shares were also issued one share of Series B-1 special voting stock for each share of Series B-1 exchangeable stock. The Series B-1 exchangeable shares are exchangeable into our Series B-1 preferred stock on a one for one basis. In connection with the foregoing, we received aggregate consideration of \$9.3 million. These shares were issued in reliance on Rule 506 of Regulation D promulgated under the Securities Act.
- (3) In June 2010, we issued an aggregate of 6,420,879 shares of our Series B-1 preferred stock to one accredited investor at a per share price of \$0.55, for aggregate consideration of \$3.5 million. These shares were issued in reliance on Rule 506 of Regulation D promulgated under the Securities Act.
- (4) In January 2011, we issued an aggregate of 8,589,632 shares of our Series B-2 preferred stock to six accredited investors at a per share price of \$0.55. In connection with this financing, we also issued an aggregate of 4,425,348 shares of our Series B-2 exchangeable shares of AQXP Canada to two accredited investors at a per share price of \$0.55. Purchasers of Series B-2 exchangeable shares were also issued one share Series B-2 special voting stock for each share of Series B-2 exchangeable stock. The Series B-2 exchangeable shares are exchangeable into our Series B-2 preferred stock on a one for one basis. In connection with the foregoing, we received aggregate consideration of \$7.1 million. These shares were issued in reliance on Rule 506 of Regulation D promulgated under the Securities Act.
- (5) In September 2011, we issued an aggregate of 6,429,155 shares of our Series B-2 preferred stock at a per share price of \$0.55 to six accredited investors. In connection with this financing, we also issued an aggregate of 2,661,752 shares of our Series B-2 exchangeable shares of AQXP Canada to one accredited investors at a per share price of \$0.55. Purchasers of Series B-2 exchangeable shares were also issued one share of Series B-2 special voting stock for each share of Series B-2 exchangeable stock. The Series B-2 exchangeable shares are exchangeable into our Series B-2 preferred stock on a one for one basis. In connection with the foregoing, we received aggregate consideration of \$5.0 million. These shares were issued in reliance on Rule 506 of Regulation D promulgated under the Securities Act.
- (6) In March 2013, we issued an aggregate of 25,454,500 shares of our Series C preferred stock to seven accredited investors at a per share price of \$0.55. In connection with this financing, we also issued an aggregate of 7,272,701 shares of our Class C exchangeable shares of AQXP Canada to one accredited investors at a per share price of \$0.55. Purchasers of Class C exchangeable shares were also issued one share of Series C special voting stock for each share of Class C exchangeable stock. The Class C exchangeable shares are exchangeable into our Series C preferred stock on a one for one basis. In connection with the foregoing, we received aggregate consideration of \$18.0 million. These shares were issued in reliance on Rule 506 of Regulation D promulgated under the Securities Act.
- (7) In March 2013, we issued a warrant to purchase an aggregate of 339,287 option securities, at an exercise price of \$0.01 per option security, with an expiration date of March 19, 2023. Prior to the exchange time, which will occur in connection with this offering when there are no more exchangeable shares outstanding other than exchangeable shares held by us or AQXP Canada, an option security consisted of units, comprised of one share of Series C Preferred Stock and one special voting share of AQXP Canada. After the exchange time, an option security would represent a share of our common stock. These securities were issued in reliance on Rule 506 of Regulation D promulgated under the Securities Act.

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- (8) In October 2013, we issued a warrant to purchase an aggregate of 218,181 units, at an exercise price of \$0.55 per unit, with an expiration date of October 23, 2023. Prior to the conversion date, which will occur in connection with this offering, a unit is comprised of one share of Series C Preferred Stock and one special voting share of AQXP Canada. After the conversion, a unit would be represent one share of our common stock. These securities were issued in reliance on Section 4(2) of the Securities Act in that the transactions were by an issuer not involving any public offering.

The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

Item 16. Exhibits and Financial Statement Schedule

(a) Exhibits.

The following exhibits are included herein or incorporated herein by reference:

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
1.1*	Form of Underwriting Agreement.
3.1#	Amended and Restated Certificate of Incorporation of the Registrant, as presently in effect.
3.2	Amended and Restated Bylaws of the Registrant, as presently in effect.
3.3*	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be in effect upon completion of this offering.
3.4*	Form of Amended and Restated Bylaws of the Registrant, to be in effect upon completion of this offering.
4.1#	Qualification and Registration Rights Agreement of the Registrant, dated March 19, 2013.
4.2#	Shareholders' Agreement of the Registrant, dated March 19, 2013.
4.3	Amendment No. 2 to Shareholders' Agreement of the Registrant, dated November 18, 2013.
4.4#	Exchange Agreement of the Registrant, dated March 19, 2013.
4.5	Warrant to Purchase Stock of the Registrant, issued to Silicon Valley Bank, dated October 23, 2013.
4.6	Warrant Agreement by and among the Registrant, Aquinox Pharmaceuticals Inc. and Pfizer Inc., dated March 19, 2013.
5.1*	Opinion of Cooley LLP regarding legality.
10.1+##	Joint Canadian Stock Option Plan.
10.2+##	Forms of Option Agreement for Registrant's Joint Canadian Stock Option Plan.
10.3+*	2014 Equity Incentive Plan, to be in effect upon completion of this offering.
10.4+*	Forms of Option Agreement and Option Grant Notice for Registrant's 2014 Equity Incentive Plan.
10.5+*	Form of Indemnity Agreement entered into between the Registrant and each of its directors and its executive officers.
10.6+##	Employment Agreement by and between the Registrant and David Main, dated March 1, 2007.
10.7+##	Employment Agreement by and between the Registrant and Tom MacRury, dated June 6, 2007.
10.8+##	Employment Agreement by and between the Registrant and Kamran Alam, dated July 18, 2011.
10.9+##	Employment Agreement by and between the Registrant and Stephen Shrewsbury, dated March 2, 2013.
10.10+##	Employment Agreement by and between the Registrant and Lloyd Mackenzie, dated May 30, 2013.
10.11#	Offer to Lease by and between the Registrant and Sun Life Assurance Company of Canada, dated February 15, 2010.
10.12†*	Asset Purchase Agreement by and between the Registrant and Biolipox, dated August 19, 2009.

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EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
10.13	Loan Agreement by and between Aquinox Pharmaceuticals Inc. and Silicon Valley Bank, dated October 23, 2013.
10.14	Security Agreement by and between the Registrant and Silicon Valley Bank, dated October 23, 2013.
10.15	Security Agreement by and between Aquinox Pharmaceuticals Inc. and Silicon Valley Bank, dated October 23, 2013.
21.1#	Subsidiaries of the Registrant.
23.1*	Consent of Deloitte LLP, Independent Registered Chartered Accountants.
23.2*	Consent of Cooley LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included in signature pages).

* To be filed by Amendment.

+ Indicates a management contract or compensatory plan.

Previously submitted.

† Confidential treatment has been requested for portions of this exhibit. These portions have been omitted from the registration statement and submitted separately to the Securities and Exchange Commission.

(b) Financial Statement Schedules.

See index to Combined Financial Statements on page F-1. All other schedules have been omitted because they are not required or are not applicable.

Item 17. Undertakings

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Richmond, Province of British Columbia on the day of , 2014.

AQUINOX PHARMACEUTICALS (USA) INC.

By: _____
Name: David J. Main
Title: President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints David J. Main and Kamran Alam, and each of them, as his true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him and in his name, place or stead, in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and to sign any registration statement for the same offering covered by this Registration Statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act of 1933, and all post-effective amendments thereto, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

<u>SIGNATURE</u>	<u>TITLE</u>	<u>DATE</u>
_____ David J. Main	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	
_____ Kamran Alam	Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>	
_____ Gary Bridger	Director	
_____ Elaine Jones	Director	
_____ Daniel Levitt	Director	
_____ Robert Pelzer	Director	

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23.1*	Consent of Deloitte LLP, Independent Registered Chartered Accountants.
23.2*	Consent of Cooley LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included in signature pages).

* To be filed by Amendment.

+ Indicates a management contract or compensatory plan.

Previously submitted.

† Confidential treatment has been requested for portions of this exhibit. These portions have been omitted from the registration statement and submitted separately to the Securities and Exchange Commission.

AQUINOX PHARMACEUTICALS (USA) INC.
SECOND AMENDED AND RESTATED BYLAWS

June 11, 2010

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BYLAWS

OF

AQUINOX PHARMACEUTICALS (USA) INC.

Adopted on June 11, 2010.

Article 1. Stockholders' Meetings

1.1. Place of Meetings. Meetings of the stockholders shall be held at such place, either within or without the State of Delaware, as the board of directors shall determine. Rather than holding a meeting at any place, the board of directors may determine that a meeting shall be held solely by means of remote communications, which means shall meet the requirements of the General Corporation Law of the State of Delaware.

1.2. Annual Meeting. The annual meeting of the stockholders for the election of the directors and the transaction of such other business as may properly be brought before the meeting shall be held on the date and at the time designated by the board of directors.

1.3. Special Meetings. Special meetings of the stockholders for any purpose or purposes may be called by the board of directors. No other person or persons may call a special meeting. The business to be transacted at any special meeting shall be limited to the purposes stated in the notice.

1.4. Remote Communications. The board of directors may permit the stockholders and their proxy holders to participate in meetings of the stockholders (whether such meetings are held at a designated place or solely by means of remote communication) using one or more methods of remote communication that satisfy the requirements of the General Corporation Law of the State of Delaware. The board of directors may adopt such guidelines and procedures applicable to participation in stockholders' meetings by means of remote communication as it deems appropriate. Participation in a stockholders' meeting by means of a method of remote communication permitted by the board of directors shall constitute presence in person at the meeting.

1.5. Notice of Meetings. Notice of the place, if any, date and hour of any stockholders' meeting shall be given to each stockholder entitled to vote. The notice shall state the means of remote communications, if any, by which stockholders and proxy holders may be deemed present in person and vote at the meeting. If the voting list for the meeting is to be made available by means of an electronic network or if the meeting is to be held solely by remote communication, the notice shall include the information required to access the reasonably accessible electronic network on which Aquinox Pharmaceuticals (USA) Inc. (the "Company") will make its voting list available either prior to the meeting or, in the case of a meeting held solely by remote communication, during the meeting. Notice of a special meeting shall also state the purpose or purposes for which the meeting has been called. Unless otherwise provided in the General Corporation Law of the State of Delaware, notice shall be given at least 10 days but not more than 60 days before the date of the meeting. Without limiting the manner by which notice may otherwise be given, notice may be given by a form of electronic transmission that satisfies

the requirements of the General Corporation Law of the State of Delaware and has been consented to by the stockholder to whom notice is given. If mailed, notice shall be deemed given when deposited in the U.S. mail, postage prepaid, directed to the stockholder's address as it appears in the Company's records. If given by a form of electronic transmission consented to by the stockholder to whom notice is given, notice shall be deemed given at the times specified with respect to the giving of notice by electronic transmission in the General Corporation Law of the State of Delaware. An affidavit of the Company's secretary, an assistant secretary or an agent of the Company that notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated in the affidavit.

1.6. Quorum. The presence, in person or by proxy, of the holders of a majority of the voting power of the stock entitled to vote at a meeting shall constitute a quorum. Where a separate vote by a class or series or classes or series of stock is required at a meeting, the presence, in person or by proxy, of the holders of a majority of the voting power of each such class or series shall also be required to constitute a quorum. In the absence of a quorum, either the chairperson of the meeting or the holders of a majority of the voting power of the stock present, in person or by proxy, and entitled to vote at the meeting may adjourn the meeting in the manner provided in Article 1.7 until a quorum shall be present. A quorum, once established at a meeting, shall not be broken by the withdrawal of the holders of enough voting power to leave less than a quorum. If a quorum is present at an original meeting, a quorum need not be present at an adjourned session of that meeting.

1.7. Adjournment of Meetings. Either the chairperson of the meeting or the holders of a majority of the voting power of the stock present, in person or by proxy, and entitled to vote at the meeting may adjourn any meeting of stockholders from time to time. At any adjourned meeting the stockholders may transact any business that they might have transacted at the original meeting. Notice of an adjourned meeting need not be given if the time and place, if any, or the means of remote communications to be used rather than holding the meeting at any place are announced at the meeting so adjourned, except that notice of the adjourned meeting shall be required if the adjournment is for more than 30 days or if after the adjournment a new record date is fixed for the adjourned meeting.

1.8. Voting List. At least 10 days before every meeting of the stockholders, the secretary of the Company shall prepare a complete alphabetical list of the stockholders entitled to vote at the meeting showing each stockholder's address and number of shares. This voting list does not need to include electronic mail addresses or other electronic contact information for any stockholder nor need it contain any information with respect to beneficial owners of the shares of stock owned, although it may do so. For a period of at least 10 days before the meeting, the voting list shall be open to the examination of any stockholder for any purpose germane to the meeting either on a reasonably accessible electronic network (provided that the information required to gain access to the list is provided with the notice of the meeting) or during ordinary business hours at the Company's principal place of business. If the list is made available on an electronic network, the Company may take reasonable steps to ensure that it is available only to stockholders. If the stockholders' meeting is held at a place, the voting list shall be produced and kept at that place during the whole time of the meeting. If the stockholders' meeting is held solely by means of remote communications, the voting list shall be made available for inspection on a reasonably accessible electronic network during the whole time of the meeting. In either case, any stockholder may inspect the voting list at any time during the meeting.

1.9. Stockholders' Designated Attendees. Each stockholder may from time to time designate up to two individuals who are employees of or counsel to the stockholders to attend at meetings of the stockholders of the Company and those individuals shall be permitted to attend meetings of the stockholders of the Company. The Company shall provide each stockholder with a copy of the minutes of each meeting of the stockholders of the Company within 60 days thereof.

1.10. Deposit of Proxies. To the extent permitted by the General Corporation Law of the State of Delaware, a stockholder may deposit a proxy and the power of attorney, appointment of authorized representative or other authority, if any, under which it is signed at any time before the proper commencement of the stockholders' meeting to which the proxy relates and any such proxy may be so deposited with the chairperson of such meeting. To the extent permitted by the General Corporation Law of the State of Delaware, a proxy deposited in accordance with this section shall be accepted as valid.

1.11. Vote Required. Subject to the provisions of the General Corporation Law of the State of Delaware requiring a higher level of votes to take certain specified actions and to the terms of the Company's Third Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") that set special voting requirements, the stockholders shall take action on all matters other than the election of directors by a majority of the voting power of the stock present, in person or by proxy, at the meeting and entitled to vote on the matter. The stockholders shall elect directors by a plurality of the voting power of the stock present, in person or by proxy, at the meeting and entitled to vote on the matter.

1.12. Chairperson; Secretary. The following people shall preside over any meeting of the stockholders: the chairperson of the board of directors, if any, or, in the chairperson's absence, the vice chairperson of the board of directors, if any, or in the vice chairperson's absence, the chief executive officer, or, in the absence of all of the foregoing persons, a chairperson designated by the board of directors, or, in the absence of a chairperson designated by the board of directors, a chairperson chosen by the stockholders at the meeting. In the absence of the secretary and any assistant secretary, the chairperson of the meeting may appoint any person to act as secretary of the meeting.

1.13. Rules of Conduct. The board of directors may adopt such rules, regulations and procedures for the conduct of any meeting of the stockholders as it deems appropriate including rules, regulations and procedures regarding participation in the meeting by means of remote communication. Except to the extent inconsistent with any applicable rules, regulations or procedures adopted by the board of directors, the chairperson of any meeting may adopt such rules, regulations and procedures for the meeting, and take such actions with respect to the conduct of the meeting, as the chairperson of the meeting deems appropriate. The rules, regulations and procedures adopted may include, without limitation, ones that (i) establish an agenda or order of business, (ii) are intended to maintain order and safety at the meeting, (iii) restrict entry to the meeting after the time fixed for its commencement and (iv) limit the time allotted to stockholder questions or comments. Unless otherwise determined by the board of directors or the chairperson of the meeting, meetings of the stockholders need not be held in accordance with the rules of parliamentary procedure.

1.14. Inspectors of Elections. The board of directors or the chairperson of a stockholders' meeting may appoint one or more inspectors of election and any substitute inspectors to act at the meeting or any adjournment thereof. Inspectors may be officers, employees or agents of the Company. Each inspector, before entering on the discharge of the inspector's duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of the inspector's ability. Inspectors shall have the duties prescribed by the General Corporation Law of the State of Delaware. At the request of the chairperson of the meeting, the inspector or inspectors shall prepare a written report of the results of the votes taken and of any other question or matter that that inspector or inspectors determined.

1.15. Record Date. If the Company proposes to take any action for which the General Corporation Law of the State of Delaware would permit it to set a record date, the board of directors may set such a record date as provided under the General Corporation Law of the State of Delaware.

1.16. Written Consent. Any action required or permitted to be taken at a meeting of the stockholders may be taken without a meeting, without prior notice and without a vote by means of a stockholder written consent meeting the requirements of the General Corporation Law of the State of Delaware. Prompt notice of the taking of action without a meeting by less than a unanimous written consent shall be given to those stockholders who have not consented as required by the General Corporation Law of the State of Delaware.

Article 2. Directors

2.1. Number. The board of directors shall consist of seven (7) directors. Directors need not be stockholders.

2.2. Term of Office. Each director shall hold office until his or her successor is elected or until his or her earlier death, resignation or removal.

2.3. Resignation. A director may resign, as a director or as a committee member or both, at any time by giving notice in writing or by electronic transmission to the Company addressed to the board of directors, the chairperson of the board of directors, the president or the secretary. A resignation will be effective upon its receipt by the Company unless the resignation specifies that it is to be effective at some later time or upon the occurrence of some specified later event.

2.4. Vacancies. Any vacancy in the board of directors caused by the death, resignation or removal of a director shall be filled only by a vote of the stockholders of the Company.

2.5. Regular Meetings. The board of directors shall meet at least five times per year (until such time as the board of directors determines to alter this schedule) at such place as the board of directors may determine from time to time.

2.6. Special Meetings. Special meetings of the board of directors may be called by the chairperson of the board of directors, the chief executive officer or by any director. Notice of any special meeting shall be given to each director and shall state the time and place for the special meeting.

2.7. Notice. Unless otherwise waived in writing by all of the directors, the Company shall give each director written notice of all meetings, together with an agenda of items to be discussed and a brief description of each item, at least three business days in advance of the meeting. Written notice may be accomplished by (i) personally delivering written notice to the director's last known business or home address, (ii) delivering an electronic transmission (including, without limitation, via telefacsimile or electronic mail) to the director's last known number or address for receiving electronic transmissions of that type, (iii) depositing written notice with a reputable delivery service or overnight carrier addressed to the director's last known business or home address for delivery to that address no later than three business days preceding the date of the meeting. Notice of a meeting need not be given to any director who attends a meeting without protesting prior to the meeting or at its commencement to the lack of notice to that director. The Company shall provide each director with copies of the minutes of each meeting within 60 days of each such meeting.

2.8. Observers. Any holder that has purchased Series Preferred Stock (as such term is defined by the Certificate of Incorporation) with an aggregate purchase price equal to or greater than \$4,000,000, shall have the right to appoint one person to act as an observer at all meetings of the board of directors of the Company; provided, however, that any holder of Series Preferred Stock who has appointed a director shall not have the right to appoint an observer pursuant to this Section 2.8. Each observer will have the right to receive notice of all meetings of the Company's board of directors and the right to speak thereat and will receive all information and material presented to the board of directors as would a director. For purposes of this Section 2.8, "fully-diluted basis" means that all options, warrants or other rights of any kind to acquire shares of Common Stock and all securities of the Company and Aquinox Pharmaceuticals Inc. convertible or exchangeable (directly or indirectly) into shares of Common Stock outstanding at that time shall be deemed to have been fully exercised, converted or exchanged, as the case may be, and the shares of Common Stock issuable as a result thereof shall be deemed to have been fully issued and to form part of the holdings of the person(s) entitled to receive such shares of Common Stock and assuming the redemption of all special voting stock in accordance with the rights, privileges, restrictions and conditions attached thereto.

2.9. Additional Information. Subject to the General Corporation Law of the State of Delaware, each director of the Company shall have the right to request such additional information concerning the affairs of the Company and its subsidiaries as the director reasonably considers necessary in order to understand and assess the affairs of the Company or its subsidiaries, and the Company shall in response to each such request provide or cause to be provided to the director or observer as promptly as possible the additional information reasonably requested.

2.10. Quorum. Except as may be otherwise provided by law, by the Certificate of Incorporation or these bylaws, at any meeting of the directors a majority of the directors then in office shall constitute a quorum, provided that such majority includes, to the extent such individuals are then serving on the board, directors nominated

by Johnson & Johnson Development Corporation, Ventures West 8 Limited Partnership and Pfizer, Inc. If a quorum is not present at the commencement of a board meeting, then the directors present may not transact any business and such directors shall be deemed to have adjourned such meeting to the same time and place on the same day the following week. At such reconvened meeting, a quorum for the transaction of business shall be a majority of the directors then in office, one of whom shall be a director nominated by Johnson & Johnson Development Corporation, Ventures West 8 Limited Partnership or Pfizer, Inc. A quorum shall not in any case be less than one-third of the total number of directors constituting the whole board.

2.11. Vote Required. The board of directors shall act by the vote of a majority of the directors present at a meeting at which a quorum is present.

2.12. Chairperson; Secretary. If the chairperson and the vice chairperson are not present at any meeting of the board of directors, or if no such officers have been elected, then the board of directors shall choose a director who is present at the meeting to preside over it. In the absence of the secretary and any assistant secretary, the chairperson may appoint any person to act as secretary of the meeting.

2.13. Use of Communications Equipment. Directors may participate in meetings of the board of directors or any committee of the board of directors by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other. Participation in a meeting in this manner shall constitute presence for the purpose of quorum and voting at such meeting.

2.14. Action Without a Meeting. Any action required or permitted to be taken at any meeting of the board of directors may be taken without a meeting if all of the directors consent to the action in writing or by electronic transmission. The writing or writings or electronic transmission or transmissions shall be filed with the minutes of the proceedings of the board of directors or of the relevant committee.

2.15. Compensation of Directors. The board of directors shall from time to time determine the amount and type of compensation to be paid to directors for their service on the board of directors and its committees.

2.16. Committees. There will be an audit committee and a compensation committee of the board of directors and such other committees as the board of directors may form. The audit committee and the compensation committee will be composed of independent directors who are not members of the Company's management. The audit committee and compensation committee shall each be composed of at least three members, one of whom shall be a director nominated by Ventures West 8 Limited Partnership, Johnson & Johnson Development Corporation or Pfizer Inc. The members of both the audit committee and the compensation committee shall be selected by a simple majority vote of the board of directors. Any committee shall, to the extent provided in a resolution of the board of directors and subject to the limitations contained in the General Corporation Law of the State of Delaware, have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the Company. Each committee shall keep such records and report to the board of directors in such manner as the board of directors may from time to time determine. Except as the board of directors may

otherwise determine, any committee may make rules for the conduct of its business. Unless otherwise provided in a resolution of the board of directors or in rules adopted by the committee, each committee shall conduct its business as nearly as possible in the same manner as is provided in these bylaws for the board of directors.

2.17. Chairperson and Vice Chairperson of the Board. The board of directors may elect from its members a chairperson of the board and a vice chairperson. If a chairperson has been elected and is present, the chairperson shall preside at all meetings of the board of directors and the stockholders. The chairperson shall have such other powers and perform such other duties as the board of directors may designate. If the board of directors elects a vice chairperson, the vice chairperson shall, in the absence or disability of the chairperson, perform the duties and exercise the powers of the chairperson and have such other powers and perform such other duties as the board of directors may designate.

Article 3. Officers

3.1. Offices Created; Qualifications; Election. The Company shall have a chief executive officer, a president, a secretary, a treasurer and such other officers, if any, as the board of directors from time to time may appoint. Any officer may be, but need not be, a director or stockholder. The same person may hold any two or more offices. The board of directors may elect officers at any time.

3.2. Term of Office. Each officer shall hold office until his or her successor has been elected, unless a different term is specified in the resolution electing the officer, or until his or her earlier death, resignation or removal.

3.3. Removal of Officers. Any officer may be removed from office at any time, with or without cause, by the board of directors.

3.4. Resignation. An officer may resign at any time by giving notice in writing or by electronic transmission to the Company addressed to the board of directors, the chairperson of the board of directors, the president or the secretary. A resignation will be effective upon its receipt by the Company unless the resignation specifies that it is to be effective at some later time or upon the occurrence of some specified later event.

3.5. Vacancies. A vacancy in any office may be filled by the board of directors.

3.6. Compensation. Officers shall receive such amounts and types of compensation for their services as shall be fixed by the board of directors.

3.7. Powers. Unless otherwise specified by the board of directors, each officer shall have those powers and shall perform those duties that are (i) set forth in these bylaws (if any are so set forth), (ii) set forth in the resolution of the board of directors electing that officer or any subsequent resolution of the board of directors with respect to that officer's duties or (iii) commonly incident to the office held.

3.8. Chief Executive Officer. The chief executive officer shall, subject to the direction and control of the board of directors, have general control and management of the business,

affairs and policies of the Company and over its officers and shall see that all orders and resolutions of the board of directors are carried into effect. The chief executive officer shall have the power to sign all certificates, contracts and other instruments on behalf of the Company.

3.9. President. The president shall be subject to the direction and control of the chief executive officer and the board of directors and shall have general active management of the business, affairs and policies of the Company. The president shall have the power to sign all certificates, contracts and other instruments on behalf of the Company. If the board of directors has not elected a chief executive officer, the president shall be the chief executive officer. If the board of directors has elected a chief executive officer and that officer is absent, disqualified from acting, unable to act or refuses to act, then the president shall have the powers of, and shall perform the duties of, the chief executive officer.

3.10. Vice Presidents. The vice presidents, if any, shall be subject to the direction and control of the board of directors, the chief executive officer and the president and shall have such powers and duties as the board of directors, the chief executive officer or the president may assign to them. If the board of directors elects more than one vice president, then it shall determine their respective titles, seniority and duties. If the president is absent, disqualified from acting, unable to act or refuses to act, the most senior in rank of the vice presidents (as determined by the board of directors) shall have the powers of, and shall perform the duties of, the president.

3.11. Chief Financial Officer. The chief financial officer, if any, shall be subject to the direction and control of the board of directors and the chief executive officer, shall have primary responsibility for the financial affairs of the Company and shall perform such other duties as the chief executive officer may assign.

3.12. Chief Operating Officer. The chief operating officer, if any, shall be subject to the direction and control of the board of directors and the chief executive officer, shall have primary responsibility for the management and supervision of the day-to-day operations of the Company and shall perform such other duties as the chief executive officer may assign.

3.13. Treasurer. The treasurer shall have charge and custody of and be responsible for all funds, securities and valuable papers of the Company. The treasurer shall deposit all funds in the depositories or invest them in the investments designated or approved by the board of directors or any officer or officers authorized by board of directors to make such determinations. The treasurer shall disburse funds under the direction of the board of directors or any officer or officers authorized by the board of directors to make such determinations. The treasurer shall keep full and accurate accounts of all funds received and paid on account of the Company and shall render a statement of these accounts whenever the board of directors or the chief executive officer shall so request. If the board of directors has not elected a chief financial officer, the treasurer shall be the chief financial officer. If the board of directors has not elected a controller, the treasurer shall be the controller.

3.14. Assistant Treasurers. The assistant treasurers, if any, shall have such powers and duties as the board of directors, the chief executive officer, the president or the treasurer may assign to them. If the board of directors elects more than one assistant treasurers, then it shall

determine their respective titles, seniority and duties. If the treasurer is absent, disqualified from acting, unable to act or refuses to act, the most senior in rank of the assistant treasurers (as determined by the board of directors) shall have the powers of, and shall perform the duties of, the treasurer.

3.15. Controller. The controller, if any, shall be the chief accounting officer of the Company and shall be in charge of its books of account, accounting records and accounting procedures.

3.16. Secretary. The secretary shall, to the extent practicable, attend all meetings of the stockholders and the board of directors. The secretary shall record the proceedings of the stockholders and the board of directors, including all actions by written consent, in a book or series of books to be kept for that purpose. The secretary shall perform like duties for any committee of the board of directors if the committee so requests. The secretary shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the board of directors. Unless the Company has appointed a transfer agent, the secretary shall keep or cause to be kept the stock and transfer records of the Company. The secretary shall have such other powers and duties as the board of directors, the chief executive officer or the president may determine.

3.17. Assistant Secretaries. The assistant secretaries, if any, shall have such powers and duties as the board of directors, the chief executive officer, the president or the secretary may assign to them. If the board of directors elects more than one assistant secretary, then it shall determine their respective titles, seniority and duties. If the secretary is absent, disqualified from acting, unable to act or refuses to act, the most senior in rank of the assistant secretaries (as determined by the board of directors) shall have the powers of, and shall perform the duties of, the secretary.

Article 4. Capital Stock

4.1. Stock Certificates. The Company's shares of stock shall be represented by certificates, provided that the board of directors may, subject to the limits imposed by law, provide by resolution or resolutions that some or all of any or all classes or series shall be uncertificated shares. Notwithstanding the adoption of such a resolution, every holder of shares of stock represented by certificates and every holder of uncertificated shares, upon request, shall be entitled to have a certificate representing such shares in such form as shall be approved by the board of directors. Stock certificates shall be numbered in the order of their issue and shall be signed by or in the name of the Company by (i) the chairperson or vice chairperson, if any, of the board of directors, the president or a vice president and (ii) the treasurer, an assistant treasurer, the secretary or an assistant secretary. Any or all of the signatures on a certificate may be a facsimile. In case any officer, transfer agent or registrar who signed or whose facsimile signature has been placed upon a certificate shall have ceased to be an officer, transfer agent or registrar before such certificate is issued, it may be issued by the Company with the same effect as if such person were such officer, transfer agent or registrar at the date of issue. Each certificate that is subject to any restriction on transfer shall have conspicuously noted on its face or back either the full text of the restriction or a statement of the existence of the restriction. Each certificate shall have on its face or back a statement that the Company will furnish without charge to each

stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences or rights.

4.2. Registration; Registered Owners. The name of each person owning a share of the Company's capital stock shall be entered on the books of the Company together with the number of shares owned, the number or numbers of the certificate or certificates covering such shares and the dates of issue of each certificate. The Company shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes regardless of any transfer, pledge or other disposition of such stock until the shares have been properly transferred on the books of the Company.

4.3. Stockholder Addresses. It shall be the duty of each stockholder to notify the Company of the stockholder's address.

4.4. Transfer of Shares. Registration of transfer of shares of the Company's stock shall be made only on the books of the Company at the request of the registered holder or of the registered holder's duly authorized attorney (as evidenced by a duly executed power of attorney provided to the Company) and upon surrender of the certificate or certificates representing those shares properly endorsed or accompanied by a duly executed stock power. The Company shall refuse to register any transfer of shares or other securities of the Company that were issued by the Company to persons outside the United States who were not U.S. persons in reliance upon Rule 903 of Regulation S under the United States Securities Act of 1933, as amended (the "Securities Act"), unless the transfer of such securities is made in accordance with Regulation S under the Securities Act, pursuant to registration under the Securities Act or pursuant to an available exemption from registration under the Securities Act. The terms "United States" and "U.S. person" have the meanings attributed thereto in Regulation S under the Securities Act. The board of directors may make further rules and regulations concerning the transfer and registration of shares of stock and the certificates representing them and may appoint a transfer agent or registrar or both and may require all stock certificates to bear the signature of either or both.

4.5. Lost, Stolen, Destroyed or Mutilated Certificates. The Company may issue a new stock certificate of stock in the place of any certificate theretofore issued by it alleged to have been lost, stolen, destroyed or mutilated. The board of directors may require the owner of the allegedly lost, stolen or destroyed certificate, or the owner's legal representatives, to give the Company such bond or such surety or sureties as the board of directors, in its sole discretion, deems sufficient to indemnify the Company against any claim that may be made against it on account of the alleged loss, theft or destruction or the issuance of such new certificate and, in the case of a certificate alleged to have been mutilated, to surrender the mutilated certificate.

Article 5. General Provisions

5.1. Waiver of Notice. Any stockholder or director may execute a written waiver or give a waiver by electronic transmission of notice of the meeting, either before or after such meeting. Any such waiver shall be filed with the records of the Company. If any stockholder or director shall be present at any meeting it shall constitute a waiver of notice of the meeting,

except when that stockholder or director attends for the express purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened. A waiver of notice of meeting need not specify the purposes of the meeting.

5.2. Electronic Transmissions. For purposes of these bylaws, “*electronic transmission*” shall mean a form of communication not directly involving the physical transmission of paper that satisfies the requirements with respect to such communications contained in the General Corporation Law of the State of Delaware.

5.3. Fiscal Year. The fiscal year of the Company shall be fixed by resolution of the board of directors.

5.4. Voting Stock of Other Organizations. Except as the board of directors may otherwise designate, each of the chief executive officer and the treasurer may waive notice of, and act as, or appoint any person or persons to act as, proxy or attorney-in-fact for the Company (with power of substitution) at any meeting of the stockholders, members or other owners of any other company or organization the securities or ownership interests of which are owned by the Company.

5.5. Corporate Seal. The Company shall have no seal.

5.6. Amendment of Bylaws. These bylaws, including any bylaws adopted or amended by the stockholders, may be amended or repealed by the board of directors.

5.7. Dividends. Dividends upon the capital stock of the Company, subject to the applicable provisions of the Certificate of Incorporation, may be declared by the board of directors at any regular or special meeting.

Article 6. Indemnification

6.1. Indemnification. The Company shall, to the fullest extent permitted by law, indemnify every person who is or was a party or is or was threatened to be made a party to any action, suit or proceeding, whether civil, criminal, administrative or investigative (an “*Action*”), by reason of the fact that such person is or was a director or officer of the Company or is or was serving at the request of the Company as a director, officer, trustee, plan administrator or plan fiduciary of another corporation, partnership, limited liability company, trust, employee benefit plan or other enterprise (an “*Indemnified Person*”), against all expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement or other disposition that the Indemnified Person actually and reasonably incurs in connection with the Action and shall reimburse each such person for all legal fees and expenses reasonably incurred by such person in seeking to enforce its rights to indemnification under this Article (by means of legal action or otherwise).

6.2. Advancement of Expenses. Upon written request from an Indemnified Person, the Company shall pay the expenses (including attorneys’ fees) incurred by such Indemnified Person in connection with any Action in advance of the final disposition of such Action. The Company’s obligation to pay expenses pursuant to this Section shall be contingent upon the Indemnified Person providing the undertaking required by the General Corporation Law of the State of Delaware.

6.3. Non-Exclusivity. The rights of indemnification and advancement of expenses contained in this Article shall not be exclusive of any other rights to indemnification or similar protection to which any Indemnified Person may be entitled under any agreement, vote of stockholders or disinterested directors, insurance policy or otherwise.

6.4. Heirs and Beneficiaries. The rights created by this Article shall inure to the benefit of each Indemnified Person and each heir, executor and administrator of such Indemnified Person.

6.5. Effect of Amendment. Neither the amendment, modification or repeal of this Article nor the adoption of any provision in these bylaws inconsistent with this Article shall adversely affect any right or protection of an Indemnified Person with respect to any act or omission that occurred prior to the time of such amendment, modification, repeal or adoption.

AMENDMENT NO. 2 TO SHAREHOLDERS' AGREEMENT

THIS AMENDMENT NO. 2 TO SHAREHOLDERS' AGREEMENT (this "**Agreement**") is dated for reference as of November 18, 2013 among Aquinox Pharmaceuticals Inc. (the "**Canadian Company**"), Aquinox Pharmaceuticals (USA) Inc. (the "**U.S. Company**") and certain shareholders of the Canadian Company and U.S. Company identified as such on the signature page thereto (the "**Shareholders**").

WHEREAS:

- A. The Canadian Company, the U.S. Company and certain shareholders of the Canadian Company and the U.S. Company entered into an Amended & Restated Shareholders' Agreement made as of March 19, 2013, as previously amended (the "**Shareholders' Agreement**") relating to the establishment of certain rights and obligations in respect of the conduct of the affairs of the Canadian Company and the U.S. Company, the holding and sale of their respective securities, and certain other matters;
- B. The Shareholders' Agreement may only be amended by an instrument in writing duly executed by the Canadian Company, the U.S. Company and Shareholders holding not less than 60% of the Common Shares (as that term is defined in the Shareholders' Agreement) that are subject to the Shareholders' Agreement on a Fully Converted Basis (as that term is defined in the Shareholders' Agreement);
- C. The undersigned Shareholders hold more than 60% of the Common Shares that are subject to the Shareholders' Agreement on a Fully Converted Basis; and
- D. The parties wish to amend the Shareholders' Agreement as set forth herein.

NOW THEREFORE THIS AGREEMENT WITNESSES that in consideration of the premises, the mutual covenants and agreements set forth in this Agreement and other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by each of the parties), the parties hereby agree as follows:

1. Amendment to Section 3.5. The first sentence of Section 3.5 of the Shareholders' Agreement is hereby amended and restated to read in its entirety as follows:
"A quorum for the transaction of business at any meeting of the Board of a Company shall be a majority of Directors, including, if such Investor Nominee Director is then serving on the Board, each of the VW Director, the JJDC Director and the PVI Director."
2. Amendment to Section 3.8(f). Section 3.8(f) of the Shareholders' Agreement is hereby amended and restated to read in its entirety as follows:
"(f) any of the following matters, provided that such approval of the Board of the U.S. Company with respect to such matters shall include, if such Investor Nominee Director is then serving on the Board, the affirmative vote of the JJDC Director and the PVI Director: (i) incur any material indebtedness or other material liability on behalf of the U.S. Company; (ii) enter into any material contract to which the U.S. Company is a party or otherwise bound; (iii) retain or

terminate the services of any employee, independent contractor or other service provider of the U.S. Company; (iv) adopt or terminate any Benefit Plan (as defined in the Series C Subscription Agreement) for the U.S. Company; or (v) initiate any legal action or proceeding on behalf of the U.S. Company; provided, however, that this Section 3.8(f) shall not be deemed to apply to a Change of Control, a public offering of securities of the U.S. Company or any action taken pursuant to, or amendment of, this Agreement (other than this Section 3.8(f)), the Subscription Agreements, the Exchange Agreement, the Support Agreement, the Registration Rights Agreement or the U.S. Company's Constatng Documents."

3. Governing Law. This Agreement is a contract made under and shall be governed by and construed in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein. Any action, suit or proceeding arising out of or relating to this Agreement shall be brought in the courts of the Province of British Columbia, and each of the Parties hereby irrevocably submits to the jurisdiction of such courts.
4. Effectiveness. This Amendment Agreement shall become effective upon the execution hereof by each of the parties hereto.
5. Counterparts. This Agreement may be executed in several counterparts (including by fax), each of which when so executed shall be deemed to be an original and shall have the same force and effect as an original but such counterparts together shall constitute but one and the same instrument.

IN WITNESS WHEREOF the parties have executed this Agreement as of the date first written above.

AQUINOX PHARMACEUTICALS INC.

Per: /s/ David J. Main
(Authorized Signatory)

**VENTURES WEST 8 LIMITED
PARTNERSHIP**, by its General Partner,
Five Corners Capital Inc.

Per: /s/ Gary Bridger
(Authorized Signatory)

Per: _____
(Authorized Signatory)

AQUINOX PHARMACEUTICALS (USA) INC.

Per: /s/ David J. Main
(Authorized Signatory)

B.C. ADVANTAGE FUNDS (VCC) LTD.

Per: /s/ Frank Holler
(Authorized Signatory)

14159, L.P.

By: Baker Bros. Advisors, LLC, management company and investment adviser to 14159, L.P., pursuant to authority granted to it by 14159 Capital, L.P., general partner to 14159, L.P., and not as the general partner

By: _____
Scott Lessing
President

BAKER BROS. INVESTMENTS II, L.P.

By: Baker Bros. Advisors, LLC, management company and investment adviser to Baker Bros. Investments II, L.P., pursuant to authority granted to it by Baker Bros. Capital, L.P., general partner to Baker Bros. Investments II, L.P., and not as the general partner

By: _____
Scott Lessing
President

**JOHNSON & JOHNSON
DEVELOPMENT CORPORATION**

Per: /s/ Asish K. Xavier

Asish K. Xavier
Vice President, Venture Investments

AUGMENT INVESTMENTS LTD.

Per: _____
Sergey Notov

667, L.P.

By: Baker Bros. Advisors, LLC, management company and investment adviser to 667, L.P., pursuant to authority granted to it by Baker Biotech Capital, L.P., general partner to 667, L.P., and not as the general partner

By: _____
Scott Lessing
President

BAKER BROTHERS LIFE SCIENCES, L.P.

By: Baker Bros. Advisors, LLC, management company and investment adviser to Baker Brothers Life Sciences, L.P., pursuant to authority granted to it by Baker Brothers Life Sciences Capital L.P., general partner to Baker Brothers Life Sciences, L.P., and not as the general partner

By: _____
Scott Lessing
President

PFIZER INC.

Per: /s/ Barbara Dalton

(Authorized Signatory)

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**ACT**"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN SECTIONS 5.3 AND 5.4 BELOW, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

UNLESS PERMITTED UNDER CANADIAN SECURITIES LEGISLATION, THE HOLDER OF THIS WARRANT MUST NOT TRADE THIS WARRANT OR THE SHARES OF AQUINOX PHARMACEUTICALS INC. ("AQUINOX CANADA") ISSUABLE HEREUNDER BEFORE THE DATE THAT IS FOUR (4) MONTHS AND A DAY AFTER THE LATER OF (i) OCTOBER 23, 2013 AND (ii) THE DATE AQUINOX CANADA BECAME A REPORTING ISSUER IN ANY PROVINCE OR TERRITORY OF CANADA.

WARRANT TO PURCHASE STOCK

Issuers: AQUINOX PHARMACEUTICALS (USA) INC. ("**Aquinox US**") and AQUINOX PHARMACEUTICALS INC. ("**Aquinox Canada**") and, together with Aquinox US, the "**Companies**").

Number of Units: 218,181

Units: Subject to adjustment in accordance with the terms hereof, prior to the Conversion Date (see Section 2.3), each Unit will be comprised of (i) one share of Series C Preferred Stock of Aquinox US (a "**Series C Share**") and (ii) the number of shares of special voting stock of Aquinox Canada (a "**Canadian Special Voting Share**") equal to the number of whole shares of Common Stock of Aquinox US (a "**Common Share**") into which a Series C Share is convertible as of the exercise date of this Warrant. From and after the Conversion Date (see Section 2.3), each Unit will be comprised of the number of whole Common Shares into which a Series C Share was convertible as of the Conversion Date, subject to adjustment in accordance with the terms hereof.

Warrant Price: Subject to adjustment in accordance with the terms hereof (including Section 2.3), US\$0.55 per Unit (of which US\$0.000001 will, if applicable, be allocated to the Canadian Special Voting Share included therein).

Issue Date: October 23, 2013

Expiration Date: Subject to Section 1.6(b), October 23, 2023

Credit Facility: This Warrant is issued in connection with that certain Loan Agreement of even date herewith between Silicon Valley Bank and Aquinox Canada.

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, SILICON VALLEY BANK (together with any successor or permitted assignee or transferee of this Warrant ("**Holder**") is entitled to purchase up to 218,181 Units at the above-stated Warrant Price, all as set forth above and as adjusted pursuant to Section 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant. Reference is made to Section 5.4 of this Warrant whereby Silicon Valley Bank shall transfer this Warrant to its parent company, SVB Financial Group.

SECTION 1. EXERCISE.

1.1 Method of Exercise. Holder may at any time and from time to time exercise this Warrant, in whole or in part, by delivering to the Companies:

- (a) the original of this Warrant together with a duly executed Notice of Exercise in substantially the form attached hereto as Appendix 1;
- (b) if Holder exercises this Warrant to acquire Special Canadian Voting Shares, a duly executed counterpart to the Amended & Restated Exchange Agreement dated March 19, 2013 between Aquinox US, Aquinox Canada and the shareholders of Aquinox US and Aquinox Canada (the "Exchange Agreement") or a covenant to do so upon being provided by the Companies with a copy of the Exchange Agreement;
- (c) if Holder exercises this Warrant prior to completion of an IPO, a duly executed counterpart to the Amended & Restated Qualification and Registration Rights Agreement dated March 19, 2013 between Aquinox US and the shareholders of Aquinox US (the "Qualification and Registration Rights Agreement") or a covenant to do so upon being provided by the Companies with a copy of the Qualification and Registration Rights Agreement; and
- (d) unless Holder is exercising this Warrant pursuant to a cashless exercise as set forth in Section 1.2, a check, wire transfer of same-day funds (to an account designated by the Companies), or other form of payment acceptable to the Companies for the aggregate Warrant Price for the Units being purchased.

1.2 Cashless Exercise. On any exercise of this Warrant, in lieu of payment of the aggregate Warrant Price in the manner as specified in Section 1.1 above, but otherwise in accordance with the requirements of Section 1.1, Holder may elect to receive Units equal to the value of this Warrant (or the portion thereof being exercised) (a "Cashless Exercise"). Upon a Cashless Exercise, the Companies shall issue to Holder that number of Units computed using the following formula:

$$X = Y(A-B)/A$$

where:

- X = the number of Units to be issued to Holder;
- Y = the number of Units with respect to which this Warrant is being exercised (inclusive of the Units surrendered to the Companies in payment of the aggregate Warrant Price);
- A = the Fair Market Value (as determined pursuant to Section 1.3 below) of one Unit; and
- B = the Warrant Price.

1.3 **Fair Market Value.** If this Warrant (or any portion thereof) is exercised prior to the Conversion Date, the “Fair Market Value” of one Unit shall be the fair market value of (a) one Series C Share and (b) the number of Canadian Special Voting Shares equal to the number of whole Common Shares into which a Series C Share is convertible as of the exercise date of this Warrant, as determined by the board of directors of Aquinox US in good faith. If this Warrant (or any portion thereof) is exercised on or after the Conversion Date and the Common Shares are then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a “**Trading Market**”), the “Fair Market Value” of one Unit shall be the product of (x) the closing price or last sale price of one Common Share on such Trading Market on the Business Day immediately before the date on which Holder duly exercises this Warrant (or a portion thereof) in accordance with Section 1.1 or 1.2 above, and (y) the number of whole Common Shares into which a Unit is convertible at the time of such exercise. If this Warrant (or any portion thereof) is exercised on or after the Conversion Date and the Common Shares are not then traded or quoted on a Trading Market, the “Fair Market Value” of one Unit shall be the fair market value of the number of whole Common Shares into which a Unit is convertible at the time of such exercise, as determined by the board of directors of Aquinox US in good faith.

1.4 **Delivery of Certificate and New Warrant.** Within a reasonable time after Holder exercises this Warrant in the manner set forth in Section 1.1 or 1.2 above, the Companies shall deliver to Holder certificates representing the securities issuable upon exercise of this Warrant (the “**Underlying Securities**”) to Holder upon such exercise and, if this Warrant has not been fully exercised and has not expired, a new warrant of like tenor representing that portion of this Warrant not so exercised.

1.5 **Replacement of Warrant.** On receipt of evidence reasonably satisfactory to the Companies of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Companies or, in the case of mutilation, on surrender of this Warrant to the Companies for cancellation, the Companies shall, within a reasonable time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

1.6 **Treatment of Warrant Upon Acquisition of Company.**

(a) **Acquisition.** For the purpose of this Warrant, “**Acquisition**” means a Change of Control as defined in Aquinox US’s Certificate of Incorporation, as in effect as of the Issue Date (“**Certificate of Incorporation**”).

(b) **Treatment of Warrant at Acquisition.** In the event of an Acquisition in which the consideration to be received by stockholders consists solely of cash, Marketable Securities or a combination of cash and Marketable Securities (a “**Cash/Public Acquisition**”), either (i) Holder shall exercise this Warrant pursuant to Section 1.1 and/or 1.2 above prior to completion of such Acquisition, in which case such exercise will be deemed effective immediately prior to and contingent upon the consummation of such Acquisition or (ii) if Holder elects not to exercise this Warrant prior to completion of such Acquisition, this Warrant will expire immediately prior to the consummation of such Acquisition.

(c) The Companies shall provide Holder with written notice of a proposed Cash/Public Acquisition (together with such reasonable information as Holder may reasonably require regarding the treatment of this Warrant in connection with such proposed Cash/Public Acquisition not less than seven (7) Business Days prior to the closing of the proposed Cash/Public Acquisition. If the Companies do not provide such notice and, immediately prior to the closing of the Cash/Public Acquisition, the Fair Market Value of one Series C Share or Common Shares, as the case may be, as determined in accordance with Section 1.3 above, would be greater than the Warrant Price in effect on such date, then the unexercised portion of this Warrant shall automatically be deemed on and as of such date to be fully exercised pursuant to Section 1.2 above and the Companies shall promptly notify Holder of the number of Units issued upon such exercise to Holder and Holder shall be deemed to have restated, as of such date, each of the representations and warranties of Holder set forth in Section 4 below.

(d) Upon the closing of any Acquisition other than a Cash/Public Acquisition, the acquiring, surviving or successor entity shall assume the obligations of the Companies under this Warrant and this Warrant shall thereafter be exercisable for that number and kind of securities and/or other property as Holder would have received upon completion of such Acquisition if Holder had held that number of Units issuable upon exercise of the unexercised portion of this Warrant immediately prior to completion of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant.

(e) As used in this Warrant, "**Marketable Securities**" means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded in Trading Market; and (iii) following the closing of such Acquisition, Holder would not be restricted from publicly re-selling all of the issuer's shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise or convert this Warrant in full on or prior to the closing of such Acquisition, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Acquisition.

SECTION 2. ADJUSTMENTS TO THE SHARES AND WARRANT PRICE.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend or distribution on the outstanding shares of the class or series included in a Unit payable in common stock or other securities or property (other than cash), then upon exercise of this Warrant, for each Unit acquired (a "**Purchased Unit**"), Holder shall receive, without additional cost to Holder, the total number and kind of securities and property which Holder would have received had Holder owned the securities or shares included in the Purchased Units as of the record date for such dividend or distribution. If the Company subdivides the outstanding shares

of the class or series included in a Unit by reclassification or otherwise, into a greater number of the number of shares of such class or series purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of the class or series included in a Unit are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of shares of such class or series purchasable hereunder shall be proportionately decreased.

2.2 Reclassification, Capital Reorganization, Recapitalization, Substitution. If at any time prior to the Expiry Time there is a reclassification, capital reorganization, recapitalization, substitution or other similar event (other than an Acquisition) resulting in a change in the outstanding shares of the same class or series as any of the Underlying Securities, Holder shall be entitled to receive, upon exercise of this Warrant, that number and kind of securities that Holder would have been entitled to receive if Holder had exercised the unexercised portion of this Warrant prior to the effective date of such reclassification, capital reorganization, recapitalization, substitution or other similar event, and subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant to Purchase Stock. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, capital reorganizations, recapitalizations, substitutions or other similar events.

2.3 Conversion of Preferred Stock. If the Series C Shares are converted, automatically or by action of the holders thereof, into Common Shares pursuant to the provisions of the Certificate of Incorporation, including, without limitation, in connection with Aquinox US's initial, underwritten public offering and sale of its common stock pursuant to an effective registration statement under the Act (the "**IPO**"), then from and after the date on which the Series C Shares have been so converted (the "**Conversion Date**"), (i) each Unit issuable upon exercise of this Warrant shall include that number of Common Shares which Holder would have been entitled to receive upon conversion of a Series C Share if Holder had exercised the unexercised portion of this Warrant prior to the Conversion Date and (ii) the Warrant Price shall equal the Warrant Price in effect immediately prior to such conversion divided by the number of Common Shares into which one Series C Share was converted, all subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant.

2.4 Adjustments for Diluting Issuances. For the avoidance of doubt, and without duplication of any adjustment otherwise provided for in this Section 2, the number of Common Shares issuable upon conversion of any Series C Shares issuable upon exercise of this Warrant shall be subject to anti-dilution adjustment from time to time in the manner set forth in the Certificate of Incorporation as if the Shares were issued and outstanding on and as of the date of any such required adjustment.

2.5 No Fractional Shares. No fractional shares shall be issuable upon exercise of this Warrant and the number of shares to be issued shall in each case be rounded down to the nearest whole share. If, but for the application of this Section 2.5, a fractional share interest arises upon any exercise of this Warrant and such fractional interest has a Fair Market Value (as determined in accordance with Section 1.3 above) of more than US\$10.00, Aquinox US or Aquinox Canada, as the case may be, shall eliminate such fractional interest by paying Holder the Fair Market Value of such fractional interest.

2.6 Notice/Certificate as to Adjustments. Upon each adjustment of the Warrant Price or the number or type of securities issuable upon exercise of this Warrant, the Companies shall, at their own expense, deliver to Holder within a reasonable time a written notice setting forth the adjustment to the Warrant Price and/or the number or type of securities issuable upon exercise of this Warrant and the facts upon which such adjustments are based. The Companies shall, upon written request from Holder, furnish Holder with a certificate of its Chief Financial Officer, including computations of such adjustments and the Warrant Price and the number or type of securities issuable upon exercise of this Warrant in effect upon the date of such adjustment.

SECTION 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANIES.

3.1 Representations, Warranties and Covenants. Each of the Companies represents, warrants and covenants with Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which Series C Shares were last sold and issued prior to the Issue Date in an arms-length transaction in which at least \$500,000 of such shares were sold.

(b) The Underlying Securities which may be issued upon the exercise of this Warrant and all securities, if any, issuable upon conversion of such Underlying Securities shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws. Each of the Companies shall at all times cause to be reserved and kept available out of its authorized and unissued capital stock such number of shares of the applicable class as will be sufficient to permit the exercise in full of this Warrant and the conversion of the Underlying Securities into Common Shares or other securities.

(c) The Companies' capitalization tables attached hereto as Schedule 1 are true and complete, in all material respects, as of the Issue Date.

3.2 Notice of Certain Events. If either of the Companies proposes at any time to:

(a) declare any dividend or distribution upon the outstanding shares of the same class or series as any of the Underlying Securities, or any class of securities into which such shares may be exchanged or converted, whether in cash, property, stock, or other securities and whether or not a regular cash dividend;

(b) offer for subscription or sale pro rata to the holders of the outstanding shares of the same class or series as any of the Underlying Securities any additional shares of any class or series in the capital of such company (other than pursuant to contractual pre-emptive rights);

(c) effect any subdivision, consolidation, reclassification, capital reorganization, recapitalization, substitution or other similar event effecting the outstanding shares of the same class or series as any of the Underlying Securities;

(d) effect an Acquisition or liquidate, dissolve or wind up such company; or

(e) effect an IPO;

then, in connection with each such event, the Companies shall give Holder:

- (1) with respect to the matters referred to in (a) and (b) above, at least seven (7) Business Days prior written notice of the date on which a record will be taken for such dividend, distribution or subscription rights (which notice shall specify the date on which the holders of outstanding shares of the applicable series or class will be entitled to receive such dividend, distribution, or subscription rights) or for determining rights to vote, if any, in respect of such matters;
- (2) with respect to the matters referred to in (c) and (d) above, at least seven (7) Business Days prior written notice of the date when such event will take place (which notice shall specify the effective date of such event); and
- (3) with respect to an IPO, at least seven (7) Business Days prior written notice of the date on which Aquinox US proposes to file its registration statement in connection therewith.

Reference is made to Section 1.6(c) above, whereby this Warrant will be deemed to be exercised pursuant to Section 1.2 hereof if the Companies do not give written notice to Holder of a Cash/Public Acquisition as required by the terms hereof. The Companies will also provide information requested by Holder that is reasonably necessary to enable Holder to comply with Holder's accounting or reporting requirements.

SECTION 4. REPRESENTATIONS, WARRANTIES OF HOLDER.

Holder represents and warrants to each of the Companies as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder are being acquired for investment for Holder's account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Act. Holder also represents that it has not been formed for the specific purpose of acquiring this Warrant or the Underlying Securities.

4.2 Disclosure of Information. Holder is aware of the business affairs and financial condition of the Companies and has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and the Underlying Securities. Holder further has had an opportunity to ask questions and receive answers from the Companies regarding the terms and conditions of the offering of this Warrant and the Underlying Securities and to obtain additional information (to the extent the Companies possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of the Underlying Securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of such Holder's investment in this Warrant and the Underlying Securities and has such knowledge and experience in financial or business matters that Holder is capable of evaluating the merits and risks of its investment in this Warrant and the Underlying Securities and/or has a preexisting personal or business relationship with the Companies and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an "accredited investor" within the meaning of each of (i) Regulation D promulgated under the Act and (ii) National Instrument 45-106—Prospectus and Registration Exemptions.

4.5 The Act. Holder understands that this Warrant and the Underlying Securities have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Holder's investment intent as expressed herein. Holder understands that this Warrant and the Underlying Securities must be held indefinitely unless (i) subsequently registered under the Act and qualified under applicable state securities laws or (ii) exemption from such registration and qualification are otherwise available. Holder is aware of the provisions of Rule 144 promulgated under the Act.

4.6 Market Stand-off Agreement. Holder agrees that the Underlying Securities shall be subject to the market stand-off provisions in Section 6.1 of the Qualification and Registration Rights Agreement.

4.7 No Voting Rights. Holder, as a holder of this Warrant, will not have any voting rights until the exercise of this Warrant.

SECTION 5. MISCELLANEOUS.

5.1 Term and Automatic Cashless Exercise upon Expiration.

(a) Term. Subject to the provisions of Section 1.6(b) above, this Warrant is exercisable in whole or in part at any time and from time to time on or before 5:00 PM, Pacific time, on the Expiration Date and shall be void thereafter.

(b) Automatic Cashless Exercise upon Expiration. In the event that, upon the Expiration Date, the Fair Market Value of one Series C Share or Common Shares, as the case may be, as determined in accordance with Section 1.3 above, is greater than the Warrant Price in effect on such date, the unexercised portion of this Warrant shall automatically be deemed on and as of such date to be exercised in its entirety pursuant to Section 1.2 above and the Companies shall, within a reasonable time, deliver certificates representing the Underlying Securities issued upon such exercise to Holder

5.2 Legends. The Underlying Securities (and the securities issuable, directly or indirectly, upon exchange or conversion of the Underlying Securities, if any) shall, to the extent required by applicable securities laws, be imprinted with a legend in substantially the following form:

THE SHARES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “**ACT**”), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN THAT CERTAIN WARRANT TO PURCHASE STOCK ISSUED BY THE ISSUER TO SILICON VALLEY BANK DATED OCTOBER 23, 2013, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR, IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

UNLESS PERMITTED UNDER CANADIAN SECURITIES LEGISLATION, THE HOLDER OF THE SHARES EVIDENCED BY THIS CERTIFICATE MUST NOT TRADE SUCH SECURITIES BEFORE THE DATE THAT IS FOUR (4) MONTHS AND A DAY AFTER THE LATER OF (i) OCTOBER 23, 2013 AND (ii) THE DATE THE REPORTING ISSUER BECAME A REPORTING ISSUER IN ANY PROVINCE OR TERRITORY OF CANADA.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Underlying Securities (and the securities issuable, directly or indirectly, upon exchange or conversion of the Underlying Securities, if any) may not be transferred or assigned in whole or in part except in compliance with applicable federal, state and provincial securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Companies, as reasonably requested by the Companies). The Companies shall not require Holder to provide an opinion of counsel if the transfer is to SVB Financial Group (Silicon Valley Bank’s parent company) or any other affiliate of Holder, provided that any such transferee is an “accredited investor” as defined in Regulation D promulgated under the Act and National Instrument 45-106—Prospectus and Registration Exemptions. Additionally, Aquinox US shall not require an opinion of counsel with respect to the transfer of securities of Aquinox US if there is no material question as to the availability of Rule 144 promulgated under the Act.

5.4 Transfer Procedure. After receipt by Silicon Valley Bank of this Warrant, Silicon Valley Bank may transfer all of this Warrant to its parent company, SVB Financial Group by delivery to the Companies of an Assignment Agreement duly executed by each of Silicon Valley Bank and SVB Financial Group. Subject to the provisions of Section 5.3 and upon providing the Companies with written notice, SVB Financial Group and any subsequent Holder may transfer all or part of this Warrant and the Underlying Securities (or the securities issuable, directly or indirectly, upon conversion of the Underlying Securities, if any) to any transferee; provided, however, that in connection with any such transfer (i) SVB Financial Group or such subsequent Holder will give the Companies notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee; (ii) SVB

Financial Group or such subsequent Holder will surrender this Warrant to the Companies for reissuance to the transferee(s) (and Holder if applicable); and (iii) any subsequent transferee other than SVB Financial Group shall agree in writing with the Companies to be bound by all of the terms and conditions of this Warrant. Notwithstanding any contrary provision herein, at all times prior to the IPO, Holder may not, without the Company's prior written consent transfer any part of this Warrant or any Underlying Securities (or the securities issuable, directly or indirectly, upon conversion of the Underlying Securities, if any) to any person or entity who directly competes with either Company, except in connection with an Acquisition of the Companies by such a direct competitor.

5.5 **Notices.** All notices and other communications hereunder from the Companies to Holder, or vice versa, shall be deemed delivered and effective (i) when given personally, (ii) on the third (3rd) Business Day after being mailed by first-class registered or certified mail, postage prepaid, (iii) upon actual receipt if given by facsimile or electronic mail and such receipt is confirmed in writing by the recipient, or (iv) on the first Business Day following delivery to a reliable overnight courier service, courier fee prepaid, in any case at such address as may have been furnished to the Companies or Holder, as the case may be, in writing by the Companies or such Holder from time to time in accordance with the provisions of this Section 5.5. All notices to Holder shall be addressed as follows until the Companies receive notice of a change of address in connection with a transfer or otherwise:

SVB Financial Group
Attn: Treasury Department
3003 Tasman Drive, HC 215
Santa Clara, CA 95054
Telephone: (408) 654-7400
Facsimile: (408) 988-8317
Email address: derivatives@svb.com

All notices to the Companies shall be addressed as follows until Holder receives notice of a change in address:

c/o Aquinox Pharmaceuticals Inc.
Attn: David Main
Suite 430, 5600 Parkwood Way
Facsimile: (778) 331-4486
Email: dmain@aqxpharma.com

With a copy (which shall not constitute notice) to:

Cooly LLP
Attn: Gordon Empey
1700 Seventh Avenue
Suite 1900
Seattle, WA 98101
Facsimile: (206) 452-8800
Email: gempey@cooley.com

and to

McCarthy Tetrault LLP
Attn: Robin Mahood
1300 – 777 Dunsmuir Street
Vancouver, BC V7Y 1K2
Facsimile: (604) 622-5796
Email: rmahood@mccarthy.ca

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated (either generally or in a particular instance and either retroactively or prospectively) only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorney's Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Counterparts; Facsimile/Electronic Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically or by facsimile shall be binding to the same extent as an original signature page with regards to any agreement subject to the terms hereof or any amendment thereto.

5.9 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.10 Headings. The headings in this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.

5.11 Business Days. "**Business Day**" is any day that is not a Saturday, Sunday or a day on which Silicon Valley Bank is closed.

[Remainder of page left blank intentionally]

[Signature page follows]

IN WITNESS WHEREOF, the parties have caused this Warrant to be executed by their duly authorized representatives effective as of the Issue Date written above.

AQUINOX PHARMACEUTICALS (USA) INC.

By: /s/ David Main
Name: David Main
(Print)
Title: CEO

AQUINOX PHARMACEUTICALS INC.

By: /s/ Kamran Alam
Name: Kamran Alam
(Print)
Title: CFO

SILICON VALLEY BANK

By: /s/ David Sanders
Name: David Sanders
(Print)
Title: VP

[Signature Page to Warrant to Purchase Stock]

APPENDIX 1
NOTICE OF EXERCISE

TO: Aquinox Pharmaceuticals (USA) Inc. and Aquinox Pharmaceuticals Inc. (the “**Companies**”)

RE: Warrant to Purchase Stock dated October __, 2013 between the Companies and the undersigned Holder (the “**Warrant**”)

1. Capitalized terms used but not defined herein shall have the meaning ascribed thereto in the Warrant.

2. The undersigned Holder hereby exercises its right purchase _____ Units pursuant to the Warrant and tenders payment of the aggregate Warrant Price for such Units as follows:

- check in the amount of \$_____ payable to order of Aquinox US enclosed herewith
- wire transfer of immediately available funds to an account specified by the Companies
- Cashless Exercise pursuant to Section 1.2 of the Warrant
- other [describe] _____

3. Please issue a certificate or certificates representing the Underlying Securities in the name specified below:

Holder's Name

(Address)

3. By its execution below and for the benefit of the Companies, Holder hereby restates each of the representations and warranties in Section 4 of the Warrant as of the date hereof.

HOLDER:

By: _____
Name: _____
Title: _____
(Date): _____

APPENDIX 2
ASSIGNMENT AGREEMENT

THIS AGREEMENT made as of Oct. 23, 2013 between SVB Financial Group (“Parent”) and its wholly-owned subsidiary Silicon Valley Bank (the “Bank”)

WHEREAS:

- A. The Bank entered into a Warrant to Purchase Stock made as of October __, 2013 (the “Warrant”) with Aquinox Pharmaceuticals (USA) Inc. and Aquinox Pharmaceuticals Inc. (together, the “Companies”).
- B. The Bank wishes to assign all of its rights, liabilities and obligations under the Warrant to Parent.

NOW THEREFORE, in consideration of the mutual promises set out below and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

Effective as of the date hereof (the “Effective Date”), the Bank hereby assigns, transfers, sets over and conveys unto Parent all of the Bank’s rights under the Warrant.

Effective as the Effective Date, Parent hereby accepts the assignment herein provided and (a) makes to the Companies each of the representations and warranties set forth in Section 4 of the Warrant, as if made by Parent on the date hereof, and (b) covenants and agrees to be bound by the terms of the Warrant to the same extent and with the same force and effect as though Parent had been a party thereto in the place and stead of the Bank.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the date first above written.

SILICON VALLEY BANK

SVB FINANCIAL GROUP

Name:
Title:

Name:
Title:

Acknowledged and agreed as of Oct. 23, 2013 by:

AQUINOX PHARMACEUTICALS INC.

AQUINOX PHARMACEUTICALS (USA) INC.

/s/ David Main
Name: David Main
Title: CEO

/s/ David Main
Name: David Main
Title: CEO

SCHEDULE 1
Capitalization Tables

See attached

Schedule 1

THE WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "1933 ACT"). THESE SECURITIES MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS SUCH SECURITIES ARE REGISTERED UNDER THE 1933 ACT AND THE SECURITIES LAWS OF ALL APPLICABLE STATES OF THE UNITED STATES OR ARE OFFERED AND SOLD IN A TRANSACTION THAT DOES NOT REQUIRE REGISTRATION UNDER THE 1933 ACT OR ANY APPLICABLE STATE SECURITIES LAW, AND THE HOLDER HAS, PRIOR TO SUCH SALE, FURNISHED TO THE COMPANIES AN OPINION OF COUNSEL, OF RECOGNIZED STANDING, OR OTHER EVIDENCE OF EXEMPTION, REASONABLY SATISFACTORY TO THE COMPANIES AS TO THE AVAILABILITY OF AN EXEMPTION.

UNLESS PERMITTED UNDER CANADIAN SECURITIES LEGISLATION, THE HOLDER OF THE WARRANT MUST NOT TRADE THE WARRANT OR THE SHARES ISSUABLE HEREUNDER BEFORE THE DATE THAT IS FOUR (4) MONTHS AND A DAY AFTER THE LATER OF (i) MARCH 19, 2013 AND (ii) THE DATE THE ISSUER BECAME A REPORTING ISSUER IN ANY PROVINCE OR TERRITORY OF CANADA.

THE WARRANT AND THE SHARES ISSUABLE HEREUNDER ARE SUBJECT TO THE PROVISIONS OF AN AMENDED AND RESTATED SHAREHOLDERS' AGREEMENT MADE AS OF MARCH 19, 2013, AS AMENDED FROM TIME TO TIME, AND SUCH SECURITIES ARE NOT TRANSFERABLE ON THE BOOKS OF THE COMPANIES EXCEPT IN ACCORDANCE AND COMPLIANCE WITH THE TERMS AND CONDITIONS OF SUCH AGREEMENT. BY ACCEPTING ANY INTEREST IN SUCH SECURITIES, THE PERSON ACCEPTING SUCH INTEREST SHALL BE DEEMED TO AGREE TO AND SHALL BECOME BOUND BY ALL THE PROVISIONS OF THAT SHAREHOLDERS' AGREEMENT, INCLUDING CERTAIN RESTRICTIONS ON TRANSFER AND OWNERSHIP SET FORTH THEREIN.

WARRANT AGREEMENT dated as of March 19, 2013;

B E T W E E N:

PFIZER INC. (along with any permitted assignee or transferee pursuant to Section 10 hereof, the "**Holder**")

- and -

AQUINOX PHARMACEUTICALS INC., a corporation governed by the laws of Canada ("**Aquinox Canada**")

- and -

AQUINOX PHARMACEUTICALS (USA) INC., a corporation governed by the laws of Delaware ("**Aquinox US**")

WHEREAS, Aquinox Canada and Aquinox US (each a "**Company**" and, collectively, the "**Companies**") have agreed to grant to the Holder an irrevocable warrant (the "**Warrant**") to purchase a certain number of Option Securities, subject to the provisions and upon the terms and conditions set out in this Warrant Agreement, in consideration for the Holder subscribing for certain shares of the Companies pursuant to a stock subscription agreement dated as of March 19, 2013 between the Companies, the Holder and certain other investors (the "**Stock Subscription Agreement**").

NOW THEREFORE, THIS WARRANT AGREEMENT WITNESSETH that in consideration of the premises and mutual agreements set forth herein, it is hereby agreed by the parties hereto as follows:

1. Defined Terms

In this Warrant Agreement:

- (a) **“Affiliate”** has the meaning given in the United States Securities Act of 1933, as amended;
- (b) **“Amended & Restated Certificate of Incorporation”** means the sixth amended and restated Certificate of Incorporation of Aquinox US;
- (c) **“Canadian Special Voting Shares”** means the special voting shares in the capital of Aquinox Canada;
- (d) **“Change of Control Event”** means:
 - (i) any acquisition of Aquinox US by means of merger, share exchange or other form of corporate reorganization in which the stockholders of Aquinox US immediately prior to such event do not hold a majority of the outstanding shares or interest of (A) the surviving corporation or entity or (B) if the surviving or resulting corporation is a wholly-owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation, and in which outstanding shares of Aquinox US are exchanged for securities or other consideration issued (or caused to be issued) by the acquiring corporation or its subsidiary (other than a mere reincorporation transaction), or any transaction or series of related transactions to which Aquinox US is a party in which in excess of fifty percent (50%) of voting power in Aquinox US is transferred;
 - (ii) any sale or other disposition (or series of related sales or dispositions) of the outstanding stock of Aquinox US, in any transaction or series of transactions not contemplated by clause (i) above, in which the stockholders immediately prior to such event do not hold a majority of the outstanding stock of Aquinox US immediately after such event;
 - (iii) any sale, license, lease or disposition of all or substantially all of the assets of Aquinox US;
 - (iv) any discontinuance of the business activities of Aquinox US, and its affiliates, of a substantial and material extent and duration, provided that the determination of such discontinuance has been confirmed by the affirmative vote or written consent of the Preferred Shareholders by Preferred Shareholder Approval (the date of such Preferred Shareholder Approval shall be deemed to be the effective date of such discontinuance for purposes of this Warrant Agreement); or
 - (v) any similar transaction or event as described in clauses (i) through (iv) above as to Aquinox Canada;
- (e) **“Common Shares”** means shares of common stock in the capital of Aquinox US;

- (f) **“Exchange Agreement”** means the amended and restated exchange agreement made as of March 19, 2013 between the Companies and the shareholders of each of the Companies, as further amended, supplemented or restated from time to time;
- (g) **“Exchange Agreement Counterpart”** means a counterpart signature page to the Exchange Agreement, substantially in the form attached to the Exchange Agreement;
- (h) **“Exchange Time”** means the time at which there are no Exchangeable Shares issued and outstanding;
- (i) **“Exchangeable Shares”** has the meaning given in the articles of Aquinox Canada;
- (j) **“Exercise Price”** means the subscription price of US\$0.01 per Option Security, subject to adjustment pursuant to the terms hereof;
- (k) **“Issue Date”** means March 19, 2013;
- (l) **“Liquidation Event”** means (i) any Change of Control Event or (ii) the liquidation, dissolution or winding-up of Aquinox Canada or Aquinox US or any other distribution of the assets of Aquinox Canada or Aquinox US among its shareholders for the purpose of winding up its affairs;
- (m) **“Option Security”** means (i) at any time prior to the Exchange Time, one Unit and (ii) at any time after the Exchange Time, one Series C Share;
- (n) **“Preferred Shareholder”** has the meaning set forth in the Amended & Restated Certificate of Incorporation;
- (o) **“Preferred Shareholder Approval”** has the meaning set forth in the Amended & Restated Certificate of Incorporation;
- (p) **“Series C Shares”** means the shares of Series C preferred stock in the capital of Aquinox US;
- (q) **“Shareholders’ Agreement”** means the amended and restated shareholders’ agreement made as of March 19, 2013 between the Companies and certain shareholders of the Companies, as amended, supplemented or restated from time to time;
- (r) **“Underlying Securities”** means, if the Warrant is exercised before the Exchange Time, the Series C Shares and Canadian Special Voting Shares issuable upon exercise of the Warrant and, if the Warrant is exercised after the Exchange Time, the Series C Shares issuable upon exercise of the Warrant, in each case as may be adjusted as contemplated in Section 6; and
- (s) **“Unit”** means a unit consisting of one Series C Share and one Canadian Special Voting Share.

2. Grant of Warrant

The Companies hereby grant the Holder an irrevocable Warrant to purchase 339,287 Option Securities at an exercise price per Option Security equal to the Exercise Price, subject to the provisions and upon the terms and conditions hereof. The Exercise Price and kind and number of Option Securities issuable upon exercise of the Warrant are subject to adjustment as provided in Section 6 hereof.

3. Term

The Warrant is exercisable, in whole or in part, at any time and from time to time commencing on the date hereof and continuing up to 5:00 p.m. (Vancouver time) (the “**Expiry Time**”) on the date that is the earliest of (a) ten years from the Issue Date and (b) the date upon which a Liquidation Event occurs, at which time the Warrant shall terminate. Nothing contained herein shall confer any right upon the Holder or any other person to subscribe for or purchase any securities of either of the Companies at any time subsequent to the Expiry Time and, if not exercised on or before the Expiry Time, from and after such time the Warrant and all rights of the Holder hereunder shall be void and of no value.

4. Exercise of Warrant

(a) Manner of Exercise.

Subject to Section 3 above, the Warrant may be exercised by the Holder, in whole or in part, at any time and from time to time after the Issue Date, at the election of the Holder, by delivering to the principal place of business of the Companies as set out in Section 16:

- (i) a duly executed notice of exercise in substantially the form attached hereto as Exhibit “A” (“**Notice of Exercise**”);
- (ii) if the Holder is exercising the Warrant to acquire Units and is not already a party to the Exchange Agreement, an Exchange Agreement Counterpart duly executed by the Holder or a covenant to do so upon being provided by Aquinox Canada with a copy of the Exchange Agreement;
- (iii) if the Holder is not already a party to the Shareholders’ Agreement, a duly executed agreement, in form and substance acceptable to the Companies, pursuant to which the Holder agrees to become a party to the Shareholders’ Agreement; and
- (iv) a certified cheque, bank draft or wire transfer of an amount equal to the aggregate Exercise Price for the number of Option Securities being purchased as specified in the Notice of Exercise.

(b) Net Exercise.

In lieu of exercising this Warrant as provided in Section 4(a), the Holder may elect to receive shares equal to the value of this Warrant (or the portion thereof being exercised) by surrender of this Warrant at the principal office of the Companies together with notice of such election (a “**Net Exercise**”). In the event of such a Net Exercise, the Companies shall issue to such Holder a number of Option Securities computed using the following formula:

$$X = \frac{Y(A - B)}{A}$$

Where

- X = the number of Option Securities to be issued to the Holder
- Y = the number of Option Securities purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being cancelled (at the date of such calculation)
- A = the fair market value of one (1) Option Security (at the date of such calculation)
- B = the Exercise Price (as adjusted to the date of such calculations)

For purposes of this Section 4(b), the fair market value of an Option Security shall mean the average of the closing price of the Option Security quoted in the over-the-counter market in which the Option Securities are traded or the closing price quoted on any exchange or electronic securities market on which the Option Securities are listed, whichever is applicable, as published in The Wall Street Journal for the thirty (30) trading days prior to the date of determination of fair market value (or such shorter period of time during which such Option Securities were traded over-the-counter or on such exchange). In the event that this Warrant is exercised pursuant to this Section 4(b) in connection with a Qualified IPO (as defined in the Amended & Restated Certificate of Incorporation), the fair market value per Option Security shall be the product of (i) the per share offering price to the public of such Qualified IPO, and (ii) the number of Common Shares into which an Option Security is convertible at the time of such exercise. If the Option Securities are not traded on an over-the-counter market, an exchange or an electronic securities market, the fair market value shall be the price per Option Security that the applicable Company could obtain from a willing buyer for Option Securities sold by such Company from authorized but unissued Option Securities, as such prices shall be determined in good faith by the applicable Company's Boards of Directors.

(c) Automatic Exercise.

Notwithstanding the provisions of this Section 4, if the Holder has not exercised this Warrant prior to the Expiry Time, this Warrant shall automatically be deemed to be exercised in full in the manner set forth in Section 4(b), without any further action on behalf of the Holder, immediately prior to such date.

(d) Other Conditions Applicable to Exercise.

- (i) In the event of the exercise of the Warrant, certificate(s) for the Underlying Securities so purchased shall be delivered to the Holder as soon as possible (and in any event within 10 business days) after receipt of such notice and the applicable aggregate Exercise Price.
- (ii) Notwithstanding the foregoing, the Warrant may not be exercised unless an exemption from the registration requirements of the 1933 Act and all applicable state securities laws is available and the Holder has delivered to the Companies an opinion of counsel reasonably satisfactory to the Companies to such effect; provided, however, that the original purchaser of this Warrant shall not be required to deliver an opinion of counsel in connection with its exercise of this Warrant if it confirms in writing that the representations and warranties set forth in Section 4.1(e) (as applicable to the Holder) of the Stock Subscription Agreement remain true and correct.
- (iii) If the Holder exercises the Warrant pursuant to this Section 4 after delivery to the Holder by the Companies of notice of a proposed Liquidation Event or other event for which notice must be provided by the Companies to the Holder under Section 7, the Holder may, by written instruction to the Companies, make such exercise conditional upon (i) the completion of the Liquidation Event or the occurrence of the

record date or the date for determining rights to vote for, or the closing or effectiveness of, such other event, as applicable, and/or (ii) the occurrence or absence of any other fact, provided that any such fact is readily ascertainable by the Companies prior to the completion of the Liquidation Event or the occurrence of the record date or the date for determining rights to vote for, or the closing or effectiveness of, such other event, as applicable. Any such conditional exercise will be deemed effective immediately prior to the completion of the Liquidation Event or the occurrence of the record date or the date for determining rights to vote for, or the closing or effectiveness of, the other event, as applicable. If the Companies, acting in good faith, determine that the proposed Liquidation Event or other event will not complete, occur, close or become effective, as applicable, or that the conditions of such conditional exercise will otherwise not be satisfied, the Companies shall return to the Holder all documents and payments delivered to the Companies by the Holder in connection with a conditional exercise by the Holder pursuant to this paragraph. Notwithstanding any other provision hereof, certificates for shares issued pursuant to a conditional exercise pursuant to this paragraph will be delivered at the time of the completion, occurrence, closing or effectiveness of the Liquidation Event or other event.

5. Underlying Securities Fully Paid; Reservation of Underlying Securities

All Underlying Securities that may be issued upon the exercise of the Warrant will, upon issuance and upon receipt of the Exercise Price and a duly completed Notice of Exercise by the Companies, be issued as fully paid and non-assessable, and free from all liens and charges with respect to the issue thereof. During the period within which the rights represented by the Warrant may be exercised, the Companies will at all times have authorized and reserved, for the purpose of issuance upon exercise of the Warrant, a sufficient number of Underlying Securities to provide for the exercise in full of the Warrant.

6. Events of Adjustments

- (a) **Share Reorganizations.** If at any time prior to the Expiry Time (i) either of the Companies issues Underlying Securities or other securities convertible into or exchangeable or exercisable for Underlying Securities by way of a stock dividend or other distribution on any of the Underlying Securities, subdivides or redivides any of its outstanding Underlying Securities into a greater number of shares or consolidates or combines any of its outstanding Underlying Securities into a lesser number of shares or (ii) there is any reclassification, recapitalization, substitution, capital reorganization or other event resulting in a change in the Underlying Securities (any such event, a “**Share Reorganization**”), then, effective immediately after the record date or effective date of such Share Reorganization, as the case may be, in any such event, the Holder shall be entitled to receive, upon exercise of the Warrant, the number and kind of securities or other property that the Holder would have received upon exercise of the Warrant if the Warrant had been exercised immediately before such record date or effective date, as the case may be. If necessary as a result of such Share Reorganization, such adjustments shall be made to the Exercise Price so that the aggregate Exercise Price required to be paid by the Holder upon full exercise of the Warrant shall not be affected.
- (b) **Special Distributions.** If at any time prior to the Expiry Time either of the Companies makes a distribution to all or substantially all of the holders of any of the Underlying Securities of (i) shares of such Company, (ii) rights, options or warrants to purchase shares of such Company, (iii) evidences of indebtedness, or (iv) cash, securities or other property or assets (other than cash dividends determined by the board of directors of such Company to be paid in the ordinary course) which, in each case,

does not constitute a Share Reorganization (any such event, a “**Corporate Reorganization**”), then, effective immediately after the record date for such dividend or distribution, the Holder shall be entitled to receive, upon exercise of the Warrant, the number and kind of securities or other property that the Holder would have received upon exercise of the Warrant if the Warrant had been exercised immediately before the record date for such distribution. If necessary as a result of such Corporate Reorganization, such adjustments shall be made to the Exercise Price so that the aggregate Exercise Price required to be paid by the Holder upon full exercise of the Warrant shall not be affected.

- (c) Other Adjustments. If at any time prior to the Expiry Time either of the Companies shall take any action affecting its capital stock to which the adjustment provisions set forth in Section 6(a) or (b) do not apply, the Companies shall make any such other appropriate or equitable adjustment to the Exercise Price and/or number and kind of securities or property issuable upon the exercise of the Warrant as the directors of the Companies shall in good faith determine are necessary or desirable to protect the Holder’s rights under this Warrant Agreement from impairment.
- (d) Adjustments Successive. The adjustments provided for in this Section 6 are cumulative, shall, in the case of any adjustment to the Exercise Price, be computed to the nearest one-tenth of one cent and, in the case of any adjustment to the number of Underlying Securities purchasable upon exercise of the Warrant, be computed to the nearest one one-hundredth of one share of such Underlying Security, as the case may be, and will apply (without duplication) to successive Share Reorganizations, Corporate Reorganizations or other events resulting in any adjustment under the provisions hereof.
- (e) Fractional Shares. Notwithstanding Section 6(d), no fractions of Underlying Securities shall be issuable upon exercise or conversion of the Warrant and the number of Underlying Securities to be issued shall be rounded down to the nearest whole security. Where a fractional Underlying Security, but for this Section 6(e), would have been issued upon the exercise of the Warrant, in lieu thereof there shall be promptly paid to the Holder an amount (rounded to the nearest US\$0.01) equal to the product obtained by multiplying such fractional share interest by the fair market value of the Underlying Security at the date of due exercise of this Warrant determined by the Companies in good faith, provided that such payment shall only be made if such amount, together with any other payments in lieu of fractional interests payable to the Holder, is equal to or greater than US\$10.
- (f) No Impairment. Neither of the Companies shall, by amendment of their respective constituting documents or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid or frustrate the observance or performance of any of the terms to be observed or performed under this Warrant Agreement, but shall at all times in good faith assist in carrying out all the provisions of this Section 6 and in taking all such action or making such adjustments as may be necessary, appropriate or equitable in the circumstances, acting reasonably, in order to protect the Holder’s rights under this Section 6 against impairment.
- (g) Certificate as to Adjustments. Whenever there shall occur an event giving rise to an adjustment under this Section 6, the Companies shall, at their own expense promptly compute such adjustment and furnish the Holder with a certificate signed by each of their respective president or chief financial officer setting forth the adjustment and the facts upon which such adjustment is based. The Companies shall, upon written request, furnish the Holder with a certificate setting out the Exercise Price and the number and kind of securities or other property issuable upon the exercise of the Warrant in effect upon the date thereof and adjustments leading thereto.

7. Notice of Certain Events

If either of the Companies proposes at any time to (a) declare any dividend or distribution upon any of its outstanding shares, whether in cash, property, shares, or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus, (b) offer for subscription pro rata to the holders of any class or series of its shares any additional shares or securities of any class or series or other rights, (c) effect any reclassification or recapitalization of any of its shares outstanding, (d) merge or consolidate with or into any other corporation, (e) sell, lease or convey all or substantially all of its assets, (f) liquidate, dissolve or wind up its business or affairs or (g) otherwise effect a Liquidation Event, then, in connection with each such event, such Company shall send to the Holder (i) at least 14 days prior written notice of the date on which a record will be taken for the holders entitled to receive such dividend, distribution, or subscription rights (and specifying the date on which the holders of such shares will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in paragraphs (c), (d), (e), (f) and (g) above, and (ii) in the case of matters referred to in paragraphs (c), (d), (e), (f) and (g) above, at least 14 days prior written notice of the expected closing or effective date when the same shall take place (and specifying the date on which the holders of such shares shall be entitled to exchange their shares for securities or other property upon the occurrence of such event).

8. Representations and Warranties of the Companies

Each of the Companies hereby jointly and severally represents and warrants to the Holder as follows:

- (a) such Company is a corporation duly incorporated, organized and validly subsisting under the laws of its jurisdiction of incorporation and is in good standing under such laws;
- (b) such Company has full corporate power, authority and capacity to execute and deliver this Warrant Agreement and to perform all of its obligations contemplated herein, including the issue, sale and delivery of the Option Securities issuable by such Company upon due exercise of the Warrant;
- (c) the entering into, execution and delivery of this Warrant Agreement and the consummation of the transactions herein contemplated, including the issue, sale and delivery of the Option Securities issuable by such Company upon due exercise of the Warrant, have been duly authorized by all necessary corporate action on behalf of such Company;
- (d) this Warrant Agreement is a legal, valid and, assuming due execution and delivery by the Holder, binding obligation of such Company, enforceable in accordance with its terms, except (i) as limited by bankruptcy, insolvency, reorganization, moratorium or other laws of general application affecting creditors' rights and (ii) as limited by laws relating to the availability of specific performance, injunctive relief and other equitable remedies;
- (e) upon exercise of the Warrant in accordance with its terms, the Option Securities issuable by such Company upon such exercise will be validly issued to the Holder as fully-paid and non-assessable shares in the capital of such Company; and
- (f) the execution and delivery by such Company of this Warrant Agreement, together with any other documentation associated herewith or therewith, and the consummation by such Company of the transactions contemplated herein or therein, will not conflict with, or result in the violation of or constitute a default under, with the passage of time or the giving of notice, or both, their respective constating documents, any applicable law, rule or regulation or the terms and provisions of any contract, judgement, decree or order to which such Company is a party or by which it is bound.

9. Legends

- (a) The Holder agrees that the certificates representing the Option Securities may bear such restrictive legends as are prescribed by applicable securities laws and the Exchange Agreement and Shareholders' Agreement. Without limiting the generality of the foregoing, the certificate(s) representing any Underlying Securities issued upon exercise of the Warrant, and any securities issued upon exchange, conversion or redemption of such Underlying Securities, and any certificates issued in exchange or in substitution therefor will, until no longer required under applicable securities laws or in relation to the Exchange Agreement and the Shareholders' Agreement, as applicable, bear legends in substantially the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "1933 ACT"). THESE SECURITIES MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS SUCH SECURITIES ARE REGISTERED UNDER THE 1933 ACT AND THE SECURITIES LAWS OF ALL APPLICABLE STATES OF THE UNITED STATES OR ARE OFFERED AND SOLD IN A TRANSACTION THAT DOES NOT REQUIRE REGISTRATION UNDER THE 1933 ACT OR ANY APPLICABLE STATE SECURITIES LAW, AND THE HOLDER HAS, PRIOR TO SUCH SALE, FURNISHED TO THE COMPANY AN OPINION OF COUNSEL, OF RECOGNIZED STANDING, OR OTHER EVIDENCE OF EXEMPTION, REASONABLY SATISFACTORY TO THE COMPANY AS TO THE AVAILABILITY OF AN EXEMPTION.

THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO THE PROVISIONS OF AN AMENDED AND RESTATED SHAREHOLDERS' AGREEMENT MADE AS OF MARCH 19, 2013, AS AMENDED FROM TIME TO TIME, AND SUCH SECURITIES ARE NOT TRANSFERABLE ON THE BOOKS OF THE COMPANY EXCEPT IN ACCORDANCE AND COMPLIANCE WITH THE TERMS AND CONDITIONS OF SUCH AGREEMENT. BY ACCEPTING ANY INTEREST IN SUCH SECURITIES THE PERSON ACCEPTING SUCH INTEREST SHALL BE DEEMED TO AGREE TO AND SHALL BECOME BOUND BY ALL THE PROVISIONS OF THAT SHAREHOLDERS' AGREEMENT, INCLUDING CERTAIN RESTRICTIONS ON TRANSFER AND OWNERSHIP SET FORTH THEREIN.

- (b) If the certificate represents shares of Aquinox Canada:

UNLESS PERMITTED UNDER SECURITIES LEGISLATION, THE HOLDER OF THIS SECURITY MUST NOT TRADE THE SECURITY BEFORE THE DATE THAT IS FOUR (4) MONTHS AND A DAY AFTER THE LATER OF (1) MARCH 19, 2013, AND (2) THE DATE THE ISSUER BECAME A REPORTING ISSUER IN ANY PROVINCE OR TERRITORY OF CANADA.

THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO ALL THE TERMS AND CONDITIONS OF AN AMENDED AND RESTATED EXCHANGE AGREEMENT MADE AS OF MARCH 19, 2013 AMONG, INTER ALIA, AQUINOX PHARMACEUTICALS INC., AQUINOX PHARMACEUTICALS (USA) INC. AND THE HOLDERS OF THE SHARES OF SUCH COMPANIES, AS IT MAY BE FURTHER AMENDED, WHICH AGREEMENT CONSTITUTES A UNANIMOUS SHAREHOLDERS AGREEMENT WITHIN THE MEANING OF THE CANADA BUSINESS CORPORATIONS ACT AND CONTAINS, AMONG OTHER THINGS, RESTRICTIONS ON THE RIGHT OF THE HOLDER HEREOF TO TRANSFER OR SELL THE SECURITIES. A COPY OF SUCH EXCHANGE AGREEMENT IS ON FILE AT THE REGISTERED OFFICE OF THE CORPORATION.

- (c) If the certificate represents shares of Aquinox US:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO ALL THE TERMS AND CONDITIONS OF AN AMENDED AND RESTATED EXCHANGE AGREEMENT MADE AS OF MARCH 19, 2013 AMONG, INTER ALIA, AQUINOX PHARMACEUTICALS INC., AQUINOX PHARMACEUTICALS (USA) INC. AND THE HOLDERS OF THE SHARES OF SUCH COMPANIES, AS IT MAY BE FURTHER AMENDED, WHICH AGREEMENT CONTAINS, AMONG OTHER THINGS, RESTRICTIONS ON THE RIGHT OF THE HOLDER HEREOF TO TRANSFER OR SELL THE SECURITIES. A COPY OF SUCH EXCHANGE AGREEMENT IS ON FILE AT THE REGISTERED OFFICE OF THE CORPORATION.

10. Transfer

The Holder may not transfer or assign all or any portion of the Warrant without the prior written consent of the Companies, which consent shall be in the sole discretion of the Companies (unless the proposed transferee or assignee is an Affiliate of the Holder, in which case such consent shall not be necessary to effect such transfer or assignment). Without limiting the generality of the foregoing, the Holder may not transfer or assign all or any portion of the Warrant or the Underlying Securities (or any securities issuable, directly or indirectly, upon conversion or exchange of the Underlying Securities) without compliance with (a) applicable U.S. federal and state and Canadian provincial securities laws by the transferor and the transferee (which may include, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Companies) and (b) the provisions of the Shareholders' Agreement (including without limitation Article 7 of the Shareholders' Agreement).

11. Rights as Shareholders

Prior to the exercise of the Holder's rights under this Warrant Agreement, the Holder shall not, by virtue of this Warrant Agreement, be entitled to vote or receive dividends and shall not be deemed a shareholder, nor shall anything contained herein be construed to confer upon the Holder any of the rights of a shareholder of either of the Companies or any right to vote for the election of directors or upon any matter submitted to the shareholders of either of the Companies at any meeting thereof, or to receive notice of meetings, or to receive dividends or subscription rights or otherwise until this Warrant shall have been exercised and the Underlying Securities purchasable upon the exercise hereof shall have become deliverable, as provided herein. Thereafter, the Holder shall have all of the rights generally applicable to holders of Option Securities.

12. Allocation of Exercise Price

- (a) On the exercise of the Warrant into Units, the Exercise Price per Unit shall be allocated US\$0.0099 as to the Series C Share included in such Unit and US\$0.0001 as to the Canadian Special Voting Share included in such Unit, subject to adjustment in order to reflect any adjustment to the number and kind of securities issuable upon exercise of the Warrant under Section 6 hereof.
- (b) On the exercise of the Warrant into Common Shares, the entire Exercise Price shall be allocated to such Common Shares, subject to adjustment in order to reflect any adjustment to the number and kind of securities issuable upon exercise of the Warrant under Section 6 hereof.

13. Taxes

The issuance of any share or other certificate upon the exercise of the Warrant shall be made without charge to the Holder for any tax in respect of the issuance of such certificate. Neither of the Companies shall, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the Holder and neither of the Companies shall be required to issue or deliver any such certificates unless and until the person or persons requesting the issuance thereof shall have paid to the applicable Company the amount of such tax or shall have established to the satisfaction of such Company that such tax has been paid. The Holder shall be responsible for all other tax liability that may arise as result of holding or transferring the Warrant or receiving Option Securities or other securities or property upon exercise thereof.

14. Expenses

All expenses relating to the Companies' performance of or compliance with the provisions set forth herein shall be paid by the Companies, unless otherwise expressly provided herein. Notwithstanding the foregoing, neither of the Companies shall be liable for any costs, fees or expenses of the Holder in relating to any exercise or transfer by the Holder of the Warrant.

15. Amendment and Waiver

Notwithstanding Section 6(c), this Warrant Agreement may only be amended by an instrument in writing signed by each of the parties hereto. A provision of this Agreement may be waived only by an instrument in writing signed by the party which has agreed or proposes to waive such provision.

16. Notices

Unless otherwise expressly provided in this Warrant Agreement, all notices, requests and other communications to any party hereunder shall be in writing (including electronic transmission, facsimile transmission or similar writing) and shall be given to such party addressed as follows:

All notices to the Companies shall be addressed as follows:

Aquinox Pharmaceuticals Inc.
Suite 430, 5600 Parkwood Way
Richmond, BC
V6V 2M2 Canada

Attention: David Main
Facsimile: 778-331-4486

Aquinox Pharmaceuticals (USA) Inc.
Suite 430, 5600 Parkwood Way
Richmond, BC
V6V 2M2 Canada

Attention: David Main
Facsimile: 778-331-4486

With a copy to:

McCarthy Tétrault LLP
777 Dunsmuir Street Suite 1300
PO Box 10424 Pacific Centre
Vancouver BC V7Y 1K2

Attention: Robin Mahood
Fax: 604-622-5796
E-mail: rmahood@mccarthy.ca

All notices to the Holder shall be addressed and sent to the Holder at the address specified in the Stock Subscription Agreement or to such other address as the Holder may hereafter specify for the purpose by notice to the Companies in accordance with this Section 16.

Each such notice, request or other communication shall be effective (a) if given by facsimile transmission, when transmitted to the facsimile number specified in this Section 16 and confirmation of receipt is received, (b) if given by mail, 72 hours after such communication is deposited in the mails with first class postage prepaid, addressed as aforesaid, or (c) if given by any other means, when delivered (or in the case of electronic transmission, received) at the address specified in this Section 16.

17. Enurement

The terms and conditions of this Warrant Agreement shall enure to the benefit of, and be binding upon, the Companies and the holders hereof and their respective permitted successors and assigns.

18. Survival

The representations, warranties, covenants and conditions of the respective parties contained herein or made pursuant to this Warrant Agreement shall survive the execution and delivery of this Warrant Agreement.

19. Miscellaneous Interpretation Matters

Unless the context otherwise necessarily requires, the following provisions shall govern the interpretation of this Warrant Agreement:

- (a) words used herein importing the singular number only shall include the plural and vice versa, and words importing the use of any gender shall include all genders;
- (b) the division of this Warrant Agreement into Sections and subsections and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation hereof; and
- (c) “this Warrant Agreement”, “hereto”, “herein”, “hereby”, “hereunder”, “hereof” and similar expressions refer to this Warrant Agreement and not to any particular Section, subsection, clause, subdivision, paragraph or other portion hereof and include any and every instrument amending, supplementing or replacing this Warrant Agreement.

20. Currency

Any reference to “dollars” or “\$” herein is to lawful currency of the United States.

21. Governing Law

This Warrant shall be governed by and construed in accordance with the laws of British Columbia and the laws of Canada applicable therein. The parties hereto irrevocably submit to the non-exclusive jurisdiction of the courts of the Province of British Columbia with respect to any dispute related to this Warrant.

22. Counterparts

This Warrant Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF the parties have executed this Warrant as of the day and year first written above.

AQUINOX PHARMACEUTICALS INC.

/s/ David J. Main

Name:

Title:

AQUINOX PHARMACEUTICALS (USA) INC.

/s/ David J. Main

Name:

Title:

PFIZER INC.

/s/ Barbara Dalton

Name: Barbara Dalton

Title: Vice President, Venture Capital
Worldwide Business Development

EXHIBIT "A"
NOTICE OF EXERCISE

Capitalized terms in this Notice of Exercise have the meaning ascribed thereto in the Warrant Agreement to which this Notice of Exercise is attached (the "**Warrant Agreement**").

[Check the appropriate box.]

Exercise. **The undersigned hereby elects to purchase:**

- at any time prior to the Exchange Time, _____ Option Securities consisting of Units consisting of one Series C Share and one Canadian Special Voting Share
- at any time after the Exchange Time, _____ Option Securities consisting of Common Share(s) of Aquinox US, pursuant to the terms of the Warrant Agreement, and tenders herewith payment of the Exercise Price for such securities, in full.

Please issue a certificate or certificates representing the securities for which the Warrant is exercised in the name of the undersigned and deliver the certificate(s) to the address below, unless otherwise indicated under "Registration Instructions" or "Delivery Instructions" below:

Pfizer Inc.
235 East 42nd Street
New York, New York
10017 USA

The undersigned represents and warrants to the Companies that: (i) it is acquiring the above securities solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws; (ii) it is an "accredited investor" as defined in Rule 501 promulgated under the United States Securities Act of 1933, as amended; and (iii) without limiting the generality of the foregoing, the representations and warranties of the Holder set forth in Section 4.1(e) (as applicable to the undersigned) of the Stock Subscription Agreement are true and correct with respect to the undersigned as if made on the date hereof.

Pfizer Inc.

Name

Address

(Signature)

(Date)

Registration Instructions (if different from above):

Name

Address

Taxpayer Identification Number

Delivery Instructions (if different from above):

Name

Address

LOAN AGREEMENT

THIS LOAN AGREEMENT (this “**Agreement**”) dated as of October 23, 2013 (the “**Effective Date**”) between **SILICON VALLEY BANK**, a California corporation (“**Bank**”), and **AQUINOX PHARMACEUTICALS INC.**, a Canadian federal corporation (“**Borrower**”), provides the terms on which Bank shall lend to Borrower and Borrower shall repay Bank. The parties agree as follows:

1. ACCOUNTING AND OTHER TERMS

Accounting terms not defined in this Agreement shall be construed following GAAP. Calculations and determinations must be made following GAAP. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Section 13. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the PPSA to the extent such terms are defined therein.

2. LOAN AND TERMS OF PAYMENT

2.1 Promise to Pay. Borrower hereby unconditionally promises to pay Bank the outstanding principal amount of all Credit Extensions and accrued and unpaid interest thereon as and when due in accordance with this Agreement.

2.1.1 Growth Capital Advances.

(a) Availability. Subject to the terms and conditions of this Agreement, Bank agrees to make Growth Capital Advances to Borrower in two (2) tranches: “**Tranche A**” and “**Tranche B**”. Bank shall make a Growth Capital Advance (i) under Tranche A, on the Effective Date, or as soon thereafter as is practical, in an amount equal to Two Million Five Hundred Thousand Dollars (\$2,500,000) (the “**Tranche A Growth Capital Advance**”), and (ii) under Tranche B, during the Tranche B Draw Period (provided that Borrower receives Positive Data Results on or prior to December 31, 2014), in an amount equal to One Million Five Hundred Thousand Dollars (\$1,500,000) (the “**Tranche B Growth Capital Advance**” and together with the Tranche A Growth Capital Advance, each a “**Growth Capital Advance**” and collectively, the “**Growth Capital Advances**”). The aggregate outstanding amount of the Growth Capital Advances shall not exceed the Growth Capital Line. After repayment, no Growth Capital Advance may be reborrowed.

(b) Repayment.

(i) Tranche A Growth Capital Advance. Borrower shall repay the Tranche A Growth Capital Advance in thirty (30) equal installments of principal, plus monthly payments of accrued interest (each a “**Tranche A Growth Capital Advance Payment**”) beginning on October 1, 2014 and continuing on the first (1st) day of each month thereafter through the Tranche A Growth Capital Maturity Date, on which date Borrower shall pay to Bank (i) the final Tranche A Growth Capital Advance Payment, which shall include all outstanding principal and accrued and unpaid interest under Tranche A and (ii) the Tranche A Final Payment.

(ii) Tranche B Growth Capital Advance. Borrower shall repay the Tranche B Growth Capital Advance in thirty (30) equal installments of principal, plus monthly payments of accrued interest (each a “**Tranche B Growth Capital Advance Payment**”) beginning on the first (1st) day of the first (1st) month following the Funding Date of the Tranche B Growth Capital Advance (the “**Initial Tranche B Growth Capital Advance Payment Date**”) and continuing on the first (1st) day of each month thereafter through the Tranche B Growth Capital Maturity Date, on which date Borrower shall pay to Bank (i) the final Tranche B Growth Capital Advance Payment, which shall include all outstanding principal and accrued and unpaid interest under Tranche B and (ii) the Tranche B Final Payment.

(c) Prepayment.

(i) Mandatory Prepayment Upon an Acceleration. If the Growth Capital Advances are accelerated following the occurrence of an Event of Default or otherwise, Borrower shall immediately pay to Bank an amount equal to the sum of (a) all outstanding principal with respect to the Growth Capital Advances, plus accrued and unpaid interest thereon, plus (b) the Tranche A Prepayment Fee, plus (c) the Tranche B Prepayment Fee, plus (d) the Tranche A Final Payment, plus (e) the Tranche B Final Payment, plus (f) all other sums, including Bank Expenses, if any, that shall have become due and payable hereunder in connection with the Growth Capital Advances, including interest at the Default Rate with respect to any past due amounts.

(ii) Voluntary Prepayment. Borrower shall have the option to prepay all, but not less than all, of the Growth Capital Advances advanced by Bank under this Agreement, provided Borrower (i) delivers written notice to Bank of its election to prepay the Growth Capital Advances at least ten (10) Business Days prior to such prepayment, and (ii) pays, on the date of such prepayment (a) all outstanding principal with respect to the Growth Capital Advances, plus accrued and unpaid interest thereon, plus (b) the Tranche A Prepayment Fee, plus (c) the Tranche B Prepayment Fee, plus (d) the Tranche A Final Payment, plus (e) the Tranche B Final Payment, plus (f) all other sums, including Bank Expenses, if any, that shall have become due and payable hereunder in connection with the Growth Capital Advances.

2.2 Intentionally Omitted.

2.3 Payment of Interest on the Credit Extensions.

(a) Interest Rate. Subject to Section 2.3(b), the principal amount outstanding for each Growth Capital Advance shall accrue interest at a fixed per annum rate equal to the greater of two percentage points (2.00%) above the Prime Rate in effect on the applicable Funding Date or five and a quarter of one percentage points (5.25%), which interest shall be payable monthly in accordance with Section 2.3(d) below.

(b) Default Rate. Immediately upon the occurrence and during the continuance of an Event of Default, Obligations shall bear interest at a rate per annum which is five percentage points (5.0%) above the rate that is otherwise applicable thereto (the “**Default Rate**”). Fees and expenses which are required to be paid by Borrower pursuant to the Loan Documents (including, without limitation, Bank Expenses) but are not paid when due shall bear interest until paid at a rate equal to the highest rate applicable to the Obligations. Payment or acceptance of the increased interest rate provided in this Section 2.3(b) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Bank.

(c) Intentionally Omitted.

(d) Payment; Interest Computation. Interest is payable monthly on the first calendar day of each month and shall be computed on the basis of a 360-day year for the actual number of days elapsed. In computing interest, (i) all payments received after 12:00 p.m. Pacific time on any day shall be deemed received at the opening of business on the next Business Day, and (ii) the date of the making of any Credit Extension shall be included and the date of payment shall be excluded; provided, however, that if any Credit Extension is repaid on the same day on which it is made, such day shall be included in computing interest on such Credit Extension.

(e) Interest Act (Canada). For the purpose of the Interest Act (Canada), the yearly rate of interest to which interest calculated on the basis of a year of 360, 365 or 366 days, as the case may be, is equivalent to the rate of interest determined as herein provided multiplied by the number of days in such year and divided by 360, 365 or 366, as the case may be. Further, subject to subsection (f) below, in this Agreement all interest shall be calculated using the nominal rate method and not the effective rate method and the “deemed re-investment principle” shall not apply to such calculations.

(f) Notwithstanding any provisions of this Agreement, in no event shall the aggregate “interest” (as defined in Section 347 of the *Criminal Code* (Canada)) payable by Borrower under the Loan Documents exceed the effective annual rate of interest on the “credit advanced” (as defined in Section 347 of the

Criminal Code (Canada)) under this Agreement lawfully permitted by that Section and, if any payment, collection or demand pursuant to this Agreement in respect of “interest” (as defined in Section 347 of the *Criminal Code* (Canada)) is determined to be contrary to the provisions of that Section, such payment, collection or demand shall be deemed to have been made by mutual mistake of Borrower and Bank and the amount of such payment or collection shall be refunded to Borrower. For the purposes of this subsection (f) the effective annual rate of interest shall be determined in accordance with generally accepted actuarial practices and principles over the relevant term and, in the event of a dispute, a certificate of a Fellow of the Canadian Institute of Actuaries appointed by Bank will be prima facie evidence of such rate.

2.4 Fees. Borrower shall pay to Bank:

(a) Facility Fee. A fully earned, non-refundable facility fee of Twelve Thousand Dollars (\$12,000) (the “**Facility Fee**”);

(b) Final Payments. The Final Payments, if and when due hereunder;

(c) Prepayment Fees. The Prepayment Fees, if and when due hereunder; and

(d) Bank Expenses. All Bank Expenses (including reasonable attorneys’ fees and expenses for documentation and negotiation of this Agreement) incurred through and after the Effective Date, when due (or, if no stated due date, upon demand by Bank).

(e) Good Faith Deposit. Bank hereby acknowledges receipt of a good faith deposit of Twenty Thousand Dollars (\$20,000), of which any amounts not utilized to pay due diligence expenses and Bank Expenses will be applied to the Facility Fee; and

(f) Fees Fully Earned. Unless otherwise provided in this Agreement or in a separate writing by Bank, Borrower shall not be entitled to any credit, rebate, or repayment of any fees earned by Bank pursuant to this Agreement notwithstanding any termination of this Agreement or the suspension or termination of Bank’s obligation to make loans and advances hereunder. Bank may deduct amounts owing by Borrower under the clauses of this Section 2.4 pursuant to the terms of Section 2.5(c). Bank shall provide Borrower written notice of deductions made from the Designated Deposit Account pursuant to the terms of the clauses of this Section 2.4.

2.5 Payments; Application of Payments; Debit of Accounts.

(a) All payments to be made by Borrower under any Loan Document shall be made in immediately available funds in Dollars, without setoff or counterclaim, before 12:00 p.m. Pacific time on the date when due. Payments of principal and/or interest received after 12:00 p.m. Pacific time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment shall be due the next Business Day, and additional fees or interest, as applicable, shall continue to accrue until paid.

(b) Bank has the exclusive right to determine the order and manner in which all payments with respect to the Obligations may be applied. Borrower shall have no right to specify the order or the accounts to which Bank shall allocate or apply any payments required to be made by Borrower to Bank or otherwise received by Bank under this Agreement when any such allocation or application is not specified elsewhere in this Agreement.

(c) Bank may debit any of Borrower’s deposit accounts, including the Designated Deposit Account, for principal and interest payments or any other amounts Borrower owes Bank when due. These debits shall not constitute a set-off.

2.6 Currency Indemnity.

(a) Indemnity. If: (i) any amount payable under, or in connection with any matter relating to or arising out of, the Loan Documents is received by Bank in a currency (the “**Payment Currency**”) other than that agreed to be payable hereunder or thereunder (the “**Agreed Currency**”), whether voluntarily or pursuant to an order, judgment or decision of any court, tribunal, arbitration panel or administrative agency or as a result of any bankruptcy, receivership, liquidation or other insolvency type proceedings or otherwise; and (ii) the amount so produced by converting the Payment Currency so received into the Agreed Currency is less than the relevant amount of the Agreed Currency; then: (iii) the amount so received shall constitute a discharge of the liability of Borrower under or in connection any of the Loan Documents only to the extent of the amount received following the conversion described in paragraph (ii) above; and (iv) Borrower shall indemnify and save Bank harmless from and against such deficiency and any loss or damage arising as a result thereof.

Any conversion pursuant to this Section 2.6(a) shall be made at such prevailing rate of exchange on the date the Payment Currency is received by Bank and in such market as is determined by Bank as being the most appropriate for such conversion. Borrower shall in addition pay the costs of such conversion.

(b) Independent Obligation. The indemnity set out in Section 2.6(a): (i) is an obligation of Borrower which is separate and independent from all other obligations of Borrower under any of the Loan Documents; (ii) gives rise to a separate and independent cause of action; (iii) applies irrespective of any indulgence granted by or on behalf of Bank; and (iv) continues in full force and effect notwithstanding, and does not merge with, any order, judgment or decision of any court, tribunal, arbitration panel or administrative agency or as a result of any bankruptcy, receivership, liquidation or other insolvency type proceeding or otherwise as to any amount due under this Agreement and the Security or in connection herewith or therewith.

3. CONDITIONS OF LOANS

3.1 Conditions Precedent to Initial Credit Extension. Bank’s obligation to make the initial Credit Extension is subject to the condition precedent that Bank shall have received, in form and substance satisfactory to Bank, such documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate, including, without limitation:

(a) duly executed original signatures to the Loan Documents;

(b) duly executed original signatures to the Control Agreements, if any;

(c) Borrower’s Operating Documents and a certificate of Compliance of Borrower certified by Industry Canada and a good standing certificate of Borrower certified by the Registrar of Companies for British Columbia, each as of a date no earlier than thirty (30) days prior to the Effective Date;

(d) duly executed original signatures to the completed Borrowing Resolutions for Borrower;

(e) copies, dated as of a recent date, of PPSA searches, as Bank shall request, accompanied by satisfactory written evidence that the Liens indicated in any such searches either constitute Permitted Liens or have been or, in connection with the initial Credit Extension, will be terminated or released;

(f) the Perfection Certificates of Borrower and Guarantor, together with the duly executed original signatures thereto;

(g) the duly executed original signatures to the Guaranty, together with the duly executed original signatures to the completed Borrowing Resolutions for Guarantor;

(h) a copy of Guarantor’s Registration Rights Agreement, Investors’ Rights Agreement or similar agreement and any amendments thereto;

(i) evidence satisfactory to Bank that the insurance policies and endorsements required by Section 6.5 hereof are in full force and effect, together with appropriate evidence showing lender loss payable and/or additional insured clauses or endorsements in favor of Bank; and

(j) payment of the fees and Bank Expenses then due as specified in Section 2.4 hereof.

3.2 Conditions Precedent to all Credit Extensions. Bank's obligations to make each Credit Extension, including the initial Credit Extension, is subject to the following conditions precedent:

(a) timely receipt of an executed Payment/Advance Form;

(b) the representations and warranties in this Agreement shall be true, accurate, and complete in all material respects on the date of the Payment/Advance Form and on the Funding Date of each Credit Extension; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date, and no Event of Default shall have occurred and be continuing or result from the Credit Extension. Each Credit Extension is Borrower's representation and warranty on that date that the representations and warranties in this Agreement remain true, accurate, and complete in all material respects; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date; and

(c) Bank determines to its satisfaction that there has not been a Material Adverse Change.

3.3 Intentionally Omitted.

3.4 Covenant to Deliver. Borrower agrees to deliver to Bank each item required to be delivered to Bank under this Agreement as a condition precedent to any Credit Extension. Borrower expressly agrees that a Credit Extension made prior to the receipt by Bank of any such item shall not constitute a waiver by Bank of Borrower's obligation to deliver such item, and the making of any Credit Extension in the absence of a required item shall be in Bank's sole discretion.

3.5 Procedures for Borrowing. Subject to the prior satisfaction of all other applicable conditions to the making of a Growth Capital Advance set forth in this Agreement, to obtain a Growth Capital Advance, Borrower shall notify Bank (which notice shall be irrevocable) by electronic mail, facsimile, or telephone by 12:00 p.m. Pacific time on the Funding Date of the Growth Capital Advance. Together with any such electronic or facsimile notification, Borrower shall deliver to Bank by electronic mail or facsimile a completed Payment/Advance Form executed by a Responsible Officer or his or her designee. Bank may rely on any telephone notice given by a person whom Bank believes is a Responsible Officer or designee. Bank shall credit Growth Capital Advances to the Designated Deposit Account. Bank may make Growth Capital Advances under this Agreement based on instructions from a Responsible Officer or his or her designee or without instructions if the Growth Capital Advances are necessary to meet Obligations which have become due.

4. CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Repayment and performance of the Obligations of Borrower to Bank will be secured by the Security.

Borrower acknowledges that it previously has entered, and/or may in the future enter, into Bank Services Agreements with Bank. Regardless of the terms of any Bank Services Agreement, Borrower agrees that any amounts Borrower owes Bank thereunder shall be deemed to be Obligations hereunder and that it is the intent of Borrower and Bank to have all such Obligations secured by the first priority perfected security interest in the Collateral granted herein (subject only to Permitted Liens that are not required to be subordinated to Bank's Lien in this Agreement).

If this Agreement is terminated, Bank's Lien in the Collateral shall continue until the Obligations (other than inchoate indemnity obligations) are repaid in full in cash. Upon payment in full in cash of the Obligations (other than inchoate indemnity obligations) and at such time as Bank's obligation to make Credit

Extensions has terminated, Bank shall, at the sole cost and expense of Borrower, release its Liens in the Collateral and all rights therein shall revert to Borrower. In the event (a) all Obligations (other than inchoate indemnity obligations), except for Bank Services, are satisfied in full, and (b) this Agreement is terminated, Bank shall terminate the security interest granted herein upon Borrower providing cash collateral acceptable to Bank in its good faith business judgment for Bank Services, if any. In the event such Bank Services consist of outstanding Letters of Credit, Borrower shall provide to Bank cash collateral in an amount equal to (x) if such Letters of Credit are denominated in Dollars, then at least one hundred five percent (105.0%); and (y) if such Letters of Credit are denominated in a Foreign Currency, then at least one hundred ten percent (110.0%), of the Dollar Equivalent of the face amount of all such Letters of Credit plus all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its business judgment), to secure all of the Obligations relating to such Letters of Credit.

4.2 Authorization to File Financing Statements. Borrower hereby authorizes Bank to file financing statements, without notice to Borrower, with all appropriate jurisdictions to perfect or protect Bank's interest or rights hereunder. Any such financing statements may indicate the Collateral as "all assets of the Debtor, other than intellectual property, but including all proceeds thereof" or words of similar effect, or as being of an equal or lesser scope, or with greater detail, all in Bank's discretion.

4.3 Delivery of Additional Documentation Required. Borrower shall from time to time execute and deliver to Bank, at the request of Bank, all financing statements and other documents that Bank may reasonably request, in a form satisfactory to Bank, to perfect and continue the perfection of Bank's security interests in the Collateral and in order to fully consummate all of the transactions contemplated under the Loan Documents.

4.4 Conflict with Security. Notwithstanding that any of the Security is expressed to be payable upon demand, Bank will not make demand under the Security in respect of any Obligations which are not expressed to be payable on demand under the Loan Agreement or other Loan Documents other than the Security unless an Event of Default has occurred. Further, if there is any conflict between the provisions of this Agreement and those of any of the Security then the provisions of this Agreement shall prevail.

5. REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants as follows:

5.1 Due Organization, Authorization; Power and Authority. Borrower, Guarantor and each of their respective Subsidiaries are duly existing and in good standing in their respective jurisdictions of formation and are qualified and licensed to do business and are in good standing in any jurisdiction in which the conduct of their respective business or ownership of property requires that they be qualified except where the failure to do so could not reasonably be expected to have a material adverse effect on Borrower's, Guarantor's or each of their respective Subsidiaries' business. In connection with this Agreement, Borrower has delivered to Bank completed certificates signed by Borrower and Guarantor, respectively, entitled "Perfection Certificate". Borrower represents and warrants to Bank that (a) each of Borrower's and Guarantor's exact legal name is that indicated on the Perfection Certificate and, with respect to the Borrower, on the signature page hereof; (b) each of Borrower and Guarantor is an organization of the type and is organized in the jurisdiction set forth in the Perfection Certificate; (c) the Perfection Certificate accurately sets forth each of Borrower's and Guarantor's organizational identification number or accurately states that Borrower or Guarantor has none; (d) the Perfection Certificate accurately sets forth each of Borrower's and Guarantor's place of business, or, if more than one, its chief executive office as well as each of Borrower's and Guarantor's mailing address (if different than its chief executive office); (e) Borrower and Guarantor (and each of their respective predecessors) has not, in the past five (5) years, changed its jurisdiction of formation, corporate structure or organizational type, or any organizational number assigned by its jurisdiction; and (f) all other information set forth on the Perfection Certificate pertaining to Borrower, Guarantor and each of their respective Subsidiaries is accurate and complete in all material respects (it being understood and agreed that Borrower and Guarantor may from time to time update certain information in the Perfection Certificate after the Effective Date to the extent permitted by one or more specific provisions in this Agreement).

The execution, delivery and performance by Borrower and Guarantor of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with any of Borrower's or Guarantor's organizational documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law, (iii) contravene, conflict or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which Borrower, Guarantor or any of their respective Subsidiaries or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental Approvals which have already been obtained and are in full force and effect (or are being obtained pursuant to Section 6.1(b))) or (v) conflict with, contravene, constitute a default or breach under, or result in or permit the termination or acceleration of, any material agreement by which Borrower or Guarantor is bound. Neither of Borrower nor Guarantor is in default under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to have a material adverse effect on Borrower's or Guarantor's business.

5.2 Collateral. Borrower has good title to, rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien hereunder, free and clear of any and all Liens except Permitted Liens. Borrower has no Collateral Accounts at or with any bank or financial institution other than Bank or Bank's Affiliates except for the Collateral Accounts described in the Perfection Certificate delivered to Bank in connection herewith and which Borrower has taken such actions as are necessary to give Bank a perfected security interest therein, pursuant to the terms of Section 6.6(b). The Accounts are bona fide, existing obligations of the Account Debtors.

The Collateral is not in the possession of any third party bailee (such as a warehouse) except as otherwise provided in the Perfection Certificate. None of the components of the Collateral shall be maintained at locations other than as provided in the Perfection Certificate or as permitted pursuant to Section 7.2.

Borrower is the sole owner of the Intellectual Property which it owns or purports to own except for (a) non-exclusive licenses granted to its customers in the ordinary course of business, and licenses of Intellectual Property that could not result in a legal transfer of title of the licensed property that may be exclusive in respects other than territory and that may be exclusive as to territory only as to discrete geographical areas outside of the United States, (b) over-the-counter software that is commercially available to the public, and (c) material Intellectual Property licensed to Borrower and noted on the Perfection Certificate. To the best of Borrower's knowledge, each Patent which it owns or purports to own and which is material to Borrower's business is valid and enforceable, and no part of the Intellectual Property which Borrower owns or purports to own and which is material to Borrower's business has been judged invalid or unenforceable, in whole or in part. To the best of Borrower's knowledge, no claim has been made that any part of the Intellectual Property violates the rights of any third party except to the extent such claim would not reasonably be expected to have a material adverse effect on Borrower's business.

Except as noted on the Perfection Certificate, Borrower is not a party to, nor is it bound by, any Restricted License.

5.3 Litigation. There are no actions or proceedings pending or, to the knowledge of any Responsible Officer, threatened in writing by or against Borrower, Guarantor or any of their respective Subsidiaries involving more than, individually or in the aggregate, Fifty Thousand Dollars (\$50,000).

5.4 Financial Statements; Financial Condition. All consolidated financial statements for Borrower, Guarantor and any of their respective Subsidiaries delivered to Bank fairly present in all material respects Borrower's consolidated financial condition and Borrower's consolidated results of operations. There has not been any material deterioration in Borrower's consolidated financial condition since the date of the most recent financial statements submitted to Bank.

5.5 Solvency. The fair salable value of Borrower's consolidated assets (including goodwill minus disposition costs) exceeds the fair value of Borrower's liabilities; Borrower is not left with unreasonably small capital after the transactions in this Agreement; and Borrower is able to pay its debts (including trade debts) as they mature.

5.6 Regulatory Compliance. Borrower is not an “investment company” or a company “controlled” by an “investment company” under the Investment Company Act of 1940, as amended. Borrower is not engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Neither Borrower nor Guarantor has violated any laws, ordinances or rules, the violation of which could reasonably be expected to have a material adverse effect on its business. None of Borrower’s, Guarantor’s or any of their respective Subsidiaries’ properties or assets has been used by Borrower, Guarantor or any Subsidiary or, to the best of Borrower’s knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than legally. Borrower, Guarantor and each of their respective Subsidiaries have obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to continue their respective businesses as currently conducted except where failure to obtain or make such consents, declarations, filings or notices would not reasonably be expected to have a material adverse effect on their respective businesses.

5.7 Subsidiaries; Investments. Borrower does not own any stock, partnership, or other ownership interest or other equity securities except for Permitted Investments.

5.8 Tax Returns and Payments; Pension Contributions. Borrower, Guarantor and each Subsidiary have timely filed or have obtained extensions for filing all required tax returns and reports, and Borrower, Guarantor and each Subsidiary have timely paid all foreign, federal, state, provincial and local taxes, assessments, deposits and contributions owed by Borrower, Guarantor and each Subsidiary except (a) to the extent such taxes are being contested in good faith by appropriate proceedings promptly instituted and diligently conducted, so long as such reserve or other appropriate provision, if any, as shall be required in conformity with GAAP shall have been made therefor, or (b) if such taxes, assessments, deposits and contributions do not, individually or in the aggregate, exceed Fifty Thousand Dollars (\$50,000).

To the extent Borrower, Guarantor or any Subsidiary defers payment of any contested taxes, Borrower shall (i) notify Bank in writing of the commencement of, and any material development in, the proceedings, and (ii) post bonds or takes any other steps required to prevent the Governmental Authority levying such contested taxes from obtaining a Lien upon any of the Collateral that is other than a “Permitted Lien.” Borrower is unaware of any claims or adjustments proposed for any of Borrower’s or Guarantor’s prior tax years which could result in additional taxes becoming due and payable by Borrower or Guarantor in excess of Fifty Thousand Dollars (\$50,000). Each of Borrower and Guarantor has paid all amounts necessary to fund all their respective present pension, profit sharing and deferred compensation plans in accordance with their terms, and neither Borrower nor Guarantor has withdrawn from participation in, or has permitted partial or complete termination of, or has permitted the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower or Guarantor.

5.9 Use of Proceeds. Borrower shall use the proceeds of the Credit Extensions solely as working capital, and to fund its general business requirements and not for personal, family, household or agricultural purposes.

5.10 Full Disclosure. No written representation, warranty or other statement of Borrower or Guarantor in any certificate or written statement given to Bank, as of the date such representation, warranty, or other statement was made, taken together with all such written certificates and written statements given to Bank, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading (it being recognized by Bank that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

5.11 Definition of “Knowledge.” For purposes of the Loan Documents, whenever a representation or warranty is made to Borrower’s knowledge or awareness, to the “best of” Borrower’s knowledge, or with a similar qualification, knowledge or awareness means the actual knowledge, after reasonable investigation, of any Responsible Officer.

6. AFFIRMATIVE COVENANTS

Borrower shall do all of the following:

6.1 Government Compliance.

(a) Maintain its, Guarantor's and all their respective Subsidiaries' organizational existence and good standing in their respective jurisdictions of formation and maintain qualification in each jurisdiction in which the failure to so qualify would reasonably be expected to have a material adverse effect on Borrower's or Guarantor's business or operations. Borrower shall comply, and have Guarantor and each Subsidiary comply, in all material respects, with all laws, ordinances and regulations to which they are subject, noncompliance with which could have a material adverse effect on Borrower's or Guarantor's business or operations.

(b) Obtain all of the Governmental Approvals necessary for the performance by Borrower of its obligations under the Loan Documents to which it is a party and the grant of a security interest to Bank in all of its property. Borrower shall promptly provide copies of any such obtained Governmental Approvals to Bank.

6.2 Financial Statements, Reports, Certificates. Provide Bank with the following:

(a) Monthly Financial Statements. As soon as available, but no later than thirty (30) days after the last day of each month, a company prepared consolidated and consolidating balance sheet and income statement covering Borrower's, Guarantor's and each of their respective Subsidiary's operations for such month certified by a Responsible Officer and in a form acceptable to Bank (the "**Monthly Financial Statements**");

(b) Monthly Compliance Certificate. Within thirty (30) days after the last day of each month and together with the Monthly Financial Statements, a duly completed Compliance Certificate signed by a Responsible Officer, certifying that as of the end of such month, Borrower was in full compliance with all of the terms and conditions of this Agreement, and setting forth calculations showing compliance with the financial covenants set forth in this Agreement and such other information as Bank may reasonably request;

(c) Annual Operating Budget and Financial Projections. Within forty five (45) days after the end of each fiscal year of Borrower, (i) annual operating budgets (including income statements, balance sheets and cash flow statements, by month) for the upcoming fiscal year of Borrower, and (ii) annual financial projections for the following fiscal year (on a quarterly basis) as approved by Borrower's board of directors, together with any related business forecasts used in the preparation of such annual financial projections;

(d) Annual Audited Financial Statements. As soon as available, but no later than one hundred eighty (180) days after the last day of Borrower's fiscal year, audited consolidated financial statements of Borrower and Guarantor prepared under GAAP, consistently applied, together with an unqualified opinion on the financial statements from an independent audit firm reasonably acceptable to Bank;

(e) Other Statements. Within five (5) days of delivery, copies of all statements, reports and notices made available to Borrower's security holders or to any holders of Subordinated Debt;

(f) SEC Filings. In the event that Borrower becomes subject to the reporting requirements under the Exchange Act within five (5) days of filing, copies of all periodic and other reports, proxy statements and other materials filed by Borrower with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange, or distributed to its shareholders, as the case may be. Documents required to be delivered pursuant to the terms hereof (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower posts such documents, or provides a link thereto, on Borrower's website on the Internet at Borrower's website address; provided, however, Borrower shall promptly notify Bank in writing (which may be by electronic mail) of the posting of any such documents;

(g) Legal Action Notice. A prompt report of any legal actions pending or threatened in writing against Borrower, Guarantor or any of their respective Subsidiaries that could result in damages or costs to Borrower, Guarantor or any of their respective Subsidiaries of, individually or in the aggregate, One Hundred Thousand Dollars (\$100,000) or more; and

(h) Other Financial Information. Other financial information reasonably requested by Bank.

6.3 Inventory; Returns. Keep all Inventory in good and marketable condition, free from material defects. Returns and allowances between Borrower and its Account Debtors shall follow Borrower's customary practices as they exist at the Effective Date. Borrower must promptly notify Bank of all returns, recoveries, disputes and claims that involve more than One Hundred Thousand Dollars (\$100,000).

6.4 Taxes; Pensions. Timely file, and require Guarantor and each Subsidiary to timely file, all required material tax returns and reports and extensions thereof and timely pay, and require Guarantor and each Subsidiary to timely pay, all material foreign, federal, state, provincial and local taxes, assessments, deposits and contributions owed by Borrower, Guarantor and each of their respective Subsidiaries, except for deferred payment of any taxes contested pursuant to the terms of Section 5.9 hereof, and shall deliver to Bank, on demand, appropriate certificates attesting to such payments, and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms.

6.5 Insurance.

(a) Keep its business and the Collateral insured for risks and in amounts standard for companies in Borrower's industry and location and as Bank may reasonably request. Insurance policies shall be in a form, with financially sound and reputable insurance companies that are not Affiliates of Borrower, and in amounts that are satisfactory to Bank. All property policies shall have a lender's loss payable endorsement showing Bank as lender loss payee. All liability policies shall show, or have endorsements showing, Bank as an additional insured. Bank shall be named as lender loss payee and/or additional insured with respect to any such insurance providing coverage in respect of any Collateral.

(b) Ensure that proceeds payable under any property policy are, at Bank's option, payable to Bank on account of the Obligations. Notwithstanding the foregoing, (a) so long as no Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any casualty policy up to Fifty Thousand Dollars (\$50,000) with respect to any loss, but not exceeding One Hundred Thousand Dollars (\$100,000) in the aggregate for all losses under all casualty policies in any one year, toward the replacement or repair of destroyed or damaged property; provided that any such replaced or repaired property (i) shall be of equal or like value as the replaced or repaired Collateral and (ii) shall be deemed Collateral in which Bank has been granted a first priority security interest subject to Permitted Liens, and (b) after the occurrence and during the continuance of an Event of Default, all proceeds payable under such casualty policy shall, at the option of Bank, be payable to Bank on account of the Obligations.

(c) At Bank's request, Borrower shall deliver certified copies of insurance policies and evidence of all premium payments. Each provider of any such insurance required under this Section 6.5 shall agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to Bank, that it will give Bank twenty (20) days prior written notice before any such policy or policies shall be materially altered or canceled (or with respect to any premiums, ten (10) days). If Borrower fails to obtain insurance as required under this Section 6.5 or to pay any amount or furnish any required proof of payment to third persons and Bank, Bank may make all or part of such payment or obtain such insurance policies required in this Section 6.5, and take any action under the policies Bank deems prudent.

6.6 Operating Accounts.

(a) Maintain all of its, Guarantor's and all of their respective Subsidiaries' primary U.S. operating and other US deposit accounts and securities accounts with Bank and Bank's Affiliates within 45 days of the Closing Date.

(b) Provide Bank five (5) days prior written notice before establishing any Collateral Account at or with any bank or financial institution other than Bank or Bank's Affiliates. For each Collateral Account that Borrower at any time maintains, Borrower shall cause the applicable bank or financial institution (other than Bank) at or with which any Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument under applicable Canadian law with respect to such Collateral Account to perfect Bank's Lien in such Collateral Account in accordance with the terms hereunder which Control Agreement may not be terminated without the prior written consent of Bank. The provisions of the previous sentence shall not apply to deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of Borrower's employees and identified to Bank by Borrower as such.

6.7 Intentionally Omitted.

6.8 Protection of Intellectual Property Rights. (a) Protect, defend and maintain the validity and enforceability of its Intellectual Property material to Borrower's business; (b) promptly advise Bank in writing of material infringements or any other event that could reasonably be expected to materially and adversely affect the value of its Intellectual Property; and (c) not allow any Intellectual Property material to Borrower's business to be abandoned, forfeited or dedicated to the public without Bank's written consent.

6.9 Litigation Cooperation. From the date hereof and continuing through the termination of this Agreement, make available to Bank, without expense to Bank, Borrower and its officers, employees and agents and Borrower's books and records, to the extent that Bank may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Bank with respect to any Collateral or relating to Borrower.

6.10 Access to Collateral; Books and Records. Allow Bank, or its agents, at reasonable times, on three (3) Business Day's notice (provided no notice is required if an Event of Default has occurred and is continuing), to inspect the Collateral and audit and copy Borrower's Books. Such inspections or audits shall be conducted no more often than once every twelve (12) months unless an Event of Default has occurred and is continuing in which case such inspections and audits shall occur as often as Bank shall determine is necessary. The foregoing inspections and audits shall be at Borrower's expense, and the charge therefor shall be Eight Hundred Fifty Dollars (\$850) per person per day (or such higher amount as shall represent Bank's then-current standard charge for the same), plus reasonable out-of-pocket expenses. In the event Borrower and Bank schedule an audit more than ten (10) days in advance, and Borrower cancels or seeks to reschedule the audit with less than ten (10) days written notice to Bank, then (without limiting any of Bank's rights or remedies), Borrower shall pay Bank a fee of One Thousand Dollars (\$1,000) plus any out-of-pocket expenses incurred by Bank to compensate Bank for the anticipated costs and expenses of the cancellation or rescheduling.

6.11 Formation or Acquisition of Subsidiaries. Notwithstanding and without limiting the negative covenants contained in Sections 7.3 and 7.7 hereof, at the time that Borrower or Guarantor forms any direct or indirect Subsidiary or acquires any direct or indirect Subsidiary after the Effective Date, Borrower and Guarantor shall (a) cause such new Subsidiary to provide to Bank a joinder to the Loan Agreement to cause such Subsidiary to become a co-borrower hereunder or a Guaranty, together with such appropriate financing statements and/or Control Agreements, all in form and substance satisfactory to Bank (including being sufficient to grant Bank a first priority Lien (subject to Permitted Liens) in and to the assets of such newly formed or acquired Subsidiary), (b) provide to Bank appropriate certificates and powers and financing statements, pledging all of the direct or beneficial ownership interest in such new Subsidiary, in form and substance satisfactory to Bank, and (c) provide to Bank all other documentation in form and substance satisfactory to Bank, including one or more opinions of counsel satisfactory to Bank, which in its opinion is appropriate with respect to the execution and delivery of the applicable documentation referred to above. Any document, agreement, or instrument executed or issued pursuant to this Section 6.11 shall be a Loan Document.

6.12 Further Assurances. Execute any further instruments and take further action as Bank reasonably requests to perfect or continue Bank's Lien in the Collateral or to effect the purposes of this Agreement. Deliver to Bank, within five (5) days after the same are sent or received, copies of all correspondence, reports, documents and other filings with any Governmental Authority that could reasonably be expected to have a material effect on the operations of Borrower, Guarantor or any of their respective Subsidiaries.

7. NEGATIVE COVENANTS

Borrower shall not do any of the following without Bank's prior written consent:

7.1 Dispositions. Convey, sell, lease, transfer, assign, or otherwise dispose of (collectively, "**Transfer**"), or permit Guarantor or any of their respective Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (a) of Inventory in the ordinary course of business; (b) of worn-out, surplus or obsolete Equipment that is, in the reasonable judgment of Borrower, no longer economically practicable to maintain or useful in the ordinary course of business of Borrower or Guarantor; (c) consisting of Permitted Liens and Permitted Investments; (d) consisting of the sale or issuance of any stock of Borrower or Guarantor permitted under Section 7.2 of this Agreement; (e) consisting of Borrower's or Guarantor's use or transfer of money or Cash Equivalents in the ordinary course of its business for the payment of ordinary course business expenses in a manner that is not prohibited by the terms of this Agreement or the other Loan Documents; (f) of non-exclusive licenses for the use of the property of Borrower, Guarantor or any of their respective Subsidiaries in the ordinary course of business and licenses that could not result in a legal transfer of title of the licensed property but that may be exclusive in respects other than territory and that may be exclusive as to territory only as to discreet geographical areas outside of Canada and the United States; and (g) transfers between Borrower and Guarantor.

7.2 Changes in Business, Management, Ownership or Business Locations. (a) Engage in or permit Guarantor or any of their respective Subsidiaries to engage in any business other than the businesses currently engaged in by Borrower, Guarantor and each such Subsidiary, as applicable, or reasonably related thereto; (b) liquidate or dissolve; or (c) (i) fail to provide notice to Bank of any Key Person departing from or ceasing to be employed by Borrower within five (5) Business Days after his or her departure from Borrower; or (ii) enter into any transaction or series of related transactions in which the stockholders of Borrower who were not stockholders immediately prior to the first such transaction own more than forty-nine percent (49%) of the voting stock of Borrower immediately after giving effect to such transaction or related series of such transactions (other than by the sale of Borrower's equity securities in a public offering or to Guarantor or to venture capital or private equity investors so long as, in the case of the sale of Borrower's equity securities venture capital or private equity investors Borrower identifies to Bank the venture capital or private equity investors prior to the closing of the transaction and provides to Bank a description of the material terms of the transaction).

Borrower shall not, without at least fifteen (15) days prior written notice to Bank: (1) add any new offices or business locations, including warehouses (unless such new offices or business locations contain less than Fifty Thousand Dollars (\$50,000) in Borrower's assets or property) or deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Fifty Thousand Dollars (\$50,000) to a bailee at a location other than to a bailee and at a location already disclosed in the Perfection Certificate, (2) change its jurisdiction of organization, (3) change its organizational structure or type, (4) change its legal name, or (5) change any organizational number (if any) assigned by its jurisdiction of organization. If Borrower intends to deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Fifty Thousand Dollars (\$50,000) to a bailee, and Bank and such bailee are not already parties to a bailee agreement governing both the Collateral and the location to which Borrower intends to deliver the Collateral, then Borrower will first receive the written consent of Bank, and such bailee shall execute and deliver a bailee agreement in form and substance satisfactory to Bank.

7.3 Mergers, Amalgamations or Acquisitions. Merge, amalgamate or consolidate, or permit any of its Subsidiaries to merge, amalgamate or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person (including, without limitation, by the formation of any Subsidiary). Borrower or a Subsidiary may merge, amalgamate or consolidate into another Subsidiary or into Guarantor or Borrower.

7.4 Indebtedness. Create, incur, assume, or be liable for any Indebtedness, or permit Guarantor or any Subsidiary to do so, other than Permitted Indebtedness.

7.5 Encumbrance. Create, incur, allow, or suffer any Lien on any of its property, or assign or convey any right to receive income, including the sale of any Accounts, or permit Guarantor or any Subsidiary to do so, except for Permitted Liens, permit any Collateral not to be subject to the first priority security interest granted herein, or enter into any agreement, document, instrument or other arrangement (except with or in favor of Bank)

with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower, Guarantor or any Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower's, Guarantor's or any Subsidiary's Intellectual Property, except customary anti-assignment provisions in contracts or other agreements or as is otherwise permitted in Section 7.1 hereof and the definition of "Permitted Liens" herein.

7.6 Maintenance of Collateral Accounts. Maintain any Collateral Account except pursuant to the terms of Section 6.6(b) hereof.

7.7 Distributions; Investments. (a) Pay any dividends or make any distribution or payment or redeem, retire or purchase any capital stock provided that (i) Borrower may convert any of its convertible securities into other securities pursuant to the terms of such convertible securities or otherwise in exchange thereof, (ii) Borrower may pay dividends solely in common stock.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower, except for transactions that are in the ordinary course of Borrower's business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated Person, (ii) equity financings provided that such transactions are permitted pursuant to the terms of Section 7.2 hereof, (iii) transactions permitted pursuant to the terms of the second sentence of Section 7.3 hereof, (iv) Permitted Investments, (v) debt financings from Borrower's investors so long as all such Indebtedness is Subordinated Debt, and (vi) transactions between Borrower and Guarantor.

7.9 Subordinated Debt. (a) Make or permit any payment on any Subordinated Debt, except under the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt which would increase the amount thereof, provide for earlier or greater principal, interest, or other payments thereon, or adversely affect the subordination thereof to Obligations owed to Bank.

8. EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an "Event of Default") under this Agreement:

8.1 Payment Default. Borrower fails to (a) make any payment of principal or interest on any Credit Extension when due, or (b) pay any other Obligations within three (3) Business Days after such Obligations are due and payable (which three (3) Business Day cure period shall not apply to payments due on the Tranche A Growth Capital Maturity Date or Tranche B Growth Capital Maturity Date). During the cure period, the failure to make or pay any payment specified under clause (b) hereunder is not an Event of Default (but no Credit Extension will be made during the cure period);

8.2 Covenant Default.

(a) Borrower fails or neglects to perform any obligation in Sections 6.2, 6.4, 6.5, 6.6, 6.10 or 6.11 or violates any covenant in Section 7; or

(b) Borrower fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents, and as to any default (other than those specified in this Section 8) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within ten (10) days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) day period or cannot after diligent attempts by Borrower be cured within such ten (10) day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to cure the default shall not be deemed an Event of Default (but no Credit Extensions shall be made during such cure period). Cure periods provided under this section shall not apply, among other things, to financial covenants or any other covenants set forth in clause (a) above;

8.3 Material Adverse Change. A Material Adverse Change occurs;

8.4 Attachment; Levy; Restraint on Business.

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of Borrower, Guarantor or of any entity under the control of Borrower or Guarantor (including a Subsidiary) in excess of Fifty Thousand Dollars (\$50,000), or (ii) a notice of lien or levy is filed against any of Borrower's or Guarantor's assets by any Governmental Authority, and the same under subclauses (i) and (ii) hereof are not, within ten (10) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Credit Extensions shall be made during any ten (10) day cure period; or

(b) (i) any material portion of Borrower's or Guarantor's assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents Borrower or Guarantor from conducting all or any material part of its business;

8.5 Insolvency. (a) Borrower or Guarantor is unable to pay its debts (including trade debts) as they become due or otherwise becomes insolvent; (b) Borrower or Guarantor begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Borrower or Guarantor and is not dismissed or stayed within thirty (30) days (but no Credit Extensions shall be made while any of the conditions described in clause (a) exist and/or until any Insolvency Proceeding is dismissed);

8.6 Other Agreements. There is, under any agreement to which Borrower or Guarantor is a party with a third party or parties, (a) any default resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount individually or in the aggregate in excess of Fifty Thousand Dollars (\$50,000); or (b) any breach or default by Borrower or Guarantor, the result of which could have a material adverse effect on Borrower's or Guarantor's business;

8.7 Judgments; Penalties. One or more fines, penalties or final judgments, orders or decrees for the payment of money in an amount, individually or in the aggregate, of at least Fifty Thousand Dollars (\$50,000) (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be rendered against Borrower or Guarantor by any Governmental Authority, and the same are not, within ten (10) days after the entry, assessment or issuance thereof, discharged, satisfied, or paid, or after execution thereof, stayed or bonded pending appeal, or such judgments are not discharged prior to the expiration of any such stay (provided that no Credit Extensions will be made prior to the satisfaction, payment, discharge, stay, or bonding of such fine, penalty, judgment, order or decree);

8.8 Misrepresentations. Borrower, Guarantor or any Person acting for Borrower or Guarantor makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Bank or to induce Bank to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made;

8.9 Subordinated Debt. Any document, instrument, or agreement evidencing the subordination of any Subordinated Debt shall for any reason be revoked or invalidated or otherwise cease to be in full force and effect, any Person shall be in breach of the subordination terms thereof or contest in any manner the validity or enforceability thereof or deny that it has any further liability or obligation thereunder, or the Obligations shall for any reason be subordinated or shall not have the priority contemplated by this Agreement;

8.10 Guaranty. (a) Any guaranty of any Obligations terminates or ceases for any reason to be in full force and effect; (b) any guarantor of any obligations (a "guarantor") does not perform any obligation or covenant under any guaranty of the Obligations; (c) any circumstance described in Sections 8.3, 8.4, 8.5, 8.7, or 8.8 occurs with respect to any guarantor, or (d) the liquidation, winding up, or termination of existence of any guarantor; or (e) (i) a material impairment in the perfection or priority of Bank's Lien in the collateral provided by any guarantor or in the value of such collateral or (ii) a material adverse change in the general affairs, management, results of operation, condition (financial or otherwise) or the prospect of repayment of the Obligations occurs with respect to any guarantor; or

8.11 Governmental Approvals. Any Governmental Approval shall have been (a) revoked, rescinded, suspended, modified in a materially adverse manner or not renewed in the ordinary course for a full term or (b) subject to any decision by a Governmental Authority that designates a hearing with respect to any applications for renewal of any of such Governmental Approval or that could result in the Governmental Authority taking any of the actions described in clause (a) above, and as to (a) or (b) above, such decision or such revocation, rescission, suspension, modification or non-renewal (i) cause, or could reasonably be expected to cause, a Material Adverse Change, or (ii) materially adversely affects the legal qualifications of Borrower, Guarantor or any of their respective Subsidiaries to hold such Governmental Approval in any applicable jurisdiction and such revocation, rescission, suspension, modification or non-renewal could reasonably be expected to affect the status of or legal qualifications of Borrower or Guarantor to hold any Governmental Approval in any other jurisdiction.

9. BANK'S RIGHTS AND REMEDIES

9.1 Rights and Remedies. Upon the occurrence and during the continuance of an Event of Default, Bank may, without notice or demand, do any or all of the following:

- (a) declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations are immediately due and payable without any action by Bank);
- (b) stop advancing money or extending credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Bank;
- (c) demand that Borrower (i) deposit cash with Bank in an amount equal to one hundred five percent (105%) if the Dollar Equivalent is denominated in U.S. dollars or one hundred ten percent (110%) if the Dollar Equivalent is denominated in Foreign Currency of the Dollar Equivalent of the aggregate face amount of all Letters of Credit remaining undrawn (plus all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its good faith business judgment)), to secure all of the Obligations relating to such Letters of Credit, as collateral security for the repayment of any future drawings under such Letters of Credit, and Borrower shall forthwith deposit and pay such amounts, and (ii) pay in advance all letter of credit fees scheduled to be paid or payable over the remaining term of any Letters of Credit;
- (d) terminate any FX Contracts;
- (e) verify the amount of, demand payment of and performance under, and collect any Accounts and General Intangibles, settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Bank considers advisable, and notify any Person owing Borrower money of Bank's security interest in such funds;
- (f) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral. Borrower shall assemble the Collateral if Bank requests and make it available as Bank designates. Bank may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Borrower grants Bank a license to enter and occupy any of its premises, without charge, to exercise any of Bank's rights or remedies;
- (g) apply to the Obligations any (i) balances and deposits of Borrower it holds, or (ii) any amount held by Bank owing to or for the credit or the account of Borrower;
- (h) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral. Bank is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's labels, Patents, Copyrights, mask works, rights of use of any name, trade secrets, trade names, Trademarks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Bank's exercise of its rights under this Section, Borrower's rights under all licenses and all franchise agreements inure to Bank's benefit;

(i) place a "hold" on any account maintained with Bank and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(j) apply for the appointment of a receiver, trustee, liquidator or conservator of the Collateral, without notice and without regard to the adequacy of the security for the Obligations and without regard to the solvency of Borrower, any guarantor or any other Person liable for any of the obligations;

(k) demand and receive possession of Borrower's Books; and

(l) exercise all rights and remedies available to Bank under the Loan Documents or at law or equity, including all remedies provided under the PPSA (including disposal of the Collateral pursuant to the terms thereof).

9.2 Power of Attorney. Borrower hereby irrevocably appoints Bank as its lawful attorney-in-fact, exercisable upon the occurrence and during the continuance of an Event of Default, to: (a) endorse Borrower's name on any checks or other forms of payment or security; (b) sign Borrower's name on any invoice or bill of lading for any Account or drafts against Account Debtors; (c) settle and adjust disputes and claims about the Accounts directly with Account Debtors, for amounts and on terms Bank determines reasonable; (d) make, settle, and adjust all claims under Borrower's insurance policies; (e) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; and (f) transfer the Collateral into the name of Bank or a third party as the PPSA permits. Borrower hereby appoints Bank as its lawful attorney-in-fact to sign Borrower's name on any documents necessary to perfect or continue the perfection of Bank's security interest in the Collateral regardless of whether an Event of Default has occurred until all Obligations have been satisfied in full and Bank is under no further obligation to make Credit Extensions hereunder. Bank's foregoing appointment as Borrower's attorney in fact, and all of Bank's rights and powers, coupled with an interest, are irrevocable until all Obligations have been fully repaid and performed and Bank's obligation to provide Credit Extensions terminates.

9.3 Protective Payments. If Borrower fails to obtain the insurance called for by Section 6.5 or fails to pay any premium thereon or fails to pay any other amount which Borrower is obligated to pay under this Agreement or any other Loan Document or which may be required to preserve the Collateral, Bank may obtain such insurance or make such payment, and all amounts so paid by Bank are Bank Expenses and immediately due and payable, bearing interest at the then highest rate applicable to the Obligations, and secured by the Collateral. Bank will make reasonable efforts to provide Borrower with notice of Bank obtaining such insurance at the time it is obtained or within a reasonable time thereafter. No payments by Bank are deemed an agreement to make similar payments in the future or Bank's waiver of any Event of Default.

9.4 Application of Payments and Proceeds Upon Default. If an Event of Default has occurred and is continuing, Bank shall have the right to apply in any order any funds in its possession, whether from Borrower account balances, payments, proceeds realized as the result of any collection of Accounts or other disposition of the Collateral, or otherwise, to the Obligations. Bank shall pay any surplus to Borrower by credit to the Designated Deposit Account or to other Persons legally entitled thereto; Borrower shall remain liable to Bank for any deficiency. If Bank, directly or indirectly, enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Bank shall have the option, exercisable at any time, of either reducing the Obligations by the principal amount of the purchase price or deferring the reduction of the Obligations until the actual receipt by Bank of cash therefor.

9.5 Bank's Liability for Collateral. So long as Bank complies with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Bank, Bank shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Borrower bears all risk of loss, damage or destruction of the Collateral.

9.6 No Waiver; Remedies Cumulative. Bank's failure, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of Bank thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by the party granting the waiver and then is only effective for the specific instance and purpose for which it is given. Bank's rights and remedies under this Agreement and the other Loan Documents are cumulative. Bank has all rights and remedies provided under the PPSA, the Code, by law, or in equity. Bank's exercise of one right or remedy is not an election and shall not preclude Bank from exercising any other remedy under this Agreement or other remedy available at law or in equity, and Bank's waiver of any Event of Default is not a continuing waiver. Bank's delay in exercising any remedy is not a waiver, election, or acquiescence.

9.7 Demand Waiver. Borrower waives demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Bank on which Borrower is liable.

10. NOTICES

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by electronic mail or facsimile transmission; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, facsimile number, or email address indicated below. Bank or Borrower may change its mailing or electronic mail address or facsimile number by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to Borrower: AQUINOX PHARMACEUTICALS INC.
5600 Parkwood Way, Suite 430
Richmond, BC V6V 2M2
Attn: Kamran Alam – VP Finance & CFO
Fax: (778) 331- 4486
Email: Kalam@aqxpharma.com

If to Bank: Silicon Valley Bank
901 5th Avenue, Suite 3900
Seattle, WA 98164
Attn: Dave Sanders – Vice President
Fax: (206) 624-0374
Email: dsanders@svb.com

11. CHOICE OF LAW AND VENUE

This Agreement shall be governed by, and construed in accordance with, the internal laws of the Province of British Columbia and the federal laws of Canada applicable therein, without regard to principles of conflicts of law. Each of Borrower and Bank hereby submits to the non-exclusive jurisdiction of the courts of British Columbia.

12. GENERAL PROVISIONS

12.1 Termination Prior to Growth Capital Maturity Date; Survival. All covenants, representations and warranties made in this Agreement continue in full force until this Agreement has terminated pursuant to its terms and all Obligations have been satisfied. So long as Borrower has satisfied the Obligations (other than inchoate indemnity obligations, and any other obligations which, by their terms, are to survive the termination of this Agreement, and any Obligations under Bank Services Agreements that are cash collateralized in accordance with

Section 4.1 of this Agreement), this Agreement may be terminated prior to the Growth Capital Maturity Date by Borrower, effective three (3) Business Days after written notice of termination is given to Bank. Those obligations that are expressly specified in this Agreement as surviving this Agreement's termination shall continue to survive notwithstanding this Agreement's termination.

12.2 Successors and Assigns. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not assign this Agreement or any rights or obligations under it without Bank's prior written consent (which may be granted or withheld in Bank's discretion). Bank has the right, without the consent of or notice to Borrower, to sell, transfer, assign, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights, and benefits under this Agreement and the other Loan Documents (other than the Warrant, as to which assignment, transfer and other such actions are governed by the terms thereof).

12.3 Indemnification. Borrower agrees to indemnify, defend and hold Bank and its directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing Bank (each, an "**Indemnified Person**") harmless against: (i) all obligations, demands, claims, and liabilities (collectively, "**Claims**") claimed or asserted by any other party in connection with the transactions contemplated by the Loan Documents; and (ii) all losses or expenses (including Bank Expenses) in any way suffered, incurred, or paid by such Indemnified Person as a result of, following from, consequential to, or arising from transactions between Bank and Borrower (including reasonable attorneys' fees and expenses), except for Claims and/or losses directly caused by such Indemnified Person's gross negligence or willful misconduct.

12.4 Right of Set-Off. Borrower hereby grants to Bank, a lien, security interest and right of setoff as security for all Obligations to Bank, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Bank or any entity under the control of Bank (including a Bank subsidiary) or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Bank may set off the same or any part thereof and apply the same to any liability or obligation of Borrower even though unmatured and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE BANK TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER, ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

12.5 Time of Essence. Time is of the essence for the performance of all Obligations in this Agreement.

12.6 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.7 Correction of Loan Documents. Bank may correct patent errors and fill in any blanks in the Loan Documents consistent with the agreement of the parties.

12.8 Amendments in Writing; Waiver; Integration. No purported amendment or modification of any Loan Document, or waiver, discharge or termination of any obligation under any Loan Document, shall be enforceable or admissible unless, and only to the extent, expressly set forth in a writing signed by the party against which enforcement or admission is sought. Without limiting the generality of the foregoing, no oral promise or statement, nor any action, inaction, delay, failure to require performance or course of conduct shall operate as, or evidence, an amendment, supplement or waiver or have any other effect on any Loan Document. Any waiver granted shall be limited to the specific circumstance expressly described in it, and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver. The Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of the Loan Documents merge into the Loan Documents.

12.9 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement.

12.10 Confidentiality. In handling any confidential information, Bank shall exercise the same degree of care that it exercises for its own proprietary information, but disclosure of information may be made: (a) to Bank's Subsidiaries or Affiliates (such Subsidiaries and Affiliates, together with Bank, collectively, "**Bank Entities**"); (b) to prospective transferees or purchasers of any interest in the Credit Extensions (provided, however, Bank shall use its best efforts to obtain any prospective transferee's or purchaser's agreement to the terms of this provision); (c) as required by law, regulation, subpoena, or other order; (d) to Bank's regulators or as otherwise required in connection with Bank's examination or audit; (e) as Bank considers appropriate in exercising remedies under the Loan Documents; and (f) to third-party service providers of Bank so long as such service providers have executed a confidentiality agreement with Bank with terms no less restrictive than those contained herein. Confidential information does not include information that is either: (i) in the public domain or in Bank's possession when disclosed to Bank, or becomes part of the public domain (other than as a result of its disclosure by Bank in violation of this Agreement) after disclosure to Bank; or (ii) disclosed to Bank by a third party, if Bank does not know that the third party is prohibited from disclosing the information.

Bank Entities may use anonymous forms of confidential information for aggregate datasets, for analyses or reporting, and for any other uses not expressly prohibited in writing by Borrower. The provisions of the immediately preceding sentence shall survive termination of this Agreement.

12.11 Attorneys' Fees, Costs and Expenses. In any action or proceeding between Borrower and Bank arising out of or relating to the Loan Documents, the prevailing party shall be entitled to recover its reasonable attorneys' fees and other costs and expenses incurred, in addition to any other relief to which it may be entitled.

12.12 Electronic Execution of Documents. The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

12.13 Captions. The headings used in this Agreement are for convenience only and shall not affect the interpretation of this Agreement.

12.14 Construction of Agreement. The parties mutually acknowledge that they and their attorneys have participated in the preparation and negotiation of this Agreement. In cases of uncertainty this Agreement shall be construed without regard to which of the parties caused the uncertainty to exist.

12.15 Relationship. The relationship of the parties to this Agreement is determined solely by the provisions of this Agreement. The parties do not intend to create any agency, partnership, joint venture, trust, fiduciary or other relationship with duties or incidents different from those of parties to an arm's-length contract.

12.16 Third Parties. Nothing in this Agreement, whether express or implied, is intended to: (a) confer any benefits, rights or remedies under or by reason of this Agreement on any persons other than the express parties to it and their respective permitted successors and assigns; (b) relieve or discharge the obligation or liability of any person not an express party to this Agreement; or (c) give any person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

13. DEFINITIONS

13.1 Definitions. As used in the Loan Documents, the word "shall" is mandatory, the word "may" is permissive, the word "or" is not exclusive, the words "includes" and "including" are not limiting, the singular includes the plural, and numbers denoting amounts that are set off in brackets are negative. As used in this Agreement, the following capitalized terms have the following meanings:

"**Account**" has the meaning set forth in the Security Agreement.

“**Account Debtor**” means any Person who owes funds to Borrower.

“**Affiliate**” is, with respect to any Person, each other Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person’s senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person’s managers and members.

“**Agreement**” is defined in the preamble hereof.

“**Authorized Signer**” is any individual described in Borrower’s Borrowing Resolution who is authorized to execute the Loan Documents, including any Advance request, on behalf of Borrower.

“**Bank**” is defined in the preamble hereof.

“**Bank Entities**” is defined in Section 12.10.

“**Bank Expenses**” are all audit fees and expenses, costs, and expenses (including reasonable attorneys’ fees and expenses) for preparing, amending, negotiating, administering, defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred with respect to Borrower, Guarantor or any other guarantor.

“**Bank Services**” are any products, credit services, and/or financial accommodations previously, now, or hereafter provided to Borrower or any of its Subsidiaries by Bank or any Bank Affiliate, including, without limitation, any letters of credit, cash management services (including, without limitation, merchant services, direct deposit of payroll, business credit cards, and check cashing services), interest rate swap arrangements, and foreign exchange services as any such products or services may be identified in Bank’s various agreements related thereto (each, a “**Bank Services Agreement**”).

“**Borrower**” is defined in the preamble hereof.

“**Borrower’s Books**” are all Borrower’s books and records including ledgers, federal, provincial and state tax returns, records regarding Borrower’s assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

“**Borrowing Resolutions**” are, with respect to any Person, those resolutions substantially in the form attached hereto as Exhibit C.

“**Business Day**” is any day that is not a Saturday, Sunday or a day on which Bank is closed, and if any determination of a “Business Day” shall relate to an FX Contract, the term “Business Day” shall mean a day on which dealings are carried on in the country of settlement of the Foreign Currency.

“**Cash Equivalents**” means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (b) commercial paper maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor’s Ratings Group or Moody’s Investors Service, Inc.; (c) Bank’s certificates of deposit issued maturing no more than one (1) year after issue; and (d) money market funds at least ninety-five percent (95%) of the assets of which constitute Cash Equivalents of the kinds described in clauses (a) through (c) of this definition.

“**Claims**” is defined in Section 12.3.

“**Code**” is the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the State of California; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such

term contained in Article or Division 9 shall govern; provided further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Bank's Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State of California, the term "Code" shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

"**Collateral**" has the meaning set forth in the Security Agreement.

"**Collateral Account**" is any Deposit Account, Securities Account, or Commodity Account.

"**Commodity Account**" is any "commodity account" as defined in the Code with such additions to such term as may hereafter be made.

"**Compliance Certificate**" is that certain certificate in the form attached hereto as Exhibit A.

"**Contingent Obligation**" is, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation, in each case, directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but "Contingent Obligation" does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"**Control Agreement**" is any control agreement entered into among the depository institution at which Borrower maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower maintains a Securities Account or a Commodity Account, Borrower, and Bank pursuant to which Bank obtains control (within the meaning of the Code) over such Deposit Account, Securities Account, or Commodity Account.

"**Copyrights**" has the meaning set forth in the Security Agreement.

"**Credit Extension**" is any Growth Capital Advance or any other extension of credit by Bank for Borrower's benefit.

"**Default Rate**" is defined in Section 2.3(b).

"**Deposit Account**" is any "deposit account" as defined in the Code with such additions to such term as may hereafter be made, and includes without limitation any operating account, current account or other deposit account of Borrower maintained with a Canada bank.

"**Designated Deposit Account**" is Borrower's deposit account number _____, maintained by Borrower with Bank; the multicurrency account denominated in Euros, account number _____, maintained by Borrower.

"**Dollars,**" "**dollars**" or use of the sign "\$" means only lawful money of the United States and not any other currency, regardless of whether that currency uses the "\$" sign to denote its currency or may be readily converted into lawful money of the United States.

“Dollar Equivalent” is, at any time, (a) with respect to any amount denominated in Dollars, such amount, and (b) with respect to any amount denominated in a Foreign Currency, the equivalent amount therefor in Dollars as determined by Bank at such time on the basis of the then-prevailing rate of exchange in San Francisco, California, for sales of the Foreign Currency for transfer to the country issuing such Foreign Currency.

“Effective Date” is defined in the preamble hereof.

“Equipment” has the meaning set forth in the Security Agreement.

“Event of Default” is defined in Section 8.

“Exchange Act” is the Securities Exchange Act of 1934, as amended.

“Final Payments” means individually and collectively, the Tranche A Final Payment and the Tranche B Final Payment.

“Foreign Currency” means lawful money of a country other than the United States.

“Funding Date” is any date on which a Credit Extension is made to or for the account of Borrower which shall be a Business Day.

“FX Contract” is any foreign exchange contract by and between Borrower and Bank under which Borrower commits to purchase from or sell to Bank a specific amount of Foreign Currency on a specified date.

“GAAP” means those accounting principles which are recognized as being generally accepted in the United States from time to time.

“Governmental Approval” is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

“Governmental Authority” is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

“Growth Capital Advance” or **“Growth Capital Advances”** is defined in Section 2.1.1(a).

“Growth Capital Line” is a Growth Capital Advance or Growth Capital Advances in an aggregate amount of up to Four Million Dollars (\$4,000,000).

“Guarantor” is AQUINOX PHARMACEUTICALS (USA) Inc., a Delaware corporation, and **“guarantor”** is defined in Section 8.10.

“Guaranty” is any guarantee of all or any part of the Obligations, as the same may from time to time be amended, restated, modified or otherwise supplemented.

“Indebtedness” is (a) indebtedness for borrowed money or the deferred price of property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations, and (d) Contingent Obligations.

“Indemnified Person” is defined in Section 12.3.

“Initial Tranche B Growth Capital Advance Payment Date” is defined in Section 2.1.1(b)(ii).

“Insolvency Proceeding” is any proceeding by or against any Person under the United States Bankruptcy Code, the Bankruptcy and Insolvency Act (Canada) or the Companies’ Creditors Agreement Act (Canada), each as amended, or any other bankruptcy or insolvency law of any jurisdiction, including assignments for the benefit of creditors, formal or informal moratoria, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

“Intellectual Property” has the meaning set forth in the Security Agreement.

“Inventory” has the meaning set forth in the Security Agreement.

“Investment” is any beneficial ownership interest in any Person (including stock, partnership interest or other securities), and any loan, advance or capital contribution to any Person.

“Key Person” is each of Borrower’s (a) Chief Executive Officer, who is David Main as of the Effective Date, and (b) Chief Financial Officer, who is Kamran Alam as of the Effective Date.

“Letter of Credit” is a standby or commercial letter of credit issued by Bank upon request of Borrower based upon an application, guarantee, indemnity, or similar agreement.

“Lien” is a claim, mortgage, deed of trust, levy, charge, pledge, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

“Loan Documents” are, collectively, this Agreement and any schedules, exhibits, certificates, notices, and any other documents related to this Agreement, the Warrant, the Perfection Certificates, any Bank Services Agreement, the Security Agreement, the Secured Guaranty Documents, the Borrowing Resolutions, any subordination agreement, any note, or notes or guaranties executed by Borrower, Guarantor or any other guarantor and any other present or future agreement by Borrower, Guarantor or any other guarantor with or for the benefit of Bank in connection with this Agreement, all as amended, restated, or otherwise modified.

“Material Adverse Change” is (a) a material impairment in the perfection or priority of Bank’s Lien in the Collateral or in the value of such Collateral; (b) a material adverse change in the business, operations, or condition (financial or otherwise) of Borrower or Guarantor; or (c) a material impairment of the prospect of repayment of any portion of the Obligations.

“Monthly Financial Statements” is defined in Section 6.2(a).

“Obligations” are Borrower’s obligations to pay when due any debts, principal, interest, fees, Bank Expenses, and other amounts Borrower owes Bank now or later, whether under this Agreement, the other Loan Documents (other than the Warrant), or otherwise, including, without limitation, all obligations relating to letters of credit (including reimbursement obligations for drawn and undrawn letters of credit), cash management services, and foreign exchange contracts, if any, and including interest accruing after Insolvency Proceedings begin and debts, liabilities, or obligations of Borrower assigned to Bank, and to perform Borrower’s duties under the Loan Documents (other than the Warrant).

“Operating Documents” are, for any Person, such Person’s formation documents, as certified by the Secretary of State (or equivalent agency) of such Person’s state of formation on a date that is no earlier than thirty (30) days prior to the Effective Date, and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

“Patents” means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

“Payment/Advance Form” is that certain form attached hereto as Exhibit B.

“Perfection Certificate” is defined in Section 5.1.

“Permitted Indebtedness” is:

- (a) Borrower’s or Guarantor’s Indebtedness to Bank under this Agreement and the other Loan Documents;
- (b) Indebtedness existing on the Effective Date and shown on the Perfection Certificate;
- (c) Subordinated Debt;
- (d) unsecured Indebtedness to trade creditors incurred in the ordinary course of business;
- (e) Indebtedness incurred as a result of endorsing negotiable instruments received in the ordinary course of business;
- (f) Indebtedness secured by Liens permitted under clauses (a) and (c) of the definition of “Permitted Liens” hereunder;
- (g) Indebtedness in the nature of Investments permitted by clause (g) of the definition of Permitted Investments;

(h) Indebtedness owed to Bank consisting of interest rate, currency, or commodity swap agreements, interest rate cap or collar agreements or arrangements entered into in the ordinary course of business and designated to protect Borrower or its Subsidiaries against fluctuations in interest rates, currency exchange rates, or commodity prices and not for speculative purposes (collectively, **“Hedging Contracts”**);

(i) Indebtedness incurred by Borrower or any Subsidiary in the ordinary course of business under a commercial credit card program with Royal Bank of Canada to a maximum amount of \$50,000; and

(j) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (i) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be.

“Permitted Investments” are:

(a) Investments (including, without limitation, Subsidiaries) existing on the Effective Date and shown on the Perfection Certificate;

(b) (i) Investments consisting of Cash Equivalents and (ii) any other Investments permitted by Borrower’s investment policy, as amended from time to time, provided that such investment policy (and any such amendment thereto) has been approved in writing by Bank;

(c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower;

(d) Investments consisting of deposit accounts or securities accounts in which Bank has a perfected security interest subject to the last sentence of Section 6.6(b);

(e) Investments accepted in connection with Transfers permitted by Section 7.1;

(f) Investments consisting of the creation of a Subsidiary for the purpose of consummating a merger transaction permitted by Section 7.3 of this Agreement, which is otherwise a Permitted Investment;

(g) Investments (i) by Borrower in Subsidiaries not to exceed One Hundred Thousand Dollars (\$100,000) in the aggregate in any fiscal year, (ii) by Subsidiaries in other Subsidiaries not to exceed One Hundred Thousand Dollars (\$100,000) in the aggregate in any fiscal year or in Borrower and (iii) Investments by Borrower in Guarantor;

(h) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the ordinary course of business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower's Board of Directors;

(i) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business;

(j) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (j) shall not apply to Investments of Borrower in Guarantor or any Subsidiary; and

(k) Investments in joint ventures or strategic alliances in the ordinary course of Borrower's business consisting of the licensing of technology, the development of technology or the providing of technical support not to exceed One Hundred Thousand Dollars (\$100,000) in the aggregate in any fiscal year.

"Permitted Liens" are:

(a) Liens existing on the Effective Date and shown on the Perfection Certificate or arising under this Agreement and the other Loan Documents;

(b) Liens for taxes, fees, assessments or other government charges or levies, either (i) not due and payable or (ii) being contested in good faith and for which Borrower or Guarantor maintains adequate reserves on its Books, provided that no notice of any such Lien has been filed or recorded under the Internal Revenue Code of 1986, as amended, and the Treasury Regulations adopted thereunder;

(c) purchase money Liens (i) on Equipment acquired or held by Borrower or Guarantor incurred for financing the acquisition of the Equipment securing no more than Fifty Thousand Dollars (\$50,000) in the aggregate amount outstanding, or (ii) existing on Equipment (other than Financed Equipment) when acquired, if the Lien is confined to the property and improvements and the proceeds of the Equipment;

(d) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed Fifty Thousand Dollars (\$50,000) and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(e) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business;

(f) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) through (c), but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase;

(g) leases or subleases of real property granted in the ordinary course of Borrower's or Guarantor's business (or, if referring to another Person, in the ordinary course of such Person's business), and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the ordinary course of Borrower's or Guarantor's business (or, if referring to another Person, in the ordinary course of such Person's business), if the leases, subleases, licenses and sublicenses do not prohibit granting Bank a security interest therein;

(h) non-exclusive license of Intellectual Property granted to third parties in the ordinary course of business, and licenses of Intellectual Property that could not result in a legal transfer of title of the licensed property that may be exclusive in respects other than territory and that may be exclusive as to territory only as to discreet geographical areas outside of the United States;

(i) Liens arising from attachments or judgments, orders, or decrees in circumstances not constituting an Event of Default under Sections 8.4 and 8.7;

(j) Liens in favor of other financial institutions arising in connection with Borrower's or Guarantor's deposit and/or securities accounts held at such institutions, provided that Bank has a perfected security interest in the amounts held in such deposit and/or securities accounts;

(k) Liens securing Subordinated Debt;

(l) easements, reservations, rights-of-way, restrictions, minor defects or irregularities in title and other similar Liens affecting real property not interfering in any material respect with the ordinary course of the business of Borrower or Guarantor;

(m) deposits to secure the performance of bids, trade contracts (other than for borrowed money), contracts for the purchase of property permitted hereunder, statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature, in each case, incurred in the ordinary course of business;

(n) deposits to secure the performance of leases incurred in the ordinary course of business and not representing an obligation for borrowed money so long as each such deposit is made at the commencement of a lease or its renewal when there is no underlying default under such lease; and

(o) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) through (n), but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase.

"Person" is any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"Positive Data Results" means either one of the following Phase IIA top-line data trial results (based on Borrower's targeted endpoints in the respective trials): (i) in the COPD trial, with respect to which, data shall be measured using EXACT (a validated readout tool specific to COPD), the target endpoint reflects a mean daily improvement of 1.67 points on the EXACT symptom score; or (ii) in the BPS/IC trial, with respect to which, data shall be based on an 11-point patient-reported questionnaire provided by Borrower, the target endpoint reflects a 1.5 point improvement in the change from the baseline pain score in treated patients in comparison to the placebo group.

"Prepayment Fees" means individually and collectively, the Tranche A Prepayment Fee and the Tranche B Prepayment Fee.

"PPSA" means the *Personal Property Security Act*, British Columbia in force from time to time, including and all amendments thereto or replacements thereof, and regulations thereunder as may from time to time be amended or replaced.

"Registered Organization" is any "registered organization" as defined in the Code with such additions to such term as may hereafter be made.

"Requirement of Law" is as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

“**Responsible Officer**” is any of the Chief Executive Officer, President, Chief Financial Officer and Controller of Borrower.

“**Restricted License**” is any material license or other agreement with respect to which Borrower is the licensee (a) that prohibits or otherwise restricts Borrower from granting a security interest in Borrower’s interest in such license or agreement or any other property, or (b) for which a default under or termination of could interfere with the Bank’s right to sell any Collateral.

“**SEC**” shall mean the Securities and Exchange Commission, any successor thereto, and any analogous Governmental Authority.

“**Secured Guaranty Documents**” means that certain Unconditional Guaranty and that certain security agreement, dated as of the Effective Date, executed by Guarantor in favor of Bank, as the same may be renewed, amended, extended or restated from time to time.

“**Securities Account**” is any “securities account” as defined in the Code or in the PPSA with such additions to such term as may hereafter be made.

“**Security**” means the Security Agreement and all other present and future security from time to time held by or on behalf of Bank from Borrower or any other Person as security for the Obligations.

“**Security Agreement**” means the security agreement given by Borrower in favor of Bank on or about the date hereof as the same may be renewed, amended, extended or restated from time to time.

“**Subordinated Debt**” is indebtedness incurred by Borrower subordinated to all of Borrower’s now or hereafter indebtedness to Bank (pursuant to a subordination, intercreditor, or other similar agreement in form and substance satisfactory to Bank entered into between Bank and the other creditor), on terms acceptable to Bank.

“**Subsidiary**” is, as to any Person, a corporation, partnership, limited liability company or other entity of which shares of stock or other ownership interests having ordinary voting power (other than stock or such other ownership interests having such power only by reason of the happening of a contingency) to elect a majority of the board of directors or other managers of such corporation, partnership or other entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly through one or more intermediaries, or both, by such Person. Unless the context otherwise requires, each reference to a Subsidiary herein shall be a reference to a Subsidiary of Borrower or Guarantor.

“**Trademarks**” has the meaning set out in the Security Agreement.

“**Tranche A**” is defined in Section 2.1.1(a).

“**Tranche A Final Payment**” is a fee equal to two percent (2.00%) of the Tranche A Growth Capital Advance.

“**Tranche A Growth Capital Advance**” is defined in Section 2.1.1(a).

“**Tranche A Growth Capital Advance Payment**” is defined in Section 2.1.1(b)(i).

“**Tranche A Growth Capital Maturity Date**” is March 1, 2017.

“**Tranche A Prepayment Fee**” means a fee equal to (i) three percent (3.00%) of the outstanding principal balance of the Tranche A Growth Capital Advance on the date of prepayment if prepayment occurs on or prior to the first anniversary of the Effective Date, (ii) two percent (2.00%) of the outstanding principal balance of the Tranche A Growth Capital Advance on the date of prepayment if prepayment occurs after the first anniversary of the Effective Date but on or prior to the second anniversary of the Effective Date and (iii) one percent (1.00%) of the outstanding principal balance of the Tranche A Growth Capital Advance on the date of prepayment if prepayment occurs after the second anniversary of the Effective Date but prior to the Tranche A Growth Capital Maturity Date.

“**Tranche B**” is defined in Section 2.1.1(a).

“**Tranche B Draw Period**” is the period of time from the date that Borrower receives Positive Data Results through the earlier to occur of (a) December 31, 2014 or (b) the occurrence and continuance of an Event of Default.

“**Tranche B Final Payment**” is a fee equal to two percent (2.00%) of the Tranche B Growth Capital Advance.

“**Tranche B Growth Capital Advance**” is defined in Section 2.1.1(a).

“**Tranche B Growth Capital Advance Payment**” is defined in Section 2.1.1(b)(ii).

“**Tranche B Growth Capital Maturity Date**” is the date thirty (30) months after the Initial Tranche B Growth Capital Advance Payment Date, but in no event later than June 1, 2017.

“**Tranche B Prepayment Fee**” means a fee equal to (i) three percent (3.00%) of the outstanding principal balance of the Tranche B Growth Capital Advance on the date of prepayment if prepayment occurs on or prior to the first anniversary of the Effective Date, (ii) two percent (2.00%) of the outstanding principal balance of the Tranche B Growth Capital Advance on the date of prepayment if prepayment occurs after the first anniversary of the Effective Date but on or prior to the second anniversary of the Effective Date and (iii) one percent (1.00%) of the outstanding principal balance of the Tranche B Growth Capital Advance on the date of prepayment if prepayment occurs after the second anniversary of the Effective Date but prior to the Tranche B Growth Capital Maturity Date.

“**Transfer**” is defined in Section 7.1.

“**Warrant**” is that certain Warrant to purchase securities of Borrower and Guarantor dated as of the Effective Date executed by Borrower and Guarantor in favor of Bank.

[Signature page follows.]

EXHIBIT A
COMPLIANCE CERTIFICATE

TO: SILICON VALLEY BANK
FROM: AQUINOX PHARMACEUTICALS INC.

Date: October 23, 2013

The undersigned authorized officer of AQUINOX PHARMACEUTICALS INC. ("Borrower") certifies that under the terms and conditions of the Loan Agreement between Borrower and Bank (the "Agreement"):

(1) Borrower is in complete compliance for the period ending _____ with all required covenants except as noted below; (2) there are no Events of Default; (3) all representations and warranties in the Agreement are true and correct in all material respects on this date except as noted below; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date; (4) Borrower, and each of its Subsidiaries, has timely filed all required tax returns and reports, and Borrower has timely paid all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower except as otherwise permitted pursuant to the terms of Section 5.9 of the Agreement; and (5) no Liens have been levied or claims made against Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Bank.

Attached are the required documents supporting the certification. The undersigned certifies that these are prepared in accordance with GAAP consistently applied from one period to the next except as explained in an accompanying letter or footnotes. The undersigned acknowledges that no borrowings may be requested at any time or date of determination that Borrower is not in compliance with any of the terms of the Agreement, and that compliance is determined not just at the date this certificate is delivered. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

Please indicate compliance status by circling Yes/No under "Complies" column.

<u>Reporting Covenants</u>	<u>Required</u>	<u>Complies</u>
Monthly financial statements with Compliance Certificate	Monthly within 30 days	Yes No
Annual financial statement (Audited) + CC	FYE within 180 days	Yes No
10-Q, 10-K and 8-K	Within 5 days after filing with SEC	Yes No
Board-approved financial projections	FYE within 45 days	Yes No

Other Matters

Have there been any amendments of or other changes to the capitalization table of Borrower and to the Operating Documents of Borrower or any of its Subsidiaries? If yes, provide copies of any such amendments or changes with this Compliance Certificate.

Yes No

EXHIBIT B – LOAN PAYMENT/ADVANCE REQUEST FORM
DEADLINE FOR SAME DAY PROCESSING IS NOON PACIFIC TIME*

Fax To: _____

Date: _____

LOAN PAYMENT:

AQUINOX PHARMACEUTICALS INC.

From Account # _____
(Deposit Account #)

To Account # _____
(Loan Account #)

Principal \$ _____

and/or Interest \$ _____

Authorized Signature: _____
Print Name/Title: _____

Phone Number: _____

LOAN ADVANCE:

Complete *Outgoing Wire Request* section below if all or a portion of the funds from this loan advance are for an outgoing wire.

From Account # _____
(Loan Account #)

To Account # _____
(Deposit Account #)

Amount of Advance \$ _____

All Borrower's representations and warranties in the Loan Agreement are true, correct and complete in all material respects on the date of the request for an advance; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date:

Authorized Signature: _____

Phone Number: _____

Print Name/Title: _____

OUTGOING WIRE REQUEST:

Complete only if all or a portion of funds from the loan advance above is to be wired.
Deadline for same day processing is noon, Pacific Time

Beneficiary Name: _____
Beneficiary Bank: _____
City and State: _____

Amount of Wire: \$ _____
Account Number: _____

Beneficiary Bank Transit (ABA) #: _____

Beneficiary Bank Code (Swift, Sort, Chip, etc.): _____
(For International Wire Only)

Intermediary Bank: _____

Transit (ABA) #: _____

For Further Credit to: _____

Special Instruction: _____

By signing below, I (we) acknowledge and agree that my (our) funds transfer request shall be processed in accordance with and subject to the terms and conditions set forth in the agreements(s) covering funds transfer service(s), which agreements(s) were previously received and executed by me (us).

Authorized Signature: _____

2nd Signature (if required): _____

Print Name/Title: _____

Print Name/Title: _____

Telephone #: _____

Telephone #: _____

* Unless otherwise provided for an Advance bearing interest at LIBOR.

EXHIBIT C
BORROWING RESOLUTIONS



CORPORATE BORROWING CERTIFICATE

BORROWER/CORPORATION: AQUINOX PHARMACEUTICALS INC.
BANK: SILICON VALLEY BANK

DATE: Oct 23, 2013

I hereby certify as follows, as of the date set forth above:

1. I am the Secretary, Assistant Secretary or other officer of Borrower. My title is as set forth below.
2. Borrower's exact legal name is set forth above. Borrower is a corporation existing under the federal laws of Canada and is extra-provincially registered in British Columbia.
3. Attached hereto are true, correct and complete copies of Borrower's Articles and Bylaws (including amendments), as filed with Industry Canada. Such Articles and Bylaws have not been amended, annulled, rescinded, revoked or supplemented, and remain in full force and effect as of the date hereof.
4. All resolutions set forth below were duly and validly adopted by Borrower's Board of Directors at a duly held meeting of such directors (or pursuant to a unanimous written consent or other authorized corporate action). Such resolutions are in full force and effect as of the date hereof and have not been in any way modified, repealed, rescinded, amended or revoked, and Silicon Valley Bank ("Bank") may rely on them until Bank receives written notice of revocation from Borrower.

APPROVAL OF LOAN TRANSACTION

- A. The Corporation wishes to borrow from Silicon Valley Bank (the "**Lender**") loans (collectively, the "**Growth Capital Advances**") in the total principal amount of up to US\$4,000,000 on the terms and subject to the conditions of a loan agreement between the Corporation and the Lender (the "**Loan Agreement**"), a draft of which has been provided to the board of directors for its review;
- B. It is a condition of the Loan Agreement that the Corporation grant security over certain of its property and assets to the Lender on the terms and subject to the conditions of a security agreement between the Corporation and the Lender (the "**Security Agreement**"), a draft of which has been provided to the board of directors for its review;
- C. It is a condition of the Loan Agreement that the Corporation grant to the Lender a warrant (the "**SBV Warrant**") to purchase from the Corporation up to 218,181 special voting shares of the Corporation (the "**Warrant Shares**") for an exercise price of US\$0.000001 per share on the terms and subject to the conditions of a warrant agreement, a draft of which has been provided to the board of directors for its review (the "**Warrant Agreement**" and, together with the Loan Agreement and the Security Agreement, the "**Transaction Documents**"); and

D. The Corporation is not at the date hereof insolvent and, in particular, its assets exceed its liabilities and it is paying and will have the ability to pay its debts as they become due in the usual course of its business;

ON MOTION DULY MADE, SECONDED AND UNANIMOUSLY CARRIED, the following resolutions were passed:

1. The Corporation is hereby authorized to borrow the Growth Capital Advances from the Lender and to enter into the Loan Agreement and perform all of its obligations thereunder.
2. The Corporation is hereby authorized, as security for all present and future indebtedness, liabilities and obligations of the Corporation to the Lender and its successors and assigns under the Loan Agreement, to grant to the Lender a security interest in all of its presently owned or held and after acquired or held personal property (other than personal property expressly excluded under the Security Agreement) and to enter into the Security Agreement and perform its obligations thereunder;
3. The Corporation is hereby authorized to issue the SBV Warrant to the Lender and to enter into the Warrant Agreement and perform its obligations thereunder;
4. The allotment of the Warrant Shares to the Lender pursuant to the terms of the Warrant Agreement is hereby authorized and approved and, upon exercise of the SBV Warrant and receipt by the Corporation of full payment therefor and without further resolution of the directors of the Corporation, the Warrant Shares shall be issued as fully paid and non-assessable shares of the Corporation;
5. The directors of the Corporation acting in good faith and in the best interests of the Corporation hereby determine the consideration for the allotment and issue of the Warrant Shares to be US\$0.000001 and fix such amount as the consideration for the allotment and issue of the Warrant Shares;
6. Any one director or officer of the Corporation is hereby authorized and directed in the name and on behalf of the Corporation to execute and, if necessary, affix the corporate seal of the Corporation to and deliver or cause to be delivered the certificates representing the Warrant Shares to the Lender;
7. Upon the issuance of Warrant Shares, (a) an amount equal to the issue price per Warrant Share be added to the stated capital account maintained by the Corporation for the special voting shares of the Corporation and (b) the appropriate entries be made in the Corporation's register of shareholders to reflect the issuance of the Warrant Shares;
8. Each of the Transaction Documents in substantially the same form and terms as the form thereof approved by the directors of the Corporation, with such amendments or variations thereto as the person signing may deem appropriate to approve, is hereby approved and hereby authorized to be executed and delivered for and on behalf of and in the name of the Corporation by any one officer or director of the Corporation and the common seal of the Corporation be and is hereby authorized (but not required) to be thereto affixed, and the approval of the person signing any such document or instrument or any such amendment or variation thereto be conclusively evidenced by his or her execution thereof and the Transaction Documents so executed be and are the Transaction Documents authorized by these resolutions.
9. Any one officer or director of the Corporation, alone, is hereby authorized and directed in the name of and on behalf of the Corporation to take all such action, do all such things, enter into, execute, affix the corporate seal of the Corporation and to deliver or cause to be delivered all such or other documents, agreements and writings, as he or she may in his or her sole discretion deem necessary or

advisable in connection with any of the matters referred to in the preceding resolutions, or any of them, or in respect thereof, or in connection with any actions to be taken by the Corporation in the performance and fulfillment of its obligations as contemplated by the agreements and the transactions referred to in the preceding resolutions and execution by any one officer or director of the Corporation, alone, shall be conclusive proof of his or her authority to act on behalf of the Corporation and his or her approval thereof.

By: /s/ David Main

Name: David Main

Title: CEO

This Certificate must also be signed by a second authorized officer or director of Borrower.

I, the CFO of Borrower, hereby certify as to all paragraphs above, as of the date set forth above.

By: /s/ Kamran Alam

Name: Kamran Alam

Title: CFO

SECURITY AGREEMENT

This Security Agreement (this "Agreement") is entered into as of October 23, 2013, by and between SILICON VALLEY BANK ("Bank") and AQUINOX PHARMACEUTICALS (USA) INC., a Delaware corporation ("Pledgor").

RECITALS

AQUINOX PHARMACEUTICALS INC., a corporation existing under the federal laws of Canada and extra-provincially registered in British Columbia ("Borrower") wishes to borrow money from time to time from Bank pursuant to that certain Loan Agreement and that certain Security Agreement, dated as of October 23, 2013 executed by and between Borrower and Bank (as amended, restated, or otherwise modified from time to time, the "Loan Agreement"; capitalized terms used but not otherwise defined herein shall have the meanings given them in the Loan Agreement).

In consideration of the agreement of Bank to extend credit and make other financial accommodations to Borrower under the Loan Agreement, Pledgor has executed that certain Unconditional Guaranty dated October 23, 2013 in favor of Bank (as amended, restated, or otherwise modified from time to time, the "Guaranty").

Pledgor's obligations under the Guaranty (the "Guarantor Obligations") shall be secured pursuant to and in accordance with the terms of this Agreement.

AGREEMENT

The parties agree as follows:

1. DEFINITIONS. Unless otherwise defined herein, capitalized terms used herein shall have the following meanings:

"Bank Expenses" means all costs or reasonable expenses (including reasonable attorneys' fees and expenses) incurred by Bank in preparing, negotiating, administering, defending, and enforcing this Agreement and the Guarantor Obligations (including, without limitation, those incurred during appeals and/or Insolvency Proceedings).

"Code" means the Uniform Commercial Code as the same may, from time to time, be in effect in the State of California.

"Collateral" means the property described in Exhibit A attached hereto.

"Insolvency Proceeding" are proceedings by or against Borrower and/or Pledgor under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with either party's creditors, or proceedings seeking reorganization, arrangement, or other relief.

"Permitted Liens" shall have the meaning ascribed to such term in the Loan Agreement.

“Responsible Officer” is any of Pledgor’s Chief Executive Officer, the President, the Chief Financial Officer and the Controller.

2. CREATION OF SECURITY INTEREST

2.1 Grant of Security Interest. Pledgor grants Bank a continuing security interest in the Collateral to secure the prompt payment and performance of the Guarantor Obligations. Except for Permitted Liens, such security interest constitutes a valid, first priority security interest in the presently existing Collateral, and will constitute a valid, first priority security interest in Collateral acquired after the date hereof. Bank may liquidate the Collateral and apply such funds toward repayment of the Guarantor Obligations after the occurrence and continuance of an Event of Default (as defined under the Loan Agreement). Such liquidation shall not be deemed a set-off.

2.2 Delivery of Additional Documentation Required. Pledgor will from time to time execute and deliver to Bank, at the request of Bank, all financing statements and other documents that Bank may reasonably request, in form satisfactory to Bank, to perfect and continue the perfection of Bank’s security interests in the Collateral. Pledgor authorizes Bank to file financing statements without notice to Pledgor, in all appropriate jurisdictions, as Bank deems appropriate, to perfect or protect Bank’s interest in the Collateral.

3. REPRESENTATIONS AND WARRANTIES

Pledgor represents and warrants as follows:

3.1 Due Organization and Qualification. Pledgor is duly existing and in good standing under the laws of its jurisdiction of formation and is qualified and licensed to do business in, and is in good standing in, any state in which the conduct of its business or its ownership of property requires that it be so qualified (except where the failure to so qualify would not have a material adverse effect on Guarantor’s condition or financial, or on Guarantor’s ability to pay or perform the obligations hereunder).

3.2 Due Authorization; No Conflict. The execution, delivery, and performance of this Agreement are within Pledgor’s powers, have been duly authorized, and neither conflict with nor constitute a breach of any provision contained in Pledgor’s formation documents or bylaws, nor will they constitute an event of default under any material agreement to which Pledgor is a party or by which Pledgor is bound.

3.3 No Prior Encumbrances. Pledgor has good title to the Collateral, free and clear of any liens, security interests, or other encumbrances other than the security interest in favor of Bank and other Permitted Liens.

3.4 Litigation. There is no action, suit or proceeding affecting Pledgor pending or threatened before any court, arbitrator, or governmental authority, domestic or foreign, which may have a material adverse effect on the ability of Pledgor to perform its obligations under this Agreement and the Guaranty.

3.5 Solvency. The incurrence of Pledgor's obligations under this Agreement will not cause Pledgor to (a) become insolvent; (b) be left with unreasonably small capital for any business or transaction in which Pledgor is presently engaged or plans to be engaged; or (c) be unable to pay its debts as such debts mature.

4. AFFIRMATIVE COVENANTS

Pledgor covenants and agrees that, until the Guarantor Obligations cease, Pledgor shall do all of the following:

4.1 Good Standing. Maintain its existence and its good standing in its jurisdiction of formation and maintain qualification in each jurisdiction in which the failure to so qualify could have a material adverse effect on Pledgor's business.

4.2 Government Compliance. Comply with all statutes, laws, ordinances and government rules and regulations to which it is subject, noncompliance with which could have a material adverse effect on Pledgor's business.

4.3 Insurance.

(a) At Pledgor's expense, keep the Collateral insured against loss or damage by fire, theft, explosion, sprinklers, and all other hazards and risks, and in such amounts, as ordinarily insured against by other owners in similar businesses conducted in the locations where Pledgor's business is conducted on the date hereof. Pledgor shall also maintain insurance relating to Pledgor's ownership and use of the Collateral in amounts and of a type that are customary to businesses similar to Pledgor's.

(b) All such policies of insurance shall be in such form, with such companies, and in such amounts as reasonably satisfactory to Bank. All such policies of property insurance shall contain a lender's loss payable endorsement, in a form satisfactory to Bank, showing Bank as an additional loss payee thereof and all liability insurance policies shall show the Bank as an additional insured, and shall specify that the insurer must give at least 20 days notice (or with respect to premiums, 10 days) to Bank before canceling its policy for any reason.

4.4 Taxes. Make timely payment or extensions thereof of all material foreign, federal, state, and local taxes or assessments (other than taxes and assessments which Pledgor in good faith contests its obligations by appropriate proceedings promptly and diligently instituted and conducted), and shall deliver to Bank, upon demand, appropriate certificates attesting to such payments.

5. NEGATIVE COVENANTS

Pledgor covenants and agrees that, until the Guarantor Obligations cease, Pledgor shall not do any of the following:

5.1 Dispositions. Convey, sell, lease, transfer, pledge, assign control over or otherwise dispose of (collectively, "Transfer") all or any part of the Collateral other than Transfers (a) in the ordinary course of business; (b) of non-exclusive licenses and similar arrangements for the use of the Collateral but that may be exclusive in respects other than territory and that may be exclusive as to territory only as to discreet geographical areas outside of Canada and the United States; (c) of worn-out, surplus or obsolete equipment; (d) consisting of the sale or issuance of any stock of Pledgor; and (e) Transfers between Borrower and Pledgor; and (h) other Transfers not in excess of \$100,000 per fiscal year.

5.2 Encumbrances. Create, incur, assume or suffer to exist any security interest, lien or encumbrance with respect to any of its property, other than the security interest in favor of Bank and other Permitted Liens.

5.3 Change in Jurisdiction of Formation, Organizational Structure, Type. Without 10 days prior written notice to Bank, change its jurisdiction of formation or its organizational structure or type.

6. EVENTS OF DEFAULT

Any one or more of the following events shall constitute an Event of Default under this Agreement:

6.1 Covenant Default. If Pledgor fails or neglects to perform, keep, or observe any material term, provision, condition, covenant, or agreement contained in this Agreement or the Guaranty, and, except with respect to Sections 5.1, 5.2, and 5.3 of this Agreement, as to any default under a term, condition or covenant that can be cured, has not cured the default within 10 days after it occurs, or if the default cannot be cured within 10 days or cannot be cured after Pledgor's attempts in the 10 day period, and the default may be cured within a reasonable time, then Pledgor has an additional time, (of not more than 30 days) to attempt to cure the default. During the cure periods set forth herein, the failure to cure the default is not an Event of Default.

6.2 Attachment. If any portion of the Collateral is made the subject of a lien, security interest or other encumbrance (other than that in favor of Bank), or is attached, seized, subjected to a writ or distress warrant, or is levied upon, or comes into the possession of any trustee, receiver or person acting in a similar capacity and such attachment, seizure, writ or distress warrant or levy has not been removed, discharged or rescinded within 10 days, or if Pledgor is enjoined, restrained, or in any way prevented by court order from continuing to conduct all or any material part of its business affairs. During the cure period set forth herein, the failure to cure the default is not an Event of Default.

6.3 Misrepresentations. If any material misrepresentation or material misstatement exists now or hereafter in any warranty or representation set forth herein or in any certificate delivered to Bank by any Responsible Officer pursuant to this Agreement or to induce Bank to enter into this Agreement or the Guaranty.

6.4 Insolvency. (a) Pledgor becomes insolvent; (b) Pledgor begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Pledgor and not dismissed or stayed within 30 days.

6.5 Material Adverse Change. If there (a) occurs a material adverse change in the business, operations, or financial condition of the Pledgor, or (b) is a material impairment of the value or priority of Bank's security interest in the Collateral.

7. BANK'S RIGHTS AND REMEDIES

7.1 Rights and Remedies. Upon the occurrence and during the continuance of an Event of Default, Bank may, at its election, without notice of its election and without demand, do any one or more of the following, all of which are authorized by Pledgor:

(a) Exercise all rights available to it under the Code and applicable law;

(b) Set off and apply to the obligations any and all (i) balances and deposits of Pledgor held by Bank or in which Bank acts as custodian, or (ii) indebtedness at any time owing to or for the credit or the account of Pledgor held by Bank; and

(c) Sell the Collateral at either a public or private sale, or both, by way of one or more contracts or transactions, for cash or on terms, in such manner and at such places (including Pledgor's premises) as Bank determines is commercially reasonable in accordance with the Code.

7.2 Remedies Cumulative. Bank's rights and remedies under the Loan Agreement and any documents related thereto, the Guaranty, and this Agreement shall be cumulative. Bank shall have all other rights and remedies not inconsistent herewith as provided under the Code, by law, or in equity. No exercise by Bank of one right or remedy shall be deemed an election, and no waiver by Bank of any Event of Default on Pledgor's part shall be deemed a continuing waiver. No delay by Bank shall constitute a waiver, election, or acquiescence by it.

7.3 Demand; Protest. Pledgor waives demand, protest, notice of protest, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees at any time held by Bank on which Pledgor may in any way be liable.

7.4 Power of Attorney. When an Event of Default occurs and continues, Pledgor irrevocably appoints Bank as its lawful attorney to: (a) endorse Pledgor's name on any checks or other forms of payment or security; (b) sign Pledgor's name on any invoice or bill of lading for any account or drafts against account debtors, (c) make, settle, and adjust all claims under Pledgor's insurance policies; (d) settle and adjust disputes and claims about the accounts directly with account debtors, for amounts and on terms Bank determines reasonable; and (e) transfer the Collateral into the name of Bank or a third party. Bank may exercise the power of attorney to sign Pledgor's name on any documents necessary to perfect or continue the perfection of any security interest regardless of whether an Event of Default has occurred. Bank's appointment as Pledgor's attorney in fact, and all of Bank's rights and powers, coupled with an interest, are irrevocable until the Guarantor Obligations cease.

7.5 Bank Expenses. If Pledgor fails to pay any amount due hereunder or furnish any required proof of payment to third persons in connection with the Collateral, Bank may make all or part of the payment and take any action Bank deems prudent. Any amounts paid by Bank are Bank Expenses and immediately due and payable, bearing interest at the then applicable rate and secured by the Collateral. No payments by Bank are deemed an agreement to make similar payments in the future or Bank's waiver of any Event of Default. After the sale of any of the Collateral, Bank may deduct all reasonable legal and other expenses and attorneys' fees for preserving, collecting, selling and delivering the Collateral and for enforcing its rights with respect to the Guarantor Obligations, and shall apply the remainder of the proceeds to the Guarantor Obligations in such manner as Bank in its reasonable discretion shall determine, and shall pay the balance, if any, to Pledgor.

7.6 Bank's Liability for Collateral. If Bank complies with reasonable banking practices, it is not liable or responsible for the safekeeping of the Collateral.

8. NOTICES

Unless otherwise provided in this Agreement, all notices or demands by any party relating to this Agreement shall be in writing and (except for financial statements and other informational documents which may be sent by first-class mail, postage prepaid) shall be personally delivered or sent by certified mail, postage prepaid, return receipt requested, or by prepaid facsimile to Pledgor or to Bank, as the case may be, at its addresses and facsimile numbers set forth below:

If to Pledgor: Aquinox Pharmaceuticals (USA) Inc.
5600 Parkwood Way, Suite 430
Richmond, BC V6V 2M2
Attn: Kamran Alam
FAX: (778) 331-4486

If to Bank: Silicon Valley Bank
901 5th Avenue, Suite 3900
Seattle, WA 98164
Attn: Dave Sanders
FAX: (206) 624-0374

Either party hereto may change the address or facsimile number at which it is to receive notices hereunder by notice in writing in the foregoing manner given to the other.

9. CHOICE OF LAW AND VENUE; JURY TRIAL WAIVER

This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of California, without regard to principles of conflicts of law. Each of Pledgor and Bank hereby submits to the exclusive jurisdiction of the state and Federal courts located in the County of Santa Clara, State of California. PLEDGOR AND BANK EACH HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE GUARANTY AND ANY RELATED DOCUMENTS OR ANY OF THE TRANSACTIONS CONTEMPLATED THEREIN, INCLUDING CONTRACT CLAIMS, TORT CLAIMS,

BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS. EACH PARTY RECOGNIZES AND AGREES THAT THE FOREGOING WAIVER CONSTITUTES A MATERIAL INDUCEMENT FOR IT TO ENTER INTO THIS AGREEMENT. EACH PARTY REPRESENTS AND WARRANTS THAT IT HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL AND THAT IT KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

WITHOUT INTENDING IN ANY WAY TO LIMIT THE PARTIES' AGREEMENT TO WAIVE THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY, if the above waiver of the right to a trial by jury is not enforceable, the parties hereto agree that any and all disputes or controversies of any nature between them arising at any time shall be decided by a reference to a private judge, mutually selected by the parties (or, if they cannot agree, by the Presiding Judge of the Santa Clara County, California Superior Court) appointed in accordance with California Code of Civil Procedure Section 638 (or pursuant to comparable provisions of federal law if the dispute falls within the exclusive jurisdiction of the federal courts), sitting without a jury, in Santa Clara County, California; and the parties hereby submit to the jurisdiction of such court. The reference proceedings shall be conducted pursuant to and in accordance with the provisions of California Code of Civil Procedure §§ 638 through 645.1, inclusive. The private judge shall have the power, among others, to grant provisional relief, including without limitation, entering temporary restraining orders, issuing preliminary and permanent injunctions and appointing receivers. All such proceedings shall be closed to the public and confidential and all records relating thereto shall be permanently sealed. If during the course of any dispute, a party desires to seek provisional relief, but a judge has not been appointed at that point pursuant to the judicial reference procedures, then such party may apply to the Santa Clara County, California Superior Court for such relief. The proceeding before the private judge shall be conducted in the same manner as it would be before a court under the rules of evidence applicable to judicial proceedings. The parties shall be entitled to discovery which shall be conducted in the same manner as it would be before a court under the rules of discovery applicable to judicial proceedings. The private judge shall oversee discovery and may enforce all discovery rules and order applicable to judicial proceedings in the same manner as a trial court judge. The parties agree that the selected or appointed private judge shall have the power to decide all issues in the action or proceeding, whether of fact or of law, and shall report a statement of decision thereon pursuant to the California Code of Civil Procedure § 644(a). Nothing in this paragraph shall limit the right of any party at any time to exercise self-help remedies, foreclose against collateral, or obtain provisional remedies. The private judge shall also determine all issues relating to the applicability, interpretation, and enforceability of this paragraph.

10. GENERAL PROVISIONS

10.1 Successors and Assigns. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Pledgor may not assign this Agreement or any rights under it without Bank's prior written consent which may be granted or withheld in Bank's reasonable discretion. Bank has the right, without the consent of or notice to Pledgor, to sell, transfer, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights and benefits under this Agreement.

10.2 Indemnification. Pledgor will indemnify, defend and hold harmless Bank and its officers, employees, and agents against: (a) all obligations, demands, claims, and liabilities asserted by any other party in connection with the transactions contemplated by the Guaranty and/or this Agreement; and (b) all losses or Bank Expenses incurred, or paid by Bank from, following, or consequential to transactions between Bank and Pledgor under the Guaranty and/or Agreement (including reasonable attorneys' fees and expenses), except for losses caused by Bank's gross negligence or willful misconduct.

10.3 Time of Essence. Time is of the essence for the performance of all obligations set forth in this Agreement.

10.4 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

10.5 Amendments in Writing, Integration. All amendments to this Agreement must be in writing and executed by the parties hereto. This Agreement and the Guaranty represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Agreement merge into this Agreement and the Guaranty.

10.6 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, are an original, and all taken together, are one Agreement.

10.7 Survival. All covenants, representations and warranties made in this Agreement continue in full force while any obligations remain outstanding. The obligations of Pledgor in Section 10.2 to indemnify Bank will survive until all statutes of limitations for actions that may be brought against Bank have run.

10.8 Attorneys' Fees, Costs and Expenses. In any action or proceeding between Pledgor and Bank arising out of the Guaranty or this Agreement, the prevailing party will be entitled to recover its reasonable attorneys' fees and other costs and expenses incurred, in addition to any other relief to which it may be entitled, whether or not a lawsuit is filed.

10.9 Disclosure of Information; Borrower Collateral. Pledgor acknowledges that it has, independently of and without reliance on Bank, made its own credit analysis of Borrower and the assets pledged by Borrower to Bank under the Loan Agreement, if any (the "Borrower Collateral"), performed its own legal review of this Agreement, the Guaranty, the Loan Agreement and all related documents and filings, and is not relying on Bank with respect to any of the aforesaid items. Pledgor has established adequate means of obtaining from Borrower, on a continuing basis, financial and other information pertaining to Borrower's financial condition and the value of the Borrower Collateral and status of Bank's lien on and in the Borrower Collateral. Pledgor agrees to keep adequately informed from such means of any facts, events or circumstances which might in any way affect Pledgor's risks hereunder or under the Guaranty, and Pledgor further agrees that Bank shall have no obligation to disclose to Pledgor information or material with respect to Borrower or the Borrower Collateral acquired in the course of Bank's relationship with Borrower. Bank makes no representation, express or implied, with respect to

the Borrower Collateral or its interest in, or the priority or perfection of its lien on and in the Borrower Collateral. Pledgor acknowledges that its obligation hereunder will not be affected by (a) Bank's failure properly to create a lien on or in the Borrower Collateral, (b) Bank's failure to create or maintain a priority with respect to the lien purported to be created in the Borrower Collateral, or (c) any act or omission of Bank (whether negligent or otherwise) which adversely affects the value of the Borrower Collateral or Bank's lien thereon or the priority of such lien.

[Signature page follows.]

This Security Agreement is executed as of the date first above written.

Pledgor

AQUINOX PHARMACEUTICALS (USA) INC.

By: /s/ David Main

Title: David Main, CEO

Bank

SILICON VALLEY BANK

By: /s/ David Sanders

Title: VP

[Signature Page to Security Agreement]

EXHIBIT A

The Collateral consists of all of Pledgor's right, title and interest in and to the following:

All goods, Accounts (including health-care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles (except as provided below), commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and

all Pledgor's Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

Notwithstanding the foregoing, the Collateral does not include (1) any lease, license, contract, equipment, property rights or agreement (including joint venture agreements) to which Pledgor is a party or any of its rights or interests thereunder if and for so long as the grant of a security interest therein shall constitute a breach or termination pursuant to the terms of, or a default under, any such lease, license, contract, equipment, property rights or agreement (including joint venture agreements) (other than to the extent that any such term would be rendered ineffective pursuant to Sections 9-406, 9-407, 9-408 or 9-409 of the UCC (or any successor provision or provisions) of any relevant jurisdiction or any other applicable law (including the United States Bankruptcy Code) or principles of equity), provided however that, in the case of either (A) or (B) above, such security interest shall attach immediately at such time as the condition causing such abandonment, invalidation or unenforceability shall be remedied and to the extent severable, shall attach immediately to any portion of such lease, license, contract, property rights or agreement that does not result in any of the consequences specified in (A) or (B) above; (2) any equity interests of any Subsidiary not organized under the laws of the United States or a political subdivision thereof in excess of sixty-five percent (65%) of the voting power of all classes of equity interests of such Subsidiary entitled to vote; or (3) any Intellectual Property; provided, however, the Collateral shall include all Accounts and all proceeds of Intellectual Property. If a judicial authority (including a U.S. Bankruptcy Court) would hold that a security interest in the underlying Intellectual Property is necessary to have a security interest in such Accounts and such property that are proceeds of Intellectual Property, then the Collateral shall automatically, and effective as of the Effective Date, include the Intellectual Property to the extent necessary to permit perfection of Bank's security interest in such Accounts and such other property of Pledgor that are proceeds of the Intellectual Property.

Pursuant to the terms of a certain negative pledge arrangement with Bank, Pledgor has agreed not to encumber any of its Intellectual Property without Bank's prior written consent.

SECURITY AGREEMENT

THIS SECURITY AGREEMENT is made the 23rd day of October, 2013.

BETWEEN:

AQUINOX PHARMACEUTICALS INC., a Canadian corporation incorporated under the federal laws of Canada and having its chief executive office at Suite 430, 5600 Parkwood Way, Richmond, British Columbia V6V 2M2

Facsimile: (604) 295-4748

(the "Debtor")

AND:

SILICON VALLEY BANK, a California corporation having an address at Suite 3900, 901 Fifth Avenue, Seattle, Washington 98164

Facsimile: (206) 624-0374

(the "Bank")

1.0 SECURITY INTEREST

1.1 For consideration the Debtor does hereby mortgage and charge as and by way of a fixed and specific charge, and assign and transfer to the Bank, and grant to the Bank a security interest in, all the Debtor's right, title and interest in and to all its presently owned or held and after acquired or held personal property, of whatever nature or kind (except the kinds set out in Sections 1.3, 2.1 and 2.2 below) and wheresoever situate, and all proceeds thereof and therefrom including:

- (a) all equipment, including, without limiting the generality of the foregoing, machinery, tools, fixtures, furniture, furnishings, chattels, motor vehicles and other tangible personal property that is not Inventory, and all parts, components, attachments, accessories, accessions, replacements, substitutions, additions and improvements to any of the foregoing (all of which is hereinafter collectively called the "Equipment");
- (b) all inventory, including, without limiting the generality of the foregoing, goods acquired or held for sale or lease or furnished or to be furnished under contracts of rental or service, all raw materials, work in process, finished goods, returned goods, repossessed goods, and all packaging materials, supplies and containers relating to or used or consumed in connection with any of the foregoing (all of which is hereinafter collectively called the "Inventory");
- (c) all debts, accounts, claims, demands, monies and choses in action which now are, or which may at any time hereafter be, due or owing to or owned by the Debtor and all books, records, documents, papers and electronically recorded data recording, evidencing or relating to the said debts, accounts, claims, demands, monies and choses in action or any part thereof (all of which is hereinafter collectively called the "Accounts");
- (d) all documents of title, chattel paper, instruments, investment property, securities and money, and all other goods of the Debtor that are not Equipment, Inventory or Accounts;

- (e) all Contracts, contractual rights, goodwill and all other choses in action of the Debtor of every kind which now are, or which may at any time hereafter be, due or owing to or owned by the Debtor, and all other intangible property of the Debtor which is not Accounts, chattel paper, instruments, documents of title, investment property, securities or money; and
- (f) charge as and by way of a floating charge, and grant to the Bank a security interest in and to all the Debtor's right, title and interest in and to all its presently owned or held and after acquired or held real, immovable and leasehold property and all interests therein, and all easements, rights-of-way, privileges, benefits, licences, improvements and rights whether connected therewith or appurtenant thereto or separately owned or held, including all structures, plant and other fixtures (all which is hereinafter collectively called the "Real Property").

1.2 The Liens created pursuant to Section 1.1 are hereinafter collectively called the "Security Interests" and the property subject to the Security Interests and all property, assets and undertakings, expressed to be charged, assigned or transferred or secured by any instruments supplemental hereto or in implementation hereof are hereinafter collectively called the "Collateral".

1.3 Notwithstanding Sections 1.1 and 1.2, except as set out in Section 1.3(b), the Collateral shall not include any of the following:

- (a) any Contract, Account, User Licence, permit, licence, claim, demand, chose in action or other intangible which, as a matter of law or by its terms, is not assignable or may not be charged or otherwise encumbered by the Debtor without the consent, authorization, approval or waiver of a third party (all such Contracts, Accounts, User Licences, permits, licences, claims, demands, choses in action and other intangibles are collectively referred to herein as the "Restricted Assets") unless and until such consent, authorization, approval or waiver has been obtained, provided that, until such time as the applicable consent, authorization, approval or waiver has been obtained, the Debtor shall hold each Restricted Asset in trust for the Bank and to assign and dispose of the same in such manner as the Bank may from time to time direct as and when the Bank is entitled to realize upon Collateral in accordance with Section 12.0. The Debtor agrees that it will use all such reasonable efforts as may be required to obtain as expeditiously as possible all such consents, authorizations, approvals or waivers other than those required under governmental permits or licences with respect to which a consent to mortgage is not capable of being obtained; and
- (b) Intellectual Property or any claims for damages by way of any past, present and future infringement of Intellectual Property. For greater certainty, the definition of Restricted Assets shall not include any Intellectual Property or any claims for damages by way of any past, present and future infringement of Intellectual Property. Notwithstanding the foregoing two sentences, the Collateral shall include all accounts, general intangibles and other property that consist of rights to payment and proceeds from the sale, licensing or disposition of all or any part of, or rights in, the Intellectual Property (collectively, the "Rights to Payment"). If any judicial authority holds that a security interest in the underlying Intellectual Property is necessary to have a security interest in the Rights to Payment, then the Collateral shall automatically, and effective as of the date of this Security Agreement, include the Intellectual Property to the extent necessary to permit, and only for the purposes of permitting, perfection of the Bank's security interest in the Rights to Payment.

2.0 FURTHER EXCEPTIONS

2.1 The last 10 days of the term created by any lease or agreement therefor are hereby excepted out of any charge or security interest created by this Security Agreement but the Debtor shall stand possessed of the reversion thereby remaining upon trust to assign and dispose thereof to any third party as the Bank shall direct.

2.2 All consumer goods of the Debtor are hereby excepted out of the Security Interests created by this Security Agreement.

3.0 **ATTACHMENT**

3.1 The Debtor acknowledges that the Security Interests hereby created attach upon the execution of this Security Agreement (or in the case of any after acquired property, upon the date of acquisition thereof), that value has been given, and that the Debtor has (or in the case of any after acquired property, will have upon the date of acquisition) rights in the Collateral.

4.0 **PROHIBITIONS**

4.1 Without the prior written consent of the Bank the Debtor shall not have power to:

- (a) create or permit to exist any Lien over, or claim against any of the Collateral which ranks or could in any event rank in priority to or *pari passu* with any of the Security Interests created by this Security Agreement other than Permitted Liens; or
- (b) grant, sell or otherwise assign its chattel paper.

4.2 The Debtor agrees not to sell, transfer, assign, mortgage, pledge, lease, grant a security interest in or encumber any of its Intellectual Property, except for Permitted Liens.

5.0 **OBLIGATIONS SECURED**

5.1 This Security Agreement and the Security Interests hereby created are in addition to and not in substitution for any other security interest now or hereafter held by the Bank from the Debtor or from any other person whomsoever and shall be general and continuing security for the payment of all indebtedness and liability of the Debtor to the Bank pursuant to that certain loan agreement dated on or about the date hereof (the "Loan Agreement") by and between the Debtor and the Bank, as may be renewed, amended, extended or restated from time to time, including interest thereon, present and future, absolute or contingent, joint or several, direct or indirect, matured or not, extended or renewed, wheresoever and howsoever incurred, and any ultimate balance thereof, including all advances on current or running account, future advances and re-advances, and for the performance of all obligations of the Debtor to the Bank in connection with the Loan Agreement and the other Loan Documents (as defined in the Loan Agreement), whether or not contained in this Security Agreement (all of which indebtedness, liability and obligations are hereinafter collectively called the "Obligations").

6.0 **REPRESENTATIONS AND WARRANTIES**

6.1 The Debtor represents and warrants that this Security Agreement is granted in accordance with resolutions of the directors (and of the shareholders as applicable) of the Debtor and all other matters and things have been done and performed so as to authorize and make the execution and delivery of this Security Agreement, and the performance of the Debtor's obligations hereunder, legal, valid and binding.

6.2 The Debtor represents and warrants that the Debtor lawfully owns and possesses all presently held Collateral and has good title thereto, free from all Liens, save only Permitted Liens, and the Debtor has good right and lawful authority to grant a security interest in the Collateral as provided by this Security Agreement.

6.3 The Debtor represents and warrants and, so long as this Security Agreement remains in effect, shall be deemed to continuously represent and warrant that the locations specified in Schedule B as to business operations and records are accurate and complete and with respect to goods (including Inventory) constituting Collateral, the locations specified in Schedule B are accurate and complete save for goods in transit to such locations and Inventory on lease or consignment.

6.4 Except as set out in Schedule C, the Debtor is the sole owner of the Intellectual Property except for licenses granted on commercially reasonable terms by the Debtor to its customers in the ordinary course of business. Each of the Patents is valid and enforceable and no claim has been made that any part of the Intellectual Property violates the rights of any third party.

7.0 **COVENANTS OF THE DEBTOR**

7.1 The Debtor covenants that at all times while this Security Agreement remains in effect the Debtor will:

- (a) defend the title to the Collateral for the benefit of the Bank against the claims and demands of all persons and will diligently initiate and prosecute legal action against all infringers of the Debtor's rights in Intellectual Property;
- (b) fully and effectually maintain and keep maintained the Security Interests hereby created valid and effective;
- (c) maintain the Collateral in good order and repair;
- (d) forthwith pay:
 - (i) all taxes, assessments, rates, duties, levies, government fees, claims and dues lawfully levied, assessed or imposed upon it or the Collateral when due, unless the Debtor shall in good faith contest its obligations so to pay and shall furnish such security as the Bank may require; and
 - (ii) all Liens which rank or could in any event rank in priority to any Security Interest created by this Security Agreement other than Permitted Liens;
- (e) forthwith, but subject to and to the extent agreed to in the Loan Agreement, pay all costs, charges, expenses and legal fees and disbursements (on a solicitor and his own client basis) which may be incurred by the Bank in:
 - (i) inspecting the Collateral;
 - (ii) negotiating, preparing, perfecting and registering this Security Agreement and other documents, whether or not relating to this Security Agreement; and
 - (iii) investigating title to the Collateral;
- (f) forthwith pay all costs, charges, expenses and legal fees and disbursements (on a solicitor and his own client basis) which may be incurred by the Bank in:
 - (i) taking, recovering and keeping possession of the Collateral; and
 - (ii) all other actions and proceedings taken in connection with the preservation of the Collateral and the enforcement of this Security Agreement and of any other security interest held by the Bank as security for the Obligations;
- (g) at the Bank's request at any time and from time to time execute and deliver such further and other documents and instruments and do all acts and things as are reasonably required by the Bank in order to confirm and perfect, and maintain perfection of, the Security Interests hereby created in favour of the Bank upon any of the Collateral;

- (h) notify the Bank promptly of:
 - (i) any change in the information contained herein relating to the Debtor, its business or the Collateral, including without limitation any change of name or address of the Debtor and any change in the present location of any Collateral;
 - (ii) the details of any material acquisition of Collateral;
 - (iii) any material loss or damage to Collateral;
 - (iv) any material default by any account debtor in payment or other performance of his obligations to the Debtor with respect to any Accounts; and
 - (v) the return to or repossession by the Debtor of Collateral where such return or repossession of Collateral is material in relation to the business of the Debtor;
- (i) prevent Collateral, other than Inventory sold, leased, or otherwise disposed of as permitted hereby, from being or becoming an accession to other property not covered by this Security Agreement;
- (j) carry on and conduct its business in a proper and business-like manner, including maintenance of proper books of account and records;
- (k) permit the Bank and its representatives, at all reasonable times access to all its Collateral and to all its books of account and records respecting such Collateral for the purpose of inspection and render all assistance reasonably necessary for such inspection;
- (l) deliver to the Bank from time to time promptly upon request:
 - (i) any documents of title, instruments, securities and chattel paper constituting, representing or relating to Collateral;
 - (ii) all books of account and all records, ledgers, reports, correspondence, schedules, documents, statements, lists and other writings relating to Collateral for the purpose of inspecting, auditing or copying the same;
 - (iii) all financial statements prepared by or for the Debtor regarding the Debtor's business; and
 - (iv) such information concerning Collateral and the Debtor and the Debtor's business and affairs related to the Security Interest as the Bank may require;
- (m) the Debtor shall do everything reasonably necessary or desirable to preserve and maintain the Intellectual Property including, without limitation:
 - (i) renew Trademark and Copyright registrations, if renewable;
 - (ii) file all assignments of the registered Trademarks and Copyrights (if any) made in favour of the Debtor which are necessary or desirable to maintain the Debtor's rights therein;
 - (iii) pay all fees necessary to maintain the Intellectual Property;
 - (iv) ensure that the Licence Agreements executed by the Debtor adequately protect the Debtor's rights in the subject Intellectual Property;

- (v) perform all of its obligations under the Licence Agreements and all Contracts;
- (vi) design Software so that duplicating the Source Code from a copy of the Object Code is impractical, disclose Source Code only on a “need to know” basis, obtain from all employees having a material input into any Software a confidentiality agreement with respect to the concepts involved;
- (vii) commence and prosecute, at its own expense, such suits, proceedings or other actions for infringement, passing off, unfair competition, dilution or other damage as are in its reasonable business judgment necessary to protect the Intellectual Property; and
- (viii) at its own expense, enforce its rights under any of its agreements in respect of Intellectual Property which in its reasonable business judgement it believes are necessary to enhance the value of or protect the Intellectual Property.

8.0 **INSURANCE**

8.1 The Debtor covenants that at all times while this Security Agreement is in effect the Debtor shall:

- (a) maintain or cause to be maintained insurance on the Collateral with an insurer, of kinds, for amounts and payable to such person or persons, all as the Bank may require, and in particular maintain insurance on the Collateral to the full insurable value against loss or damage by fire including extended coverage endorsement and in the case of motor vehicles, maintain insurance against theft;
- (b) cause the insurance policy or policies required hereunder to be assigned to the Bank and have as part thereof a standard mortgage clause or a mortgage endorsement, as appropriate; and
- (c) pay any premium in connection with such insurance, and deliver copies of all such policies to the Bank, if it so requires.

8.2 If proceeds of any insurance required hereunder become payable, the Bank may, in its absolute discretion apply such proceeds to such part or parts of the Obligations as the Bank may see fit or the Bank may release any such insurance proceeds to the Debtor for the purpose of repairing, replacing or rebuilding, but any release of insurance proceeds to the Debtor shall not operate as a payment on account of the Obligations or in any way affect this Security Agreement.

8.3 The Debtor will forthwith, on the happening of loss or damage to the Collateral, notify the Bank thereof and furnish to the Bank at the Debtor’s expense any necessary proof and do any necessary act to enable the Bank to obtain payment of the insurance proceeds but nothing herein contained shall limit the Bank’s right to submit to the insurer a proof of loss on its own behalf.

8.4 The Debtor hereby authorizes and directs the insurer under any policy of insurance required hereunder to include the name of the Bank as a loss payee on any cheque or draft which may be issued with respect to a claim under and by virtue of such insurance, and the production by the Bank to any insurer of a certified copy of this Security Agreement shall be its full and complete authority for so doing.

8.5 If the Debtor fails to maintain insurance as required by Section 8.1, the Bank may, but shall not be obliged to, maintain or effect such insurance coverage, or so much thereof as the Bank considers necessary for its protection.

9.0 PERFORMANCE OF OBLIGATIONS

9.1 If the Debtor fails to perform its obligations hereunder, the Bank may, but shall not be obliged to, perform any or all of such obligations without prejudice to any other rights and remedies of the Bank hereunder, and any payments made and any costs, charges, expenses and legal fees and disbursements (on a solicitor and his own client basis) incurred in connection therewith shall be payable by the Debtor to the Bank forthwith with interest until paid at the highest rate borne by any of the Obligations.

10.0 RESTRICTIONS ON SALE OR DISPOSAL OF COLLATERAL

10.1 Except as otherwise provided herein or in the Loan Agreement, without the prior written consent of the Bank the Debtor will not:

- (a) sell, lease or otherwise dispose of the Collateral;
- (b) release, surrender or abandon possession of the Collateral; or
- (c) move or transfer the Collateral from the jurisdictions in which the Security Interests hereby created have been perfected.

10.2 At any time other than upon the occurrence and during the continuance of a default under this Security Agreement, the Debtor may lease, sell, licence, consign or otherwise deal with items of Inventory in the ordinary course of its business and for the purposes of carrying on its business.

11.0 DEFAULT

11.1 The Debtor shall be in default under this Security Agreement, in any of the following events:

- (a) the Debtor makes default in payment when due of any indebtedness or liability of the Debtor to the Bank;
- (b) the Debtor is in breach of any term, condition, obligation or covenant to the Bank, or any representation or warranty to the Bank is untrue, whether or not contained in this Security Agreement;
- (c) the Debtor declares itself to be insolvent or admits in writing its inability to pay its debts generally as they become due, or makes an assignment for the benefit of its creditors, is declared bankrupt, makes a proposal or otherwise takes advantage of provisions for relief under the *Bankruptcy and Insolvency Act*, the *Companies' Creditors Arrangement Act* or similar legislation in any jurisdiction, or makes an authorized assignment;
- (d) a receiver, receiver and manager or receiver manager of all or any part of the Collateral is appointed;
- (e) an order is made or an effective resolution is passed for winding up the Debtor;
- (f) the Debtor ceases or threatens to cease to carry on all or substantially all of its business;
- (g) an order of execution against the Collateral or any part thereof remains unsatisfied for a period of 10 days;
- (h) without the prior written consent of the Bank, except for Permitted Liens, the Debtor creates or permits to exist any Lien against the Collateral which ranks or could in any event rank in priority to or *pari passu* with any of the Security Interests created by this Security Agreement;

- (i) the holder (including the holder of any Permitted Liens) of any other Lien against all or any material part of the Collateral does anything to enforce or realize on such Lien;
- (j) the Debtor enters into an amalgamation, a merger or other similar arrangement with any other person, unless such transaction is otherwise permitted pursuant to the Loan Agreement;
- (k) the Bank in good faith believes and has commercially reasonable grounds to believe that the prospect of payment or performance of any of the Obligations is impaired or that any of the Collateral is or is about to be placed in jeopardy.

11.2 For the purposes of Section 203 of the *Land Title Act* (British Columbia), the floating charge created by this Security Agreement over Real Property shall become a fixed charge thereon upon the earliest of:

- (a) the occurrence of an event described in Clause 11.1(c), (d), (e) or (f); or
- (b) the Bank taking any action pursuant to Clause 12 to enforce and realize on the Security Interests created by this Security Agreement.

12.0 **ENFORCEMENT**

12.1 Upon the occurrence and during the continuance of an Event of Default (as defined in the Loan Agreement), the Bank may declare any or all of the Obligations to become immediately due and payable and the security hereby constituted will immediately become enforceable. To enforce and realize on the Security Interests created by this Security Agreement the Bank may take any action permitted by law or in equity, as it may deem expedient, and in particular and without limiting the generality of the foregoing, the Bank may do any of the following:

- (a) appoint by instrument a receiver, receiver and manager or receiver manager (the person so appointed being hereinafter called the "Receiver") of the Collateral, with or without bond as the Bank may determine, and from time to time in its absolute discretion remove such Receiver and appoint another in its stead;
- (b) enter upon any premises of the Debtor and take possession of the Collateral with power to exclude the Debtor, its agents and its servants therefrom, without becoming liable as a mortgagee in possession;
- (c) preserve, protect and maintain the Collateral and make such replacements thereof and repairs and additions thereto as the Bank may deem advisable;
- (d) sell, lease or otherwise dispose of all or any part of the Collateral, whether by public or private sale or lease or otherwise, in such manner, at such price as can be reasonably obtained therefor and on such terms as to credit and with such conditions of sale and stipulations as to title or conveyance or evidence of title or otherwise as to the Bank may seem reasonable, provided that if any sale, lease or other disposition is on credit the Debtor will not be entitled to be credited with the proceeds of such sale, lease or other disposition until the monies therefor are actually received; and
- (e) exercise all of the rights and remedies of a secured party under the Act.

12.2 The Bank is hereby granted a licence or other right, solely upon the occurrence and continuance of an Event of Default and upon the enforcement by the Bank of its security pursuant to the provisions of this Section 12.0, to use without charge the labels, rights of use of any name, trade names, service marks, and advertising matter, or any property of a similar nature, as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with the Bank's exercise of its rights under this Section 12.0, the Debtor's rights under all licences and all franchise agreements shall enure to the Bank's benefit.

12.3 A Receiver appointed pursuant to this Security Agreement shall be the agent of the Debtor and not of the Bank and, to the extent permitted by law or to such lesser extent permitted by its appointment, shall have all the powers of the Bank hereunder, and in addition shall have power to carry on the business of the Debtor and for such purpose from time to time to borrow money either secured or unsecured, and if secured by a security interest on any Collateral, such security interest may rank before or *pari passu* with or behind any of the Security Interests created by this Security Agreement, and if it does not so specify such security interest shall rank in priority to the Security Interests created by this Security Agreement.

12.4 Subject to the claims, if any, of the creditors of the Debtor ranking in priority to this Security Agreement, all amounts realized from the disposition of Collateral pursuant to this Security Agreement will be applied as the Bank, in its absolute discretion, may direct as follows:

- (a) in payment of all costs, charges and expenses (including legal fees and disbursements on a solicitor and his own client basis) incurred by the Bank in connection with or incidental to:
 - (i) the exercise by the Bank of all or any of the powers granted to it pursuant to this Security Agreement; and
 - (ii) the appointment of the Receiver and the exercise by the Receiver of all or any of the powers granted to it pursuant to this Security Agreement, including the Receiver's reasonable remuneration and all outgoings properly payable to the Receiver;
- (b) in or toward payment to the Bank of all principal and other monies (except interest) due in respect of the Obligations; and
- (c) in or toward payment to the Bank of all interest remaining unpaid in respect of the Obligations.

Subject to applicable law and the claims, if any, of other creditors of the Debtor, any surplus will be paid to the Debtor.

13.0 **DEFICIENCY**

If the amounts realized from the disposition of the Collateral are not sufficient to pay the Obligations in full, the Debtor will immediately pay to the Bank the amount of such deficiency.

14.0 **LIABILITY OF BANK**

14.1 Except in the event of gross negligence or willful misconduct of the Bank, the Bank shall not be responsible or liable for any debts contracted by it, for damages to persons or property or for salaries or non-fulfillment of contracts during any period when the Bank shall manage the Collateral upon entry, as herein provided, nor shall the Bank be liable to account as a mortgagee in possession or for anything except actual receipts or be liable for any loss on realization or for any default or omission for which a mortgagee in possession may be liable. The Bank shall not be bound to do, observe or perform or to see to the observance or performance by the Debtor of any obligations or covenants imposed upon the Debtor nor shall the Bank, in the case of securities, instruments or chattel paper, be obliged to preserve rights against other persons, nor shall the Bank be obliged to keep any of the Collateral identifiable. The Debtor hereby waives any applicable provision of law permitted to be waived by it which imposes higher or greater obligations upon the Bank than aforesaid.

15.0 **APPOINTMENT OF ATTORNEY**

The Debtor hereby irrevocably appoints the Bank or the Receiver, as the case may be, with full power of substitution, to be the attorney of the Debtor for and in the name of the Debtor to sign, endorse or execute under seal or otherwise any deeds, documents, transfers, cheques, instruments, demands, assignments, assurances or consents that the Debtor is obliged to sign, endorse or execute and generally to use the name of the Debtor and to do all things as may be necessary or incidental to the exercise of all or any of the powers conferred on the Bank or the Receiver, as the case may be, pursuant to this Security Agreement.

16.0 **ACCOUNTS**

Notwithstanding any other provision of this Security Agreement, the Bank may collect, realize, sell or otherwise deal with the Accounts or any part thereof in such manner, upon such terms and conditions and at such time or times, whether before or after default, as may seem to it advisable, and without notice to the Debtor, except in the case of disposition after default and then subject to the provisions of Part V of the Act. All monies or other forms of payment received by the Debtor in payment of any Account will be received and held by the Debtor in trust for the Bank.

17.0 **APPROPRIATION OF PAYMENTS**

17.1 Any and all payments made in respect of the Obligations from time to time and monies realized from any security interests held therefor (including monies collected in accordance with or realized on any enforcement of this Security Agreement) may be applied to such part or parts of the Obligations as the Bank may see fit, and the Bank may at all times and from time to time change any appropriation as the Bank may see fit.

18.0 **CONSOLIDATION**

In accordance with the *Property Law Act* (British Columbia), the doctrine of consolidation applies to this Security Agreement.

19.0 **LIABILITY TO ADVANCE**

19.1 Except to the extent that the Bank:

- (a) by accepting bills of exchange drawn on it by the Debtor; or
- (b) by issuing letters of credit or letters of guarantee on the application of the Debtor;

is required to advance monies on the maturity of such bills or pursuant to such letters of credit or letters of guarantee, as the case may be, none of the preparation, execution, perfection and registration of this Security Agreement or the advance of any monies shall bind the Bank to make any advance or loan or further advance or loan, or renew any note or extend any time for payment of any indebtedness or liability of the Debtor to the Bank.

20.0 **WAIVER**

20.1 The Bank may from time to time and at any time waive in whole or in part any right, benefit or default under any clause of this Security Agreement but any such waiver of any right, benefit or default on any occasion shall be deemed not to be a waiver of any such right, benefit or default thereafter, or of any other right, benefit or default, as the case may be. No waiver shall be effective unless it is in writing.

21.0 **NOTICE**

21.1 Notice may be given to either party by personal delivery or facsimile transmission to the party for whom it is intended, at the principal address of such party provided herein or at such other address as may be given in writing by such party to the other, and any notice shall be deemed to have been given on delivery or confirmation of transmission if received by 3:00 p.m. local time on a business day or on the next business day if received after that time.

22.0 EXTENSIONS

22.1 The Bank may grant extensions of time and other indulgences, take and give up security, accept compositions, compound, compromise, settle, grant releases and discharges, refrain from perfecting or maintaining perfection of security interests, and otherwise deal with the Debtor, account debtors of the Debtor, sureties and others and with Collateral and other security interests as the Bank may see fit without prejudice to the liability of the Debtor or the Bank's right to hold and realize on the Security Interests created by this Security Agreement.

23.0 NO MERGER

23.1 This Security Agreement shall not operate so as to create any merger or discharge of any of the Obligations, or of any assignment, transfer, guarantee, lien, contract, promissory note, bill of exchange or security interest of any form held or which may hereafter be held by the Bank from the Debtor or from any other person whomsoever. The taking of a judgment with respect to any of the Obligations will not operate as a merger of any of the covenants contained in this Security Agreement.

24.0 RIGHTS CUMULATIVE

24.1 All rights and remedies of the Bank set out in this Security Agreement, and in any other security agreement held by the Bank from the Debtor or any other person whomsoever to secure payment and performance of the Obligations, are cumulative and no right or remedy contained herein or therein is intended to be exclusive but each is in addition to every other right or remedy contained herein or therein or in any future security agreement, or now or hereafter existing at law, in equity or by statute, or pursuant to any other agreement between the Debtor and the Bank that may be in effect from time to time.

25.0 ASSIGNMENT

25.1 The Bank may, without further notice to the Debtor, at any time assign, transfer or grant a security interest in this Security Agreement and the Security Interests created hereby. The Debtor expressly agrees that the assignee, transferee or secured party, as the case may be, shall have all of the Bank's rights and remedies under this Security Agreement and the Debtor will not assert any defense, counterclaim, right of set-off or otherwise any claim which it now has or hereafter acquires against the Bank in any action commenced by such assignee, transferee or secured party, as the case may be, and will pay the Obligations to the assignee, transferee or secured party, as the case may be, as the Obligations become due.

26.0 SATISFACTION AND DISCHARGE

26.1 Any partial payment or satisfaction of the Obligations, or any ceasing by the Debtor to be indebted to the Bank shall be deemed not to be a redemption or discharge of this Security Agreement. The Debtor shall be entitled to a release and discharge of this Security Agreement and the Security Interests upon full payment and satisfaction of all Obligations, and upon written request by the Debtor and payment to the Bank of a commercially reasonable discharge fee to be fixed by the Bank and payment of all costs, charges, expenses and legal fees and disbursements (on a solicitor and his own client basis) incurred by the Bank in connection with the Obligations and such release and discharge.

27.0 ENUREMENT

27.1 This Security Agreement shall enure to the benefit of the Bank and its successors and assigns, and shall be binding upon the successors and permitted assigns of the Debtor.

28.0 **INTERPRETATION**

28.1 In this Security Agreement:

“**Collateral**” has the meaning set out in Section 1.2 hereof as modified by Sections 1.3, 2.1 and 2.2 and any reference to Collateral shall, unless the context otherwise requires, be deemed to be a reference to Collateral as a whole or any part thereof.

“**Contracts**” means all contractual, allied ancillary and subsidiary rights, rights in intangibles and all properties and things of value pertaining to the Collateral other than Intellectual Property including, without limitation, all rights and benefits arising in favour of the Debtor under contracts to which it is a party or pursuant to which it receives a benefit.

“**Copyrights**” means all copyrights, domestic and foreign (whether registered or unregistered), now owned or existing or hereafter adopted or acquired, all registrations and recordings thereof, and all applications in connection therewith, including all registrations, recordings and applications in the Canadian Copyright Office or United States Copyright office or in any similar office in any other country, and all reissues, extensions or renewals thereof.

“**Debtor**” means Aquinox Pharmaceuticals Inc.

“**Grantor Licences**” means all agreements pursuant to which the Debtor has granted rights or an option to acquire rights to use any Intellectual Property.

“**Intellectual Property**” means all Copyrights, Patents, Trademarks and any other intellectual or industrial property now owned or licensed or hereafter owned, acquired or licensed by the Debtor, including the intellectual property described in Schedule C, and including trade secrets, Software and Software Documentation, whether owned or licensed, and all benefits, options and rights to use any of the foregoing, including all User Licences and all Grantor Licences, securities, instruments and, when the context permits, all registrations and applications that have been made or shall be made or filed in any office in any jurisdiction in respect of the foregoing, and all reissues, extensions and renewals thereof.

“**Licence Agreements**” means User Licences or Grantor Licences, or both, as the context requires.

“**Lien**” means any mortgage, lien, deed of trust, charge, pledge, security interest or other encumbrance.

“**Object Code**” means fully compiled or assembled Software in binary form which may be used directly by information processing equipment to process information.

“**Patents**” means all patents, patent applications and intellectual or industrial property underlying such patents or patent applications, including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

“**Permitted Liens**” means the following:

- (a) any Liens existing on the date hereof and disclosed in Schedule A;
- (b) Liens for taxes, fees, assessments or other governmental charges or levies, either delinquent or being contested in good faith by appropriate proceedings, provided the same have no priority over any of the Bank’s security interests;

- (c) Liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by Liens of the type described in clauses (a) and (b) above, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness being extended, renewed or refinanced does not increase;
- (d) Liens in favour of the Bank or consented to in writing by the Bank; and
- (e) Liens described as Permitted Liens in the Loan Agreement.

“**Software**” means all computer programs, firmware and databases and portions of each of the foregoing in whatever form and on whatever medium expressed, fixed, embodied or stored from time to time, whether physical, magnetic, electronic, optical or otherwise and the Copyright, Patents and trade secrets therein including, without limitation, Object Code and Source Code versions of each such program and firmware and portion thereof and all corrections, updates, enhancements, translations, modifications, adaptations and new versions thereof together with both the media upon or in which such programs, firmware, databases and portions thereof are expressed, fixed, embodied or stored (such as disks, diskettes, tapes and semiconductor chips) and all flow charts, manuals, instructions, documentation and other material relating thereto.

“**Software Documentation**” means all documentation and other materials in any way related to Software including, without limitation, copies of the Source Code or Object Code, drawings, flowcharts, user’s manuals, reference manuals and all functional descriptions and specifications of or relating to the Software regardless of the medium in or on which such information is stored including, without limitation, all such information necessary or desirable for the production, modification, enhancement, testing, marketing and use of the Software.

“**Source Code**” means Software created or stored in a computer programming or instructional language, including without limitation, computer programming or instructional language commonly used for the creation or storage of Software such as, without limitation, Pascal, Fortran, Basic and C.

“**the Act**” means the *Personal Property Security Act* (British Columbia) and all regulations thereunder, as amended from time to time.

“**Trademarks**” means all trademarks and trade names, registered and unregistered, including, without limitation:

- (a) all designs, logos, indicia, trade names, corporate names, company names, business names, trade styles, service marks, logos and other source or business identifiers;
- (b) all fictitious characters;
- (c) all prints and labels on which any of the foregoing have appeared or appear or shall appear;
- (d) all registrations and applications that have been or shall be made or filed in the Canadian Intellectual Property Office or United States Patent and Trademark Office or any similar office in any other country or political subdivision thereof and all records thereof and all reissues, extensions, or renewals thereof;
- (e) all goodwill associated with or symbolized by any of the foregoing; and

(f) all common law and other rights in the above.

“**User Licences**” means all agreements pursuant to which the Debtor has obtained rights or an option to acquire rights to use any Intellectual Property.

28.2 Words and expressions used herein that have been defined in the Act shall be interpreted in accordance with their respective meanings given in the Act unless otherwise defined herein or unless the context otherwise requires.

28.3 The invalidity or unenforceability of the whole or any part of any clause of this Security Agreement shall not affect the validity or enforceability of any other clause or the remainder of such clause.

28.4 The headings of the clauses of this Security Agreement have been inserted for reference only and do not define, limit, alter or enlarge the meaning of any provision of this Security Agreement.

28.5 This Security Agreement shall be governed by the laws of British Columbia.

29.0 **COPY OF AGREEMENT AND FINANCING STATEMENT**

29.1 The Debtor hereby:

- (a) acknowledges receiving a copy of this Security Agreement; and
- (b) waives all rights to receive from the Bank a copy of any financing statement or financing change statement filed, or any verification statement received, at any time in respect of this Security Agreement.

[Signature Page follows]

IN WITNESS WHEREOF the Debtor has executed this Security Agreement effective as of the date first written above.

AQUINOX PHARMACEUTICALS INC.

By: /s/ David Main

Name: David Main

Title: Chief Executive Officer

SCHEDULE A
ADDITIONAL PERMITTED LIENS

Nil.

SCHEDULE B

- 1. Locations of Debtor's Chief Executive Office, Corporate Office, Principal Place of Business and Business Operations**
Suite 430, 5600 Parkwood Way, Richmond, British Columbia V6V 2M2
- 2. Locations of Books and Records relating to Collateral and Account Debtors (if different from 1 above)**
- 3. All Warehouses and Premises Where Collateral is Stored or Located (if different from 1 above)**

SCHEDULE C
INTELLECTUAL PROPERTY

See attached listing of intellectual property.

**Canadian Patents
of Aquinox Pharmaceuticals Inc.
as of September 11, 2013**

<u>Patent</u>	<u>Patent No.</u>	<u>Filing Date</u>	<u>Status</u>
3-Nitrogen-6, 7-Dioxygen Steroids and Use Related Thereto	CA2418748	2001/04/30	Dead application (February 17, 2012)
Indene Derivatives as Pharmaceutical Agents	CA2521883	2004/04/15	In good standing – pending examination—next maintenance fee due 2014/04/15
Ship1 Modulators and Methods Related Thereto	CA2781661	2010/12/03	In good standing – next maintenance fee due 2013/12/03