

Aeterna Zentaris Inc.
Form SUPPL
January 09, 2014
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**Filed pursuant to General Instruction II.L of Form F-10
File No. 333-181714**

The information in this prospectus supplement is not complete and may be changed. A registration statement relating to these securities has been filed with the United States Securities and Exchange Commission and declared effective. We are not using this prospectus supplement and accompanying prospectus to offer to sell these securities or solicit offers to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 8, 2014

A copy of this preliminary prospectus supplement (this prospectus supplement) has been filed with the securities regulatory authority in each of the provinces of Canada but has not yet become final for the purpose of the sale of securities. Information contained in this preliminary prospectus supplement may not be complete and may have to be amended.

This prospectus supplement, together with the accompanying short form base shelf prospectus dated June 8, 2012 to which it relates, as amended or supplemented, and each document incorporated or deemed to be incorporated by reference into this prospectus supplement and the accompanying prospectus, constitutes a public offering of these securities only in those jurisdictions where such securities may be lawfully offered for sale and therein only by persons permitted to sell such securities. No securities regulatory authority has expressed an opinion about these securities and it is an offense to claim otherwise.

Information has been incorporated by reference into this prospectus supplement and the short form base shelf prospectus dated June 8, 2012 from documents filed with the United States Securities and Exchange Commission and with securities commissions or similar authorities in Canada. Copies of the documents incorporated herein by reference may be obtained on request without charge from the secretary of Aeterna Zentaris Inc. at 1405 du Parc-Technologique Boulevard, Quebec City, Quebec, Canada, G1P 4P5, tel. (418) 652-8525 and are also available electronically at www.sec.gov/edgar.shtml or www.sedar.com.

New Issue

PRELIMINARY PROSPECTUS SUPPLEMENT NO. 5

(TO SHORT FORM BASE SHELF PROSPECTUS DATED JUNE 8, 2012)

US\$

Units Consisting of One Common Share and of a Warrant

to Purchase One Common Share

US\$ per Unit

Aeterna Zentaris Inc. (we, us or the Company) is hereby offering units (the Units) at a price of US\$ per Unit, with each Unit being comprised of one common share of our capital (the Common Shares) and of a warrant to purchase one Common Share (each whole warrant, a Warrant), pursuant to this prospectus supplement and the accompanying short form base shelf prospectus dated June 8, 2012. Each Warrant has an exercise price of US\$ per Common Share. The Warrants will be immediately exercisable and expire five years from the

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date of issuance. The Units will not be certificated and the Common Shares and the Warrants will be issued separately but will be purchased together in this offering. This offering of Units is being conducted pursuant to the Company's effective shelf registration statement on Form F-10, its corresponding Canadian base shelf prospectus and an exemption from the *Autorité des marchés financiers* permitting the Company to offer common shares and warrants in the United States (U.S.). See Exemptive Relief Granted by the *Autorité des marchés financiers* on page S-44 of this prospectus supplement. The distribution of the Warrants and the Common Shares issuable upon the exercise of the Warrants is qualified and registered by this prospectus supplement and the accompanying prospectus. The Units will be issued and sold pursuant to an underwriting agreement dated January 2, 2014 between the Company, as issuer, and Canaccord Genuity Inc., as underwriter.

Unless otherwise stated, currency amounts in this prospectus supplement are stated in United States dollars, or \$ or US\$.

Our Common Shares are listed on the NASDAQ Capital Market (NASDAQ) under the symbol AEZS and on the Toronto Stock Exchange (TSX) under the symbol AEZ . On January 8, 2014, the last reported sales price of our Common Shares on NASDAQ was \$1.46 per share and on TSX was C\$1.57 per share.

Investing in our Common Shares and Warrants involves a high degree of risk. There is no established public trading market for the Warrants, we do not expect a market to develop, and purchasers may not be able to resell Warrants purchased under this prospectus supplement and the accompanying prospectus. In addition, we do not intend to apply for listing of the Warrants on any national securities exchange or other nationally recognized trading system. This may affect the pricing of the Warrants in the secondary market, the transparency and availability of trading prices, the liquidity of the Warrants, and the extent of issuer regulation. See Risk Factors beginning on page S-10 of this prospectus supplement and the risk factors described in the documents incorporated by reference herein for information that should be considered before investing in our Common Shares and Warrants.

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	Per Unit	Total
Public offering price ⁽¹⁾	\$	\$
Underwriting discounts and commissions ⁽²⁾	\$	\$
Proceeds, before expenses, to us	\$	\$

(1) The proceeds shown exclude proceeds that we may receive upon exercise of the Warrants.

(2) We have agreed to reimburse the underwriter for certain out-of-pocket expenses incurred by it in connection with this offering. See Underwriting beginning on page S-33 for additional information on these arrangements.

Delivery of the Units, comprised of Common Shares and Warrants, is expected to be made on or about January 14, 2014.

The underwriter, as principal, is conditionally offering the Units, subject to prior sale, when, as and if issued and accepted by it in accordance with the terms and conditions in the underwriting agreement referred to under Underwriting , and subject to the approval of legal matters by its counsel, including other conditions contained in the underwriting agreement, such as the receipt by the underwriter of officer s certificates and legal opinions. Subject to the terms and conditions set forth in the underwriting agreement, the underwriter has agreed to purchase all of the Units sold under the underwriting agreement if any of these Units are purchased. The offering price of the Units sold under the underwriting agreement and the exercise price for the Warrants was determined by negotiation between us and the underwriter with reference to the prevailing market price of the Common Shares. **After the initial offering of Units pursuant to this prospectus supplement, the public offering price, concession or any other term of the offering may be changed upon public notice of such change. See Underwriting beginning on page S-33 of this prospectus supplement.**

We are a foreign private issuer under the securities laws of the U.S. and are permitted, under a multi-jurisdictional disclosure system (MJDS) adopted in the U.S. and Canada, to prepare this prospectus supplement and the accompanying prospectus in accordance with Canadian regulatory disclosure requirements. You should be aware that such requirements are different from those in the U.S. The financial statements included in or incorporated by reference into this prospectus supplement and the accompanying prospectus have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board. Our consolidated financial statements are subject to Canadian generally accepted auditing standards and auditor independence standards, in addition to the standards of the Public Company Accounting Oversight Board (United States) and the U.S. Securities and Exchange Commission (SEC) independence standards, and thus may not be comparable to financial statements of U.S. companies.

The Units offered hereby are not being offered for sale to the public in Canada under this prospectus supplement. See Exemptive Relief Granted by the Autorité des Marchés Financiers on page S-44 of this prospectus supplement and Underwriting beginning on page S-33 of this prospectus supplement. The acquisition of the securities described herein may subject you to tax consequences both in the U.S. and Canada. See Certain Income Tax Considerations beginning on page S-35 of this prospectus supplement. This prospectus supplement and the accompanying prospectus may not describe these tax consequences fully. You should read the tax discussion in this prospectus supplement and the accompanying prospectus fully and consult with your own tax advisors.

Your ability to enforce civil liabilities under U.S. federal securities laws may be adversely affected by the fact that we are incorporated under the laws of Canada, many of our officers and directors and some of the experts named in this prospectus supplement and the accompanying prospectus are residents of Canada or elsewhere outside of the U.S., and a substantial portion of our assets and the assets of such persons are located outside of the U.S.

NEITHER THE SEC NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OF THIS PROSPECTUS SUPPLEMENT AND THE ACCOMPANYING PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Our registered address and head office is located at 1405 du Parc-Technologique Boulevard, Quebec City, Quebec, Canada, G1P 4P5, and our telephone number is (418) 652-8525.

Canaccord Genuity

The date of this prospectus supplement is January , 2014.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering of Units, which are comprised of Common Shares and Warrants, and supplements information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part is the accompanying prospectus, which gives more general information about us and the securities we may offer from time to time under our base shelf prospectus and our shelf registration statement.

We have not authorized any dealer, salesperson or other person to give any information or to make any representation other than those contained or incorporated by reference into this prospectus supplement, the accompanying prospectus and any related free writing prospectus that we may authorize to be provided to you. You should not rely upon any information or representation not contained or incorporated by reference into this prospectus supplement, the accompanying prospectus or any free writing prospectus that we may authorize to be provided to you. If information in this prospectus supplement is inconsistent with the accompanying prospectus or the information incorporated by reference, you should rely on this prospectus supplement. This prospectus supplement, the accompanying prospectus and any related free writing prospectus that we may authorize to be provided to you do not constitute an offer to sell or the solicitation of an offer to buy Units, in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus supplement, the accompanying prospectus and any related free writing prospectus that we may authorize to be provided to you is accurate on any date other than the date set forth on the front cover of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference regardless of the date of delivery of this prospectus supplement, the accompanying prospectus and any related free writing prospectus that we may authorize to be provided to you or any sale of Units. Our business, financial condition, results of operations and prospects may have changed since those dates.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference into this prospectus supplement and the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose

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of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

The financial statements included in or incorporated by reference into this prospectus supplement and the accompanying prospectus have been prepared in accordance with IFRS as issued by the International Accounting Standards Board. Our consolidated financial statements are subject to Canadian generally accepted auditing standards and auditor independence standards, in addition to the standards of the Public Company Accounting Oversight Board (United States) and the SEC independence standards.

As used in this prospectus supplement, the terms we, us, our, Company and Aeterna Zentaris refer to Aeterna Zentaris Inc. and its subsidiaries on a consolidated basis.

CURRENCY AND EXCHANGE RATES

The following table sets out the high and low exchange rates for one U.S. dollar expressed in Canadian dollars, for the period indicated and the average of such exchange rates, as well as the exchange rate at the end of such period, in each case, based upon the noon rates as quoted by the Bank of Canada:

	January 2014 ⁽¹⁾	Year ended December 31,		
		2013	2012	2011
High	1.0804	1.0697	1.0418	1.0604
Low	1.0614	0.9839	0.9710	0.9449
Rate at end of period	1.0804	1.0636	0.9949	1.0170
Average rate per period	1.0690	1.0299	0.9996	0.9891

(1) Up to and including January 8, 2014.

On January 8, 2014, the exchange rate for one U.S. dollar expressed in Canadian dollars based upon the noon rate of the Bank of Canada was C\$1.0804.

SPECIAL NOTE ON FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated herein by reference contain forward-looking statements concerning the business, operations, financial performance and condition of the Company. When used in this prospectus supplement, the accompanying prospectus and the documents incorporated herein by reference, words such as may, will, should, could, expects, plans, anticipates, intends, believes, estimates, predicts, potential or continue or the negative of these terms and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain such words. These forward-looking statements are based on current expectations and are naturally subject to uncertainty and changes in circumstances that may cause actual results to differ materially from those expressed or implied by such forward-looking statements. Such statements, based as they are on the current expectations of management, inherently involve numerous risks and uncertainties, known and unknown, many of which are beyond our control. Such risks include but are not limited to:

investments in biopharmaceutical companies are generally considered to be speculative;

we may never achieve or maintain operating profitability;

our clinical trials may not yield results which will enable us to obtain regulatory approval for our products and we may suffer setbacks in any of our clinical trials;

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we may not be able to successfully complete our clinical trial programs, or such clinical trials could take longer to complete than we project;

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the impact of the stringent ongoing government regulation to which our product candidates are subject and future changes in such regulatory environment;

we may not be able to generate significant revenues if our products do not gain market acceptance;

we may require significant additional financing, and we may not have access to sufficient capital;

we may cease to continue operating as we do if we are unsuccessful in increasing our revenues and/or raising additional funding;

failure to achieve our projected development goals in the time-frames we announce and expect;

the impact of any failure on our part to obtain acceptable prices or adequate reimbursement for our products on our ability to generate revenues;

competition in our targeted markets;

we may not obtain adequate protection for our products through our intellectual property;

we may infringe the intellectual property rights of others;

we may incur liabilities from our involvement in any patent litigation;

we may not obtain trademark registrations in connection with our product candidates;

we may not be able to make adequate arrangements with third parties for the purpose of commercializing our product candidates;

the failure to perform satisfactorily by third parties upon which we rely to conduct, supervise and monitor our clinical trials;

the failure to perform satisfactorily by third parties upon which we rely to manufacture and supply products;

our ability to retain or attract key personnel;

our strategic partners' manufacturing capabilities may not be adequate to effectively commercialize our product candidates;

risks related to product liability and other claims;

risks related to our holding company structure;

the impact of healthcare reform measures on our business prospects or future financial condition;

fluctuations in currency exchange rates;

the impact of future claims and litigation on our business, financial condition or results of operations;

the impact of legislative actions, new accounting pronouncements and higher insurance costs on our future financial position or results of operations; and

stock market volatility and the possibility that our Common Shares may be delisted from the stock exchanges on which they currently trade.

More detailed information about these and other factors is included under **Risk Factors** in this prospectus supplement and the accompanying prospectus as well as in other documents incorporated herein by reference. Many of these factors are beyond our control. Future events may vary substantially from what we currently foresee. You should not place undue reliance, if any, on such forward-looking statements. The Company disavows and is under no obligation to update or alter such forward-looking statements whether as a result of new information, future events or otherwise, other than as required by applicable securities legislation.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained elsewhere in or incorporated by reference into this prospectus supplement and the accompanying prospectus. The summary may not contain all of the information that you should consider before investing in our Common Shares and Warrants. You should read this entire prospectus supplement and the accompanying prospectus carefully, including Risk Factors contained in this prospectus supplement and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus, before making an investment decision. This prospectus supplement may add to, update or change information in the accompanying prospectus.

Our Business

We are a specialty biopharmaceutical company engaged in developing novel treatments in oncology and endocrinology. Our pipeline encompasses compounds from drug discovery to regulatory approval. We also benefit from agreements and arrangements with strategic collaborators and licensee partners, which contribute to the development of our pipeline of product candidates and in the establishment of commercial activities in specific territories.

In oncology, we have an ongoing Phase 3 ZoptEC (Zoptarelin doxorubicin in Endometrial Cancer) trial in endometrial cancer under a Special Protocol Assessment (SPA) with the U.S. Food and Drug Administration (the FDA) with zoptarelin doxorubicin (AEZS-108), a doxorubicin Luteinizing Hormone Releasing Hormone-targeted conjugate compound, for which we have successfully completed a Phase 2 trial in advanced endometrial and advanced ovarian cancer. We are also advancing a Phase 2 investigator-driven trial with zoptarelin doxorubicin in castration- and taxane-resistant prostate cancer. Our oncology pipeline also encompasses earlier-stage programs, including AEZS-120, a live recombinant oral tumor vaccine candidate, and our PI3K/Erk inhibitors, such as AEZS-129 and AEZS-136.

In endocrinology, our New Drug Application (NDA) in the U.S. for the registration of macimorelin acetate (AEZS-130), an oral ghrelin agonist, as an inducer of growth hormone release for the evaluation of adult growth hormone deficiency (AGHD); has been accepted for filing by the FDA. See Recent Developments Other Recent Developments below. In addition, macimorelin acetate is in a Phase 2A investigator-driven trial for the treatment of cancer-induced cachexia.

Recent Developments

November 2013 Public Offering

On November 25, 2013, we announced the closing of our previously announced public offering of 13.1 million units (the November 2013 Offering) generating net proceeds of approximately \$13.7 million, with each unit having consisted of one common share and one whole warrant to purchase one common share, at a purchase price of \$1.15 per unit. Each warrant issued in the November 2013 Offering is exercisable for a period of five years from their date of issuance at an original exercise price of \$1.60 per share.

In connection with the offering of Units under this prospectus supplement, the holders of warrants issued in the November 2013 Offering have agreed to waive certain anti-dilution provisions of such warrants solely in connection with this offering, and have agreed that the exercise price of such warrants following the closing of this offering will be adjusted from their original exercise price of \$1.60 per share to an exercise price equal to the exercise price of the Warrants to be issued under this offering, being \$ per share. For holders of the warrants issued in the November 2013 Offering who do not participate in this offering by acquiring Units under this prospectus supplement, the exercise price of the warrants held by such non-participating holder shall be reduced, upon the closing of this offering, to an exercise price equal to the exercise price of the Warrants under this offering less \$0.05.

Other Recent Developments

On January 3, 2014, we announced that we had appointed Richard Sachse, MD, PhD, as our Senior Vice President, Chief Scientific Officer. As Chief Scientific Officer, Dr. Sachse will be responsible for all areas of the Company's global research and development activities, while also serving on our corporate Operating Committee.

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On January 6, 2014, we announced that the FDA had accepted for filing the Company's NDA for its ghrelin agonist, macimorelin acetate, in AGHD. The acceptance for filing of the NDA indicates the FDA has determined that the application is sufficiently complete to permit a substantive review. The Company's NDA, submitted on November 5, 2013, seeks approval for the commercialization of macimorelin acetate as the first orally-administered product that induces growth hormone release to evaluate AGHD. The application will be subject to a standard review and will have a Prescription Drug User Fee Act (PDUFA) date of November 5, 2014. The PDUFA date is the goal date for the FDA to complete its review of the NDA.

Corporate Information

Aeterna Zentaris Inc. was incorporated on September 12, 1990 under the laws of Canada. Our registered address and head office is located at 1405 du Parc-Technologique Boulevard, Quebec City, Quebec, Canada, G1P 4P5, our telephone number is (418) 652-8525 and our website is www.aezsinc.com. None of the documents or information found on our website shall be deemed to be included in or incorporated into this prospectus supplement or the accompanying prospectus, unless such document is specifically incorporated herein or therein by reference.

We currently have three wholly-owned direct and indirect subsidiaries, Aeterna Zentaris GmbH (AEZS Germany), based in Frankfurt, Germany, Zentaris IVF GmbH, a direct wholly-owned subsidiary of AEZS Germany, based in Frankfurt, Germany, and Aeterna Zentaris, Inc., based in Basking Ridge, New Jersey in the U.S. AEZS Germany is our principal operating subsidiary.

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The Offering

Issuer:	Aeterna Zentaris Inc.
Offering:	Units. Each Unit is comprised of one Common Share and of a Warrant to purchase one Common Share.
Price per Unit:	\$
Common Shares outstanding before this offering:	45,513,969 Common Shares (31,523,823 as of September 30, 2013).
Common Shares to be outstanding immediately after this offering:	Common Shares without giving effect to the exercise of Warrants, and Common Shares assuming and after giving effect to the exercise of all Warrants offered under this prospectus supplement.
Warrants we are offering:	Each Unit will include of a Warrant to purchase one Common Share. Warrants to purchase an aggregate of up to Common Shares will be issued in this offering. The Warrants will be exercisable during the period commencing on the date of original issuance and ending five years from such date at an exercise price of \$ per Common Share, subject to adjustment. This prospectus supplement also relates to the offering of the Common Shares issuable upon exercise of the Warrants. There is no established public trading market for the Warrants, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Warrants on any national securities exchange or other nationally recognized trading system.
Use of proceeds:	We intend to use the net proceeds from the sale of the securities under this prospectus supplement to continue to fund our ongoing drug development activities, primarily for the advancement of our zoptarelin doxorubicin program, secondly for our macimorelin acetate program, including the preparation of its commercial launch, for the potential addition of commercialized products to our pipeline as well as for future negative cash flow, general corporate purposes and working capital. See Use of Proceeds on page S-28 of this prospectus supplement.
NASDAQ and TSX symbols:	NASDAQ: AEZS; TSX: AEZ
Risk factors:	An investment in our Common Shares and Warrants involves a high degree of risk. See Risk Factors beginning on page S-10 of this prospectus supplement as well as the other information included in or incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of factors that you should consider carefully before making an investment decision.
Additional information:	The number of our outstanding Common Shares described in this prospectus supplement excludes as of September 30, 2013:

7,007,410 Common Shares issuable upon exercise of warrants that we previously issued in various registered direct offerings in October 2009, April 2010, June 2010 and July 2013 and in a public offering in October 2012, having a weighted average exercise price of approximately \$3.92 per Common Share;

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1,626,493 Common Shares that underlie outstanding stock options granted under our stock option plan as at September 30, 2013, having a weighted average exercise price of approximately \$3.77 per Common Share, and an additional 722,692 Common Shares that underlie outstanding stock options granted under our stock option plan as at September 30, 2013, having a weighted average exercise price of approximately C\$12.72 per Common Share; and

an aggregate of 1,244,530 Common Shares available for future grants under our stock option plan.

The number of our outstanding Common Shares described in this prospectus supplement (except for the above reference to 45,513,969 Common Shares next to the heading Common Shares outstanding before this offering) also excludes since September 30, 2013:

13,100,000 Common Shares issued in connection with the November 2013 Offering;

13,100,000 Common Shares issuable upon exercise of warrants that we previously issued in connection with the November 2013 Offering, having an original exercise price of \$1.60 per Common Share (as adjusted in connection with this offering; see also Recent Developments November 2013 Public Offering); and

an aggregate of approximately 0.9 million Common Shares issued under our at-the-market issuance program implemented in May 2013 at an average issuance price of \$1.50 per Common Share.

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RISK FACTORS

Before making an investment decision, you should carefully consider the risks described in this prospectus supplement, together with all of the other information incorporated by reference into this prospectus supplement and the accompanying prospectus, including those described in our most recent Annual Report on Form 20-F and subsequent consolidated financial statements and corresponding management's discussion and analysis filed with the Canadian securities regulatory authorities and our Reports on Form 6-K furnished to the SEC including our unaudited interim consolidated financial statements and corresponding management's discussion and analysis. The risks mentioned below are presented as of the date of this prospectus supplement and we expect that these will be updated from time to time in our various continuous disclosure documents filed with the Canadian securities regulatory authorities and our periodic and current reports filed with or furnished to the SEC, as applicable, which will be incorporated herein by reference. Please refer to these subsequent reports for additional information relating to the risks associated with investing in our Common Shares and Warrants.

Our business, financial condition or results of operations could be materially adversely affected by any of these risks. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. The trading price of our Common Shares could decline due to any of these risks, and you may lose part or all of your investment. This prospectus supplement, the accompanying prospectus and the incorporated documents also contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks mentioned below. Forward-looking statements included in this prospectus supplement are based on information available to us on the date hereof, and all forward-looking statements in documents incorporated by reference are based on information available to us as of the date of each such document. The Company disavows and is under no obligation to update or alter such forward-looking statements whether as a result of new information, future events or otherwise, other than as required by applicable securities legislation.

Risks Relating to Us and Our Business

Investments in biopharmaceutical companies are generally considered to be speculative.

The prospects for companies operating in the biopharmaceutical industry may generally be considered to be uncertain, given the very nature of the industry and, accordingly, investments in biopharmaceutical companies should be considered to be speculative.

We have a history of operating losses and we may never achieve or maintain operating profitability.

Our product candidates remain at the development stage, and we have incurred substantial expenses in our efforts to develop products. Consequently, we have incurred recurrent operating losses and, as disclosed in our unaudited interim consolidated financial statements as at September 30, 2013 and for the three-month and nine-month periods ended September 30, 2013 and 2012, we had an accumulated deficit of approximately US\$198.0 million as at September 30, 2013. Our operating losses have adversely impacted, and will continue to adversely impact, our working capital, total assets and shareholders' deficiency. We do not expect to reach operating profitability in the immediate future, and our expenses are likely to remain in line with current levels as we continue our research and development (R&D) and clinical study programs and our sales and marketing activities and seek regulatory approval for our product candidates. Even if we succeed in developing, acquiring or in-licensing new commercial products, we expect to incur additional operating losses for at least the next several years. If we do not ultimately generate sufficient revenue from commercialized products and achieve or maintain operating profitability, an investment in our Common Shares and Warrants could result in a significant or total loss.

Our clinical trials may not yield results which will enable us to obtain regulatory approval for our products, and a setback in any of our clinical trials would likely cause a drop in the price of our Common Shares.

We will only receive regulatory approval for a product candidate if we can demonstrate in carefully designed and conducted clinical trials that the product candidate is both safe and effective. We do not know whether our pending or any future clinical trials will demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals or will result in marketable products. Unfavorable data from those studies could result in the withdrawal of marketing

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approval for approved products or an extension of the review period for developmental products. Clinical trials are inherently lengthy, complex, expensive and uncertain processes and have a high risk of failure. It typically takes many years to complete testing, and failure can occur at any stage of testing. Results attained in preclinical testing and early clinical studies, or trials, may not be indicative of results that are obtained in later studies.

None of our current product candidates has to date received regulatory approval for its intended commercial sale. We cannot market a pharmaceutical product in any jurisdiction until it has completed rigorous preclinical testing and clinical trials and passed such jurisdiction's extensive regulatory approval process. In general, significant R&D and clinical studies are required to demonstrate the safety and efficacy of our product candidates before we can submit regulatory applications. Preclinical testing and clinical development are long, expensive and uncertain processes. Preparing, submitting and advancing applications for regulatory approval is complex, expensive and time-consuming and entails significant uncertainty. Data obtained from preclinical and clinical tests can be interpreted in different ways, which could delay, limit or prevent regulatory approval. It may take us many years to complete the testing of our product candidates and failure can occur at any stage of this process. In addition, we have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approval in the U.S., in Canada and abroad and, accordingly, may encounter unforeseen problems and delays in the approval process. Though we may engage a contract research organization (a CRO) with experience in conducting regulatory trials, errors in the conduct, monitoring and/or auditing could invalidate the results from a regulatory perspective. Even if a product candidate is approved by the FDA, the Canadian Therapeutic Products Directorate or any other regulatory authority, we may not obtain approval for an indication whose market is large enough to recoup our investment in that product candidate. In addition, there can be no assurance that we will ever obtain all or any required regulatory approvals for any of our product candidates.

We are currently developing our product candidates based on R&D activities, preclinical testing and clinical trials conducted to date, and we may not be successful in developing or introducing to the market these or any other new products or technology. If we fail to develop and deploy new products successfully and on a timely basis, we may become non-competitive and unable to recoup the R&D and other expenses we incur to develop and test new products.

Interim results of preclinical or clinical studies do not necessarily predict their final results, and acceptable results in early studies might not be obtained in later studies. Safety signals detected during clinical studies and preclinical animal studies may require us to do additional studies, which could delay the development of the drug or lead to a decision to discontinue development of the drug. Product candidates in the later stages of clinical development may fail to show the desired safety and efficacy traits despite positive results in initial clinical testing. Results from earlier studies may not be indicative of results from future clinical trials and the risk remains that a pivotal program may generate efficacy data that will be insufficient for the approval of the drug, or may raise safety concerns that may prevent approval of the drug. Interpretation of the prior preclinical and clinical safety and efficacy data of our product candidates may be flawed and there can be no assurance that safety and/or efficacy concerns from the prior data were overlooked or misinterpreted, which in subsequent, larger studies appear and prevent approval of such product candidates.

Furthermore, we may suffer significant setbacks in advanced clinical trials, even after promising results in earlier studies. Based on results at any stage of clinical trials, we may decide to repeat or redesign a trial or discontinue development of one or more of our product candidates. Further, actual results may vary once the final and quality-controlled verification of data and analyses has been completed. If we fail to adequately demonstrate the safety and efficacy of our products under development, we will not be able to obtain the required regulatory approvals to commercialize our product candidates.

Clinical trials are subject to continuing oversight by governmental regulatory authorities and institutional review boards and:

must meet the requirements of these authorities;

must meet requirements for informed consent; and

must meet requirements for good clinical practices.

We may not be able to comply with these requirements in respect of one or more of our product candidates.

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In addition, we rely on third parties, including CROs and outside consultants, to assist us in managing and monitoring clinical trials. Our reliance on these third parties may result in delays in completing, or in failing to complete, these trials if one or more third parties fails to perform with the speed and level of competence we expect.

A failure in the development of any one of our programs or product candidates could have a negative impact on the development of the others. Setbacks in any phase of the clinical development of our product candidates would have an adverse financial impact (including with respect to any agreements and partnerships that may exist between us and other entities), could jeopardize regulatory approval and would likely cause a drop in the price of our Common Shares.

If we are unable to successfully complete our clinical trial programs, or if such clinical trials take longer to complete than we project, our ability to execute our current business strategy will be adversely affected.

Whether or not and how quickly we complete clinical trials is dependent in part upon the rate at which we are able to engage clinical trial sites and, thereafter, the rate of enrollment of patients, and the rate we collect, clean, lock and analyze the clinical trial database. Patient enrollment is a function of many factors, including the design of the protocol, the size of the patient population, the proximity of patients to and availability of clinical sites, the eligibility criteria for the study, the perceived risks and benefits of the drug under study and of the control drug, if any, the efforts to facilitate timely enrollment in clinical trials, the patient referral practices of physicians, the existence of competitive clinical trials, and whether existing or new drugs are approved for the indication we are studying. Certain clinical trials are designed to continue until a pre-determined number of events have occurred to the patients enrolled. Such trials are subject to delays stemming from patient withdrawal and from lower than expected event rates and may also incur increased costs if enrollment is increased in order to achieve the desired number of events. If we experience delays in identifying and contracting with sites and/or in patient enrollment in our clinical trial programs, we may incur additional costs and delays in our development programs, and may not be able to complete our clinical trials on a cost-effective or timely basis. In addition, conducting multi-national studies adds another level of complexity and risk as we are subject to events affecting countries outside Canada. Moreover, negative or inconclusive results from the clinical trials we conduct or adverse medical events could cause us to have to repeat or terminate the clinical trials. Accordingly, we may not be able to complete the clinical trials within an acceptable time frame, if at all. If we or any third party have difficulty enrolling a sufficient number of patients to conduct our clinical trials as planned, we may need to delay or terminate ongoing clinical trials.

Additionally, we have limited experience in filing an NDA, or similar application for approval in the U.S. or in any country for our current product candidates, which may result in a delay in, or the rejection of, our filing of an NDA or similar application. During the drug development process, regulatory agencies will typically ask questions of drug sponsors. While we endeavor to answer all such questions in a timely fashion, or in the NDA filing, some questions may not be answered by the time we file our NDA. Unless the FDA waives the requirement to answer any such unanswered questions, submission of an NDA may be delayed or rejected.

We are and will be subject to stringent ongoing government regulation for our products and our product candidates, even if we obtain regulatory approvals for the latter.

The manufacture, marketing and sale of our products and product candidates are and will be subject to strict and ongoing regulation, even if regulatory authorities approve any of the latter. Compliance with such regulation will be expensive and consume substantial financial and management resources. For example, an approval for a product may be conditioned on our agreement to conduct costly post-marketing follow-up studies to monitor the safety or efficacy of the products. In addition, as a clinical experience with a drug expands after approval because the drug is used by a greater number and more diverse group of patients than during clinical trials, side effects or other problems may be observed after approval that were not observed or anticipated during pre-approval clinical trials. In such a case, a regulatory authority could restrict the indications for which the product may be sold or revoke the product's regulatory approval.

We and our contract manufacturers will be required to comply with applicable current Good Manufacturing Practice regulations for the manufacture of our products. These regulations include requirements relating to quality assurance, as well as the corresponding maintenance of rigorous records and documentation. Manufacturing facilities must be approved before we can use them in the commercial manufacturing of our products and are subject to subsequent periodic inspection by regulatory authorities. In addition, material changes in the methods of manufacturing or changes in the suppliers of raw materials are subject to further regulatory review and approval.

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If we, or any future marketing collaborators or contract manufacturers, fail to comply with applicable regulatory requirements, we may be subject to sanctions including fines, product recalls or seizures and related publicity requirements, injunctions, total or partial suspension of production, civil penalties, suspension or withdrawals of previously granted regulatory approvals, warning or untitled letters, refusal to approve pending applications for marketing approval of new products or of supplements to approved applications, import or export bans or restrictions, and criminal prosecution and penalties. Any of these penalties could delay or prevent the promotion, marketing or sale of our products and product candidates.

If our products do not gain market acceptance, we may be unable to generate significant revenues.

Even if our products are approved for commercialization, they may not be successful in the marketplace. Market acceptance of any of our products will depend on a number of factors including, but not limited to:

demonstration of clinical efficacy and safety;

the prevalence and severity of any adverse side effects;

limitations or warnings contained in the product's approved labeling;

availability of alternative treatments for the indications we target;

the advantages and disadvantages of our products relative to current or alternative treatments;

the availability of acceptable pricing and adequate third-party reimbursement; and

the effectiveness of marketing and distribution methods for the products.

If our products do not gain market acceptance among physicians, patients, healthcare payers and others in the medical community, which may not accept or utilize our products, our ability to generate significant revenues from our products would be limited and our financial conditions will be materially adversely affected. In addition, if we fail to further penetrate our core markets and existing geographic markets or successfully expand our business into new markets, the growth in sales of our products, along with our operating results, could be negatively impacted.

Our ability to further penetrate our core markets and existing geographic markets in which we compete or to successfully expand our business into additional countries in Europe, Asia or elsewhere is subject to numerous factors, many of which are beyond our control. Our products, if successfully developed, may compete with a number of drugs, therapies, products and tests currently manufactured and marketed by major pharmaceutical and other biotechnology companies. Our products may also compete with new products currently under development by others or with products which may be less expensive than our products. There can be no assurance that our efforts to increase market penetration in our core markets and existing geographic markets will be successful. Our failure to do so could have an adverse effect on our operating results and would likely cause a drop in the price of our Common Shares.

We may require significant additional financing, and we may not have access to sufficient capital.

We may require additional capital to pursue planned clinical trials, regulatory approvals, as well as further R&D and marketing efforts for our product candidates and potential products. Except as expressly described in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, we do not anticipate generating significant revenues from operations in the near future and we currently have no committed sources of capital.

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We may attempt to raise additional funds through public or private financings, collaborations with other pharmaceutical companies or financing from other sources. Additional funding may not be available on terms which are acceptable to us. If adequate funding is not available to us on reasonable terms, we may need to delay, reduce or eliminate one or more of our product development programs or obtain funds on terms less favorable than we would otherwise accept. To the extent that additional capital is raised through the sale of equity securities or securities convertible into or exchangeable for equity securities, the issuance of those securities could result in dilution to our shareholders. Moreover, the incurrence of debt financing could result in a substantial portion of our future operating cash flow, if any, being dedicated to the payment of principal and interest on such indebtedness and could impose restrictions on our operations. This could render us more vulnerable to competitive pressures and economic downturns.

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We anticipate that our existing working capital, including the proceeds from the sale of Units under this prospectus supplement and the accompanying prospectus (but excluding proceeds we may receive upon exercise of the Warrants) and anticipated revenues, will be sufficient to fund our development programs, clinical trials and other operating expenses for the near future. However, our future capital requirements are substantial and may increase beyond our current expectations depending on many factors including:

the duration and results of our clinical trials for our various product candidates going forward;

unexpected delays or developments in seeking regulatory approvals;

the time and cost involved in preparing, filing, prosecuting, maintaining and enforcing patent claims;

other unexpected developments encountered in implementing our business development and commercialization strategies;

the potential addition of commercialized products to our pipeline;

the outcome of litigation, if any; and

further arrangements, if any, with collaborators.

In addition, global economic and market conditions as well as future developments in the credit and capital markets may make it even more difficult for us to raise additional financing in the future.

If we are unsuccessful in increasing our revenues and/or raising additional funding, we may possibly cease to continue operating as we currently do.

We have had sustained losses, accumulated deficits and negative cash flows from operations since our inception and we expect that this will continue for the foreseeable future. Although our unaudited interim consolidated financial statements as at September 30, 2013 and for the three-month and nine-month periods ended September 30, 2013 and 2012 have been prepared on a going concern basis, which contemplates the realization of assets and liquidation of liabilities during the normal course of operations, our ability to continue as a going concern is dependent on the successful execution of our business plan, which will require an increase in revenue and/or additional funding to be provided by potential investors as well as non-traditional sources of financing. Although we stated in our unaudited interim consolidated financial statements as at September 30, 2013 and for the three-month and nine-month periods ended September 30, 2013 and 2012 that management believed that the Company had, as at September 30, 2013, sufficient financial resources to fund planned expenditures and other working capital needs for at least, but not limited to, the 12-month period following such date, there can be no assurance that management will be able to reiterate such belief in the future, particularly in the event that we do not or are unable to raise additional capital, as we do not expect our operations to generate sufficient cash flow to fund our obligations.

Additional funding may be in the form of debt or equity or a hybrid instrument depending on the needs of the investor. Depending on the prevailing global economic and credit market conditions, we may not be able to raise additional cash resources through these traditional sources of financing. Although we are also pursuing non-traditional sources of financing with third parties, the global credit markets may adversely affect the ability of potential third parties to pursue such transactions with us. Accordingly, as a result of the foregoing, we continue to review traditional sources of financing, such as private and public debt or various equity financing alternatives, as well as other alternatives to enhance shareholder value including, but not limited to, non-traditional sources of financing, such as alliances with strategic partners, the sale of assets or licensing of our technology or intellectual property, a combination of operating and related initiatives or a substantial reorganization of our business.

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There can be no assurance that we will achieve profitability or positive cash flows or be able to obtain additional funding or that, if obtained, they will be sufficient, or whether any other initiatives will be successful, such that we may continue as a going concern. There could also be material uncertainties related to certain adverse conditions and events that could impact our ability to remain a going concern.

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We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications for which there may be a greater likelihood of success.

Because we have limited financial and managerial resources, we are currently focusing our efforts on our later stage clinical research programs and product candidates, zoptarelin doxorubicin and macimorelin acetate, for specific indications. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications for which there may be a greater likelihood of success or may prove to have greater commercial potential. Notwithstanding our investment to date and anticipated future expenditures on zoptarelin doxorubicin, macimorelin acetate and our earlier-stage programs we have not yet developed, and may never successfully develop, any marketed treatments using these products. Research programs to identify new product candidates or pursue alternative indications for current product candidates require substantial technical, financial and human resources. These activities may initially show promise in identifying potential product candidates or indications, yet fail to yield product candidates or indications for further clinical development.

We may not achieve our projected development goals in the time-frames we announce and expect.

We set goals and make public statements regarding the timing of the accomplishment of objectives material to our success, such as the commencement, enrollment and anticipated completion of clinical trials, anticipated regulatory submission and approval dates and time of product launch. The actual timing of these events can vary dramatically due to factors such as delays or failures in our clinical trials, the uncertainties inherent in the regulatory approval process and delays in achieving manufacturing or marketing arrangements sufficient to commercialize our products. There can be no assurance that our clinical trials will be completed, that we will make regulatory submissions or receive regulatory approvals as planned or that we will be able to adhere to our current schedule for the launch of any of our products. If we fail to achieve one or more of these milestones as planned, the price of our Common Shares would likely decline.

If we fail to obtain acceptable prices or adequate reimbursement for our products, our ability to generate revenues will be diminished.

The ability for us and/or our partners to successfully commercialize our products will depend significantly on our ability to obtain acceptable prices and the availability of reimbursement to the patient from third-party payers, such as governmental and private insurance plans. These third-party payers frequently require companies to provide predetermined discounts from list prices, and they are increasingly challenging the prices charged for pharmaceuticals and other medical products. Our products may not be considered cost-effective, and reimbursement to the patient may not be available or sufficient to allow us or our partners to sell our products on a competitive basis. It may not be possible to negotiate favorable reimbursement rates for our products.

In addition, the continuing efforts of third-party payers to contain or reduce the costs of healthcare through various means may limit our commercial opportunity and reduce any associated revenue and profits. We expect proposals to implement similar government control to continue. In addition, increasing emphasis on managed care will continue to put pressure on the pricing of pharmaceutical and biopharmaceutical products. Cost control initiatives could decrease the price that we or any current or potential collaborators could receive for any of our products and could adversely affect our profitability. In addition, in the U.S., in Canada and in many other countries, pricing and/or profitability of some or all prescription pharmaceuticals and biopharmaceuticals are subject to government control.

If we fail to obtain acceptable prices or an adequate level of reimbursement for our products, the sales of our products would be adversely affected or there may be no commercially viable market for our products.

Competition in our targeted markets is intense, and development by other companies could render our products or technologies non-competitive.

The biopharmaceutical field is highly competitive. New products developed by other companies in the industry could render our products or technologies non-competitive. Competitors are developing and testing products and technologies that would compete with the products that we are developing. Some of these products may be more effective or have an entirely different approach or means of accomplishing the desired effect than our products. We expect competition from biopharmaceutical and pharmaceutical companies and academic research institutions to increase over time. Many of our competitors and potential competitors have substantially greater product development

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capabilities and financial, scientific, marketing and human resources than we do. Our competitors may succeed in developing products earlier and in obtaining regulatory approvals and patent protection for such products more rapidly than we can or at a lower price.

We may not obtain adequate protection for our products through our intellectual property.

We rely heavily on our proprietary information in developing and manufacturing our product candidates. Our success depends, in large part, on our ability to protect our competitive position through patents, trade secrets, trademarks and other intellectual property rights. The patent positions of pharmaceutical and biopharmaceutical firms, including us, are uncertain and involve complex questions of law and fact for which important legal issues remain unresolved. Applications for patents and trademarks in Canada, the U.S. and in other foreign territories have been filed and are being actively pursued by us. Pending patent applications may not result in the issuance of patents and we may not be able to obtain additional issued patents relating to our technology or products. Even if issued, patents to us or our licensing partners may be challenged, narrowed, invalidated, held to be unenforceable or circumvented, which could limit our ability to stop competitors from marketing similar products or limit the length of term of patent protection we may have for our products. Changes in either patent laws or in interpretations of patent laws in the U.S. and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection. The patents issued or to be issued to us may not provide us with any competitive advantage or protect us against competitors with similar technology. In addition, it is possible that third parties with products that are very similar to ours will circumvent our patents by means of alternate designs or processes. We may have to rely on method of use and new formulation protection for our compounds in development, and any resulting products, which may not confer the same protection as claims to compounds *per se*.

In addition, our patents may be challenged by third parties in patent litigation, which is becoming widespread in the biopharmaceutical industry. There may be prior art of which we are not aware that may affect the validity or enforceability of a patent claim. There may also be prior art of which we are aware, but which we do not believe affects the validity or enforceability of a claim, which may, nonetheless, ultimately be found to affect the validity or enforceability of a claim. No assurance can be given that our patents would, if challenged, be held by a court to be valid or enforceable or that a competitor's technology or product would be found by a court to infringe our patents. Our granted patents could also be challenged and revoked in post-grant proceedings in the U.S. and in opposition or nullity proceedings in certain countries outside the U.S. In addition, we may be required to disclaim part of the term of certain patents.

Patent applications relating to or affecting our business have been filed by a number of pharmaceutical and biopharmaceutical companies and academic institutions. A number of the technologies in these applications or patents may conflict with our technologies, patents or patent applications, and any such conflict could reduce the scope of patent protection which we could otherwise obtain. Because patent applications in the U.S. and many other jurisdictions are typically not published until eighteen months after their first effective filing date, or in some cases not at all, and because publications of discoveries in the scientific literature often lag behind actual discoveries, neither we nor our licensing partners can be certain that we or they were the first to make the inventions claimed in our or their issued patents or pending patent applications, or that we or they were the first to file for protection of the inventions set forth in these patent applications. If a third party has also filed a patent application in the U.S. covering our product candidates or a similar invention, we may have to participate in adversarial proceedings, such as interferences and derivation proceedings, before the United States Patent and Trademark Office to determine which party is entitled to a U.S. patent claiming the disputed invention. The costs of these proceedings could be substantial and it is possible that our efforts could be unsuccessful, resulting in a loss of our U.S. patent position.

In addition to patent protection, we may utilize orphan drug regulations, pediatric exclusivity or other provisions of the United States *Food, Drug and Cosmetic Act of 1938*, as amended, such as new chemical entity exclusivity or new formulation exclusivity, to provide market exclusivity for a drug candidate. Orphan drug regulations provide incentives to pharmaceutical and biotechnology companies to develop and manufacture drugs for the treatment of rare diseases, currently defined as diseases that exist in fewer than 200,000 individuals in the U.S., or, diseases that affect more than 200,000 individuals in the U.S. but that the sponsor does not realistically anticipate will generate a net profit. Under these provisions, a manufacturer of a designated orphan drug can seek tax benefits, and the holder of the first

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FDA approval of a designated orphan product will be granted a seven-year period of marketing exclusivity for such FDA-approved orphan product. In the U.S., the FDA has the authority to grant additional data protection for approved drugs where the sponsor conducts specified testing in pediatric or adolescent populations. If granted, this pediatric exclusivity provides an additional six months which are added to the term of data protection as well as to the term of any relevant patents, to the extent these protections have not already expired. We may also seek to utilize market exclusivities in other territories, such as in the European Union (the EU). We cannot assure that any of our drug candidates will obtain such orphan drug designation, pediatric exclusivity, new chemical entity exclusivity or any other market exclusivity in the U.S., the EU or any other territory, or that we will be the first to receive the respective regulatory approval for such drugs so as to be eligible for any market exclusivity protection.

We also rely on trade secrets and proprietary know-how to protect our intellectual property. If we are unable to protect the confidentiality of our proprietary information and know-how, the value of our technology and products could be adversely affected. We seek to protect our unpatented proprietary information in part by requiring our employees, consultants, outside scientific collaborators and sponsored researchers and other advisors to enter into confidentiality agreements. These agreements provide that all confidential information 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. In the case of our employees, the agreements provide that all of the technology which is conceived by the individual during the course of employment is our exclusive property. These agreements may not provide meaningful protection or adequate remedies in the event of unauthorized use or disclosure of our proprietary information. In addition, it is possible that third parties could independently develop proprietary information and techniques substantially similar to ours or otherwise gain access to our trade secrets. If we are unable to protect the confidentiality of our proprietary information and know-how, competitors may be able to use this information to develop products that compete with our products and technologies, which could adversely impact our business.

We currently have the right to use certain patents and technologies under license agreements with third parties. Our failure to comply with the requirements of material license agreements could result in the termination of such agreements, which could cause us to terminate the related development program and cause a complete loss of our investment in that program.

As a result of the foregoing factors, we may not be able to rely on our intellectual property to protect our products in the marketplace.

We may infringe the intellectual property rights of others.

Our commercial success depends significantly on our ability to operate without infringing the patents and other intellectual property rights of third parties. There could be issued patents of which we are not aware that our products or methods may be found to infringe, or patents of which we are aware and believe we do not infringe but which we may ultimately be found to infringe. Moreover, patent applications and their underlying discoveries are in some cases maintained in secrecy until patents are issued. Because patents can take many years to issue, there may be currently pending applications of which we are unaware that may later result in issued patents that our products or technologies are found to infringe. Moreover, there may be published pending applications that do not currently include a claim covering our products or technologies but which nonetheless provide support for a later drafted claim that, if issued, our products or technologies could be found to infringe.

If we infringe or are alleged to infringe intellectual property rights of third parties, it will adversely affect our business. Our research, development and commercialization activities, as well as any product candidates or products resulting from these activities, may infringe or be accused of infringing one or more claims of an issued patent or may fall within the scope of one or more claims in a published patent application that may subsequently be issued and to which we do not hold a license or other rights. Third parties may own or control these patents or patent applications in the U.S. and abroad. These third parties could bring claims against us or our collaborators that would cause us to incur substantial expenses and, if successful against us, could cause us to pay substantial damages. Further, if a patent infringement suit were brought against us or our collaborators, we or they could be forced to stop or delay research, development, manufacturing or sales of the product or product candidate that is the subject of the suit.

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The biopharmaceutical industry has produced a proliferation of patents, and it is not always clear to industry participants, including us, which patents cover various types of products. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. In the event of infringement or violation of another party's patent or other intellectual property rights, we may not be able to enter into licensing arrangements or make other arrangements at a reasonable cost. Any inability to secure licenses or alternative technology could result in delays in the introduction of our products or lead to prohibition of the manufacture or sale of products by us or our partners and collaborators.

Patent litigation is costly and time consuming and may subject us to liabilities.

Our involvement in any patent litigation, interference, opposition or other administrative proceedings will likely cause us to incur substantial expenses, and the efforts of our technical and management personnel will be significantly diverted. In addition, an adverse determination in litigation could subject us to significant liabilities.

We may not obtain trademark registrations.

We have filed applications for trademark registrations in connection with our product candidates in various jurisdictions, including the U.S. We intend to file further applications for other possible trademarks for our product candidates. No assurance can be given that any of our trademark applications will be registered in the U.S. or elsewhere, or that the use of any registered or unregistered trademarks will confer a competitive advantage in the marketplace. Furthermore, even if we are successful in our trademark registrations, the FDA and regulatory authorities in other countries have their own process for drug nomenclature and their own views concerning appropriate proprietary names. The FDA and other regulatory authorities also have the power, even after granting market approval, to request a company to reconsider the name for a product because of evidence of confusion in the marketplace. No assurance can be given that the FDA or any other regulatory authority will approve of any of our trademarks or will not request reconsideration of one of our trademarks at some time in the future. The loss, abandonment, or cancellation of any of our trademarks or trademark applications could negatively affect the success of the product candidates to which they relate.

Our revenues and expenses may fluctuate significantly, and any failure to meet financial expectations may disappoint securities analysts or investors and result in a decline in the price of our Common Shares.

We have a history of operating losses. Our revenues and expenses have fluctuated in the past and are likely to do so in the future. These fluctuations could cause our share price to decline. Some of the factors that could cause our revenues and expenses to fluctuate include but are not limited to:

the inability to complete product development in a timely manner that results in a failure or delay in receiving the required regulatory approvals to commercialize our product candidates;

the timing of regulatory submissions and approvals;

the timing and willingness of any current or future collaborators to invest the resources necessary to commercialize our product candidates;

the revenue available from royalties derived from our strategic partners;

licensing fees revenues;

tax credits and grants (R&D);

the outcome of litigation, if any;

changes in foreign currency fluctuations;

the timing of achievement and the receipt of milestone payments from current or future collaborators; and

failure to enter into new or the expiration or termination of current agreements with collaborators.

Due to fluctuations in our revenues and expenses, we believe that period-to-period comparisons of our results of operations are not necessarily indicative of our future performance. It is possible that in some future quarter or quarters, our revenues and expenses will be above or below the expectations of securities analysts or investors. In this case, the price of our Common Shares could fluctuate significantly or decline.

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We will not be able to successfully commercialize our product candidates if we are unable to make adequate arrangements with third parties for such purposes.

We currently have a lean sales and marketing staff. In order to commercialize our product candidates successfully, we need to make arrangements with third parties to perform some or all of these services in certain territories.

We contract with third parties for the sales and marketing of our products. Our revenues will depend upon the efforts of these third parties, whose efforts may not be successful. If we fail to establish successful marketing and sales capabilities or to make arrangements with third parties for such purposes, our business, financial condition and results of operations will be materially adversely affected.

If we had to resort to developing a sales force internally, the cost of establishing and maintaining a sales force would be substantial and may exceed its cost effectiveness. In addition, in marketing our products, we would likely compete with many companies that currently have extensive and well-funded marketing and sales operations. Despite our marketing and sales efforts, we may be unable to compete successfully against these companies.

We are currently dependent on strategic partners and may enter into future collaborations for the research, development and commercialization of our product candidates. Our arrangements with these strategic partners may not provide us with the benefits we expect and may expose us to a number of risks.

We are dependent on, and rely upon, strategic partners to perform various functions related to our business, including, but not limited to, the research, development and commercialization of some of our product candidates. Our reliance on these relationships poses a number of risks.

We may not realize the contemplated benefits of such agreements nor can we be certain that any of these parties will fulfill their obligations in a manner which maximizes our revenue. These arrangements may also require us to transfer certain material rights or issue our equity, voting or other securities to corporate partners, licensees and others. Any license or sublicense of our commercial rights may reduce our product revenue.

These agreements also create certain risks. The occurrence of any of the following or other events may delay product development or impair commercialization of our products:

not all of our strategic partners are contractually prohibited from developing or commercializing, either alone or with others, products and services that are similar to or competitive with our product candidates, and, with respect to our strategic partnership agreements that do contain such contractual prohibitions or restrictions, prohibitions or restrictions do not always apply to our partners' affiliates and they may elect to pursue the development of any additional product candidates and pursue technologies or products either on their own or in collaboration with other parties, including our competitors, whose technologies or products may be competitive with ours;

our strategic partners may under-fund or fail to commit sufficient resources to marketing, distribution or other development of our products;

we may not be able to renew such agreements;

our strategic partners may not properly maintain or defend certain intellectual property rights that may be important to the commercialization of our products;

our strategic partners may encounter conflicts of interest, changes in business strategy or other issues which could adversely affect their willingness or ability to fulfill their obligations to us (for example, pharmaceutical companies historically have re-evaluated their priorities following mergers and consolidations, which have been common in recent years in this industry);

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delays in, or failures to achieve, scale-up to commercial quantities, or changes to current raw material suppliers or product manufacturers (whether the change is attributable to us or the supplier or manufacturer) could delay clinical studies, regulatory submissions and commercialization of our product candidates; and

disputes may arise between us and our strategic partners that could result in the delay or termination of the development or commercialization of our product candidates, resulting in litigation or arbitration that could be time-consuming and expensive, or causing our strategic partners to act in their own self-interest and not in our interest or those of our shareholders or other stakeholders.

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In addition, our strategic partners can terminate our agreements with them for a number of reasons based on the terms of the individual agreements that we have entered into with them. If one or more of these agreements were to be terminated, we would be required to devote additional resources to developing and commercializing our product candidates, seek a new partner or abandon this product candidate which would likely cause a drop in the price of our Common Shares.

We have entered into important strategic partnership agreements relating to certain of our product candidates for various indications. Detailed information on our research and collaboration agreements is available in our various reports and disclosure documents filed with the Canadian securities regulatory authorities and filed with or furnished to the SEC, including the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. See, for example, Note 5 to our audited consolidated financial statements as at December 31, 2012 and December 31, 2011 and for the years ended December 31, 2012, 2011 and 2010 included in our Annual Report on Form 20-F (filed in Canada with the Canadian securities regulatory authorities in lieu of an annual information form), which is incorporated by reference into this prospectus supplement.

For example, on April 10, 2013, we announced that we had entered into a co-development and profit-sharing agreement with Ergomed Clinical Research Ltd. (Ergomed) for zoptarelin doxorubicin in endometrial cancer. Ergomed was selected as the contract clinical development organization to conduct the multicenter, multinational, randomized Phase 3 ZoptEC trial with zoptarelin doxorubicin in endometrial cancer. Under the terms of this agreement, Ergomed will assume 30% (up to \$10 million) of the clinical and regulatory costs for our Phase 3 ZoptEC trial of zoptarelin doxorubicin in endometrial cancer, which are currently estimated at approximately \$30 million over the course of the study, and it will receive its return on investment based on an agreed single digit percentage of any net income received by us for zoptarelin doxorubicin in this indication, up to a specified maximum amount.

We have also entered into a variety of collaboration agreements with various universities and institutes under which we are obligated to support some of the research expenses incurred by the university laboratories and pay royalties on future sales of the products. In turn, we have retained exclusive rights for the worldwide exploitation of results generated during the collaborations.

We rely on third parties to conduct, supervise and monitor our clinical trials, and those third parties may not perform satisfactorily.

We rely on third parties such as CROs, medical institutions and clinical investigators to enroll qualified patients and conduct, supervise and monitor our clinical trials. Our reliance on these third parties for clinical development activities reduces our control over these activities. Our reliance on these third parties, however, does not relieve us of our regulatory responsibilities, including ensuring that our clinical trials are conducted in accordance with Good Clinical Practice guidelines and the investigational plan and protocols contained in an Investigational New Drug application, or a comparable foreign regulatory submission. Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. In addition, they may not complete activities on schedule, or may not conduct our preclinical studies or clinical trials in accordance with regulatory requirements or our trial design. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, our efforts to obtain regulatory approvals for, and commercialize, our product candidates may be delayed or prevented.

In carrying out our operations, we are dependent on a stable and consistent supply of ingredients and raw materials.

There can be no assurance that we, our contract manufacturers or our partners, will be able, in the future, to continue to purchase products from our current suppliers or any other supplier on terms similar to current terms or at all. An interruption in the availability of certain raw materials or ingredients, or significant increases in the prices paid by us for them, could have a material adverse effect on our business, financial condition, liquidity and operating results.

The failure to perform satisfactorily by third parties upon which we rely to manufacture and supply products may lead to supply shortfalls.

We rely on third parties to manufacture and supply marketed products. We also have certain supply obligations *vis-à-vis* our licensing partners who are responsible for the marketing of the products. To be successful, our products

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have to be manufactured in commercial quantities in compliance with quality controls and regulatory requirements. Even though it is our objective to minimize such risk by introducing alternative suppliers to ensure a constant supply at all times, we cannot guarantee that we will not experience supply shortfalls and, in such event, we may not be able to perform our obligations under contracts with our partners.

We are subject to intense competition for our skilled personnel, and the loss of key personnel or the inability to attract additional personnel could impair our ability to conduct our operations.

We are highly dependent on our management and our clinical, regulatory and scientific staff, the loss of whose services might adversely impact our ability to achieve our objectives. Recruiting and retaining qualified management and clinical, scientific and regulatory personnel is critical to our success. Competition for skilled personnel is intense, and our ability to attract and retain qualified personnel may be affected by such competition.

Our strategic partners' manufacturing capabilities may not be adequate to effectively commercialize our product candidates.

Our manufacturing experience to date with respect to our product candidates consists of producing drug substance for clinical studies. To be successful, these product candidates have to be manufactured in commercial quantities in compliance with regulatory requirements and at acceptable costs. Our strategic partners' current manufacturing facilities have the capacity to produce projected product requirements for the foreseeable future, but we will need to increase capacity if sales continue to grow. Our strategic partners may not be able to expand capacity or to produce additional product requirements on favorable terms. Moreover, delays associated with securing additional manufacturing capacity may reduce our revenues and adversely affect our business and financial position. There can be no assurance that we will be able to meet increased demand over time.

We are subject to the risk of product liability claims, for which we may not have or be able to obtain adequate insurance coverage.

The sale and use of our products, in particular our biopharmaceutical products, involve the risk of product liability claims and associated adverse publicity. Our risks relate to human participants in our clinical trials, who may suffer unintended consequences, as well as products on the market whereby claims might be made directly by patients, healthcare providers or pharmaceutical companies or others selling, buying or using our products. We manage our liability risks by means of insurance. We maintain liability insurance covering our liability for our preclinical and clinical studies and for our pharmaceutical products already marketed. However, we may not have or be able to obtain or maintain sufficient and affordable insurance coverage, including coverage for potentially very significant legal expenses, and without sufficient coverage any claim brought against us could have a materially adverse effect on our business, financial condition or results of operations.

Our business involves the use of hazardous materials which requires us to comply with environmental and occupational safety laws regulating the use of such materials. If we violate these laws, we could be subject to significant fines, liabilities or other adverse consequences.

Our discovery and development processes involve the controlled use of hazardous and radioactive materials. We are subject to federal, provincial and local laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. The risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of an accident or a failure to comply with environmental or occupational safety laws, we could be held liable for any damages that result, and any such liability could exceed our resources. We may not be adequately insured against this type of liability. We may be required to incur significant costs to comply with environmental laws and regulations in the future, and our operations, business or assets may be materially adversely affected by current or future environmental laws or regulations.

We are a holding company, and claims of creditors of our subsidiaries will generally have priority as to the assets of such subsidiaries over our claims and those of our creditors and shareholders.

Aeterna Zentaris Inc. is a holding company and a substantial portion of our assets is the share capital of our subsidiaries. AEZS Germany, our principal operating subsidiary, based in Frankfurt, Germany, holds most of our intellectual property rights, which represent the principal assets of our business.

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Because Aeterna Zentaris Inc. is a holding company, our obligations to our creditors are structurally subordinated to all existing and future liabilities of our subsidiaries. Therefore, our rights and the rights of our creditors to participate in any distribution of the assets of any subsidiary in the event that such subsidiary were to be liquidated or reorganized or in the event of any bankruptcy or insolvency proceeding relating to or involving such subsidiary, and therefore the rights of the holders of our Common Shares to participate in those assets, are subject to the prior claims of such subsidiary's creditors. To the extent that we may be a creditor with recognized claims against any such subsidiary, our claims would still be subject to the prior claims of our subsidiary's creditors to the extent that they are secured or senior to those held by us.

Holders of our Common Shares are not creditors of our subsidiaries. Claims to the assets of our subsidiaries will derive from our own ownership interest in those operating subsidiaries. Claims of our subsidiaries' creditors will generally have priority as to the assets of such subsidiaries over our own ownership interest claims and will therefore have priority over the holders of our Common Shares. Our subsidiaries' creditors may from time to time include general creditors, trade creditors, employees, secured creditors, taxing authorities, and creditors holding guarantees.

Accordingly, in the event of any foreclosure, dissolution, winding-up, liquidation or reorganization, or a bankruptcy or insolvency proceeding relating to us or our property, or any subsidiary, there can be no assurance as to the value, if any, that would be available to holders of our Common Shares.

In addition, any distributions to us by our subsidiaries could be subject to monetary transfer restrictions in the jurisdictions in which our subsidiaries operate.

Our subsidiaries may incur additional indebtedness and other liabilities.

It may be difficult for U.S. investors to obtain and enforce judgments against us because of our Canadian incorporation and German presence.

We are a company existing under the laws of Canada. Most of our directors and officers, and certain of the experts named herein, are residents of Canada or otherwise reside outside the U.S., and all or a substantial portion of their assets, and a substantial portion of our assets, are located outside the U.S. Consequently, although we have appointed an agent for service of process in the U.S., it may be difficult for investors in the U.S. to bring an action against such directors, officers or experts or to enforce against those persons or us a judgment obtained in a U.S. court predicated upon the civil liability provisions of federal securities laws or other laws of the U.S. Investors should not assume that foreign courts (1) would enforce judgments of U.S. courts obtained in actions against us or such directors, officers or experts predicated upon the civil liability provisions of the U.S. federal securities laws or the securities or "blue sky" laws of any state within the U.S. or (2) would enforce, in original actions, liabilities against us or such directors, officers or experts predicated upon the U.S. federal securities laws or any such state securities or "blue sky" laws. In addition, we have been advised by our Canadian counsel that in normal circumstances, only civil judgments and not other rights arising from U.S. securities legislation (for example, penal or similar awards made by a court in a regulatory prosecution or proceeding) are enforceable in Canada and that the protections afforded by Canadian securities laws may not be available to investors in the U.S.

Health care reform measures could adversely affect our business.

The business prospects and financial condition of pharmaceutical and biotechnology companies are affected by the efforts of governmental and third-party payers to contain or reduce the costs of health care. In the U.S. and in foreign jurisdictions there have been, and we expect that there will continue to be, a number of legislative and regulatory proposals aimed at changing the health care system, such as proposals relating to the pricing of healthcare products and services in the U.S. or internationally, the reimportation of drugs into the U.S. from other countries (where they are then sold at a lower price), and the amount of reimbursement available from governmental agencies or other third party payers. For example, drug manufacturers are required to have a national rebate agreement with the Department of Health and Human Services in order to obtain state Medicaid coverage, which requires manufacturers to pay a rebate on drugs dispensed to Medicaid patients. On January 27, 2012, the Centers for Medicare and Medicaid Services (CMS) issued a proposed regulation covering the calculation of Average Manufacturer Price (AMP) which is the key variable in the calculation of these rebates.

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Furthermore, in the U.S., health care reform legislation titled the *Patient Protection and Affordable Care Act* (PPACA) was signed into law in March 2010. The impact of this legislation on our business is inherently difficult to predict as many of the details regarding the implementation of this legislation have not been determined. In a decision issued on June 29, 2012, the United States Supreme Court upheld the majority of PPACA. The Court's decision allows implementation of key provisions impacting the pharmaceutical industry, including drug and device manufacturers. This includes PPACA changes to the Medicare Part D Program (including closing the donut hole), Medicaid Drug Rebate Program (including the definition of AMP), and expansion of the 340B Drug Discount Program. The decision also allows the FDA and CMS to continue with implementation efforts, including related to the *Biologics Price Competition and Innovation Act* and the *Physician Payments Sunshine Act*, both of which were enacted as part of the PPACA. Regulations to implement PPACA could result in a decrease in our stock price or limit our ability to raise capital or to obtain strategic partnerships or licenses. Government-financed comparative efficacy research could also result in new practice guidelines, labeling or reimbursement policies that discourages use of our products.

In addition, on September 27, 2007, the *Food and Drug Administration Amendments Act of 2007* was enacted, giving the FDA enhanced post-market authority, including the authority to require post-marketing studies and clinical trials, labeling changes based on new safety information, and compliance with risk evaluations and mitigation strategies approved by the FDA. The FDA's exercise of this authority may result in delays or increased costs during the period of product development, clinical trials and regulatory review and approval, which may also increase costs related to complying with new post-approval regulatory requirements, and increase potential FDA restrictions on the sale or distribution of approved products.

We are subject to additional reporting requirements under applicable Canadian securities laws and the Sarbanes-Oxley Act in the U.S. We can provide no assurance that we will at all times in the future be able to report that our internal controls over financial reporting are effective.

As a public company, we are required to comply with Section 404 of the United States *Sarbanes-Oxley Act* (Section 404) and National Instrument 52-109 *Certification of Disclosure in Issuers Annual and Interim Filings*, and we are required to obtain an annual attestation from our independent auditors regarding our internal control over financial reporting. In any given year, we cannot be certain as to the time of completion of our internal control evaluation, testing and remediation actions or of their impact on our operations. Upon completion of this process, we may identify control deficiencies of varying degrees of severity under applicable SEC and Public Company Accounting Oversight Board rules and regulations. As a public company, we are required to report, among other things, control deficiencies that constitute material weaknesses or changes in internal controls that, or that are reasonably likely to, materially affect internal controls over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual consolidated financial statements will not be prevented or detected on a timely basis. If we fail to comply with the requirements of Section 404, Canadian requirements or report a material weakness, we might be subject to regulatory sanction and investors may lose confidence in our consolidated financial statements, which may be inaccurate if we fail to remedy such material weakness.

It is possible that we may be a passive foreign investment company, which could result in adverse tax consequences to U.S. investors.

Adverse U.S. federal income tax rules apply to U.S. Holders (as defined below in Certain Material U.S. Federal Income Tax Considerations) that directly or indirectly hold common shares or warrants of a passive foreign investment company (PFIC). We will be classified as a PFIC for U.S. federal income tax purposes for a taxable year if (i) at least 75% of our gross income is passive income or (ii) at least 50% of the average value of our assets, including goodwill (based on annual quarterly average), is attributable to assets which produce passive income or are held for the production of passive income.

We believe that we were not a PFIC for the 2012 taxable year. However, the PFIC determination depends on the application of complex U.S. federal income tax rules concerning the classification of our assets and income for this purpose, and these rules are uncertain in some respects. In addition, the fair market value of our assets may be determined in large part by the market price of our Common Shares, which is likely to fluctuate, and the composition of our income and assets will be affected by how, and how quickly, we spend any cash that is raised in any financing transaction. No assurance can be provided that we will not be classified as a PFIC for the 2013 taxable year and for any future taxable year.

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PFIC characterization could result in adverse U.S. federal income tax consequences to U.S. Holders. In particular, absent certain elections, a U.S. Holder would generally be subject to U.S. federal income tax at ordinary income tax rates, plus a possible interest charge, in respect of a gain derived from a disposition of our Common Shares or Warrants, as well as certain distributions by us. If we are treated as a PFIC for any taxable year, a U.S. Holder may be able to make an election to mark to market Common Shares each taxable year and recognize ordinary income pursuant to such election based upon increases in the value of the Common Shares. However a mark-to-market election is not available to be made in respect of Warrants. In addition, U.S. Holders may mitigate the adverse tax consequences of the PFIC rules by making a qualified electing fund (QEF) election; however, the Company does not expect to provide the information regarding its income that would be necessary for a U.S. Holder to make a QEF election.

Under U.S. tax legislation, if the Company is a PFIC, U.S. Holders will generally be required to file an annual information return with the Internal Revenue Service (the IRS) (on IRS Form 8621, which PFIC shareholders are required to file with their U.S. federal income tax or information returns) relating to their ownership of Common Shares and, potentially, Warrants. This new filing requirement is in addition to any preexisting reporting requirements that apply to a U.S. Holder's interest in a PFIC (which the tax legislation does not affect).

For a more detailed discussion of the potential tax impact of us being a PFIC, see Certain Material U.S. Federal Income Tax Considerations below. The PFIC rules are complex. Prospective purchasers of any of our securities should consult their tax advisors regarding the potential application of the PFIC regime and any reporting obligations to which they may be subject under that regime.

We may incur losses associated with foreign currency fluctuations.

Our operations are in many instances conducted in currencies other than the euro, our functional currency. Fluctuations in the value of currencies could cause us to incur currency exchange losses. We do not currently employ a hedging strategy against exchange rate risk. We cannot assert with any assurance that we will not suffer losses as a result of unfavorable fluctuations in the exchange rates between the United States dollar, the euro, the Canadian dollar and other currencies. For more information, see Item 11. Quantitative and Qualitative Disclosures About Market Risk in our most recent Annual Report on Form 20-F.

We may not be able to successfully integrate acquired businesses.

Future acquisitions may not be successfully integrated. The failure to successfully integrate the personnel and operations of businesses which we may acquire in the future with ours could have a material adverse effect on our operations and results.

Legislative actions, new accounting pronouncements and higher insurance costs are likely to impact our future financial position or results of operations.

Changes in financial accounting standards or implementation of accounting standards may cause adverse, unexpected revenue or expense fluctuations and affect our financial position or results of operations. New pronouncements and varying interpretations of pronouncements have occurred with greater frequency and are expected to occur in the future, and we may make or be required to make changes in our accounting policies in the future. Compliance with changing regulations of corporate governance and public disclosure, notably with respect to internal controls over financial reporting, may result in additional expenses. Changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for companies such as ours, and insurance costs are increasing as a result of this uncertainty.

The outcome of any future claims and litigation could have a material adverse impact on our business, financial condition and results of operations.

The Company and its subsidiaries may, from time to time, be parties to litigation in the normal course of business. Due to the inherent uncertainties of litigation, it is not possible to predict the final outcome of these lawsuits or determine the amount of any potential losses, if any, and we may, in the future, be subject to litigation proceedings, including class action lawsuits. In the event we are required or determine to pay amounts in connection with any such lawsuits, such amounts could be significant and could have a material adverse impact on our liquidity, business, financial condition and results of operations.

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Risks Relating to the Common Shares and Warrants

Our share price is volatile, which may result from factors outside of our control. If our Common Shares were to be delisted from NASDAQ or TSX, investors may have difficulty in disposing of our Common Shares held by them.

Our Common Shares are currently listed and traded only on NASDAQ and TSX. Our valuation and share price since the beginning of trading after our initial listings, first in Canada and then in the U.S., have had no meaningful relationship to current or historical financial results, asset values, book value or many other criteria based on conventional measures of the value of shares.

Between January 1, 2013 and January 7, 2014, the closing price of our Common Shares ranged from \$1.03 to \$3.23 per share on NASDAQ and from C\$1.08 to C\$3.27 per share on TSX. See Price Range and Trading Volume on page S-29 of this prospectus supplement. Our share price may be affected by developments directly affecting our business and by developments out of our control or unrelated to us. The stock market generally, and the biopharmaceutical sector in particular, are vulnerable to abrupt changes in investor sentiment. Prices of shares and trading volume of companies in the biopharmaceutical industry can swing dramatically in ways unrelated to, or that bear a disproportionate relationship to, operating performance. Our share price and trading volume may fluctuate based on a number of factors including, but not limited to:

clinical and regulatory developments regarding our product candidates;

delays in our anticipated development or commercialization timelines;

developments regarding current or future third-party collaborators;

other announcements by us regarding technological, product development or other matters;

arrivals or departures of key personnel;

governmental or regulatory action affecting our product candidates and our competitors' products in the U.S., Canada and other countries;

developments or disputes concerning patent or proprietary rights;

actual or anticipated fluctuations in our revenues or expenses;

general market conditions and fluctuations for the emerging growth and biopharmaceutical market sectors; and

economic conditions in the U.S., Canada or abroad.

Our listing on both NASDAQ and TSX may increase price volatility due to various factors, including different ability to buy or sell our Common Shares, different market conditions in different capital markets and different trading volumes. In addition, low trading volume may increase the price volatility of our Common Shares. A thin trading market could cause the price of our Common Shares to fluctuate significantly more than the stock market as a whole.

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A period of large price decline in our Common Shares could increase the risk that securities class action litigation could be initiated against us. Litigation of this type and other litigation could result in substantial costs and diversion of management's attention and resources, which would adversely affect our business. Any adverse determination in litigation could also subject us to significant liabilities.

We must meet continuing listing requirements to maintain the listing of our Common Shares on NASDAQ and TSX. For continued listing, NASDAQ requires, among other things, that listed securities maintain a minimum closing bid price of not less than \$1.00 per share.

If our Common Shares trade for 30 consecutive business days below the required \$1.00 minimum closing bid price, we expect that NASDAQ would then send us a deficiency notice and provide us with a period of 180 calendar days to regain compliance with the minimum bid price requirement. In order to regain compliance, the closing bid price of our Common Shares would have to be at least US\$1.00 for a minimum of 10 consecutive business days. If we were not able to regain compliance, NASDAQ would notify us that our securities are subject to delisting. At that time, we could appeal any determination to delist our securities to a Listing Qualifications Panel.

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In addition to the minimum bid price requirement, the continued listing rules of NASDAQ require us to meet at least one of the following listing standards: (i) stockholders' equity of at least \$2.5 million (the Equity Standard), (ii) market value of listed securities (calculated by multiplying the daily closing bid price of our Common Shares by our total outstanding Common Shares) of at least \$35 million (the Market Value Standard) or (iii) net income from continuing operations (in the latest fiscal year or in two of the last three fiscal years) of at least \$500,000 (the Net Income Standard). If our total market capitalization decreases to an amount less than \$35 million for 30 consecutive trading days, it is possible that we would no longer meet any of these three listing standards. Similar to the process described above in the minimum bid price context, if we fail to meet the Market Value Standard for 30 consecutive trading days and do not otherwise meet the Equity Standard or the Net Income Standard, we expect that we would then receive a notification letter from NASDAQ advising us that we fail to comply with the Market Value Standard and providing us a period of 180 calendar days to regain compliance with the Market Value Standard. In order to regain compliance with the Market Value Standard, the market value of our listed securities would have to be at least \$35 million for a period of 10 consecutive business days. Otherwise, our securities may then be subject to delisting.

There can be no assurance that our Common Shares will remain listed on NASDAQ. If we fail to meet any of NASDAQ's continued listing requirements, our Common Shares may be delisted. Any delisting of our Common Shares may adversely affect a shareholder's ability to dispose, or obtain quotations as to the market value, of such shares.

You will experience immediate and substantial dilution.

Since the public offering price of the Common Shares offered pursuant to this prospectus supplement and the accompanying prospectus is higher than the net tangible book value per Common Share, you will suffer substantial dilution in the net tangible book value of the Common Shares you purchase in this offering.

We do not intend to pay dividends in the near future.

To date, we have not declared or paid any dividends on our Common Shares. We currently intend to retain our future earnings, if any, to finance further research and the expansion of our business. As a result, the return on an investment in our Common Shares and Warrants will, for the foreseeable future, depend upon any future appreciation in value. There is no guarantee that our Common Shares will appreciate in value or even maintain the price at which shareholders have purchased them.

There is no public market for the Warrants being offered in this offering.

There is no established public trading market for the Warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the Warrants will be limited.

A large number of Common Shares may be issued and subsequently sold upon the exercise of the Warrants. The sale or availability for sale of these Warrants may depress the price of our Common Shares.

An aggregate of _____ Common Shares are issuable upon the exercise of the Warrants. To the extent that purchasers of Units sell Common Shares issued upon the exercise of the Warrants, the market price of our Common Shares may decrease due to the additional selling pressure in the market. The risk of dilution from issuances of Common Shares underlying the Warrants may cause shareholders to sell their Common Shares, which could further contribute to any decline in the Common Share price.

The sale of Common Shares issued upon exercise of the Warrants could encourage short sales by third parties which could further depress the price of the Common Shares.

Any downward pressure on the price of Common Shares caused by the sale of Common Shares issued upon the exercise of the Warrants could encourage short sales by third parties. In a short sale, a prospective seller borrows Common Shares from a shareholder or broker and sells the borrowed Common Shares. The prospective seller hopes that the Common Share price will decline, at which time the seller can purchase Common Shares at a lower price for

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delivery back to the lender. The seller profits when the Common Share price declines because it is purchasing Common Shares at a price lower than the sale price of the borrowed Common Shares. Such sales could place downward pressure on the price of our Common Shares by increasing the number of Common Shares being sold, which could further contribute to any decline in the market price of our Common Shares.

Management will have broad discretion as to the use of the proceeds of this offering of Units. We may invest or spend the proceeds of this offering of Units in ways with which investors may not agree and in ways that may not earn a profit.

Our management team will have broad discretion concerning the use of the proceeds from this offering of Units as well as the timing of their expenditure. As a result, investors will be relying on the judgment of management for the application of the proceeds of this offering of Units. We intend to use the net proceeds from the sale of the securities under this prospectus supplement to continue to fund our ongoing drug development activities, primarily for the advancement of our zoptarelin doxorubicin program, secondly for our macimorelin acetate program, including the preparation of its commercial launch, for the potential addition of commercialized products to our pipeline, as well as for future negative cash flow, general corporate purposes and working capital. Investors may not agree with the ways we decide to use these proceeds, and our use of the proceeds may not yield any results or profits.

Future issuances of securities and hedging activities may depress the trading price of our Common Shares.

Any issuance of equity securities or securities convertible into or exchangeable for equity securities after the offering of Units under this prospectus supplement, including the issuance of Common Shares upon the exercise of stock options and upon the exercise of outstanding warrants (including the Warrants), could dilute the interests of our existing shareholders, and could substantially decrease the trading price of our Common Shares. We may issue equity securities in the future for a number of reasons, including to finance our operations and business strategy, to satisfy our obligations upon the exercise of options or warrants or for other reasons. Our stock option plan generally permits us to have outstanding, at any given time, stock options that are exercisable for a maximum number of Common Shares equal to 11.4% of all then issued and outstanding Common Shares. As at September 30, 2013, there were:

31,523,823 Common Shares issued and outstanding;

no issued and outstanding Preferred Shares (as defined below);

7,007,410 Common Shares issuable upon exercise of outstanding warrants; and

2,349,185 stock options outstanding.

In addition, the price of Common Shares and Warrants could also be affected by possible sales of Common Shares and Warrants by investors who view other investment vehicles as more attractive means of equity participation in us and by hedging or arbitrage trading activity that may develop involving our Common Shares and Warrants. This hedging or arbitrage could, in turn, affect the trading price of our Common Shares.

Holders of our Warrants will have no rights as a shareholder until such holders exercise their Warrants and acquire our Common Shares.

Until holders of Warrants acquire our Common Shares upon exercise of the Warrants, holders of Warrants will have no rights with respect to the Common Shares underlying such Warrants. Upon exercise of the Warrants, the holders thereof will be entitled to exercise the rights of a shareholder only as to matters for which the record date occurs after the exercise date.

The Warrants may not have any value.

The Warrants have an exercise price of \$ _____ per share and expire on the fifth anniversary of the date of original issuance. In the event our Common Share price does not exceed the exercise price of the Warrants during the period when the Warrants are exercisable, the Warrants may not have any value.

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If our Common Shares are not listed on a U.S. national securities exchange, U.S. holders of Warrants may not be able to exercise their Warrants without compliance with applicable state securities laws and the value of such Warrants may be significantly reduced.

If our Common Shares are delisted from NASDAQ and are not eligible to be listed on another national securities exchange, the exercise of the Warrants by U.S. holders may not be exempt from state securities laws. As a result, depending on the state of residence of a holder of the Warrants, a U.S. holder may not be able to exercise its Warrants unless we comply with any state securities law requirements necessary to permit such exercise or an exemption applies. Although we plan to use our reasonable efforts to assure that U.S. holders will be able to exercise their Warrants under applicable state securities laws if no exemption exists, there is no assurance that we will be able to do so. As a result, in the event that our Common Shares are delisted from NASDAQ and are not eligible to be listed on another securities exchange, your ability to exercise your Warrants may be limited. The value of the Warrants may be significantly reduced if U.S. holders are not able to exercise their Warrants under applicable state securities laws.

Our articles of incorporation contain blank check preferred share provisions, which could delay or impede an acquisition of our company.

Our articles of incorporation, as amended, authorize the issuance of an unlimited number of blank check preferred shares, which could be issued by our board of directors without shareholder approval and may contain voting, liquidation, dividend and other rights equivalent or superior to our Common Shares. In addition, we could implement in our constating documents an advance notice procedure for shareholder approvals to be brought before an annual meeting of our shareholders, including proposed nominations of persons for election to our board of directors. These provisions, among others, whether alone or together, could delay or impede hostile takeovers and changes in control or changes in our management. Any provision of our constating documents that has the effect of delaying or deterring a change in control could limit the opportunity for our shareholders to receive a premium for their Common Shares and could also affect the price that some investors are willing to pay for our Common Shares.

If our Common Shares are not listed on a national securities exchange, compliance with applicable state securities laws may be required for subsequent offers, transfers and sales of the Common Shares and Warrants offered hereby.

Our Common Shares and the Warrants are being offered pursuant to one or more exemptions from registration and qualification under applicable state securities laws. Because our Common Shares are listed on NASDAQ, we are not required to register or qualify in any state the subsequent offer, transfer or sale of the Common Shares or Warrants. If our Common Shares were to be delisted from NASDAQ and were not eligible to be listed on another national securities exchange, subsequent transfers of our Common Shares and Warrants offered hereby by U.S. holders may not be exempt from state securities laws. In such event, it will be the responsibility of the holder of Common Shares or Warrants to register or qualify the Common Shares or the Warrants for any subsequent offer, transfer or sale in the United States or to determine that any such offer, transfer or sale is exempt under applicable state securities laws.

USE OF PROCEEDS

We estimate that the net proceeds to us from this offering will be approximately \$ million, after deducting underwriting discounts and commissions and our offering expenses, which are estimated to be approximately \$ million, and excluding the proceeds, if any, from the exercise of the Warrants issued pursuant to this offering.

Except as otherwise provided in any free writing prospectus that we may authorize to be provided to you, we intend to use the net proceeds from the sale of the securities under this prospectus supplement to continue to fund our ongoing drug development activities, primarily for the advancement of our zoptarelin doxorubicin program, secondly for our macimorelin acetate program, including the preparation of its commercial launch, for the potential addition of commercialized products to our pipeline, as well as for future negative cash flow, general corporate purposes and working capital. Pending the application of the net proceeds, we expect to invest the proceeds in investment grade, interest bearing securities.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds we will have upon completion of this offering. Accordingly, our management will have broad discretion in the application of net proceeds.

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Our Common Shares are listed and posted for trading on NASDAQ under the symbol **AEZS** and on TSX under the symbol **AEZ**. The following table indicates the monthly range of high and low closing prices of a Common Share and the average daily volumes traded on NASDAQ and on TSX during the period beginning on January 1, 2013 and ending on January 8, 2014:

	NASDAQ (US\$)			TSX (C\$)		
	High	Low	Volume	High	Low	Volume
2013						
January	3.23	2.53	1,042,958	3.27	2.48	23,532
February	3.04	2.41	657,955	3.03	2.45	15,826
March	2.62	1.88	541,009	2.67	1.90	12,960
April	1.98	1.73	213,368	2.02	1.74	7,623
May	2.10	1.77	230,931	2.18	1.80	3,952
June	1.99	1.83	213,541	2.03	1.91	4,215
July	1.98	1.39	545,036	2.09	1.42	12,784
August	1.49	1.37	393,508	1.55	1.41	7,943
September	1.70	1.48	285,416	1.79	1.55	7,060
October	1.51	1.35	221,618	1.56	1.41	