

# QUARTERLY UPDATE

Æterna Zentaris Inc.

**AEZS-NASDAQ** 

February 27, 2017

# **Company Description**

Aeterna Zentaris Inc. ("Aeterna" or "the Company") is a specialty biopharmaceutical company developing and commercializing therapies to enhance and improve patient lives. With a focus on establishing revenues and profitability while optimizing resources to reduce its burn rate, the Company co-promotes two commercial products in multiple U.S. markets: (1) EMD Serono's Saizen® [somatropin (rDNA origin) for injection] for growth hormone deficiencies; and (2) Armune BioScience's Apifiny®, a non-PSA blood test for evaluating prostate cancer risk. Aeterna further holds a pipeline of product candidates in development and is working to acquire or in-license other commercial compounds. One of the Company's wholly owned product candidates, Zoptrex™ [zoptarelin doxorubicin (doxorubicin peptide conjugate targeting LHRH receptor–expressing tumors)], has completed the clinical program of a Phase 3 trial in advanced, recurrent, or metastatic endometrial cancer (EC)—a disease for which patients typically have a poor prognosis and there is no approved systemic therapy (except in Germany). Aeterna's development program further includes Macrilen™ (macimorelin), which has also completed a confirmatory Phase 3 trial for the evaluation of Adult Growth Hormone Deficiency (AGHD). Overall, the Company is focused on pursuing strategic initiatives consistent with becoming a commercially operating specialty biopharmaceutical company.

## **Key Points**

- Zoptrex<sup>™</sup>, if approved, will be the first FDA approved treatment for advanced (stage III & IV) EC. An ongoing pivotal Phase 3 trial to treat advanced EC is under Special Protocol Assessment. Pivotal Phase 3 trial top-line results are expected in H1 2017, and if sufficient, the Company could submit an NDA in H2 2017.
- Apifiny<sup>®</sup> is the only non-PSA based blood test for evaluating the risk of prostate cancer. The Company has an exclusive U.S. promotion agreement with Armune BioScience on a commission basis. This is a large market opportunity with 20+ million PSA tests performed annually. Apifiny<sup>®</sup> measures specific biological markers known to be associated with an immune system response to prostate cancer.
- Macrilen<sup>™</sup>, if approved, will be the only FDA approved drug for assessing AGHD. The drug is patented through 2027 and has been granted Orphan Drug Designation. There is significant market expansion opportunity for traumatic brain injury (TBI) patients at risk of developing AGHD.
- Saizen<sup>®</sup> for growth hormone replacement therapy in children and adults via a needle-free delivery system is copromoted with EMD Serono in the U.S. on a commission basis. The U.S. market opportunity is significant at \$1.6 billion.
- As of September 30, 2016, Aeterna held cash and cash equivalents of approximately \$21.1 million, and subsequently, in November 2016, closed a registered direct offering for \$7.56 million in gross proceeds from the sale of common shares, pre-funded warrants, and warrants.
- The Company is actively pursuing additional portfolio opportunities via its product in-license/acquisition strategy. Aeterna Zentaris' leadership team has a strong track record of creating shareholder value.

# Æterna Zentaris

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#### **AEZS One-Year Chart**



Ticker (Exchange)	AEZS (NASDAQ)
Recent Price (02/27/17)	\$3.08 (NASDAQ)
52-week Range	\$2.35 - \$5.59*
Shares Outstanding	~12.9 million
Market Capitalization	~\$39.7 million
Avg. 3-mo. Daily Volume	313,330
Insider Ownership + >5%	5.80%
EPS (Qtr. ended 09/30/16)	(\$0.61)
Employees	46
*100-to-1 share consolidation executed in Nov. 2015.	

## **Recent Events and Financial Results**

All amounts are in U.S. dollars unless otherwise noted.

#### **Recent Events**

- On February 14, 2017, Aeterna announced that a poster entitled, "A phase II trial of zoptarelin doxorubicin in castration-and taxane-resistant prostate cancer", will be presented during the 2017 Genitourinary Cancers Symposium's "Translating Research to Value-based and Patient-centric Care" by lead investigator, and co-author of the presentation, Jacek Pinski, MD, PhD, USC Norris Comprehensive Cancer Center, in Orlando, Florida on Thursday, February 16, 2017 at 11:30 am-1:00 pm ET and 5:15 pm-6:15 pm ET. The event is a co-sponsored by the American Society of Clinical Oncology–ASCO; Society of Urologic Oncology–SUO; and Targeting Cancer Care–ASTRO. The sessions were held at Rosen Shingle Creek Hotel, 9939 Universal Blvd, Orlando, FL 32819. Further details from this announcement are on page 4.
- On February 13, 2017, the Company announced that following a comprehensive review of data obtained from the confirmatory Phase 3 clinical trial of Macrilen<sup>™</sup> (macimorelin) for the evaluation of growth hormone deficiency in adults (AGHD) using the insulin tolerance test (ITT) as a comparator, it concluded that Macrilen<sup>™</sup> demonstrated performance supportive of achieving registration with the U.S. Food and Drug Administration (FDA), with the FDA agreeing to consider the Company's conclusions during a Type A meeting (which is currently being scheduled). Further details from this announcement are on pages 5 and 6.
- On February 9, 2017, Aeterna announced that it will be presenting at the 2<sup>nd</sup> Annual Disruptive Growth & Healthcare Conference on Thursday, February 16<sup>th</sup> at 9:30 am EST. President and Chief Executive Officer, Mr. David A. Dodd will be presenting an updated overview of the Company, as well as meeting with investors.
- On February 7, 2017, the Company announced that it will be presenting at the 2017 BIO CEO & Investor Conference on Monday, February 13<sup>th</sup> at 8:00 am EST in New York City. President and Chief Executive Officer, Mr. David A. Dodd presented an updated Company overview, as well as meeting with investors.
- On January 30, 2017, Aeterna announced the occurrence of the 384<sup>th</sup> death in the pivotal Phase 3 ZoptEC (Zoptarelin Doxorubicin in endometrial cancer) study with Zoptrex<sup>™</sup> in women with advanced, recurrent, or metastatic endometrial cancer, representing the clinical endpoint of the study. The Company currently expects to lock the clinical database and to report top-line results in April 2017. Zoptrex<sup>™</sup> is the Company's proposed tradename for zoptarelin doxorubicin. The proposed tradename is subject to approval by the FDA. Reaching this milestone took longer than the Company anticipated because the rate of events slowed significantly during the past year. The study was fully enrolled in June 2015 and the final dosing occurred in January 2016. Aeterna is close to locking the clinical database and are focused on producing the top-line results of the study, which it expects to release in April 2017.

The ZoptEC pivotal Phase 3 trial was a fully-recruited (over 500 patients), open-label, randomized-controlled study, comparing the efficacy and safety of zoptarelin doxorubicin, a hybrid molecule composed of a synthetic peptide carrier and a well-known chemotherapy agent, doxorubicin, to doxorubicin alone. Patients were centrally randomized in a 1:1 ratio and received either Zoptrex<sup>™</sup> (267 mg/m2) or doxorubicin (60 mg/m2) intravenously, every three weeks, and for up to nine cycles. Response was evaluated every three cycles during treatment, and thereafter, every 12 weeks until progression. All patients were followed for survival as the primary efficacy endpoint (EP). Secondary EPs include progression-free survival, objective response-rate, and clinical benefit rate. The trial is being conducted under a Special Protocol Assessment with the U.S. FDA.

- On January 4, 2017, the Company announced that the confirmatory Phase 3 clinical trial of Macrilen™ (macimorelin) failed to achieve its objective of validating a single oral dose of macimorelin for the evaluation of growth hormone deficiency in adults (AGHD), using the insulin tolerance test (ITT) as a comparator. In that trial, Macrilen™ failed to achieve one of the two co-primary endpoints.
- On November 8, 2016, Aeterna reported its financial and operating results for the third quarter and nine months ended September 30, 2016.
- On November 1, 2016, Aeterna announced the closing of a previously announced registered direct offering for US\$7.56 million in gross proceeds. The offering was to a single healthcare-dedicated institutional investor in the U.S. of 2.1 million units, consisting of either one common share or one-pre-funded warrant to acquire one common share and 0.45 of a warrant to purchase one common share, at a purchase price of US\$3.60 per unit. The purchaser acquired units with pre-funded warrants substituted for common shares where the purchase of units with common shares would have resulted in the purchaser beneficially owning more than its beneficial ownership limitation following the consummation of the offering. The warrants have an exercise price of US\$4.70 per share and are exercisable six months after their date of issuance and expire three years after their initial exercise date.

The Company announced its intention to use the net proceeds from the offering to fund the preparation and submission of New Drug Applications for Macrilen<sup>™</sup> and Zoptrex<sup>™</sup> (if the results of its ongoing clinical trials of such products warrant doing so), for general corporate and working capital purposes, and to fund negative cash flow.

#### Zoptrex<sup>™</sup> Presentation in Prostate Cancer at 2017 Genitourinary Cancers Symposium

The Company announced on February 14, 2017, that a poster entitled, "A phase II trial of zoptarelin doxorubicin in castration-and taxane-resistant prostate cancer", will be presented during the 2017 Genitourinary Cancers Symposium's "Translating Research to Value-based and Patient-centric Care". Zoptarelin doxorubicin represents a new targeting concept in oncology using a hybrid molecule composed of a synthetic peptide carrier and a well-known chemotherapy agent, doxorubicin. As the first intravenous drug in advanced clinical development that directs the chemotherapy agent specifically to LHRH-receptor expressing tumors, Zoptarelin doxorubicin is resulting in a more targeted treatment with less damage to healthy tissue. Aeterna recently concluded a Phase 3 trial in women with advanced, recurrent, or metastatic endometrial cancer called ZoptEC (Zoptarelin doxorubicin in Endometrial Cancer), with the Company owning the worldwide rights to this compound.

#### Background

- The Company announced the initiation of its Phase 1/2 trial on December 14, 2010.
- On February 3, 2012, updated results for the Phase 1 portion of the study were reported, where results were based on 13 patients who had been previously treated with androgen-deprivation therapy (LHRH agonist) and at least one taxane-based chemotherapy regimen who were treated on three dose levels of Zoptrex<sup>™</sup>: three at 160 mg/m<sup>2</sup>, three at 210 mg/m<sup>2</sup>, and seven at 267 mg/m<sup>2</sup>. In general, Zoptrex<sup>™</sup> was well tolerated among this group of heavily pretreated older patients.

There were two dose-limiting toxicities, each of were a case of asymptomatic Grade 4 neutropenia at the 267 mg/m2 dose level and in each situation, both patients fully recovered. The Grade 3 and 4 toxicities were primarily hematologic. There was minimal non-hematologic toxicity, most frequently fatigue and alopecia. Despite the low doses of Zoptrex<sup>™</sup> in the first cohorts, there was indication of antitumor activity. One patient received eight cycles (at 210 mg/m<sup>2</sup>) due to continued benefit. Among the five evaluable patients with measurable disease, four achieved stable disease. At the time of submission of the abstract, a decrease in prostate specific antigen (PSA) was noted in six patients. Six of 13 (46%) treated patients received at least five cycles of therapy with no evidence of disease progression at twelve weeks.

- On November 12, 2012, Aeterna announced the initiation of the Phase 2 portion of Dr. Pinski's Phase 1/2 study of Zoptrex<sup>™</sup> in prostate cancer. This was a single-arm Simon Optimum Design Phase 2 study of Zoptrex<sup>™</sup> in 25 patients with castrate-resistant prostate cancer (CRPC). Patients received Zoptrex<sup>™</sup> (210 mg/m<sup>2</sup>) intravenously over two hours, every three weeks. The primary endpoint was clinical benefit (CB) defined as remaining progression-free by RECIST and PSA after treatment for 12+ weeks. Secondary endpoints were progression free survival (PFS), best overall response, toxicity, pain, and overall survival (OS).
- On June 3, 2013, the Company announced that final data for the Phase 1 portion of Dr. Pinski's Phase 1/2 trial with Zoptrex<sup>™</sup> in prostate cancer demonstrated its promising anti-tumor activity. Results were presented by Dr. Pinski during a poster session at the ASCO Annual Meeting in Chicago. The results of the study were published in an article by Liu et al in the journal Clinical Cancer Research (Clin. Cancer Res. (2014) 20:6277). Eighteen men were treated at three dose levels: (160 mg/m2; (ii) 210 mg/m2; and (iii) 267 mg/m2). Overall Zoptrex<sup>™</sup> was well tolerated among this group of heavily pretreated patients. There were two dose-limiting toxicities (grade four neutropenia and grade three febrile neutropenia), prompting de-escalation to 210 mg/m<sup>2</sup> and establishing it as the Maximum Tolerated Dose. Among the 15 evaluable patients with measurable disease, ten achieved stable disease (SD), and a drop in PSA was noted in three patients.
- On September 28, 2015, Dr. Pinski announced during a poster session at the 18<sup>th</sup> ECCO-40<sup>th</sup> ESMO European Cancer Congress in Vienna, Austria, that among the 25 patients in the Phase 2 portion of the trial, 11 patients experienced CB as the primary endpoint, and 13 patients achieved SD. Maximal PSA response was stable in 20 patients. Pain assessment improved for 11 patients. Zoptrex<sup>™</sup> was well tolerated in this heavily pretreated patient population with hematological toxicities, usually limited to grade three, as the most common adverse events. Dr. Pinski concluded that Zoptrex<sup>™</sup> was well tolerated and met the primary efficacy endpoint in castration- and taxane-resistant prostate cancer patients.

#### Other Potential Indications

Aeterna believes that Zoptrex<sup>™</sup> may be useful in treating other cancers, such as breast, bladder, and prostate cancer, noting that the Company terminated early clinical trials of the compound in treating triple-negative breast cancer and bladder cancer as part of its ongoing review of its development activities to ensure the most effective use of Company resources.

#### Plans Announced to Pursue FDA Registration of Macrilen™

Following a comprehensive review of data obtained from the confirmatory Phase 3 clinical trial of Macrilen<sup>™</sup> (macimorelin) for the evaluation of growth hormone deficiency in adults (AGHD), using the insulin tolerance test (ITT) as a comparator, Aeterna concluded that Macrilen<sup>™</sup> demonstrated performance supportive of achieving registration with the U.S. FDA, where the FDA has agreed to consider the Company's conclusions during a Type A meeting. AGHD affects approximately 75,000 adults across the U.S., Canada, and Europe. Growth hormone not only plays an important role in growth from childhood to adulthood, but also helps promote a hormonally-balanced health status. AGHD mostly results from damage to the pituitary gland. It is usually characterized by a reduction in bone mineral density, lean body mass, exercise capacity, and overall quality of life as well as an increase of cardiovascular risks. Macimorelin, a ghrelin agonist, is an orally-active small molecule that stimulates the secretion of growth hormone. Macimorelin has been granted orphan drug designation by the FDA for diagnosis of AGHD. The Company owns the worldwide rights to this compound and has significant patent protection left. The Company's U.S. composition of matter patent expires in 2022 and its U.S. utility patent runs through 2027. The Company proposes to market macimorelin under the tradename Macrilen<sup>™</sup> subject to FDA approval.

After complete analysis of the data from the confirmatory trial, the Company concluded as follows:

- Macrilen<sup>™</sup> stimulates the pituitary gland to produce growth hormone more effectively than the ITT; in approximately 80% of all patients, measured growth hormone levels following the administration of Macrilen<sup>™</sup> were equal to or higher than the growth hormone levels produced by the ITT;
- The Macrilen<sup>™</sup> test performed well in the study:
  - Sensitivity (87%) and specificity (96%) of the Macrilen<sup>™</sup> test were satisfactory;
  - Data of the previous study (82% sensitivity, 92% specificity) could be reproduced;
  - The co-primary endpoint "negative agreement" with the ITT, which is considered as the more relevant endpoint, was met, demonstrating that the Macrilen<sup>™</sup> test provides medical benefit;
  - The co-primary endpoint "positive agreement" with the ITT was not met;
- In the repeatability part of the study, conducted upon request of the European Medicines Agency, Macrilen<sup>™</sup> results proved to be highly reproducible:
  - 94% reproducibility (32 out of 34 cases at the cut-off point defined in the study protocol);
  - Reproducibility of the ITT, which was not investigated in this study, appears worse than the Macrilen<sup>™</sup> test as demonstrated by a high number of non-evaluable ITTs in the study;
- Study results can be further optimized by modulation of the pre-defined cut-off point of 2.8 ng/mL:
  - Any cut-off point for Macrilen<sup>™</sup> between 4.6 ng/mL and 8.6 ng/mL would have resulted in a positive study outcome in that both protocol-defined co-primary endpoints would have been met; and
- The dose of Macrilen<sup>™</sup> used in the study was adequate and appropriate.

#### About the Study

The confirmatory Phase 3 clinical study of Macrilen<sup>M</sup>, entitled *Confirmatory Validation of Oral Macimorelin as a Growth Hormone (GH) Stimulation Test (ST) for the Diagnosis of AGHD in Comparison with the Insulin Tolerance Test (ITT),* was designed as a two-way crossover study with the ITT as the benchmark comparator and involved some 26 sites in the U.S. and Europe. The trial involved 157 subjects, of whom 140 completed two evaluable tests for AGHD using both Macrilen<sup>M</sup> and the ITT. Thirty-four of the patients were evaluated using Macrilen<sup>M</sup> a second time to measure the repeatability of the result obtained using Macrilen<sup>M</sup> as the evaluation method. The study population consisted of 115 patients who were suspected of having AGHD as a result of the presence of one or more symptoms or risk factors. This segment of the population included a range of patients from those considered at low risk of having AGHD to those considered at high risk. The study population also included 25 healthy subjects, who had no risk of having AGHD.

Under the study protocol, the evaluation of AGHD with Macrilen<sup>™</sup> will be considered successful if the lower bound of the two-sided 95% confidence interval (or lower bound of the one-sided 97.5% confidence interval) for the primary efficacy variables is 75% or higher for "percent negative agreement," and 70% or higher for the "percent positive agreement." Based on meetings with the FDA as well as the European Medicines Agency (EMA) and subsequent written scientific advice, the Company believes that if successful, that the study meets the FDA's and the EMA's study-design expectations allowing U.S. and European approval.

#### Third Quarter and Year-to-Date 2016 Financial Results

On November 8, 2016, Aeterna reported its financial and operating results for the third quarter and nine months ended September 30, 2016. Aeterna reported research and development (R&D) costs of \$4.5 million and \$11.9 million for the three and nine months ended September 30, 2016, respectively, versus \$4.1 million and \$13 million for the same periods in 2015. The increase in quarter-over-quarter R&D costs resulted from the start of the confirmatory Phase 3 trial for Macrilen™ at the end of 2015, which just completed patient recruitment in October 2016. Year to date, the decrease in R&D costs from the same period in 2015 is largely a result of lower comparative third-party costs attributable to Zoptrex<sup>™</sup>, for which patient dosing in the ongoing ZoptEC trial ended in February 2016, as well as lower employee compensation, benefits, and other costs related to the Company's previously enacted ongoing effort to streamline R&D activities.

General and administrative (G&A) expenses for Aeterna were \$1.6 million and \$5.4 million for the three and nine months ended September 30, 2016, respectively, versus \$1.9 million and \$7.4 million for the same periods in 2015. The decreases in G&A expenses stems from the impact of recent corporate restructuring as well as the recording, in the prior year period, of certain transaction costs allocated to warrants in connection with the completion of an offering in March 2015.

Aeterna reported relatively flat selling expenses of \$1.8 million and \$5.2 million for the three and nine months ended September 30, 2016, respectively, versus \$1.7 million and \$5.1 million for the same periods in 2015. The Company's net loss for the three and nine months ended September 30, 2016, was \$6.1 million and \$16.7 million, or (\$0.61) and (\$1.68) per basic and diluted share, versus a net loss of \$15.3 million and \$40.1 million, or (\$6.66) and (\$29.12) per basic and diluted share, for the same periods in 2015. The decrease in net loss for the third quarter 2016 was due largely to higher comparative net finance income, while the year-to-date decrease in net loss was due largely to lower operating expenses and higher comparative net finance income.

#### **Cash Position**

As at September 30, 2016, Aeterna held cash and cash equivalents of approximately \$21.1 million versus approximately \$26.2 million as at June 30, 2016. During the third quarter 2016, Aeterna raised approximately \$2.3 million in gross proceeds from the sale of 580,912 common shares pursuant to the Company's ATM program. Subsequent to the quarter's end, Aeterna closed a registered direct offering for \$7.56 million in gross proceeds from the sale of common shares, pre-funded warrants, and warrants, and thus believes it is positioned financially to complete both of its pivotal Phase 3 trials and potentially file a New Drug Application for Macrilen<sup>™</sup> during 2017.

## **Company Background**

Aeterna Zentaris Inc. ("Aeterna" or "the Company") is a specialty biopharmaceutical company engaged in developing, commercializing, and promoting novel treatments in oncology and endocrinology via internal development programs as well as expanding its commercial portfolio through co-promotion, in-licensing, and the acquisition of products already on the market. With a focus on establishing revenues and profitability while optimizing resources and reducing its burn rate, the Company has two commercial programs at present: (1) promotion of a growth hormone deficiency product, EMD Serono, Inc.'s Saizen®; and (2) promotion of Armune Bioscience, Inc.'s Apifiny®, the first non-PSA blood test for use in evaluating and managing the risk of prostate cancer. Aeterna routinely pursues opportunities to in-license or acquire products to further complement its portfolio.

Aeterna also holds a pipeline of candidates in varying stages of development, including two product candidates (Zoptrex<sup>™</sup> and Macrilen<sup>™</sup>) in Phase 3 studies. Both Phase 3 trials are nearing completion and are on track to report top-line results in early 2017, potentially followed by the filing of a New Drug Application (NDA) for both Macrilen<sup>™</sup> and Zoptrex<sup>™</sup> during 2017, pending favorable trial results. This could be a significant milestone for the Company that would mark the completion of two Phase 3 clinical programs.

As well, during 2016, Aeterna ramped up out-licensing activity for Zoptrex<sup>™</sup>, which included agreements for the drug in Taiwan, Southeast Asia, Israel, Palestine, Australia, and New Zealand. In addition, the Company's licensee in China filed an Investigational New Drug (IND) application for Zoptrex<sup>™</sup> with the Chinese FDA in June 2016, and anticipates the start of a clinical program in China in the first half of 2017.

Aeterna is also investigating various other compounds as potential treatments in oncology and endocrinology as it pursues strategic initiatives that are consistent with the operations of a commercial specialty biopharmaceutical company.

#### **Pipeline and Development Summary**

Figure 1 summarizes the Company's current product pipeline, which is described in greater detail on pages 16-30 of Crystal Research Associates' base Executive Informational Overview<sup>®</sup> (EIO) published on Aeterna and available at <u>http://www.crystalra.com/research-library/aeterna-zentaris</u>.



#### **Key Corporation Information**

The Company was incorporated on September 12, 1990, under the Canada Business Corporations Act (CBCA) and continues to be governed by the CBCA. On December 30, 2002, it acquired Zentaris AG, a biopharmaceutical company based in Frankfurt, Germany. Zentaris was a spin-off of Asta Medica GmbH, a former pharmaceutical company affiliated with Degussa AG. In May 2004, the Company's name was changed to Aeterna Zentaris Inc. and on May 11, 2007, Zentaris GmbH was renamed Aeterna Zentaris GmbH. On October 2, 2012, Aeterna effected a 6-to-1 reverse stock split and on October 5, 2012, the common shares began trading on a consolidated and adjusted basis on both the NASDAQ and TSX. In November 2015, the Company performed another share consolidation at a ratio of 100-to-1.

The Company's operational base is in Charleston, South Carolina, with offices also in Frankfurt, Germany. Aeterna trades on the NASDAQ under the ticker symbol AEZS and on the TSX under AEZ. Its three wholly owned direct and indirect subsidiaries include Aeterna Zentaris GmbH (Germany); Zentaris IVF GmbH, a direct wholly owned subsidiary of AEZS Germany based in Frankfurt, Germany; and Aeterna Zentaris, Inc., an entity incorporated in the State of Delaware.

### **Risks and Disclosures**

This Quarterly Update has been prepared by Crystal Research Associates, LLC (CRA) based upon information provided by Aeterna. CRA has not independently verified such information. Some of the information in this Update relates to future events or future business and financial performance. Such statements constitute forward-looking information within the meaning of the Private Securities Litigation Act of 1995. Such statements can only be predictions and the actual events or results may differ from those discussed due to the risks described in Aeterna's statements in its public and investor materials as well as regulatory forms filed from time to time.

The content of this report with respect to Aeterna has been compiled primarily from information available to the public released by the Company through news releases, investor presentations, and other materials released from time to time. Aeterna is solely responsible for the accuracy of this information. Information as to other companies and information as to the prevalence of certain disease and of the use of certain treatment modalities has been prepared from publicly available information and has not been independently verified by Aeterna or CRA. Certain summaries of activities and outcomes have been condensed to aid the reader in gaining a general understanding. CRA assumes no responsibility to update the information contained in this report. In addition, CRA has been compensated by the Company in cash of thirty-nine thousand U.S. dollars for its services in creating the base report and updates.

Investors should carefully consider the risks and information about Aeterna's business, as described in Crystal Research Associates' Executive Informational Overview<sup>®</sup> (EIO) published on April 21, 2015, and Aeterna's regulatory filings. Investors should not interpret the order in which considerations are presented in filings as an indication of their relative importance. The risks and uncertainties overviewed in the EIO are not the only risks that the Company faces. Additional risks and uncertainties not presently known to Aeterna or that it currently believes to be immaterial may also adversely affect the Company's business. If any of such risks and uncertainties develops into an actual event, Aeterna's business, financial condition, and results of operations could be materially and adversely affected, and the trading price of the Company's shares could decline. This report is published solely for information purposes and is not to be construed as an offer to sell or the solicitation of an offer to buy any security in any state. Past performance does not guarantee future performance. Additional information about Aeterna, as well as copies of this report, can be obtained by calling (843) 900-3223.



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