

FORM 51-102F3

MATERIAL CHANGE REPORT

Item 1 Name and Address of Company

Aeterna Zentaris Inc. (the “**Company**”)
c/o Stikeman Elliott LLP
1155 René-Lévesque Blvd. West
41st Floor
Montréal, Québec
H3B 3V2

Item 2 Date of Material Change

December 20, 2017.

Item 3 News Release

On December 20, 2017, the Company issued a news release indicating the material change, which was disseminated on the GlobeNewswire news service.

Item 4 Summary of Material Change

On December 20, 2017, the Company announced that the United States Food and Drug Administration (“**FDA**”) granted marketing approval for Macrilen™ (macimorelin), an orally available ghrelin agonist, to be used in the diagnosis of patients with adult growth hormone deficiency (“**AGHD**”).

Item 5.1 Full Description of Material Change

On December 20, 2017, the Company announced that the FDA granted marketing approval for Macrilen™ (macimorelin), an orally available ghrelin agonist, to be used in the diagnosis of patients with AGHD. The Company estimates that approximately 60,000 tests for suspected AGHD are being conducted each year across the United States, Canada and Europe.

Macrilen™ (macimorelin) stimulates the secretion of growth hormone from the pituitary gland into the circulatory system. Stimulated growth hormone levels are measured in four blood samples over ninety minutes after oral administration of Macrilen™ (macimorelin) for the assessment of growth hormone deficiency. Prior to the approval of Macrilen™ (macimorelin), the historical gold standard for evaluation of AGHD was the insulin tolerance test (“**ITT**”), an intravenous test requiring many blood draws over several hours. The ITT procedure is inconvenient for patients and medical practitioners and may contraindicate in patients, such as those with coronary heart disease or seizure disorder, because it requires the patient to experience hypoglycemia to obtain an accurate result.

The Company intends to make Macrilen™ (macimorelin) available commercially in the United States during the first quarter of 2018.

Item 5.2 Disclosure for Restructuring Transactions

Not applicable.

Item 6 Reliance on subsection 7.1(2) or (3) of National Instrument 51-102

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Executive Officer

Further information regarding the matter described in this report may be obtained from Michael V. Ward, Chief Executive Officer, at 843-900-3201 or IR@AEZSinc.com.

Item 9 Date of Report

December 22, 2017.

Cautionary Note Regarding Forward-Looking Statements

This material change report contains forward-looking statements made pursuant to the safe-harbor provisions of the U.S. Securities Litigation Reform Act of 1995 and applicable Canadian securities laws, which reflect our current expectations regarding future events. Forward-looking statements may include, but are not limited to statements preceded by, followed by, or that include the words “expects,” “believes,” “intends,” “would,” “could,” “may,” “anticipates,” and similar terms that relate to future events, performance, or our results. Forward-looking statements involve known risks and uncertainties, many of which are discussed under the caption “Key Information - Risk Factors” in our most recent Annual Report on Form 20-F filed with the relevant Canadian securities regulatory authorities in lieu of an annual information form and with the U.S. Securities and Exchange Commission (“SEC”) and under the caption “Risk Factors and Uncertainties” in our management’s discussion and analysis for the third quarter of 2017. Such statements include, but are not limited to, statements about the timing of, and prospects for, regulatory approval and commercialization of our product candidates, statements about the status of our efforts to establish a commercial operation and to obtain the right to promote or sell products that we did not develop and estimates regarding our capital requirements and our needs for, and our ability to obtain, additional financing. Known and unknown risks and uncertainties could cause our actual results to differ materially from those in forward-looking statements. Such risks and uncertainties include, among others, our now heavy dependence on the success of Macrilen™ (macimorelin) and the continued availability of funds and resources to successfully launch the product, and, more generally, uncertainties related to the regulatory process, the rejection of the MMA by the EMA and the ability of the Company to efficiently commercialize Macrilen™ (macimorelin), the degree of market acceptance of Macrilen™ (macimorelin), our ability to obtain necessary approvals from the relevant regulatory authorities to enable us to use the desired brand names for our products, the impact of securities class action litigation, the litigation involving two former officers of the Company, or other litigation, on our cash flow, results of operations and financial position; any evaluation of potential strategic alternatives to maximize potential future growth and stakeholder value may not result in any such alternative being pursued, and even if pursued, may not result in the anticipated benefits, our ability to take advantage of business opportunities in the pharmaceutical industry, our ability to protect our intellectual property, the potential of liability arising from shareholder lawsuits and general changes in economic conditions. Investors should consult the Company’s quarterly and annual filings with the applicable Canadian securities regulators and the SEC for additional information on risks and uncertainties. Given these uncertainties and risk factors, readers are cautioned not to place undue reliance on these forward-looking statements. We disclaim any obligation to update any such factors or to publicly announce any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, unless required to do so by a governmental authority or applicable law.