

FORM 51-102F3

MATERIAL CHANGE REPORT

Item 1 Name and Address of Company

Aeterna Zentaris Inc. (the "Company")
c/o Stikeman Elliott LLP
5300 Commerce Court West
199 Bay Street
Toronto, Ontario
M5L 1B9

Item 2 Date of Material Change

June 6, 2019

Item 3 News Release

On June 6, 2019, the Company issued a news release indicating the material change, which was disseminated on the GlobeNewswire news service.

Item 4 Summary of Material Change

The Company announced that it is reducing the size of its German workforce and operations to more closely reflect the Company's ongoing commercial activities in Frankfurt. The Company also provided an update on its previously disclosed securities class action lawsuit pending in the U.S. District Court for the District of New Jersey, brought on behalf of shareholders of the Company.

Item 5.1 Full Description of Material Change

The Company announced that it is reducing the size of its German workforce and operations to more closely reflect the Company's ongoing commercial activities in Frankfurt. This restructuring will affect eight employees in Frankfurt, Germany and is expected to result in approximately US\$800,000 of severance costs that is expected to be paid by January 31, 2020.

The Company also provided an update on the previously disclosed securities class action lawsuit pending in the U.S. District Court for the District of New Jersey, brought on behalf of shareholders of the Company. The lawsuit alleges violations of the Securities Exchange Act of 1934 in connection with allegedly false and misleading statements made by the defendants between August 30, 2011 and November 6, 2014 regarding the safety and efficacy of Macrilen™ (macimorelin) and the prospects for the approval of the Company's New Drug Application for the product by the FDA. In February 2018, the U.S. court granted a motion for class certification in the case, and this week the U.S Third Circuit Court of Appeals dismissed an appeal of that certification motion that had been brought by the Company. The Company considers the claims that have been asserted in the lawsuit to be without merit and is vigorously defending against them. The Company cannot, however, predict at this time the outcome or potential losses, if any, with respect to this lawsuit. The Company continues to believe that substantially all of the costs for its defense will be borne by the insurers who provide directors' and officers' liability insurance to the Company, subject to policy limits.

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 Leslie Auld, Chief Financial Officer, at 843-900-3201 or IR@AEZSinc.com.

Item 9 Date of Report

June 7, 2019