UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

February 25, 2019

Leslie Auld
Chief Financial Officer
Aeterna Zentaris Inc.
315 Sigma Drive
Summerville, South Carolina 29486

Re: Aeterna Zentaris Inc.
Form 20-F for the Year Ended December 31, 2017
Filed March 28, 2018
Form 6-K for the Month of May 2018
Filed May 7, 2018
File No. 001-38064

Dear Ms. Auld:

We have reviewed your January 18, 2019 response to our comment letter and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our December 19, 2018 letter.

Form 6-K filed May 7, 2018

Exhibit 99.1
Notes to Condensed Interim Consolidated Financial Statements (unaudited)
4 Licensing Arrangements, page 10

1. With regard to your response to comment one:
   - as to the first bullet: you state it "makes sense" to allocate the $29 million, however, we continue to believe that the transaction price to be allocated on day one is $24 million as determined in accordance with paragraph 47 of IFRS 15. Please advise with references to authoritative literature that supports your conclusion.
   - with regard to bullet two: tell us if another agreement will be required for the license

of the Pediatric Indication and why or why not. We note that Product is defined as "any pharmaceutical product containing the API including the product developed by the Licensor for the Existing Indications" (plural). "Any pharmaceutical product containing the API" seems quite broad. We further note that Section 2.1(c) of the license agreement gives the Licensee the right and license to use the Licensor IPR Package to Develop the Product for Commercialization. Develop is defined as carrying out the PIP. The PIP is defined as the pediatric investigation plan. Accordingly, it appears a license was granted for the Pediatric Indication. Please direct us to the language in the license agreement that supports your position. Explain why Section 2 of the license agreement does not use the term "Adult Indication" is licensed as that term is defined in the agreement if that was the only indication licensed.

- with regard to bullet four: you state "Strongbridge has no right to access our Pediatric Indication IP". Please reconcile this to Section 2.1 of the license agreement which states "grants to the Licensee the exclusive...right and license to use the Licensor IPR Package".
- with regard to bullet five: our request for your basis in determining the $400,000 was meant to elicit the authoritative literature which supports your computation.
- in your financial statements for March 31, 2018 you indicated you determined the license for Macrilen TM (macimorelin) for pediatric indication was a “right to access” license. Please tell us why you changed your view on the type of license entered into.

You may contact SiSi Cheng at 202-551-5004 or Lisa Vanjoske at 202-551-3614 if you have any questions.

Sincerely,

Division of Corporation Finance
Office of Healthcare & Insurance