



DIVISION OF
CORPORATION FINANCE

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

August 30, 2012

Via E-mail

Mr. Dennis Turpin
Senior Vice President and Chief Financial Officer
Aeterna Zentaris Inc.
1405 du Parc-Technologique Blvd.
Quebec City, Quebec
Canada, G1P 4P5

**Re: Aeterna Zentaris Inc.
Form 20-F for the Fiscal Year Ended December 31, 2011
Filed on March 28, 2012
File No. 000-30752**

Dear Dr. Turpin:

We have reviewed your filing and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within 10 business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing the information you provide, we may have additional comments and/or request that you amend your filing.

Notes to Consolidated Financial Statements

Note 2: Summary of significant accounting policies
Identifiable intangible assets, page 155

1. You disclose that your in-process R&D intangible assets result from business combinations and that you amortize these assets on a straight-line basis over their estimated useful lives of eight to fifteen years. Please provide us proposed disclosure to be included in future periodic reports that indicates when you begin to amortize your in-process R&D assets. Reference for us the authoritative literature you relied upon to support your accounting.

Note 13: Goodwill, page 171

2. You disclose that you allocated all your goodwill to the cash generating unit of your consolidated group. Given your announcement of the failed Phase III trial of Perifosine in refractory advanced colorectal cancer on April 2, 2011 and the significant decline in your stock price since that date, please tell us why you do not appear to record a goodwill impairment in your June 30, 2012 financial statements submitted on Form 6-K on August 14, 2012. In addition, please tell us whether any of your intangible assets relate to Perifosine and, if so, why you did not appear to record an impairment of those assets in your June 30, 2012 financial statements. Reference for us the authoritative literature you relied upon to support your accounting.

Note 15: Warrant liability, page 172

3. Please provide us proposed revised disclosure to be included herein in future periodic reports that clarifies why you classify your warrants as liabilities consistent with your IFRS transition disclosures on page 196.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Mark Brunhofer, Staff Accountant, at (202) 551-3638 or Lisa Vanjoske, Assistant Chief Accountant, at (202) 551-3614 if you have questions regarding the comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg
Senior Assistant Chief Accountant