

Aeterna Zentaris Inc.  
Form 6-K  
February 23, 2011

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 6-K**

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13A-16 OR 15D-16  
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

**For the month of February 2011  
Commission file number 0-30752**

**ÆTERNA ZENTARIS INC.  
1405 du Parc-Technologique Blvd.  
Quebec City, Québec  
Canada, G1P 4P5**

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F  Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes  No

If  Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b):  
82-\_\_\_\_\_.

**DOCUMENTS INDEX**

Documents Description

- 99.1 Press release dated February 22, 2011
- 99.2 At market issuance sales agreement dated February 22, 2011 between the registrant and McNicoll Lewis & Vlak, LLC

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ÆTERNA ZENTARIS INC.

Date: February 22, 2011

By: /s/ DENNIS TURPIN  
Dennis Turpin  
Senior Vice President and Chief Financial  
Officer