Rosetta Genomics Ltd. Form 6-K January 06, 2016

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 of the Securities Exchange Act of 1934

For the Month of January 2016

Commission File Number 001-33042

Rosetta Genomics Ltd. (Translation of registrant's name into English)

10 Plaut Street, Science Park Rehovot 76706, Israel (Address of principal executive office)

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

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): o

Rosetta Genomics Ltd.

On January 6, 2016, Rosetta Genomics Ltd. (the "Company") issued a press release announcing the signing of an agreement with Mirna Therapeutics, Inc. for a worldwide sublicense to the Company's patents related to therapeutic uses of certain microRNA technologies. The agreement includes an exclusive sublicense related to Mirna's MRX34 product candidate, a mimic of naturally occurring microRNA-34 being evaluated in clinical studies for a variety of cancers. Under the terms of the agreement, the Company will receive an upfront payment of \$1.6 million from Mirna, and is eligible for low single-digit royalties on product sales and potential milestone payments and sublicense payments. A copy of the press release is filed as Exhibit 99.1 to this Form 6-K and incorporated by reference herein.

The information contained in this Report (including the exhibit hereto) is hereby incorporated by reference into the Company's Registration Statements on Form F-3, File Nos. 333-163063, 333-171203, 333-172655, 333-177670, 333-185338 and 333-207697.

Exhibits

Exhibit

Description of Exhibit

Number

99.1 Press Release dated January 6, 2016.

Signatures

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

ROSETTA GENOMICS LTD.

Date: January 6, 2016 By:/s/ Oded Biran

Oded Biran

Chief Legal Officer and Corporate Secretary