

NEWS RELEASE

Rosetta Genomics Raises \$8,000,000 in Private Placement

PHILADELPHIA, PA. and REHOVOT, Israel (October 14, 2015) – Rosetta Genomics Ltd. (NASDAQ: ROSG), a leading developer and provider of microRNA-based and other molecular diagnostics, today announced it has entered into definitive agreements with investors to purchase an aggregate of \$8,000,000 in units, consisting of ordinary shares and warrants, in a private placement. The closing is expected to occur on or about October 16, 2015 and is subject to the satisfaction of customary closing conditions.

Under the terms of the private placement, Rosetta will sell an aggregate of 3,333,333 units at \$2.40 per unit, with each unit consisting of (i) one ordinary share, (ii) a Series A Warrant to purchase one-half of an ordinary share at an exercise price of \$2.75 per ordinary share (subject to adjustment), exercisable for a period of five years from the closing date, and (iii) a partially pre-funded Series B Warrant. The Series B Warrants have an exercise price of NIS 0.6 (which has been prepaid) plus \$0.0001 per share. The Series B Warrants are intended to reset the price of the units, and will be exercisable for an aggregate number of ordinary shares based on a reset price per unit equal to 85% of the arithmetic average of the five lowest weighted average prices calculated during the ten trading days following the effective date of the Company's resale registration statement to be filed for the private placement; provided that the maximum aggregate number of ordinary shares issuable upon exercise of the Series B Warrants will not exceed 2,666,667. The Series B Warrants are exercisable for 60 days following the effective date of the resale registration statement. Rosetta is required to file a resale registration statement within 60 days following the closing of the private placement that covers the resale by the purchasers of the ordinary shares and the ordinary shares issuable upon exercise of the warrants issued in the private placement.

Aegis Capital Corp. acted as the exclusive placement agent in connection with the private placement.

The securities offered and sold in the private placement have not been registered under the Securities Act of 1933, as amended, or any state securities laws, and may not be offered or sold in the United States absent registration, or an applicable exemption from registration under the Securities Act and applicable state securities laws.

This announcement is neither an offer to sell nor a solicitation of an offer to buy any securities of Rosetta.

About Rosetta Genomics

Rosetta develops and commercializes a broad range of microRNA-based and other high-value molecular diagnostics. Rosetta's integrative research platform combining bioinformatics and state-of-the-art laboratory processes has led to the discovery of hundreds of biologically

validated novel human microRNAs. Building on its strong patent position and proprietary platform technologies, Rosetta is working on the application of these technologies in the development and commercialization of a full range of microRNA-based diagnostic tools. Through the acquisition of PersonalizeDx, the Company also offers core FISH, IHC and PCR-based testing capabilities and partnerships in oncology and urology that provide additional content and platforms that complement the Rosetta offerings. Rosetta's cancer testing services are commercially available through the Philadelphia, PA- and Lake Forest, CA-based CAP-accredited, CLIA-certified labs.

Forward-Looking Statement Disclaimer

Various statements in this release concerning Rosetta's future expectations, plans and prospects, including without limitation, statements relating to the expected closing of the transaction constitute forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including those risks more fully discussed in the "Risk Factors" section of Rosetta's Annual Report on Form 20-F for the year ended December 31, 2014 as filed with the Securities and Exchange Commission. In addition, any forward-looking statements represent Rosetta's views only as of the date of this release and should not be relied upon as representing its views as of any subsequent date. Rosetta does not assume any obligation to update any forward-looking statements unless required by law.

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