ROSETTAGENOM**i**CS™
Revealing Genomic Answers

News Release

Clinical Validation Study for RosettaGX Reveal Published in the *Journal of Clinical Pathology*

Second peer-reviewed publication represents a major milestone that is expected to support continued RosettaGX Reveal momentum

PHILADELPHIA and REHOVOT, Israel (October 27, 2016) – Rosetta Genomics Ltd. (NASDAQ: ROSG), a leading developer and provider of microRNA-based and other molecular diagnostics, announces that a clinical validation study in support of RosettaGX Reveal™ (Reveal), the Company's first-of-its-kind microRNA classifier for indeterminate thyroid nodules, has been published in the *Journal of Clinical Pathology*. The article, entitled "Multicenter Validation of a MicroRNA-based Assay for Diagnosing Indeterminate Thyroid Nodules Utilizing Fine Needle Aspirate Smears," is available online here.

Thyroid nodules are very common and most are benign, with only a 5% risk of being malignant. In order to make a diagnosis, a thyroid fine needle aspiration (FNA) biopsy is performed. In most cases, the cytopathologist is able to determine if the nodule is benign or malignant. Unfortunately, approximately 10-40% of the Fine Needle Aspirates (FNA) are categorized as indeterminate.[1] This leads to many unnecessary surgeries. The RosettaGX Reveal miRNA Classifier can help to significantly reduce the number of unnecessary surgeries. The publication of data for the Reveal assay in the *Journal of Clinical Pathology* supports its use as a tool in the diagnosis of indeterminate thyroid nodules and highlights its ability to analyze the same thyroid cells on which the indeterminate diagnosis was based. With a market-leading 99% negative predictive value, this unique assay will help reduce the number of unnecessary surgeries.

"In addition to this clinical validation study, data from an analytical validation study published in the May 2016 edition of *Cancer Cytopathology* and highlighted on the cover of the journal this month, demonstrate the robustness of our Reveal assay under various laboratory conditions. Together, these two publications support our efforts to grow demand for Reveal as well as to secure additional reimbursement. In addition, this publication well positions us competitively as one of two companies to have a peer-reviewed publication of a blinded, clinical validation study for their currently marketed molecular classifier," stated Kenneth A. Berlin, President and Chief Executive Officer of Rosetta Genomics.

"Following the publication in *Cancer Cytopathology*, we saw a significant increase in demand for Reveal that has continued to result in strong gross billings. Commercial demand for Reveal

---

[1] Cibas ES, Ali SZ. The Bethesda System For Reporting Thyroid Cytopathology. *Am J Clin Pathol* 391 2009;**132**(5):658-65 doi: 10.1309/ajcpphlwmi3jv4la [published Online First: 392 2009/10/23]

increased more than 50% from July to August, and more than 60% from August to September. We believe that publication of this data demonstrating Reveal's ability to classify indeterminate thyroid nodules with its market leading 99% negative predictive value will support and enhance our stated goal to process more than 200 Reveal samples per month by the end of this year," added Mr. Berlin.

About Rosetta Genomics
Rosetta develops and commercializes a full range of microRNA-based and other 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 now offers core FISH, IHC and PCR-based testing capabilities and partnerships in Pathology, Oncology and Urology that provide additional content and platforms that complement Rosetta's microRNA and Next-Gen Sequencing offerings. RosettaGX Reveal™, a Thyroid microRNA Classifier for the diagnosis of indeterminate thyroid FNA smears, as well as the full RosettaGX™ portfolio of cancer testing services are commercially available through the Company's Philadelphia, PA- and Lake Forest, CA-based CAP-accredited, CLIA-certified labs. For more information visit www.rosettagx.com.

Forward-Looking Statement Disclaimer
Various statements in this release concerning Rosetta's future expectations, plans and prospects including, but not limited to statements relating to supporting continued RosettaGX Reveal momentum, growing demand, securing additional reimbursement, and supporting and enhancing our stated goal to process more than 200 Reveal samples per month by the end of the year 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 most recently filed Annual Report on Form 20-F, as filed with the SEC. 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.

Rosetta Genomics Contact:	**Rosetta Genomics Investor Contact:**
Ken Berlin, President & CEO	LHA
(267) 298-1159	Anne Marie Fields
investors@rosettagx.com	(212) 838-3777
	afields@lhai.com

# # #