

News Release

RosettaGX Reveal™ Analytical Validation Study Featured on the Cover of the October Issue of *Cancer Cytopathology*

Previously available online, print article enhances awareness of the first commercial test validated to analyze the same thyroid cells on which the initial indeterminate diagnosis was based

PHILADELPHIA and REHOVOT, Israel (October 24, 2016) – Rosetta Genomics Ltd. (NASDAQ: ROSG), a leading developer and provider of microRNA-based and other molecular diagnostics, announces that an article highlighting the analytical validation data from a study of the Company's novel, microRNA-based assay for the classification of indeterminate thyroid nodules is featured on the cover of the October issue of the peer-reviewed journal, *Cancer Cytopathology*.

These data were previously published in the journal's online edition in an article titled "Analytical Validity of a microRNA-based Assay for Diagnosing Indeterminate Thyroid FNA Smears from Routinely Prepared Cytology Slides," and highlights the robustness of RosettaGX Reveal™. This assay classifies indeterminate thyroid nodules as "benign," "suspicious for malignancy by microRNA profiling" or "positive for medullary carcinoma". The Reveal assay is run preoperatively on existing cytology smears from Fine Needle Aspiration (FNA) biopsy procedures. The Reveal assay does not require any additional passes or repeat FNA biopsies. It can also be run on historical specimens. Although the Reveal assay can correctly classify samples with low numbers of thyroid cells, it does not mistakenly diagnose samples that do not contain any thyroid material as reported for other molecular tests.

These published data report that the assay was found to be robust to varying physical processing conditions and to differing characteristics of the samples. The study also shows the classifier results are reproducible across operators, processing runs, reagent lots and laboratories.

The study authors conclude that, "Given the assay's performance, robustness and utilization of routinely prepared FNA slides, it has the potential to provide valuable aid for physicians in the diagnosis of thyroid nodules."

"We are delighted to have our analytical validation study as the cover story in *Cancer Cytopathology* as it recognizes the high level of interest in this groundbreaking assay and its robustness to various conditions. This peer-reviewed journal of the American Cancer Society is considered a premier publication in its field, and is widely read by cytopathologists, a key target audience for our Reveal assay," said Kenneth A. Berlin, President and Chief Executive Officer of Rosetta Genomics.

"Since the online publication of these data in May 2016, we have seen rapid growth in demand for Reveal to help resolve ambiguity in indeterminate thyroid cancer diagnoses and, thus, reduce unnecessary surgeries. We expect the added exposure of having Reveal featured on the cover of *Cancer Cytopathology* will build upon this momentum," 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 building momentum 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.

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