

Rosetta Genomics Receives Key U.S. Patent Allowance for its Cancer of Origin Diagnostic Assay

Covers method of identifying the tissue of origin from a tissue sample through measuring the expression levels of 64 microRNAs

PRINCETON, N.J. and REHOVOT, Israel (April 16, 2015) – Rosetta Genomics Ltd. (NASDAQ: ROSG), a leading developer and provider of microRNA-based assays, FISH testing and other molecular diagnostics, announces receipt of a Notice of Allowance for U.S. Patent Application No. 13/856,190, entitled, “Methods and materials for classification of tissue of origin of tumor samples.”

The allowed patent claims a method for identifying a tissue of origin of a cancer sample by the expression levels of 64 microRNAs using a combination of probes attached to a solid substrate, and employing a classifier algorithm in order to identify the tissue of origin. This patent specifically covers the second generation of Rosetta’s Cancer Origin Test™, which uses more markers and identifies a larger spectrum of cancers than the previous generation. Further, it is based on microarray technology for microRNA expression profiling.

“This U.S. patent allowance will provide core protection for one of our lead products, the Rosetta Cancer Origin Test™, which can accurately identify the primary tumor type in primary and metastatic cancer including cancer of unknown or uncertain primary. By accurately identifying the primary tumor origin, physicians are able to make more informed decisions, to select the best treatment choices and to optimize patient outcomes. This is particularly relevant with the number of new targeted oncology therapies coming to market,” said Kenneth A. Berlin, President and Chief Executive Officer of Rosetta Genomics. “Our growing intellectual property position continues to protect and solidify our global leadership position in microRNA biomarker technology while providing additional revenue generating opportunities for us and enhancing our leadership position in the commercialization of differentiated and/or proprietary content in the area of personalized medicine.”

Rosetta Genomics has 42 issued patents, five allowed patents and 45 patents pending worldwide.

About Rosetta Cancer Testing Services

Rosetta Cancer Tests are a series of microRNA-based diagnostic testing services offered by Rosetta Genomics. The Rosetta Cancer Origin Test™ can accurately identify the primary tumor type in primary and metastatic cancer including cancer of unknown or uncertain primary (CUP). The Rosetta Lung Cancer Test™ accurately identifies the four main subtypes of lung cancer using small amounts of tumor cells. The Rosetta Kidney Cancer Test™ accurately classifies the four most common kidney tumors: clear cell renal cell carcinoma (RCC), papillary RCC, chromophobe RCC and oncocytoma. Rosetta’s assays are designed to provide objective diagnostic data. In the U.S. alone, Rosetta Genomics estimates that 200,000 patients a year may benefit from the Rosetta Cancer Origin Test™, 62,000 from the Rosetta Kidney Cancer Test™ and 222,000 patients from the Rosetta Lung Cancer Test™. The Company’s assays are offered directly

by Rosetta Genomics in the U.S., and through distributors around the world. In addition to its proprietary products, the Company markets the Rosetta Genomics PGxOne™ and EGFR and KRAS tests for Admera Health. With the recent acquisition of PersonalizeDx, the company now offers a broader menu of molecular assays for lung, bladder, prostate and breast cancer patients. For more information, please visit www.rosettagenomics.com. Parties interested in ordering these tests can contact Rosetta Genomics at (215) 382-9000 ext. 309.

About Rosetta Genomics

Rosetta develops and commercializes a full range of microRNA-based molecular diagnostics. Founded in 2000, 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. PersonalizeDx's core FISH, IHC and PCR-based testing capabilities and partnerships in oncology and urology provide additional content and platforms that complement the Rosetta offerings. Rosetta's and PersonalizeDx's cancer testing services are commercially available through the Philadelphia, PA- and Lake Forest, CA-based CAP-accredited, CLIA-certified labs, respectively.

Forward-Looking Statement Disclaimer

Various statements in this release concerning Rosetta's future expectations, plans and prospects, including without limitation, statements that the patent allowance will provide core protection for the Rosetta Cancer Origin Test™ and statements relating to the benefits of the Rosetta Cancer Origin Test™, 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 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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