News Release

ROSETTA GENOMICS™
expanding personalized medicine

Rosetta Genomics Receives Key U.S. Patent Allowance for its Novel Kidney Cancer Test

Covers key claims for microRNA diagnostic which distinguishes the four different types of kidney cancer in order to reduce unnecessary surgery and guide treatment decisions

PRINCETON, N.J. and REHOVOT, Israel (March 26, 2015) – Rosetta Genomics Ltd. (NASDAQ: ROSG), a leading developer and provider of microRNA-based molecular diagnostics, announces receipt of a Notice of Allowance for U.S. Patent Application No. 13/412,020, entitled, "Gene Expression Signature for Classification of Kidney Tumors." The patent is owned jointly with Tel Hashomer Medical Research Ltd., the technology transfer company of the Chaim Sheba Medical Center in Israel.

The allowed patent claims a method for distinguishing four different types of kidney cancer: oncocytoma, clear cell renal cell carcinoma (RCC), papillary (chromaphil) RCC and chromophobe RCC in a human subject with renal cancer, through the expression profile of a unique set of 24 microRNAs and a classifier algorithm.

The impact of the limitation of diagnostic capability in renal oncocytoma was highlighted by a recent health economics outcome review of the management of kidney masses[1]. This study clearly demonstrated the adverse economic and health outcomes impact of poor pre-operative diagnosis, and confirmed the reported very low rates of pre-nephrectomy biopsy. In their analysis of the IMS LifeLink database, covering more than 60 million commercially insured patients in the U.S., the authors found that approximately 1 in 6 who underwent a nephrectomy for suspected renal cell cancer were subsequently identified as having benign disease, with an economic impact of approximately $26,500 per patient. This is in contrast to total expenditures of approximately $1,300 pre-operatively today, most commonly for one or more CT examinations. They projected that this represents more than 10,000 unnecessary surgeries annually in the U.S. alone.

"This U.S. patent allowance will provide core protection for the Rosetta Kidney Cancer Test which accurately distinguishes between the four main subtypes of kidney cancer. We believe that the different long-term prognosis for these four subtypes makes the correct pathological diagnosis of a renal cancer critically important for the clinician, especially for oncocytomas so as to avoid unnecessary surgeries, " said Kenneth A. Berlin, President and Chief Executive Officer of Rosetta Genomics. "In addition to reducing the number of unnecessary surgeries in the case of oncocytomas, new molecularly-targeted therapeutics for kidney cancer are making accurate sub-classification of tumor type important for optimizing treatment choices and improving outcomes."

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[1] Asnis-Alibozek AG, Fine MJ, Russo P, McLaughlin T, Farrelly EM, LaFrance N, Lowrance W. Cost of care for malignant and benign renal masses. AJMC 2013: 19(8) 617-24. [PMID: 24304211]

"With 42 issued patents, four allowed patents and 46 patents pending worldwide, our growing intellectual property position continues to provide protection for and solidify our global leadership position in microRNA biomarker technology and in creating differentiated and proprietary content in the area of personalized medicine," concluded Mr. Berlin.

Kidney cancer is among the ten most common cancers in both men and women. Kidney cancers account for more than 3% of adult malignancies and cause more than 14,000 deaths per year in the U.S. alone.

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; it is the treating physician's responsibility to diagnose and administer the appropriate treatment. In the U.S. alone, Rosetta Genomics estimates that 200,000 patients a year may benefit from the Rosetta Cancer Origin Test™, 65,000 from the Rosetta Kidney Cancer Test™ and 226,000 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™ test and the EGFR and KRAS sequencing services for Admera Health, as well as Precipio's oncology tests, which include bone marrow and peripheral blood testing for hematological malignancies, such as leukemias and lymphomas. 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. The Company also leverages its commercial infrastructure by marketing tests and sequencing services for Admera Health and Precipio. Rosetta's cancer testing services are commercially available through its Philadelphia-based CAP-accredited, CLIA-certified lab.

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 Kidney Cancer Test and statements relating to the benefits of the Rosetta Kidney Cancer 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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