News Release

ROSETTA GENOMICS™
expanding personalized medicine

Rosetta Genomics Launches Two Assays for Bladder Cancer

FGFR3 biomarker assays for disease monitoring and predicting patient outcomes using both urine- and tissue-based testing

PRINCETON, N.J. and REHOVOT, Israel (May 14, 2015) – Rosetta Genomics Ltd. (NASDAQ: ROSG), a leading developer and provider of microRNA-based molecular and other diagnostics, announces that the Company will commercially introduce two FGFR3 gene mutation assays; one for diagnostic monitoring using urine samples to detect recurrences of FGFR3-positive low-grade bladder cancers, and the other in conjunction with Ki67 expression for tissue-based prognostication at initial diagnosis of bladder cancer. Both assays will be introduced at the American Urological Association Annual Meeting (AUA 2015) taking place from May 15-19, 2015 in New Orleans.

FGFR3 mutation analysis identifies low-grade bladder cancer in both urine- and tissue-based specimens to help urologists better manage patients through improved prognostication and non-invasive recurrence monitoring in urine samples. These assays are used in conjunction with the Company's leading FISH technology to provide highly sensitive and specific assays for all grades of bladder cancer. Multiple prior studies have shown that FGFR3 has the ability to detect a significant number of low-grade bladder tumors as well as tumors in the upper urothelial tract from voided urine specimens. Therefore, FGFR3 may detect tumors that conventional detection methods miss.

The FGFR3 mutation analysis is part of the PersonalizeDx product line and addresses a market opportunity of approximately $250 million in the U.S. PersonalizeDx, a Rosetta Genomics company, was acquired by Rosetta Genomics last month.

"We are delighted to be initially launching our FGFR3 mutation analysis testing for bladder cancer at AUA 2015 among an audience of the country's leading urologists who diagnose and treat bladder cancer daily. These promising assays are expected to help urologists better understand their patients' bladder cancer and improve their outcomes," stated Kenneth A. Berlin, President and Chief Executive Officer of Rosetta Genomics. "In addition to FGFR3 in bladder cancer, we are developing a microRNA-based assay for bladder cancer risk of invasiveness. We have completed two studies with this assay and expect to begin additional studies for this indication by the end of the year. We believe these offerings create a broader commercial footprint and expanded product offering in urological oncology diagnostics with numerous products to address unmet needs in bladder, prostate and kidney cancer."

About Bladder Cancer

Some 75,000 new cases of bladder cancer are diagnosed in the U.S. every year, according to the American Cancer Society, with approximately 16,000 deaths. Most patients with clinically localized bladder cancer (stages 0-2) can be treated successfully with surgery and chemotherapy. Nine in ten patients with stage 1 bladder cancer live five years or longer and more than 500,000 people in the U.S. are bladder cancer survivors.

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 and other assays for lung, bladder, prostate and breast cancer patients. For more information, please visit www.rosettagenomics.com. Parties interested in ordering any of 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 relating to the commercial and market opportunities for Rosetta's FGFR3 mutation analysis tests, Rosetta's FGFR3 mutation analysis tests detecting tumors that conventional detection methods miss, Rosetta's FGFR3 mutation analysis tests improving patients' outcomes, Rosetta's development and launch of a microRNA-based assay for bladder cancer risk and the possibilities for Rosetta's expanding its product offerings and/or clinical pipeline, 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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