

Rosetta Genomics' Cancer Origin Test™ Highlighted at Landmark CUP Foundation Seminar 2014

International Medical Seminar Highlights the Management, Treatment, Diagnosis and Future Perspectives of Cancer of Unknown Primary

PRINCETON, N.J. and REHOVOT, Israel (March 21, 2014) – Rosetta Genomics Ltd. (NASDAQ: ROSG), a leading developer and provider of microRNA-based molecular diagnostics, reports that the Company is sponsoring and participating in the CUP Foundation seminar 2014 taking place from March 21-22 in London, England. This international medical seminar highlights the management, treatment, diagnosis and future perspectives of Cancer of Unknown Primary (CUP) by some of the world's leading clinicians for CUP and is supported by the European Society for Medical Oncology (ESMO) and the European School of Oncology.

E. Robert Wassman, MD, FAAP, FACMG, Rosetta Genomics' Chief Medical Officer, delivered a presentation on the role of molecular profiling and new diagnostic technologies in discussion Module Two entitled, "Diagnostic challenges, subsets, and prognosis," taking place on Friday, March 21st from 11:30 a.m. until 1:30 p.m. local time.

"We are delighted to participate in and support this important seminar in which we demonstrated how molecular profiling and other new diagnostic technologies can help to resolve the diagnostic conundrum of CUP. By accurately identifying the primary tumor origin, physicians will be able to make more informed decisions to select the best treatment choices to optimize patient outcomes. We applaud the efforts of the CUP Foundation in hosting this meeting, which provided valuable information and resources to patients, physicians and care givers," commented Dr. Wassman.

Rosetta's Cancer Origin Test™ is the company's second-generation microRNA-based diagnostic for the identification of the primary site of metastatic cancer, specifically metastatic cancer of CUP. The Cancer Origin Test utilizes custom-designed microarray technology to identify 49 possible cancer origins with very high accuracy using 64 microRNAs. These 49 origins include carcinomas, soft tissue tumors, lymphoma and other malignancies.

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). Rosetta Mesothelioma Test™ diagnoses mesothelioma, a cancer connected to asbestos exposure. 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™, 60,000 from the Rosetta Mesothelioma 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. For more information, please visit www.rosettagenomics.com. Parties interested in ordering the test 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. 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, 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, 2012 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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