

News Release



Rosetta Genomics Announces Poster Presentations at AACR Annual Meeting 2013

microRNA-based diagnostic assays for classifying renal cell tumors and for classifying tumors from patients with cancer of unknown or uncertain primary to be featured in poster session on April 7

PHILADELPHIA and REHOVOT, Israel (April 2, 2013) – Rosetta Genomics Ltd. (NASDAQ: ROSG), a leading developer and provider of microRNA-based molecular diagnostics, announces that two posters related to the Company's microRNA-based diagnostic assays will be featured at the American Association for Cancer Research (AACR) Annual Meeting 2013, to be held April 6-10 at the Walter E. Washington Convention Center in Washington, D.C. Both posters will be presented by Mats Sanden, M.D., Medical & Laboratory Director, Rosetta Genomics and will be available for viewing Sunday, April 7 from 1:00-5:00 p.m. local time in the Molecular and Cellular Biology 12 Session in Hall A-C, Poster Section 34. The two posters are as follows:

Title: "Development and validation of a microRNA-based diagnostic assay for the classification of renal cell tumors"

Abstract number: 802

Summary: This poster describes the development and validation of the miRview® kidney assay, which differentiates between the four main types of primary kidney tumors. The assay was developed on a microarray platform using 181 training samples and validated blindly on an independent set of 201 samples. The assay was able to return results for 92% of the validation samples, with 95% accuracy.

Title: "A novel microRNA-based test demonstrates 92% accuracy in the classification of metastatic tumors from patients diagnosed with carcinoma of unknown primary"

Abstract number: 816

Summary: This study reports the performance and clinical utility of miRview® mets², a microRNA-based molecular diagnostic assay for identifying the tissue of origin in real cases of cancer of unknown or uncertain primary (CUP) patients collected by leading academic centers in Greece. The assay demonstrated agreement in 92% of the cases with all pathological and clinical information, including patient follow-up data. Results of this study demonstrate the assay to be a helpful tool for identifying the correct final clinical diagnosis and in facilitating the selection of optimal therapy, including targeted agents, early in the disease course.

"Attendees at the prestigious AACR annual meeting are an important audience for Rosetta Genomics, and we are delighted that studies involving our microRNA-based diagnostic assays in kidney cancer and cancer of unknown or uncertain primary are being featured this year," said Kenneth A. Berlin, President and Chief Executive Officer of Rosetta Genomics.

"The classification of tumors into subtypes of renal cell cancer (RCC) has historically been less than definitive by histology, cytology and immunohistochemistry, particularly in the growing context of smaller, non-resection derived diagnostic specimens. Expanded clarity of RCC diagnosis through the availability of the miRview® kidney assay will help lead to

improved rationalization and optimization of therapies both new and emerging,” said Bob Wassman, M.D., Chief Medical Officer of Rosetta Genomics.

Regarding the second poster on CUP diagnosis by Rosetta’s proprietary microRNA-based miRview® mets² assay, he added, “Where clinical and immunohistochemical data are available, but uncertain, the resulting molecular diagnoses from our assay will generally fall within the range of possible cancers but more precisely and with no subjectivity, and will, with much higher confidence, identify one tumor type. There are also hallmark cases where unusual tumors of origin have actually been found only after molecular analysis, both of which are critical advances for these patients.”

About miRview® Testing Services

miRview® assays are a series of microRNA-based diagnostic testing services offered by Rosetta Genomics. miRview® mets² accurately identifies the primary tumor type in primary and metastatic cancer including cancer of unknown or uncertain primary (CUP). miRview® meso diagnoses mesothelioma, a cancer connected to asbestos exposure. miRview® lung accurately identifies the four main subtypes of lung cancer using small amounts of tumor cells. miRview® kidney accurately classifies the four most common kidney tumors: clear cell renal cell carcinoma (RCC), papillary RCC, chromophobe RCC and oncocytoma. miRview® 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 miRview® mets² assay, 60,000 from miRview® meso, 65,000 from miRview® kidney and 226,000 patients from miRview® lung. 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.mirviewdx.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 miRview® testing services are commercially available through its Philadelphia-based CAP-accredited, CLIA-certified lab. Frost & Sullivan recognized Rosetta Genomics with the 2012 North American Next Generation Diagnostics Entrepreneurial Company of the Year Award.

Forward-Looking Statement Disclaimer

Various statements in this release concerning Rosetta’s future expectations, plans and prospects, including without limitation, statements relating to Rosetta’s development or commercialization of molecular diagnostics, the market acceptance of Rosetta’s miRview® assays, particularly miRview® mets², Rosetta’s capitalization of its microRNA platform, Rosetta’s patent position and Rosetta’s development of personalized medicine products and services 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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