

News Release



Rosetta Genomics Reports First Quarter 2011 Financial Results

PHILADELPHIA and REHOVOT, Israel (June 1, 2011) – Rosetta Genomics, Ltd. (NASDAQ: ROSG), a leading developer of microRNA-based molecular diagnostics, today announced financial results for the three months ended March 31, 2011.

Non-financial highlights since the Company's announcement of 2010 financial results on April 4, 2011 include:

- Presentation at the American Society of Clinical Oncologists 2011 Annual Meeting of data from multiple studies demonstrating the clinical utility of the Company's miRview® products in identifying and classifying various cancers.
- Issuance of U.S. Patent No. 7,943,745, which is related to human hsa-miR-497 and its variants and covers the composition of matter, which is an important component of the Company's miRview® mets and mets² diagnostic tests for the accurate identification of the tissue of origin in Cancer of Unknown Primary (CUP) and difficult-to-diagnose metastatic cancers.
- Launch of a U.S. oncology sales team for the commercialization of the Company's microRNA-based diagnostic tests, with a primary focus on its miRview® mets and mets² tests for the accurate identification of the primary tumor site in metastatic cancers and CUP.
- Publication in *Clinical Cancer Research* of results from of a joint study with researchers at the University of Texas, MD Anderson Cancer Center showing that Rosetta Genomics' miRview® mets test is a powerful tool to identify tissue of origin in CUP patients.
- Appointment of Director Brian A. Markison, former Chairman and Chief Executive Officer of King Pharmaceuticals, as Rosetta's new Board Chairman.

Management Commentary

"The 2011 first quarter was significant as we laid the U.S. commercial foundation for the launch of our microRNA-based diagnostic tests in several key oncology markets. We continued to publish and present compelling data in support of the clinical utility of our lead products, miRview® mets and mets², to identify the tissue of origin in metastatic cancers and CUP. These further enhance the significant body of clinical data demonstrating the value of our microRNA molecular diagnostic tests and form the foundation of our marketing efforts to leading pathologists and oncologists. In addition, we fortified our competitive position with the issuance of a U.S. patent covering composition of matter related to human hsa-miR-497, which is an important component of our miRview® mets tests. Importantly, during the first quarter we significantly

strengthened our balance sheet, allowing us to initiate our U.S. commercial strategy,” said Kenneth A. Berlin, President and Chief Executive Officer of Rosetta Genomics.

“We are optimistic about the opportunity for our advanced molecular diagnostic tests in the U.S. now that we have a dedicated sales effort underway. Over the coming months, we expect to expand our product offering with the launch of miRview® lung. This microRNA-based diagnostic test is designed to use small, pre-operative biopsies as well as resections from the lung, to differentiate neuroendocrine tumors from non-small cell lung cancer (NSCLC), and further sub-classify the neuroendocrine tumors into small and carcinoid, and NSCLC tumors into squamous and non-squamous. There is a growing market opportunity for this microRNA diagnostic test as the introduction of molecularly targeted treatments for lung cancers has made such classification increasing important to clinicians in determining treatment plans,” concluded Mr. Berlin.

First Quarter Results

During the first quarter of 2011, the Company recorded revenues from continuing operations of \$37,000, compared with \$27,000 for the first quarter of 2010 and \$46,000 for the fourth quarter of 2010.

Research and development expenses for the first quarter of 2011 declined to \$1.0 million from \$1.6 million for the first quarter of 2010, primarily due to lower costs related to salaries and development costs as a result of the previously announced restructuring.

Marketing and business development expenses for the first quarter of 2011 decreased to \$625,000 compared with \$1.2 million for the first quarter of 2010 primarily due to lower costs related to salaries and as a result of the previously announced restructuring.

General and administrative expenses for the first quarter of 2011 increased to \$815,000 from \$729,000 for the first quarter of 2010.

The operating loss for the first quarter of 2011 was \$2.6 million, including \$306,000 of non-cash stock-compensation expense. This compares with an operating loss for the first quarter of 2010 of \$3.7 million, including \$219,000 of non-cash stock-compensation expense.

The Company’s net loss from continuing operations for the first quarter of 2011 was \$1.7 million or \$0.07 per ordinary share, compared with a net loss from continuing operations for the first quarter of 2010 of \$3.7 million or \$0.23 per ordinary share.

On a non-GAAP basis, excluding stock-compensation expense and excluding income from revaluation of warrants, which are presented as a liability in the balance sheet, the net loss for the first quarter of 2011 was \$1.9 million or \$0.08 per ordinary share, compared with a net loss for the first quarter of 2010 of \$3.5 million or \$0.22 per ordinary share.

Details reconciling non-GAAP amounts with GAAP amounts are provided in the table below.

As of March 31, 2011 Rosetta Genomics had \$10.7 million in cash and cash equivalents, short-term bank deposit and marketable securities, compared with \$3.3 million as of December 31, 2010. The first quarter 2011 cash position includes the \$5.5 million in net proceeds from the concurrent private placement and registered direct offerings in February 2011 and reflects the Company's 50.03% interest in Rosetta Green (TASE: RSTG), which completed its initial public offering in Israel in February 2011.

About miRview® Products

miRview® are a series of microRNA-based diagnostic products offered by Rosetta Genomics. miRview® mets and miRview® mets² accurately identify the primary tumor site in metastatic cancer and CUP. miRview® squamous accurately identifies the squamous subtype of non-small cell lung cancer, which carries an increased risk of severe or fatal internal bleeding and poor response to treatment for certain therapies. miRview® meso diagnoses mesothelioma, a cancer connected to asbestos exposure. miRview® tests 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 approximately 200,000 patients a year may benefit from the miRview® mets and miRview® mets² test, 60,000 from miRview® squamous and 60,000 from miRview® meso. The Company's tests are offered directly by Rosetta Genomics in the U.S., and through distributors around the globe. 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 microRNAs

MicroRNAs (miRNAs) are recently discovered, small RNAs that act as master regulators of protein synthesis, and have been shown to be highly effective biomarkers. The unique advantage of microRNAs as biomarkers lies in their high tissue specificity, and their exceptional stability in the most routine preservation methods for biopsies, including Formalin Fixed Paraffin Embedded (FFPE) block tissue and fine needle aspirate (FNA) cell blocks. It has been suggested that their small size (19 to 21 nucleotides) enables them to remain intact in FFPE blocks, as opposed to messenger RNA (mRNA), which tends to degrade rapidly. In addition, early preclinical data has shown that by controlling the levels of specific microRNAs, cancer cell growth may be reduced. To learn more about microRNAs, please visit www.rosettagenomics.com.

About Rosetta Genomics

Rosetta Genomics is a leading developer of microRNA-based molecular diagnostics. Founded in 2000, the company'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 Genomics is working on the application of these technologies in the development of a full range of microRNA-based diagnostic tools. The company's microRNA-based tests, miRview® squamous, miRview® mets, miRview® mets² and miRview® meso, are commercially available through its Philadelphia-based CAP-accredited, CLIA-certified lab. To learn more, please visit www.rosettagenomics.com.

Forward-Looking Statement Disclaimer

Various statements in this release concerning Rosetta's future expectations, plans and prospects, including without limitation, statements relating to the expected launch of our miRview® lung test and the market opportunity for this 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, 2010 as filed with the Securities and Exchange Commission. 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.

Use of Non-GAAP Financial Measures

This press release contains certain non-GAAP financial measures. A "non-GAAP financial measure" refers to a numerical measure of historical or future financial performance, financial position, or cash flows that excludes (or includes) amounts that are included in (or excluded from) the most directly comparable measure calculated and presented in accordance with GAAP in the financial statements. In this release, Rosetta provides non-GAAP net loss and non-GAAP net loss per share data as additional information relating to its operating results. The presentation of this additional information is not meant to be considered in isolation or as a substitute for net loss or net loss per share prepared in accordance with GAAP.

Pursuant to the requirements of Regulation G promulgated by the SEC, the Company has provided a reconciliation of each non-GAAP financial measure used in this earnings release and related conference call or webcast to the most directly comparable financial measure prepared in accordance with GAAP. This reconciliation is presented in a table below under the heading "Reconciliation of GAAP to Non-GAAP Consolidated Statement of Operation." Investors are encouraged to review these reconciliations to ensure they have a thorough understanding of the reported non-GAAP financial measures and their most directly comparable GAAP financial measures.

Management uses these non-GAAP measures for internal reporting and forecasting purposes. The Company has provided these non-GAAP financial measures in addition to GAAP financial results because it believes that these non-GAAP financial measures provide useful information to certain investors and financial analysts for comparison across accounting periods not influenced by certain non-cash items that are not used by management when evaluating the Company's historical and prospective financial performance.

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-Financial Tables to Follow-

ROSETTA GENOMICS LTD. AND ITS SUBSIDIARY CONSOLIDATED STATEMENTS OF OPERATIONS
U.S. dollars in thousands (except share and per share data)

	Three months ended March 31,	
	2011	2010
	Unaudited	
Revenues	\$ 37	\$ 27
Cost of revenues	124	158
Gross loss	87	131
Operating expenses:		
Research and development, net	1,048	1,620
Marketing and business development	625	1,176
General and administrative	815	729
Total operating expenses	2,488	3,525
Operating loss	2,575	3,656
Financial expense (income), net	(822)	105
Net loss	1,753	3,761
Attributable to non controlling interest	-	-
Net loss attributable to Rosetta Genomics before discontinued operation	1,753	3,761
Net loss attributable to Rosetta Genomics from discontinued operation	-	-
Net loss attributable to Rosetta Genomics after discontinued operation	\$ 1,753	\$ 3,761
Attributable to non-controlling interests	(96)	(21)
Net loss attributable to Rosetta Genomics	\$ 1,657	\$ 3,740
Basic and diluted net loss per Ordinary share of continuing operation attributable to Rosetta Genomics' shareholders	\$ 0.07	\$ 0.23
Basic and diluted net loss per Ordinary share of discontinuing operation attributable to Rosetta Genomics' shareholders	\$ -	\$ -
Basic and diluted net loss per Ordinary share attributable to Rosetta Genomics' shareholders	\$ 0.07	\$ 0.23
Weighted average number of Ordinary shares used to computed basic and diluted net loss per Ordinary share	23,750,376	16,235,437

RECONCILIATION OF GAAP TO NON-GAAP CONSOLIDATED STATEMENT OF OPERATION:

U.S. dollars in thousands in thousands (except share and per share data)

	Three Months ended	
	March 31,	
	2011	2010
GAAP net loss as reported	\$ 1,657	\$ 3,740
NON-GAAP Adjustment:		
Expenses reported for stock-based compensation		
Cost of revenues	(11)	-
Research and development, net.	(91)	(68)
Marketing and business development	(122)	(22)
General and administrative	(82)	(129)
Financial expenses, net (revaluation of Warrants related to share purchase agreement)	563	-
Total Adjustment	257	(219)
NON-GAAP net loss	<u>1,914</u>	<u>3,521</u>
NON-GAAP Basic net loss (income) per Ordinary share	<u>\$ 0.08</u>	<u>\$ 0.22</u>

**ROSETTA GENOMICS LTD. AND ITS SUBSIDIARY
CONSOLIDATED BALANCE SHEETS**

U.S. dollars in thousands

	March 31,		December 31,
	2011	2010	2010
	Unaudited		
ASSETS			
CURRENT ASSETS:			
Cash and cash equivalents	\$ 5,074	\$ 2,087	\$ 2,727
Restricted cash	-	1,056	-
Short-term bank deposits	112	5,186	190
Marketable securities	5,554	2,808	392
Trade receivables	25	44	21
Other accounts receivable and prepaid expenses	696	811	458
Total current assets	<u>11,461</u>	<u>11,992</u>	<u>3,788</u>
LONG-TERM ACCOUNTS RECEIVABLE	155	1,398	153
SEVERANCE PAY FUND	130	98	128
PROPERTY AND EQUIPMENT, NET	1,122	479	1,224
<u>Total</u> long term assets	<u>1,407</u>	<u>1,975</u>	<u>1,505</u>
<u>Total</u> assets	<u>\$ 12,868</u>	<u>\$ 13,967</u>	<u>\$ 5,293</u>
LIABILITIES AND SHAREHOLDERS' EQUITY			
CURRENT LIABILITIES:			
Current maturities of capital lease	\$ 23	118	\$ 49
Trade payables	561	848	1,152
Other accounts payable and accruals	1,812	1,268	2,117
Total current liabilities	<u>2,396</u>	<u>2,234</u>	<u>3,318</u>
LONG-TERM LIABILITIES:			
Capital lease	-	20	1
Warrants related to share purchase agreements	387	1,583	1,479
Deferred revenue	228	1,928	228
Settlement arrangement	756	-	728
Accrued severance pay	169	134	169
<u>Total</u> Long-term Liabilities	<u>1,540</u>	<u>3,665</u>	<u>2,605</u>
EQUITY:			
Share capital	76	39	46
Additional paid-in capital	83,535	72,850	74,732
Other comprehensive income	(3)	152	7
Accumulated deficit	(77,872)	(65,200)	(76,215)
Total Rosetta Genomics shareholders' equity (deficiency)	<u>5,736</u>	<u>7,841</u>	<u>(1,430)</u>
Non-controlling interests	3,196	227	800
<u>Total</u> equity (deficiency)	<u>8,932</u>	<u>8,068</u>	<u>(630)</u>
<u>Total</u> liabilities and equity (deficiency)	<u>\$ 12,868</u>	<u>\$ 13,967</u>	<u>\$ 5,293</u>

