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News Release

Rosetta Genomics Reports Third Quarter 2015 Financial Results

PHILADELPHIA and REHOVOT, Israel (December 1, 2015) – Rosetta Genomics Ltd. (NASDAQ: ROSG), a leading developer and provider of microRNA-based and other molecular diagnostics, today reported financial results for the three and nine months ended September 30, 2015.

Highlights for the third quarter of 2015 and recent weeks include:

- Launched RosettaGX Reveal™, a first-of-its-kind, microRNA-based thyroid nodule classification assay, at the International Thyroid Congress and Annual Meeting of the American Thyroid Association.
- Presented positive performance data from a multi-center validation study of the Company's thyroid nodule classification assay.
- Partnered with FNApath to provide centralized laboratory testing services for RosettaGX Reveal for the classification of indeterminate thyroid nodules.
- Appointed Maria Fe Paz, M.D., an accomplished medical executive in molecular diagnostics and precision medicine, as interim Chief Medical Officer.
- Strengthened the Company's balance sheet with $7.4 million in net proceeds from a private placement of ordinary shares and warrants.
- Granted allowance for a U.S. patent for the prognosis and treatment of prostate cancer.
- Expanded the Company's high-value molecular diagnostics offering with the launch of OncoGxLung™ and BRAF assays.

Management Commentary

"During recent months we continued to make meaningful progress integrating the PersonalizeDx acquisition, growing top-line results, expanding our high-value molecular diagnostics offerings with important product launches, upgrading our sales and reimbursement infrastructure and strengthening our balance sheet," stated Kenneth A. Berlin, President and Chief Executive Officer of Rosetta Genomics.

"The third quarter of 2015 was the first full quarter of PersonalizeDx being part of Rosetta Genomics and we had strong revenue growth from our two lines of business, namely solid tumor testing services and urologic cancer testing services.

"Throughout the third quarter and recent weeks we have been focused on the preparation and launch of RosettaGX Reveal, our microRNA-based assay for the classification of indeterminate thyroid nodules. We are particularly excited about the positive performance data from our blinded validation study of RosettaGX Reveal as these data demonstrate exceptional clinical performance when compared with the current market leader. The ability to run RosettaGX Reveal on cytology slides is important because working off the same slides created to perform the initial diagnoses eliminates the inconvenience and risks associated with additional fine

needle passages into the patient's neck that are required by other assays. We have already begun to receive and process commercial samples at our Philadelphia laboratory and have reported our results on these first orders with very positive feedback from clinicians. Moving forward, our plan is to leverage our solid tumor sales force as well as a dedicated group of thyroid sales specialists to call on endocrinologists and cytopathologists to form a third business segment with high-growth potential. Given its high negative predictive value, health economic benefit and added convenience of working on cytology slides, we expect RosettaGX Reveal to gain significant traction into a market valued at $350 million annually in the U.S.

"When issued, our new U.S. patent in prostate cancer will fortify our leadership in microRNA technology and expand our footprint in urological cancers. Through PersonalizeDx we offer FISH, IHC and PCR-based testing capabilities in urologic and other cancers, which provide content and platforms that complement our microRNA offerings to provide clinicians with valuable information to guide treatment decisions. This patent is important as this biomarker, which is over-expressed in primary prostate tumors, could be used as both a prognostic tool and as a therapeutic target for prostate cancer. We continue to explore opportunities to monetize our broad intellectual property portfolio in microRNA-based diagnostics and therapeutics.

"We were particularly pleased with the recent Clinical Lab Fee Schedule (CLFS) posted by the Centers for Medicare and Medicaid Services (CMS) for 2016, which reverses some of the unfavorable features of the original CLFS draft proposal. Importantly, the final fees provide a long overdue correction to FISH reimbursement, which includes a 92% increase in allowable reimbursement for our most common solid tumor FISH procedures, which account for approximately 20% of our current testing revenue. These and other favorable fee schedules are encouraging and should continue to enhance both the amount and timing of payments for our testing services in 2016.

"As we look toward 2016, Rosetta Genomics is fundamentally stronger and better positioned for success, and we look forward to achieving a series of value-creating milestones," concluded Mr. Berlin.

Financial results for the three months ended September 30, 2015 include:

- The Company recorded revenues from continuing operations for the third quarter of 2015 of $2.4 million, up 790% from revenues from continuing operations of $273,000 for the third quarter of 2014 and up 17% from pro forma revenues from continuing operations of $2.1 million for the second quarter of 2015.
- Revenue from solid tumor testing services in the third quarter of 2015 increased 319% to $1.1 million from $273,000 in the third quarter of 2014 and increased 16% from pro forma revenues from solid tumor testing services of $983,000 in the second quarter of 2015. Within solid tumor testing services, the Company's Cancer Origin Test posted revenue of $346,000, a 27% increase compared with $273,000 in the third quarter of 2014, and a 5% increase compared with $329,000 in the second quarter of 2015.
- Revenue from urologic cancer testing services in the third quarter of 2015 was $1.3 million, a 17% increase compared with pro forma urologic cancer testing services revenues of $1.1 million in the second quarter of 2015. Prior to the PersonalizeDx acquisition in April 2015, Rosetta Genomics did not have revenue from urologic cancer testing services so there is no comparison with the prior-year's third quarter.
- Gross billings for the third quarter of 2015 were $7.5 million compared with gross billings of $644,000 in the third quarter of 2014.
- Cost of revenues for the third quarter of 2015 were $2.2 million compared with $377,000 for the same period in 2014.

- Research and development expenses for the third quarter of 2015 increased to $586,000 from $482,000 in the third quarter of 2014.
- Marketing and business development expenses for the third quarter of 2015 were $1.7 million compared with $1.6 million in the year-ago period.
- General and administrative expenses for the third quarter of 2015 were $1.9 million compared with $1.3 million for the third quarter of 2014.
- The operating loss for the third quarter of 2015 was $3.9 million, including $211,000 of non-cash stock-based compensation expense, compared with an operating loss of $3.4 million, including $264,000 of non-cash stock-based compensation, for the third quarter of 2014.
- The net loss for the third quarter of 2015 was $3.9 million, or $0.27 per ordinary share on 14.8 million shares outstanding, compared with a net loss for the third quarter of 2014 of $3.4 million, or $0.29 per ordinary share on 11.6 million shares outstanding.

Financial results for the nine months ended September 30, 2015 include:

- For the nine months ended September 30, 2015, recorded revenues from continuing operations were $4.7 million, an increase of 469% compared with $827,000 for the same period of 2014.
- Pro forma consolidated revenues for the first nine months of 2015, assuming a full nine months of PersonalizeDx operations, were $6.6 million.
- Revenue from solid tumor testing services in the first nine months of 2015 increased 196% to $2.5 million. Within solid tumor testing services, the Company's Cancer Origin Test posted revenue of $1.0 million during the first nine months of 2015, an increase of 25% compared with $827,000 in the same period of 2014.
- Revenue from urologic cancer testing services in the first nine months of 2015 were $2.3 million. On a pro forma basis, urologic cancer testing services in the first nine months of 2015 were $3.7 million. As noted previously, prior to the PersonalizeDx acquisition in April 2015, Rosetta Genomics did not have revenue from urologic cancer testing services so there is no comparison with the prior-year period.Pro forma gross billings for the first nine months of 2015, assuming a full nine months of PersonalizeDx operations, were $19.3 million, which included gross billings for the PersonalizeDx business of $17.2 million. For the same period in 2014, Rosetta Genomics' gross billings were $2.0 million.
- Cost of revenues for the first nine months of 2015 increased to $4.4 million from $1.1 million a year ago, primarily due to the acquisition of PersonalizeDx leading to a higher volume of processed samples as well as increases in personnel and infrastructure.
- Research and development expenses for the first nine months of 2015 increased to $1.9 million from $1.5 million for the first nine months of 2014, primarily due to increased activities related to the development of the Company's thyroid assay.
- Marketing and business development expenses for the first nine months of 2015 increased to $5.8 million from $4.9 million in the prior-year period due to a larger commercial footprint as a result of the acquisition of PersonalizeDx.
- General and administrative expenses for the first nine months of 2015 were $5.5 million compared with $3.9 million for the same period in 2014, with the increase primarily due to acquisition-related costs of the PersonalizeDx business.
- The operating loss for the nine months ended September 30, 2015 was $10.6 million, including $755,000 of non-cash stock-based compensation expense as well as a $2.4 million gain from a bargain purchase related to the acquisition of PersonalizeDx. This compares with an operating loss for the first nine months of 2014 of $10.7 million, including $735,000 of non-cash stock-based compensation expense.

- The net loss for the first nine months of 2015 was $10.6 million, or $0.76 per ordinary share on 14.0 million shares outstanding, compared with a net loss for the same period in 2014 of $10.5 million, or $0.95 per ordinary share on 11.1 million shares outstanding.

Balance Sheet Highlights

As of September 30, 2015, Rosetta Genomics had $10.3 million in cash and cash equivalents, restricted cash and short- and long-term bank deposits, compared with $14.5 million as of June 30, 2015. The Company used approximately $4.2 million in cash to fund operations during the third quarter 2015. On October 16, 2015, Rosetta Genomics raised net proceeds of $7.4 million in a private placement of units that consisted of common shares and warrants. Given this recent fundraise and based on the Company's current operations and plans, Rosetta expects its current cash position will fund operations into the first quarter of 2017.

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 news release, Rosetta provides non-GAAP gross billings 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 revenues, 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 the tables 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.

About RosettaGX Cancer Testing Services

RosettaGX Cancer Tests are a series of microRNA-based and other molecular diagnostic testing services offered by Rosetta Genomics. RosettaGX Cancer Origin™ can accurately identify the primary tumor type in primary and metastatic cancer including cancer of unknown or uncertain primary (CUP). The mi-LUNG™ assay accurately identifies the four main subtypes of lung cancer using small amounts of tumor cells. The mi-KIDNEY™ assay accurately classifies the four most common kidney tumors: clear cell renal cell carcinoma (RCC), papillary RCC, chromophobe RCC and oncocytoma. RosettaGX Reveal™, is a first-of-its-kind microRNA-based assay for the classification of indeterminate thyroid nodules. Rosetta's assays are designed to provide objective diagnostic data. In the U.S. alone, Rosetta Genomics estimates that 150,000 patients a year may benefit from the RosettaGX Cancer Origin test, 62,000 patients a year from the mi-KIDNEY assay, 222,000 patients a year from the mi-LUNG assay and 150,000 patients a year from RosettaGX Reveal™ for indeterminate thyroid FNAs. The Company's assays are

offered directly by Rosetta Genomics in the U.S., and through distributors around the world. With the acquisition of PersonalizeDx in April 2015, the Company now offers a broader menu of molecular and other assays for bladder, lung, prostate and breast cancer patients. For more information, please visit www.rosettagx.com. Parties interested in ordering any of these tests can contact Rosetta Genomics at (215) 382-9000.

About Rosetta Genomics
Rosetta develops and commercializes a full range of microRNA-based and other molecular diagnostics. 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. Through the acquisition of PersonalizeDx, the Company offers core FISH, IHC and PCR-based testing capabilities and partnerships in oncology and urology that 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. For more information visit www.rosettagx.com.

Forward-Looking Statement Disclaimer
Various statements in this release concerning Rosetta's future expectations, plans and prospects, including but not limited to statements that we expect RosettaGX Reveal to gain significant traction into a market valued at $350 million annually in the U.S., that the biomarker for which we were granted a patent allowance could be used as both a prognostic tool and as a therapeutic target for prostate cancer, that the recent CLFS and other favorable fee schedules are encouraging and should continue to enhance both the amount and timing of payments for our testing services in 2016 and that our current cash position will fund operations into the first quarter of 2017constitute 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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CONSOLIDATED STATEMENTS OF OPERATIONS

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

	Nine months ended September 30,		Three months ended September 30,	
	2015	2014	2015	2014
	Unaudited		Unaudited	
Revenues	$ 4,709	$ 827	$ 2,431	$ 273
Cost of revenues:	4,437	1,147	2,168	377
Gross profit (loss)	272	(320)	263	(104)
Operating expenses:				
Research and development, net	1,947	1,493	586	482
Marketing and business development	5,753	4,949	1,678	1,556
General and administrative	5,525	3,903	1,882	1,283
Gain from bargain purchase related to acquisition of CynoGen, Inc.	(2,352)	-	-	-
Total operating expenses	10,873	10,345	4,146	3,321
Operating loss	10,601	10,665	3,883	3,425
Financial loss (income), net	6	(133)	47	(69)
Tax expenses	15	12	5	4
Net loss	$ 10,622	$ 10,544	$ 3,935	$ 3,360
Basic and diluted net loss per ordinary share attributable to Rosetta Genomics' shareholders	$ 0.76	$ 0.95	$ 0.27	$ 0.29
Weighted average number of ordinary shares used to compute basic and diluted net loss per ordinary share	13,991,549	11,065,597	14,765,423	11,574,874

CONDENSED INTERIM CONSOLIDATED BALANCE SHEETS

U.S. dollars in thousands

	September 30, 2015	December 31, 2014
	Unaudited	
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 6,387	$ 7,929
Restricted cash	52	52
Short-term bank deposits	3,247	7,650
Trade receivables	5,922	338
Other accounts receivable and prepaid expenses	521	483
Total current assets	16,129	16,452
LONG TERM ASSETS:		
Property and equipment, net	3,056	822
Restricted bank deposit and other long-term receivables	625	4
Total long term assets	3,681	826
Total assets	$ 19,810	$ 17,278

CONDENSED INTERIM CONSOLIDATED BALANCE SHEETS

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

	September 30, 2015	December 31, 2014
	Unaudited	
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Trade payables	$ 846	$ 563
Other accounts payables and accruals	1,787	1,648
Total current liabilities	2,633	2,211
LONG-TERM LIABILITIES:		
Warrants related to share purchase agreements	2	2
Total long-term liabilities	2	2
COMMITMENTS AND CONTINGENT LIABILITIES		
SHAREHOLDERS EQUITY:		
Share capital:		
Ordinary Shares of NIS 0.6 par value: 40,000,000 shares authorized at September 30, 2015 and December 31, 2014; 14,847,286 and 11,765,678 shares issued at September 30, 2015 and December 31, 2014, respectively; 14,844,028 (unaudited) and 11,762,420 shares outstanding at September 30, 2015 and December 31, 2014, respectively	2,309	1,830
Additional paid-in capital	148,413	136,160
Accumulated deficit	(133,547)	(122,925)
Total shareholders' equity	17,175	15,065
Total liabilities and shareholders' equity	$ 19,810	$ 17,278

	Nine months ended September 30,		Three months ended September 30,	
	2015	2014	2015	2014
GAAP revenues (Pro forma revenues for nine months ended 9/30/2015)	$ 6,612	$ 827	$ 2,431	$ 273
Unrecognized billings	12,714	1,132	5,068	371
Gross billings	$ 19,326	$ 1,959	$ 7,499	$ 644

	Nine months ended September 30, 2015
GAAP revenues	$ 4,709
Additional revenues from PersonalizeDx for non-consolidated period of January 1, 2015 - April 12, 2015	1,903
Pro forma revenues	$ 6,612

	Three months ended June 30, 2015
GAAP revenues	$ 1,916
Additional revenues from PersonalizeDx for non-consolidated period of April 1, 2015 - April 12, 2015	169
Pro forma revenues	$ 2,085

	Three months ended June 30, 2015
GAAP revenues for solid tumor testing services	$ 945
Additional revenues from PersonalizeDx for non-consolidated period of April 1, 2015 - April 12, 2015	38
Pro forma revenues for solid tumor testing services	$ 983

	Three months ended June 30, 2015
GAAP revenues for urologic cancer testing services	$ 971
Additional revenues from PersonalizeDx for non-consolidated period of April 1, 2015 - April 12, 2015	131
Pro forma revenues for urologic cancer testing services	$ 1,102

	Nine months ended September 30, 2015
GAAP revenues for urologic cancer testing services	$ 2,258
Additional revenues from PersonalizeDx for non-consolidated period of April 1, 2015 - April 12, 2015	1,433
Pro forma revenues for urologic cancer testing services	$ 3,691