ROSETTAGENOMICS™
Revealing Genomic Answers

Rosetta Genomics to Increase Investment in RosettaGX Reveal™ and Explore Strategic Alternatives for the PersonalizeDx Business

1Q17 Reveal revenue increased more than 50% from 4Q16; Building on Strong Momentum Created through First Year of Commercial Launch of Reveal

PHILADELPHIA and REHOVOT, Israel (May 2, 2017) – Rosetta Genomics Ltd. (NASDAQ: ROSG), a genomic diagnostics company that improves treatment decisions by providing timely and accurate diagnostic information to physicians, announces plans to increase investments in commercial, promotional and reimbursement efforts for RosettaGX Reveal™ (Reveal) to accelerate the product's growth. Reveal, a first-of-its-kind microRNA assay for the classification of indeterminate thyroid nodules, offers significant long-term revenue opportunity. The Company also announces plans to explore strategic alternatives for its PersonalizeDx business.

Preliminary Reveal revenue for the first quarter of 2017 was approximately $600,000, representing growth of more than 50% compared with revenue of $389,000 for the fourth quarter of 2016 and more than double revenue of $282,000 reported for the third quarter of 2016. Gross billings for the first quarter of 2017 were approximately $1.5 million, a 20% increase from $1.25 million for the fourth quarter of 2016 and a 61% increase from $930,000 for the third quarter of 2016.

"Sequential-quarter revenue growth for Reveal has increased significantly over the past quarters, giving us confidence that dedicating substantially all of our sales and marketing resources to its promotion offers the quickest, most efficient path to profitability," stated Kenneth A. Berlin, President and Chief Executive Officer of Rosetta Genomics. "During the first quarter, Reveal was the Company's second largest revenue contributor and thus far in the second quarter, it is shaping up to be our largest contributor to revenues."

"Reveal is a truly differentiated assay being promoted in an established market that has substantial room for further penetration. Reveal's convenience and performance advantages are strongly resonating with clinicians, allowing us to continue to win business from the competition and to expand Reveal sales into untapped parts of the market.

Due to its near term growth prospects and high margin relative to our other products, we expect that increasing our investment in Reveal will provide the shortest path to profitability. Consequently, we are realigning our strategy and reallocating resources to

create a core focus on the commercialization of Reveal in the U.S. We expect that this will enable us to achieve our 2017 financial goals and maximize value creation into the future.

"This strategic realignment will include growing our commercial field team for Reveal, publishing additional clinical data in support of the use of Reveal, continuing to expand our Philadelphia laboratory operations to meet anticipated increases in demand, building our billing and reimbursement team for Reveal and exploring strategic alternatives for our PersonalizeDx business.

"We acquired our PersonalizeDx business in April 2015 with the expectation of product synergies and leveraging customers. While this strategic rationale continues to remain solid, we believe the impact of investing and focusing our capital resources on Reveal will create more value over the next several years.

"While concentrating our efforts on commercializing Reveal in the U.S., we plan to expand our reach globally through regional distribution agreements that leverage the unique convenience advantages of Reveal and the growing global interest in this assay," concluded Mr. Berlin.

2017 Revenue and Unit Guidance for RosettaGX Reveal
Rosetta Genomics affirms 2017 revenue and unit guidance for RosettaGX Reveal. For 2017, Rosetta Genomics expects Reveal revenue to be between $4.0 million and $5.0 million, and expects to process between 2,500 and 3,500 Reveal units during the year.

About Rosetta Genomics
Rosetta is pioneering the field of molecular diagnostics by offering rapid and accurate diagnostic information that enables physicians to make more timely and informed treatment decisions to improve patient care. Rosetta has developed a portfolio of unique diagnostic solutions for oncologists, urologists, endocrinologists, cytopathologists and other specialists to help them deliver better care to their patients. RosettaGX Reveal™, a Thyroid microRNA Classifier for the diagnosis of cancer in thyroid nodules, as well as the full RosettaGX™ portfolio of cancer testing services are commercially available through the Company's Philadelphia, PA- and Lake Forest, CA-based CAP-accredited, CLIA-certified labs.

Forward-Looking Statement Disclaimer
Various statements in this release concerning Rosetta's future expectations, plans and prospects including, but not limited to accelerating product growth, creating long term revenue opportunities via Reveal, achieving profitability, growing Reveal to become the largest revenue contributor, achieving further market penetration, continuing to win business from the competition, expanding Reveal sales into untapped parts of the market, achieving our 2017 financial goals and maximizing value creation into the future, growing our commercial field team for Reveal, publishing additional clinical data in support of the use of Reveal, continuing to expand our Philadelphia laboratory operations to meet anticipated increase in demand, building our billing and

reimbursement team for Reveal, exploring strategic alternatives for our PersonalizeDx business, expanding our reach globally through regional distribution agreements that leverage the unique convenience advantages of Reveal, growing global interest in this assay, expecting 2017 Reveal revenue to be between $4.0 million and $5.0 million, and expecting to process between 2,500 and 3,500 Reveal units during 2017 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 risks and uncertainties, including, but are not limited to: we will require substantial additional funds to continue our operations and, if additional funds are not available, we may need to significantly scale back or cease our operations; we have a history of losses and may never be profitable; if we are unable to expand sales of our diagnostic tests in the United States, it would have a material adverse effect on our business and financial condition; the intensely competitive biotechnology market could diminish demand for our tests and products; the market may not be receptive to any diagnostic tests or therapeutic products using our microRNA technology; we currently have limited sales, marketing or distribution experience and may in the future depend significantly on third parties to commercialize microRNA-based diagnostic tests or therapeutic products we may develop; we are largely dependent upon our distributors for the success of commercialization of our current diagnostic tests; health insurers and other third-party payors may decide not to cover our diagnostic products or may provide inadequate reimbursement, which could jeopardize our commercial prospects; because of Medicare billing rules, we may not receive reimbursement for all tests provided to Medicare patients; if we fail to comply with our obligations under any licenses or related agreements, we could lose license rights that may be necessary for developing microRNA-based diagnostics and therapeutics; if we fail to comply with the complex federal, state, local and foreign laws and regulations that apply to our business, we could suffer severe consequences that could materially and adversely affect our operating results and financial condition; we contract with a single manufacturer for the purchase of microarray chips for certain tests, and the failure of this manufacturer to supply sufficient quantities on a timely basis could have a material adverse effect on our business; and other risk factors discussed under the heading "Risk Factors" in Rosetta's most recently filed Annual Report on Form 20-F, 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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Tables to Follow

Non-GAAP Tables

USD in thousands	March 30, 2017
Preliminary Reveal revenues	$600
Unrecognized billings	900
Preliminary gross billings for Reveal	$1,500

	Quarter ended	
USD in thousands	December 31, 2016	September 30, 2016
Revenues for Reveal	$389	$282
Unrecognized billings	861	648
Gross billings for Reveal	$1,250	$930

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