

Regulus Reports First Quarter 2014 Financial Results and Recent Highlights

- 'Clinical Map Initiative' On Track; Advanced RG-101 and RG-012, Expect to Nominate Third microRNA Clinical Candidate by YE 2014 -

- Maintained Strong Financial Position Ending Q1 2014 with \$114.6 Million in Cash -

LA JOLLA, Calif., May 8, 2014 /PRNewswire/ -- [Regulus Therapeutics Inc.](#) (NASDAQ:RGLS), a biopharmaceutical company leading the discovery and development of innovative medicines targeting microRNAs, today reported financial results and highlights for the quarter ended March 31, 2014 and provided a summary of recent corporate highlights.

"In the first quarter of 2014, we continued to demonstrate our leadership in the microRNA therapeutics field by advancing our therapeutics pipeline with the initiation of the RG-101 clinical trial, bolstering our intellectual property portfolio, and strengthening our existing partnerships with the renewal of our alliance with Sanofi," said Kleanthis G. Xanthopoulos, Ph.D., President and CEO of Regulus. "Over the next few quarters, we aim to build on this momentum and execute on our 'Clinical Map Initiative' strategy. We have a unique opportunity to demonstrate our first human proof of concept results with a microRNA therapeutic, which if favorable, may set the stage for success in future clinical trials across the pipeline. To that end, we aim to nominate a third candidate for clinical development by the end of the year, potentially giving us three clinical-stage programs by 2015."

Neil W. Gibson, Ph.D., Chief Scientific Officer of Regulus, added, "To date in 2014, we've demonstrated significant scientific progress - we dosed our first human subject with RG-101, advanced our preclinical oncology programs, and initiated IND-enabling activities for the RG-012 program. In addition, we continued to maximize our discovery efforts across our technology platform by pursuing new microRNA therapeutic targets and advancing the biomarker work in Regulus' microMarkers™ division."

Recent Highlight

- **Advanced Oncology Portfolio; Presented Positive Preclinical Data on miR-21 and miR-221 Programs at AACR.** At the American Association for Cancer Research Annual Meeting, Regulus presented three posters and its strategic alliance partner, Sanofi, presented an oral presentation on the therapeutic potential of targeting microRNA-21 ("miR-21") and microRNA-221 ("miR-221") for the treatment of hepatocellular carcinoma ("HCC"), the most common form of liver cancer. In addition, Regulus presented data from biomarker discovery studies evaluating the pharmacodynamics signature for assessing miR-221 inhibition and microRNA expression in tumor tissues in mouse models of HCC. Regulus believes these data provide further evidence that miR-21 and miR-221 are validated targets for the treatment of HCC and is currently optimizing anti-miRs in each program for potential clinical development.

First Quarter 2014 Highlights

- **Commenced Dosing Human Subjects in Phase I Clinical Study of RG-101.** Regulus commenced dosing human subjects in the Phase I clinical study of RG-101, a GalNAc-conjugated anti-miR targeting microRNA-122 ("miR-122") for the treatment of chronic hepatitis C virus infection ("HCV"). The Phase I clinical study is being conducted in the Netherlands and has four parts (i) a single ascending-dose study in healthy volunteer subjects; (ii) a multiple-ascending dose study in healthy volunteer subjects; (iii) a single-dose drug-drug interaction study of RG-101 in combination with an approved oral direct-acting antiviral ("DAA") in healthy volunteer subjects; and (iv) a single-dose study in HCV patients to assess the safety and viral load reduction. The primary objective of the Phase I clinical study of RG-101 is to evaluate safety and tolerability and the secondary objectives are to evaluate pharmacokinetics, viral load reduction and any impact an oral DAA may have on the pharmacokinetics of RG-101. Up to approximately 100 healthy volunteer subjects and HCV patients are planned to be enrolled in the Phase I study. Regulus expects to demonstrate human proof-of-concept results from Part IV of the Phase I study of RG-101 by the end of 2014, which is a key corporate goal under the 'Clinical Map Initiative'.

In preclinical studies, Regulus has observed significant HCV viral load reduction in a human chimeric liver mouse model infected with genotypes 1a and 3a, a long duration of action for RG-101 which supports the potential for a once-a-month dosing regimen, and a favorable preclinical safety profile in which RG-101 has been well tolerated.

- **Renewed Strategic Alliance with Sanofi.** Regulus and Sanofi are now focused on specific orphan disease and oncology targets, miR-21 for fibrosis and HCC and miR-221/222 for HCC. Regulus intends to advance RG-012 (targeting miR-21 for kidney fibrosis/Alport syndrome), and its programs targeting miR-21 and miR-221/222 for HCC to proof-of-concept. Sanofi has an exclusive option, exercisable after proof-of-

concept, to take over further development and commercialization of each program. Regulus is eligible to receive milestone payments of up to \$101.8 million for proof-of-concept option exercises, \$15.0 million for clinical milestones and up to \$300.0 million for regulatory and commercial milestones. In addition, Regulus has an option to co-promote in the United States or receive royalty payments in the mid 10% to 20% range on any products.

- **Partnered with Alport Syndrome Foundation to Raise Awareness of Alport Syndrome; Regulus' RG-012 Program Expected to Enter the Clinic in 1H 2015.** Regulus partnered with the Alport Syndrome Foundation, a non-profit corporation, to raise awareness of the orphan disease during National Kidney Month and the inaugural Alport Syndrome Awareness Month. Alport syndrome, a life-threatening genetic kidney disease with no approved therapy, is a genetic condition that impacts the body's ability to create a specific type of collagen highly expressed in the kidney and essential to normal kidney structure. In the absence of this type of collagen, the kidneys are unable to effectively filter toxins and waste products, resulting in end-stage renal disease and also hearing loss or effects on vision. Regulus has discovered that miR-21 is highly overexpressed in mouse models of Alport syndrome. Regulus is developing RG-012, an anti-miR targeting miR-21, which has demonstrated potent inhibition of miR-21 *in vitro* and *in vivo*, a decrease in the rate of progression of renal fibrosis, an increase in the lifespan of mice by up to fifty percent, and a favorable pharmacokinetic profile that supports the potential for a once per week dosing regimen. In the third quarter of 2014, Regulus expects to initiate a natural history of disease study to gather greater information about the progression of Alport syndrome and to inform future clinical development plans. In addition to this study, Regulus expects to initiate a Phase I clinical study of RG-012 in the first half of 2015, which is a key corporate goal under the 'Clinical Map Initiative'.
- **Pursued Several Additional microRNA Targets, Independently and with Strategic Partners.** Regulus continued to pursue several undisclosed microRNA targets, namely for orphan disease and oncology indications, to expand its therapeutics pipeline. Regulus and AstraZeneca have focused their collaborative efforts on microRNA-103/107 for the treatment of metabolic diseases and microRNA-19 for oncology indications and AstraZeneca has contractual rights to a third target under the terms of the alliance agreement. Regulus expects to nominate a third microRNA candidate for clinical development (either independently or with a strategic partner) by the end of 2014, which is a key corporate goal under the 'Clinical Map Initiative'.
- **Established Regulus *micro Markers*™ R&D Division.** Regulus continued its microRNA biomarker efforts within its newly established R&D division, which utilizes a clinically-validated, highly reproducible, proprietary technology platform to identify microRNAs as potential biomarkers for disease.

First Quarter 2014 Financial Results & Highlights

Regulus reported a net loss of \$12.7 million for the quarter ended March 31, 2014, compared to a net loss of \$7.2 million for the quarter ended March 31, 2013. Basic and diluted net loss per share was \$0.30 for the quarter ended March 31, 2014, compared to net loss per share of \$0.20 for the quarter ended March 31, 2013.

Regulus recognized revenue of \$1.6 million for the quarter ended March 31, 2014, compared to \$3.2 million for the quarter ended March 31, 2013. Revenue during these periods consisted primarily of amortization of up-front payments received from our strategic alliances and collaborations, which is recognized over the estimated period of performance.

Research and development expenses were \$9.6 million for the quarter ended March 31, 2014, compared to \$6.9 million for quarter ended March 31, 2013. This increase was primarily driven by the initiation of a Phase I clinical study for RG-101 and the continued advancement of other preclinical development programs.

General and administrative expenses were \$2.7 million for the quarter ended March 31, 2014, compared to \$1.9 million for the quarter ended March 31, 2013. This increase was primarily driven by an increase in salaries and related employee costs and other operating costs.

Non-cash charges recorded from changes in the value of convertible notes payable were \$2.1 million for the quarter ended March 31, 2014, compared to \$1.8 million for the quarter ended March 31, 2013.

In February 2014, we entered into a Common Stock Purchase Agreement with Aventis Holdings, Inc., an entity affiliated with Sanofi, in which we sold 1,303,780 shares of our common stock in a private placement at a price per share of \$7.67 for an aggregate purchase price of \$10.0 million. As of March 31, 2014, Regulus had \$114.6 million in cash, cash equivalents and short-term investments, debt with a principal balance of \$5.4 million and 43,346,014 shares of common stock outstanding. Regulus expects to maintain its strong financial position and finish 2014 with at least \$75.0 million in cash, cash equivalents and short-term investments.

Conference Call & Webcast Information

Regulus will host a conference call and webcast at 5:00 p.m. Eastern Daylight Time today to discuss its first quarter 2014 financial results, recent company highlights and its expectations for the remainder of 2014. A live webcast of the call will be available online at www.regulusrx.com. To access the call, please dial (877) 257-8599 (domestic) or (970) 315-0459 (international) and refer to conference ID 33745994. To access the telephone replay of the call, dial (855) 859-2056 (domestic) or (404) 537-3406 (international), passcode 33745994. The webcast and telephone replay will be archived on the company's website for ninety days following the call.

About the 'Clinical Map Initiative'

Launched in February 2014, Regulus' 'Clinical Map Initiative' outlines certain corporate goals to advance its microRNA therapeutics pipeline over the next several years. Regulus expects to demonstrate human proof-of-concept results in the Phase I clinical study of RG-101 for the treatment of HCV by the end of 2014, initiate a Phase I clinical study of RG-012 for the treatment of Alport syndrome in the first half of 2015, nominate a third microRNA candidate for clinical development by the end of 2014, and maintain a strong financial position and end 2014 with at least \$75.0 million in cash, cash equivalents and short-term investments.

About Regulus

Regulus Therapeutics Inc. (*NASDAQ:RGLS*) is a biopharmaceutical company leading the discovery and development of innovative medicines targeting microRNAs. Regulus is uniquely positioned to leverage a mature therapeutic platform that harnesses the oligonucleotide drug discovery and development expertise of Alnylam Pharmaceuticals, Inc. and Isis Pharmaceuticals, Inc., which founded the company. Regulus has a well-balanced microRNA therapeutics pipeline entering clinical development, an emerging microRNA biomarkers platform to support its therapeutic programs, and a rich intellectual property estate to retain its leadership in the microRNA field. Regulus intends to focus its proprietary efforts on developing microRNA therapeutics for oncology indications and orphan diseases and is currently advancing several programs toward clinical development in oncology, fibrosis and metabolic diseases. Specifically, Regulus is developing RG-012, an anti-miR targeting microRNA-21 for the treatment of Alport syndrome, a life-threatening kidney disease driven by genetic mutations with no approved therapy, and RG-101, a GalNAc-conjugated anti-miR targeting microRNA-122 for the treatment of chronic hepatitis C virus infection. Regulus' commitment to innovation and its leadership in the microRNA field have enabled the formation of strategic alliances with AstraZeneca, GlaxoSmithKline and Sanofi and a research collaboration with Biogen Idec focused on microRNA biomarkers. In addition, the Company has established Regulus microMarkers™, a research and development division focused on identifying microRNAs as biomarkers of human disease, which is designed to support its therapeutic pipeline, collaborators and strategic partners.

For more information, please visit <http://www.regulusrx.com>.

Forward-Looking Statements

Statements contained in this press release regarding matters that are not historical facts are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements associated with financial estimates (including Regulus' projected cash at the end of 2014), the projected sufficiency of Regulus' capital position for future periods, the expected ability of Regulus to undertake certain activities and accomplish certain goals (including with respect to development and other activities related to RG-012 and RG-101 and with respect to the nomination of a third microRNA candidate for clinical development), the projected timeline of clinical development activities, and expectations regarding future therapeutic and commercial potential of Regulus' business plans, technologies and intellectual property related to microRNA therapeutics and biomarkers being discovered and developed by Regulus. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. Words such as "believes," "anticipates," "plans," "expects," "intends," "will," "goal," "potential" and similar expressions are intended to identify forward-looking statements. These forward-looking statements are based upon Regulus' current expectations and involve assumptions that may never materialize or may prove to be incorrect. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of various risks and uncertainties, which include, without limitation, risks associated with the process of discovering, developing and commercializing drugs that are safe and effective for use as human therapeutics, and in the endeavor of building a business around such drugs. These and other risks concerning Regulus' financial position and programs are described in additional detail in Regulus filings with the Securities and Exchange Commission. All forward-looking statements contained in this press release speak only as of the date on which they were made. Regulus undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made.

Regulus Therapeutics Inc.**Selected Financial Information****Condensed Statement of Operations****(In thousands, except share and per share data)**

	Three months ended March 31,	
	2014	2013
(Unaudited)		
Revenues:		
Revenues under strategic alliances and collaborations	\$ 1,631	\$ 3,238
Operating expenses:		
Research and development	9,604	6,883
General and administrative	2,732	1,905
Total operating expenses	12,336	8,788
Loss from operations	(10,705)	(5,550)
Other income (expense), net	(2,035)	(1,689)
Loss before income taxes	(12,740)	(7,239)
Income tax (benefit) expense	1	(10)
Net loss	\$ (12,741)	\$ (7,229)
Basic and diluted net loss per share	\$ (0.30)	\$ (0.20)
Shares used to compute basic and diluted net loss per share	42,690,200	35,872,606

Regulus Therapeutics Inc.**Condensed Balance Sheets****(In thousands)**

	March 31, 2014	December 31, 2013
	(Unaudited)	
Assets		
Cash, cash equivalents and short-term investments	\$ 114,597	\$ 114,005
Other current assets	3,632	3,177
Non-current assets	5,878	5,883
Total assets	\$ 124,107	\$ 123,065
Liabilities and stockholders' equity		
Current liabilities	\$ 6,829	\$ 5,482
Total deferred revenue	10,227	11,388
Convertible notes payable, at fair value	13,403	11,279
Other long-term liabilities	1,361	1,459
Stockholders' equity	92,287	93,457
Total liabilities and stockholders' equity	\$ 124,107	\$ 123,065

SOURCE Regulus Therapeutics Inc.

For further information: Investor Relations: Amy Conrad, Director, Investor Relations and Corporate Communications, Regulus Therapeutics Inc., 858-202-6321, aconrad@regulusrx.com, or Media Contact: Liz Bryan, Spectrum Science, lbryan@spectrumscience.com, 202-955-6222 x2526

<https://ir.regulusrx.com/2014-05-08-Regulus-Reports-First-Quarter-2014-Financial-Results-and-Recent-Highlights>