Verve Therapeutics Announces Pipeline Progress and Reports First Quarter 2024 Financial Results

May 8, 2024 11:00 AM EDT

First patient dosed in Heart-2 Phase 1b clinical trial of VERVE-102

VERVE-201 clinical trial initiation on track for the second half of 2024

Received first milestone payment from Eli Lilly for collaboration on an in vivo *gene editing program targeting lipoprotein(a) (Lp(a))*

Cash, cash equivalents and marketable securities of $606.4 million; cash runway into late 2026

BOSTON, May 08, 2024 (GLOBE NEWSWIRE) -- Verve Therapeutics, a clinical-stage biotechnology company pioneering a new approach to the care of cardiovascular disease with single-course gene editing medicines, today reported pipeline updates and financial results for the quarter ended March 31, 2024.

"Our accomplishments in the first quarter bring us closer to realizing our mission of protecting patients from cardiovascular disease through single-course gene editing medicines. We are excited to investigate VERVE-102 in the Heart-2 clinical trial, having recently announced the first patient dosing in the trial," said Sekar Kathiresan, M.D., co-founder and chief executive officer of Verve Therapeutics. "We also remain on track to initiate the Phase 1b clinical trial for VERVE-201 targeting *ANGPTL3* in the second half of the year and are pleased with the progress we're making on our Lp(a) collaboration with Eli Lilly. Following these recent achievements and program updates, we are focused on continued execution across our pipeline as we develop our clinical and preclinical programs addressing a robust set of validated targets in areas of high unmet need."

First Patient Dosed with VERVE-102 in Heart-2 Clinical Trial

VERVE-102 is a novel, investigational gene editing medicine designed to be a single course treatment that permanently turns off the *PCSK9* gene in the liver to reduce disease-driving low-density lipoprotein cholesterol (LDL-C). VERVE-102 is being developed initially as a treatment for patients with heterozygous familial hypercholesterolemia (HeFH) or premature coronary artery disease (CAD). VERVE-102 consists of messenger RNA expressing an adenine base editor and an optimized guide RNA targeting the *PCSK9* gene, identical to VERVE-101. However, VERVE-102 uses a different delivery system than VERVE-101, which includes a different ionizable lipid and Verve's proprietary GalNAc liver-targeting ligand, which allows the lipid nanoparticle (LNP) to access liver cells using either the asialoglycoprotein receptor (ASGPR) or the low-density lipoprotein receptor (LDLR).

Verve recently dosed its first patient in the Heart-2 Phase 1b clinical trial. Heart-2 is an open-label Phase 1b clinical trial designed to evaluate the safety and tolerability of VERVE-102 in adult patients with HeFH or premature CAD who require additional lowering of LDL-C, with additional analyses for pharmacokinetics and changes in blood PCSK9 protein and LDL-C levels. The company received clearances of its Clinical Trial Applications (CTAs) in Canada and the U.K. Verve expects to provide a data update on the PCSK9 program in 2025.

Ongoing Analysis of Heart-1 Clinical Trial of VERVE-101

Enrollment remains paused in the Heart-1 trial as Verve continues to investigate the observed laboratory abnormalities which Verve believes are attributable to the LNP delivery system. As the company continues to work with regulatory authorities to define a potential path forward, the VERVE-101 Investigational New Drug Application (IND) in the U.S. and CTAs in the U.K. and New Zealand remain active.

VERVE-201 on Track for Clinical Trial Initiation in Second Half of 2024

VERVE-201, an *in vivo* base editing medicine delivered as a one-time intravenous infusion, is designed to inactivate the *ANGPTL3* gene in liver cells, turning off liver production of blood ANGPTL3 protein and thereby durably reducing blood LDL-C and triglyceride-rich lipoproteins. For VERVE-201, Verve is utilizing its proprietary GalNAc-LNP delivery technology. VERVE-201 is being developed for the treatment of patients living with homozygous familial hypercholesterolemia (HoFH), a rare and often fatal inherited subtype of premature accelerated atherosclerotic cardiovascular disease (ASCVD) characterized by extremely high blood LDL-C. VERVE-201 aims to reduce the heavy treatment burden associated with available therapies for HoFH, including the requirement for multiple oral, injectable, and intravenous infusions, often administered over decades. VERVE-201 is also being developed for ASCVD patients with refractory hypercholesterolemia, who have high LDL-C despite treatment with maximally-tolerated standard of care therapies.

Verve has completed preclinical studies to support regulatory submissions for clinical development. Verve expects to initiate the VERVE-201 Phase 1b clinical trial in the second half of 2024, subject to regulatory clearances.

First Milestone Achieved in Global Collaboration with Eli Lilly

Verve achieved its first research and development milestone related to its exclusive research collaboration with Eli Lilly focused on advancing Verve's research stage *in vivo* gene editing program targeting *LPA*. Elevated Lp(a) is an established and genetically validated independent risk factor for ASCVD, ischemic stroke, and aortic stenosis.

Under the terms of the collaboration established in June 2023, Verve will advance the research and development of the Lp(a) program through the completion of Phase 1 clinical development. Lilly will be responsible for subsequent development, manufacturing, and commercialization of the Lp(a) program. Verve is eligible to receive up to $465 million in research, development, and commercial milestones, as well as tiered royalties on global net sales. Following the completion of Phase 1 clinical trials, Verve has the right to opt-in to co-fund and share margins globally on the Lp(a) program (in lieu of receipt of milestones and royalties).

Upcoming Medical Meeting Presentations

American Society of Gene and Cell Therapy (ASGCT) 27th Annual Meeting: Verve will present an overview of off-target analyses for VERVE-101.
Presentation title: Characterization of Guide RNA Site Consistency Across Ancestries and the Potential for Off-Target Editing with the Clinical-Stage Base Editing Medicine, VERVE-101
Track: Base Editing and Prime Editing II
Date/time: Saturday, May 11, 2024, 10:30 – 10:45 a.m. ET
Location: Ballroom 3, Baltimore Convention Center, Baltimore, MD

TIDES 2024: Verve will present previously disclosed nonclinical and clinical data from the company's PCSK9 program.
Presentation title: Proof-of-concept for *in vivo* Base Editing to Inactivate the *PCSK9* Gene and Lower LDL-Cholesterol in Humans
Track: Genome Editing Technology and Applications
Date/time: Friday, May 17, 2024, 11:15 – 11:45 a.m. ET
Location: Hynes Convention Center, Boston, MA

Upcoming Investor Event

Verve plans to participate in a fireside chat at the RBC Global Healthcare Conference on Wednesday, May 15, 2024, at 8:00 a.m. ET in New York.

A live webcast will be available in the investor section of the company's website at www.vervetx.com. The webcast will be archived for 30 days following the presentation.

First Quarter 2024 Financial Results

Cash Position: Verve ended the first quarter of 2024 with $606.4 million in cash, cash equivalents, and marketable securities. Verve continues to expect its capital position to be sufficient to fund its operations into late 2026.

Collaboration Revenue: Collaboration revenue was $5.7 million for the first quarter of 2024, compared to $1.4 million for the first quarter of 2023. The increase was primarily due to an increase in research services performed under the company's collaboration agreements and cost reimbursements.

Research & Development (R&D) Expenses: R&D expenses were $48.4 million for the first quarter of 2024, compared to $47.1 million for the first quarter of 2023. Stock-based compensation expense included in R&D expenses was $5.6 million and $4.5 million for the first quarter of 2024 and 2023, respectively.

General & Administrative (G&A) Expenses: G&A expenses were $14.2 million for the first quarter of 2024, compared to $12.6 million for the first quarter of 2023. Stock-based compensation expense included in G&A expenses was $4.7 million and $3.5 million for the first quarter of 2024 and 2023, respectively.

Net Loss: Net loss was $48.7 million, or $0.59 basic and diluted net loss per share, for the first quarter of 2024, compared to $52.0 million, or $0.84 basic and diluted net loss per share, for the first quarter of 2023.

About Verve Therapeutics
Verve Therapeutics, Inc. (Nasdaq: VERV) is a clinical-stage genetic medicines company pioneering a new approach to the care of cardiovascular disease, potentially transforming treatment from chronic management to single-course gene editing medicines. The company's lead programs – VERVE-101, VERVE-102, and VERVE-201 – target genes that have been extensively validated as targets for lowering low-density lipoprotein cholesterol (LDL-C), a root cause of atherosclerotic cardiovascular disease (ASCVD). VERVE-101 and VERVE-102 are designed to permanently turn off the *PCSK9* gene in the liver and are being developed initially for heterozygous familial hypercholesterolemia (HeFH) and ultimately to treat patients with established ASCVD who continue to be impacted by high LDL-C levels. VERVE-201 is designed to permanently turn off the *ANGPTL3* gene in the liver and is initially being developed for homozygous familial hypercholesterolemia (HoFH) and for refractory hypercholesterolemia where patients still have high LDL-C despite treatment with maximally-tolerated standard of care therapies. For more information, please visit www.VerveTx.com.

Cautionary Note Regarding Forward Looking Statements
This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 that involve substantial risks and uncertainties, including statements regarding the company's ongoing Heart-2 clinical trial; the timing and availability of data for the PCSK9 program; expectations for the company's Heart-1 clinical trial, including the company's assessment of the laboratory abnormalities observed in the trial and the company's interactions with regulatory authorities regarding VERVE-101; the receipt of regulatory clearances and expected timing of initiating the clinical trial of VERVE-201; its research and development plans; the potential advantages and therapeutic potential of the company's programs; the potential milestone payments and potential royalties on future sale under the Lilly collaboration; the potential co-fund and margin share arrangement under the Lilly collaboration; and the period over which the company believes that its existing cash, cash equivalents and marketable securities will be sufficient to fund its operating expenses. All statements, other than statements of historical facts, contained in this press release, including statements regarding the company's strategy, future operations, future financial position, prospects, plans and objectives of management, are forward-looking statements. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in, or implied by, such forward-looking statements. These risks and uncertainties include, but are not limited to, risks associated with the company's limited operating history; the company's ability to timely submit and receive approvals of regulatory applications for its product candidates; advance its product candidates in clinical trials; initiate, enroll and complete its ongoing and future clinical trials on the timeline expected or at all; correctly estimate the potential patient population and/or market for the company's product candidates; replicate in clinical trials positive results found in preclinical studies and/or earlier-stage clinical trials of VERVE-101, VERVE-102, and VERVE-201; advance the development of its product candidates under the timelines it anticipates in current and future clinical trials; obtain, maintain or protect intellectual property rights related to its product candidates; manage expenses; and raise the substantial additional capital needed to achieve its business objectives. For a discussion of other risks and uncertainties, and other important factors, any of which could cause the company's actual results to differ from those contained in the forward-looking statements, see the "Risk Factors" section, as well as discussions of potential risks, uncertainties and other important factors, in the company's most recent filings with the Securities and Exchange Commission and in other filings that the company makes with the Securities and Exchange Commission in the future. In addition, the forward-looking statements included in this press release represent the company's views as of the date hereof and should not be relied upon as representing the company's views as of any date subsequent to the date hereof. The company anticipates that subsequent events and developments will cause the company's views to change. However, while the company may elect to update these forward-looking statements at some point in the future, the company specifically disclaims any obligation to do so.

Investor Contact
Jen Robinson
Verve Therapeutics, Inc.

jrobinson@vervetx.com

Media Contact
Ashlea Kosikowski
1AB
ashlea@1abmedia.com

Verve Therapeutics, Inc.
Selected Condensed Consolidated Financial Information
(in thousands, except share and per share amounts)
(unaudited)

Condensed consolidated statements of operations	Three months ended March 31, 2024	2023
Collaboration revenue	$ 5,695	$ 1,404
Operating expenses:		
Research and development	48,376	47,110
General and administrative	14,163	12,553
Total operating expenses	62,539	59,663
Loss from operations	(56,844)	(58,259)
Other income:		
Change in fair value of success payment liability	78	738
Interest and other income, net	8,136	5,546
Total other income, net	8,214	6,284
Loss before provision for income taxes	(48,630)	(51,975)
Provision for income taxes	(106)	-
Net loss	$ (48,736)	$ (51,975)
Net loss per common share, basic and diluted	$ (0.59)	$ (0.84)
Weighted-average common shares used in net loss per share, basic and diluted	83,132,960	61,787,403

Condensed consolidated balance sheet data	March 31, 2024	December 31, 2023
Cash, cash equivalents and marketable securities	$ 606,367	$ 623,950
Total assets	$ 732,357	$ 752,688
Total liabilities	$ 149,288	$ 153,186
Total stockholders' equity	$ 583,069	$ 599,502