Prime Medicine Reports Third Quarter 2023 Financial Results and Provides Business Updates

November 3, 2023

-- Presented new preclinical research across multiple programs, including proof-of-concept data from in vivo rodent and large animal studies, as well as updates on proprietary delivery systems --

-- Shared detailed safety evaluation of lead Prime Editors across multiple programs; preliminary off-target analyses did not identify off-target editing, supporting potential best-in-class safety profile --

-- Received U.S. FDA Rare Pediatric Drug designation for PM359 for CGD; initiated IND-enabling studies and remain on track to file IND application in 2024 --

-- Further extended intellectual property portfolio; U.S. PTO issued Prime Medicine's third patent, No. 11,795,452 --

CAMBRIDGE, Mass., Nov. 03, 2023 (GLOBE NEWSWIRE) -- Prime Medicine, Inc. (Nasdaq: PRME), a biotechnology company committed to delivering a new class of differentiated one-time curative genetic therapies, today reported financial results and provided business updates for the third quarter ended September 30, 2023.

"In recent weeks, we announced compelling preclinical data across our pipeline, including our first *in vivo* demonstration of Prime Editing in non-human primates. The consistency of these data provides proof-of-concept that our technology can precisely and efficiently edit across a range of target tissues, correcting pathogenic mutations at levels that may be sufficient to reverse disease manifestations across severe genetic conditions," said Keith Gottesdiener, M.D., President and Chief Executive Officer of Prime Medicine. "We also shared presentations detailing the power of our proprietary delivery systems, as well as new off-target analyses demonstrating the potentially best-in-class safety profile of Prime Editors. Together, these encouraging results mark meaningful progress toward the clinic and support our strategy of simultaneously advancing multiple programs forward. We look forward to leveraging the modularity of our platform, as well as our many clinical, manufacturing and regulatory learnings, to inform further development of our pipeline with the goal of delivering one-time, curative therapies to transform the lives of patients with a wide spectrum of debilitating diseases."

Recent Business Updates

Prime Medicine is advancing a strategic pipeline of eighteen programs. The Company is initially focused on indications with the opportunity for the fastest, most direct path to the clinic and technical success in humans, as well as indications that cannot be treated using other gene editing approaches.

Chronic Granulomatous Disease (CGD)

- In August 2023, Prime Medicine received Rare Pediatric Drug designation (RPDD) from the U.S. Food and Drug Administration (FDA) for PM359. The FDA grants RPDD to medicines intended for the treatment of serious and life-threatening diseases that primarily affect children ages 18 years or younger and fewer than 200,000 people in the United States. Companies that receive approval for a New Drug Application or Biologics License Application for a rare pediatric disease may be eligible to receive a voucher for priority review of a subsequent marketing application for a different product. The priority review voucher may be used by the Company or sold to a third party.

Glycogen Storage Disease 1b (GSD1b)

- In October 2023, Prime Medicine presented new *in vivo* data at the European Society of Gene and Cell Therapy 2023 Congress, demonstrating the ability of Prime Editors to precisely correct one of the most prevalent disease-causing mutations of GSD1b in both non-human primate (NHP) and mouse models. In these preclinical studies using single lipid nanoparticle (LNP) administration, Prime Editors showed up to 50% whole liver precise editing in NHPs (resulting in up to 83% of the key target cells, liver hepatocytes, edited), with no observed safety concerns. In addition, no detectable off-target effects were observed following a comprehensive *in vitro* off-target screening analysis. These data, the first evidence of Prime Editing in NHPs, provide proof-of-concept for Prime Medicine's LNP liver-targeted delivery approach and support the further advancement of the Company's Prime Editors for liver-targeted programs. Read the full data here.

Retinitis Pigmentosa / Rhodopsin

- In October 2023, Prime Medicine presented new *in vivo* data at the International Symposium on Retinal Degeneration, demonstrating that Prime Editors can efficiently and precisely correct the predominant mutations that cause rhodopsin associated autosomal dominant retinitis pigmentosa (RHO adRP). In preclinical studies, single Prime Editors showed up to 70% precise correction in photoreceptors, as well as favorable tolerability. These data suggest that Prime Medicine's proprietary dual adeno-associated virus platform can effectively deliver Prime Editors to the eye, with the potential to treat a range of retinal diseases. Read the full data here.

Additional Pipeline and Prime Editing Platform Updates

- Prime Medicine presented additional preclinical data across its Prime Editing pipeline and technology at several healthcare industry conferences in October and has plans to share additional abstracts at medical meetings before year-end. Highlights of the conference presentations included:
    - An overview of Prime Medicine's comprehensive suite of assays to identify potential off-target events, which has been expanded to include new, unbiased genome-wide tools. These analyses continue to demonstrate minimal to no detectable off-target edits, chromosomal rearrangements or translocations. These preliminary analyses, across multiple editing programs, suggest potentially best-in-class safety;
    - The first presentation on Prime Medicine's universal LNP-RNA platform designed to deliver Prime Editors to correct pathogenic mutations in the liver;
    - An update on using Prime Editors for the potential treatment of repeat expansion diseases, including an update on Fragile X syndrome; and
    - Initial proof-of-concept data for Prime Medicine's hotspot approach to developing Prime Editors to correct the CFTR gene in patients with Cystic Fibrosis, as well as new detail on Prime Medicine's LNP and all-RNA delivery approaches for the lung.
- In December, Prime Medicine will present preclinical data showcasing the potential of the PASSIGE platform to multiplex edit CAR-T cells at the 65th American Society of Hematology (ASH) Annual Meeting, being held December 9-12, 2023, in San Diego, CA. Details of the poster presentation are as follows:

Abstract Title: Multiplex Prime Editing and PASSIGE for Non-Viral Generation of an Allogeneic CAR-T Cell Product
Date & Time: Monday, December 11, 6-8 PM PT
Room: San Diego Convention Center, Halls G-H
Session Title: Cellular Immunotherapies: Basic and Translational
Presenter: Emily Pomeroy

Corporate

- In October 2023, the U.S. Patent and Trademark Office issued Prime Medicine's third patent, No. 11,795,452, "Methods and Compositions for Editing Nucleotide Sequences," which covers Prime Editing systems that include a PEgRNA, Prime Editor protein, and, optionally, a recombinase.

Anticipated Upcoming Milestones

Year-to-date, Prime Medicine continues to make significant progress, executing against key initiatives to drive its Prime Editing platform forward. The Company initiated IND-enabling studies for PM359 in CGD, and expanded preclinical proof-of-concept data *in vivo* and *in vitro* across several programs and target tissue types. In addition, as evidenced by *in vivo* data shared in recent presentations, Prime Medicine continues to optimize its non-viral and viral delivery systems, and to demonstrate excellent off-target profiles for its Prime Editing programs.

Prime Medicine expects the following activities and next steps to drive the Prime Editing platform forward in the coming months:

Pipeline

- Complete first IND filing as early as 2024 with additional IND filings anticipated in 2025.

Platform

- Expand Prime Editing using proprietary recombinase technologies for new and existing programs.
- Maximize Prime Editing's broad therapeutic potential and create value through strategic business development that extends the reach and impact of Prime Editing to areas beyond Prime Medicine's current areas of focus.

Third Quarter 2023 Financial Results:

- **R&D Expenses:** Research and development (R&D) expenses were $41.0 million for the three months ended September 30, 2023, as compared to $25.0 million for the three months ended September 30, 2022. This increase was primarily due to increases in lab supplies, personnel, and facilities costs as the Company continues to expand and build out its R&D activities and function.
- **G&A Expenses:** General and administrative (G&A) expenses were $10.5 million for the three months ended September 30, 2023, as compared to $6.6 million for the three months ended September 30, 2022. This increase was primarily due to an increase in professional and consultant costs and personnel costs primarily attributable to the build-out of the Company's G&A team to support its R&D function.
- **Net Loss**: Net loss was $50.7 million for the three months ended September 30, 2023, as compared to $29.4 million for the three months ended September 30, 2022.
- **Cash Position**: As of September 30, 2023, cash, cash equivalents, investments and restricted cash were $178.8 million, as compared to $307.4 million as of December 31, 2022.

Financial Guidance

Based on its current operating plans, Prime Medicine expects that its cash, cash equivalents and investments as of September 30, 2023, will be sufficient to fund its operating expenses and capital expenditure requirements through the end of 2024.

About Prime Medicine
Prime Medicine is a leading biotechnology company dedicated to creating and delivering the next generation of gene editing therapies to patients. The Company is leveraging its proprietary Prime Editing platform, a versatile, precise and efficient gene editing technology, to develop a new class of differentiated, one-time, potentially curative genetic therapies. Designed to make only the right edit at the right position within a gene while minimizing unwanted DNA modifications, Prime Editors have the potential to repair almost all types of genetic mutations and work in many different tissues, organs and cell types.

Prime Medicine is currently progressing a diversified portfolio of eighteen programs initially focused on genetic diseases with a fast, direct path to treating patients or with a high unmet need because they cannot be treated using other gene-editing approaches. Over time, the Company intends to maximize Prime Editing's therapeutic potential and advance potentially curative therapeutic options to patients for a broad spectrum of diseases. For more information, please visit www.primemedicine.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, as amended, including, without limitation, implied and express statements about Prime Medicine's beliefs and expectations regarding: the initiation, timing, progress, and results of its research and development programs, preclinical studies and future clinical trials, and the release of data related thereto, including its ability to expand preclinical proof-of-concept *in vivo* data; its ability to maintain Pediatric Drug designation for PM359 and the potential to use a priority review voucher or sell it to a third party; the timing of its regulatory filings, including its anticipated initial IND application submission for CGD as early as 2024 with additional filings anticipated in 2025; the potential of Prime Editors to reproducibly correct disease-causing genetic mutations across different tissues, organs and cell types, and the capacity of its PASSIGE technology to edit CAR-T cells for the treatment of certain cancers and immune diseases; its continued development and optimization of various non-viral and viral delivery systems; its ability to demonstrate superior off-target profiles for Prime Editing programs; its expansion of Prime Editing using proprietary recombinase and/or retrotransposon and other proprietary technologies; the expansion of Prime Editing's therapeutic potential and the creation of value through strategic business development to extend the reach and impact of Prime Editing to areas beyond Prime Medicine's current areas of focus; its expectations regarding the breadth of Prime Editing technology and the implementation of its strategic plans for its business, programs, and technology; the potential of Prime Editing to offer curative genetic therapies for a wide spectrum of diseases; and its estimates of expenses, capital requirements, and needs for additional financing and its expectations regarding the ability to fund its anticipated operating expenses and capital expenditure requirements through the end of 2024. The words "may," "might," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "expect," "estimate," "seek," "predict," "future," "project," "potential," "continue," "target" and similar words or expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, risks associated with: uncertainties related to the authorization, initiation, and conduct of preclinical and IND-enabling studies and other development requirements for potential product candidates, including uncertainties related to opening INDs and obtaining regulatory approvals; risks related to the development and optimization of new technologies, the results of preclinical studies, or clinical studies not being predictive of future results in connection with future studies; the scope of protection Prime Medicine is able to establish and maintain for intellectual property rights covering its Prime Editing technology; Prime Medicine's ability to identify and enter into future license agreements and collaborations; and general economic, industry and market conditions, including rising interest rates, inflation, and adverse developments affecting the financial services industry. These and other risks and uncertainties are described in greater detail in the section entitled "Risk Factors" in Prime Medicine's most recent Annual Report on Form 10-K, as well as any subsequent filings with the Securities and Exchange Commission. In addition, any forward-looking statements represent Prime Medicine's views only as of today and should not be relied upon as representing its views as of any subsequent date. Prime Medicine explicitly disclaims any obligation to update any forward-looking statements subject to any obligations under applicable law. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

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Condensed Consolidated Balance Sheet Data
(unaudited)

(in thousands)	September 30, 2023	December 31, 2022
Cash, cash equivalents, and investments	165,317	293,921
Total assets	239,145	360,314
Total liabilities	45,188	44,044
Total stockholders' equity	193,957	316,270

Condensed Consolidated Statement of Operations
(unaudited)

(in thousands, except share and per share amounts)	Three Months Ended September 30, 2023	Three Months Ended September 30, 2022
Operating expenses:		
Research and development	$ 40,967	$ 25,047
General and administrative	10,492	6,608
Total operating expenses	51,459	31,655
Loss from operations	(51,459)	(31,655)
Other income (expense):		
Change in fair value of short-term investment — related party	(1,579)	1,789
Other income, net	2,222	728
Total other income (expense), net	643	2,517
Net loss before income taxes	(50,816)	(29,138)
(Provision for) benefit from income taxes	108	(212)
Net loss	$ (50,708)	$ (29,350)
Cumulative dividend on preferred stock	—	(6,362)
Net loss attributable to common stockholders	$ (50,708)	$ (35,712)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.55)	$ (1.61)
Weighted-average common shares outstanding, basic and diluted	91,846,835	22,226,301