4DMT Highlights Recent Clinical Pipeline Progress, Near-Term Milestones and Organizational Updates

January 4, 2024

- *Poised for multiple meaningful catalysts in 2024 driven by strong clinical progress across large market programs in wet age-related macular degeneration (wet AMD), diabetic macular edema (DME) and cystic fibrosis (CF)*
- *Established next-generation AAV & CRISPR/Cas-based genetic medicines partnership for central nervous system (CNS) diseases with Arbor Biotechnologies*
- *Announced organizational updates, including the appointment of UCSF Professor Noriyuki Kasahara (Nori), M.D., Ph.D. as Chief Scientific Officer*
- *Well capitalized ending 2023 with $300 million in estimated cash, financial runway guidance unchanged and cash expected to be sufficient to fund operations into H1 2026*

EMERYVILLE, Calif., Jan. 04, 2024 (GLOBE NEWSWIRE) -- 4D Molecular Therapeutics (Nasdaq: FDMT, 4DMT or the Company), a leading clinical-stage genetic medicines company focused on unlocking the full potential of genetic medicines to treat large market diseases, today announced clinical pipeline progress, updates to near-term milestones and organizational updates.

“2023 was a landmark year for 4DMT, highlighted by rapid enrollment for 4D-150 in wet AMD and DME, strong CFTR protein expression data for 4D-710 in lungs of people with CF, multiple value-generating business development partnerships, and key additions to the Executive Team,” said David Kirn, M.D., Co-founder and Chief Executive Officer of 4DMT. “Looking forward to 2024, we plan to release multiple important datasets from our lead programs in wet AMD, DME and CF. We also plan to share guidance on the design and timing of Phase 3 clinical trials. In addition, we expect to initiate clinical development of 4D-175 in geographic atrophy by the second half of the year. By the end of 2024, we intend to progress clinical development in four large market diseases, positioning us well in our strategy to become a fully integrated large market genetic medicines company.”

Large Market Ophthalmology Portfolio Recent Updates and Expected Upcoming Milestones

- **4D-150 for Wet AMD:**
  - Phase 2 PRISM Clinical Trial
    - *Randomized Dose Expansion arm (N=50) in advanced high treatment need patients:*
      - Initial interim 24 week landmark data to be presented at the Angiogenesis, Exudation, and Degeneration 2024 Conference on Saturday, February 3, 2024 followed by a corporate webcast with details to be announced at a future date
    - *Population Extension arm (N≤45) in broad population (non-advanced, standard treatment-need):*
      - Enrollment update expected in Q1 2024
      - Initial interim 24 week landmark data analysis expected in H2 2024
  - Received both RMAT and PRIME in Q4 2023, enabling increased collaboration between the FDA and EMA on regulatory approval planning, in addition to the opportunity for expedited product development
  - Update on Phase 3 trial plans expected in February 2024 along with the interim randomized Phase 2 PRISM trial data
- **4D-150 for DME:**
  - Phase 2 SPECTRA Clinical Trial: Part 1 – Dose Confirmation Stage
    - Completed enrollment in Q4 2023
    - Initial interim 24 week landmark data expected in H2 2024
- **4D-175 for Geographic Atrophy:**
  - IND filing expected in Q2 2024
  - Phase 1 initiation expected in H2 2024

Pulmonology Portfolio Expected Upcoming Milestones

- **4D-710 for CF Lung Disease:**
  - Update on FDA feedback on development plan for monotherapy and approved CF modulator combination regimens expected in Q1 2024
  - Interim data update from Phase 1/2 AEROW clinical trial expected in mid-2024
- **4D-725 for A1AT Deficiency Lung Disease:**
  - Program update and initiation of IND-enabling studies expected in 2024

Cardiology Franchise Expected Upcoming Milestones

- **4D-310 for Fabry Disease Cardiomyopathy:**
  - Interim data update including cardiac functional, imaging, quality-of-life and cardiac biopsy data for all 6 patients dosed to be presented in the late-breaking session at the WORLD*Symposium* ™ 2024 in San Diego, California on Friday, February 9 (10:15 a.m.

to 11:15 a.m. PT) titled “Phase 1/2 clinical trial evaluating 4D-310 in adults with Fabry disease cardiomyopathy: Interim analysis of cardiac and safety outcomes in patients with 12-33 months of follow-up”

- FDA submission of data from the non-human primate (NHP) study evaluating the safety and biodistribution of intravenous (IV) 4D-310 with the rituximab/sirolimus (R/S) immunosuppressive regimen compared to the prior prednisone regimen expected in Q2 2024

Rare Inherited Retinal Disorders Portfolio Expected Upcoming Milestones

- **4D-110 for Choroideremia and 4D-125 for X-Linked Retinitis Pigmentosa:** The safety and tolerability profiles for both product candidates remain unchanged from prior data releases. All enrolled patients are expected to reach 24 months of follow-up in 2024, and we plan to assess the magnitude and durability of key imaging and functional endpoint changes in evaluable patients. We expect to provide program updates in 2024.

Expanded CNS and Gene Editing Capabilities Through Partnership with Arbor Biotechnologies

- Partnership with a leader in next-generation genetic medicines to engineer, co-develop and co-commercialize (50:50 profit share) AAV-delivered CRISPR/Cas-based therapeutics for up to six product candidates in CNS
- Initial product candidate, led by Arbor, will be developed for a target in amyotrophic lateral sclerosis (ALS) with additional targets expected to be in diseases with high unmet need in both rare and large patient populations
- More information can be found in the press release issued on January 3, 2024

Corporate Governance Update: New Chief Scientific Officer (CSO) and Scientific Advisory Board (SAB)

- **Appointment of Noriyuki (Nori) Kasahara, M.D., Ph.D. as CSO:**
  - Noriyuki Kasahara (Nori), M.D., Ph.D., was appointed as Chief Scientific Officer of 4DMT, effective January 2, 2024, and previously served as a member of 4DMT’s Board of Directors and chaired the Board’s Science & Technology Committee from September 2022 to December 2023. Dr. Kasahara was most recently Professor & Alvera L. Kan Endowed Chair of Neurological Surgery and Radiation Oncology at the University of California, San Francisco Medical School (UCSF). He brings more than 30 years of experience and has authored more than 150 peer-reviewed articles in the fields of gene therapy and genetic engineering. As an academic researcher, he previously established the first Vector Core & Shared Resource facilities for gene delivery vector research at both the University of Southern California and the University of California, Los Angeles. Most recently, in addition to his professorship and Endowed Chair, he served as a Principal Investigator in the UCSF Brain Tumor Center. Dr. Kasahara’s research has focused on optimizing the application of multiple and diverse viral vector delivery systems to achieve maximal therapeutic potential, as well as developing next-generation gene transfer technologies with greater therapeutic efficacy *in vivo*.
  - In his new role as CSO, Nori will lead the creation and validation of new genetic medicine delivery and transgene payload platforms. Our Chief Development Officer An Song, Ph.D., will continue her role in leading nonclinical and clinical scientific development functions, including AAV product design and engineering, *in vitro* and *in vivo* pharmacology, toxicology, immunology, biomarkers and bioanalytical development, and further advancing the AAV-based Therapeutic Vector Evolution platform.
- **Newly Formed SAB Combines the Expertise of Renowned Key Opinion Leaders in AAV Gene Therapy, Immunology and Core 4DMT Therapeutic Areas**
  - **Ronald Crystal, M.D.** is Professor and Chairman of the Department of Genetic Medicine at the Weill Medical College of Cornell University, where he is also the Bruce Webster Professor of Internal Medicine, Director of the Belfer Gene Therapy Core Facility and Attending Physician at the New York-Presbyterian Hospital/Weill Cornell Medical Center. Dr. Crystal is a pioneer in the field of gene therapy, where he was the first to use a recombinant virus as a vehicle for *in vivo* gene therapy and has carried out human trials of gene therapy for CF, cardiac ischemia, cancer and central nervous system disorders.
  - **Amit Gaggar, M.D., Ph.D.** is the William C. Bailey Endowed Chair of Pulmonary Medicine and Professor of Medicine at University of Alabama at Birmingham (UAB), where he serves as Scientific Director of the UAB Lung Health Center. Dr. Gaggar is a physician-scientist with a long standing interest in protease biology and innate immune signaling in chronic lung disease such as chronic obstructive pulmonary disease (COPD) and CF.
  - **Douglas Hanahan, Ph.D.** is Director Emeritus of the Swiss Institute for Experimental Cancer Research at École Polytechnique Fédérale de Lausanne (EFPL) and is a Distinguished Scholar at the Ludwig Institute for Cancer Research. Dr. Hanahan is a pioneer in angiogenesis, cancer research, and is a recipient of the AACR Lifetime Achievement Award in Cancer Research.
  - **Richard Moss, M.D.** is Professor Emeritus at Stanford University School of Medicine in the Department of Pediatrics’ Center for Excellence in Pulmonary Biology. He is former Chief of the pediatric pulmonary and allergy-immunology divisions, and former allergy-immunology and pulmonary fellowship training programs Director at Stanford Children’s Health/Lucile Packard Children’s Hospital Stanford. He was Director of the Stanford Cystic Fibrosis Center from 1991 to 2009 and Principal Investigator for the CF Foundation’s Therapeutics Development Network, where he also served as the inaugural Chair of the TDN Protocol Review Committee. He has served on CFF’s Clinical Research Committee, Translational Advisory Group and Clinical Research Advisory Board.
  - **Amy Rosenberg, M.D.,** a physician-immunologist, trained in basic immunology in Al Singer’s lab in the Experimental Immunology Branch of the NCI, NIH, following medical residency and specialty training in Internal Medicine and Infectious Diseases. She then established a laboratory and performed regulatory duties at the FDA and there, for 33 years (14 as Director of the Division of Therapeutic Proteins then Division III in the Office of Biotechnology Products), regulated an array of biotechnology products including cellular and protein therapeutics and cell-device combination products. She is currently Senior Director of Immunology and Protein Therapeutics at EpiVax, Inc.
  - **Ramesh Shivdasani, M.D., Ph.D.** is Professor of Medicine / Medical Oncology at Harvard Medical School, and serves as Deputy Director of the Dana-Farber Cancer Institute. He is a gastrointestinal disease expert, medical oncologist and laboratory investigator in the Gastrointestinal Cancer Center at Dana-Farber and Brigham and Women's Hospital, and is an internationally recognized expert in cellular and tissue development and oncology.

- **Daniel Takefman, Ph.D.** is Principal of Takefman Gene Therapy Advisors since March 2020. Dr. Takefman provides expert regulatory advice for the development and commercialization of cell and gene therapies, and assists in due diligence assessments of gene therapy assets for venture capital firms and is a member of multiple scientific advisory boards. Previously Dr. Takefman was SVP and Head of Regulatory Affairs at Spark Therapeutics for 5 years. At Spark, Dr. Takefman supervised the submission through to approval of the FDA and EMA Luxturna® marketing applications. Dr. Takefman also supervised the regulatory process for multiple AAV based investigation products including two additional Breakthrough Designation products: SPK-9001 for the treatment of Hemophilia B (marketing applications currently under review by FDA and EMA) and SPK-8011 for the treatment of Hemophilia A. Dr. Takefman held multiple positions during his 15-year career at FDA, ultimately becoming Chief of the Gene Therapy Branch.

- **Paul J. (PJ) Utz, M.D.** is Professor of Medicine at Stanford School of Medicine in the Department of Medicine, Division of Immunology, where he has directed a translational research lab for 24 years. He co-founded several companies including Bayhill Therapeutics, Tolerion and Yolo Immune, and has decades of experience as a consultant and SAB member for many biotechnology and pharmaceutical companies. Dr. Utz studies autoimmune diseases, including systemic lupus erythematosus, rheumatoid arthritis, scleroderma, myositis, Sjögren's disease, type I diabetes, vasculitis and multiple sclerosis.

- More details on our members can be found in the SAB section of our website

About 4DMT

4DMT is a leading clinical-stage genetic medicines company focused on unlocking the full potential of genetic medicines to treat large market diseases in ophthalmology and pulmonology. 4DMT's proprietary invention platform, Therapeutic Vector Evolution, combines the power of the Nobel Prize-winning technology, directed evolution, with approximately one billion synthetic AAV capsid-derived sequences to invent customized and evolved vectors for use in our wholly owned and partnered product candidates. Our product design, development, and manufacturing engine helps us efficiently create and advance our diverse product pipeline with the goal of revolutionizing medicine with potential curative therapies for millions of patients. Currently, 4DMT is advancing five clinical-stage and two preclinical product candidates, each tailored to address rare and large market diseases in ophthalmology, pulmonology, and cardiology. In addition, 4DMT is also advancing programs in CNS through a gene editing partnership. 4D Molecular Therapeutics™, 4DMT™, Therapeutic Vector Evolution™, and the 4DMT logo are trademarks of 4DM

All of our product candidates are in clinical or preclinical development and have not yet been approved for marketing by the FDA or any other regulatory authority. No representation is made as to the safety or effectiveness of our product candidates for the therapeutic uses for which they are being studied.

Learn more at www.4DMT.com and follow us on LinkedIn.

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 regarding the therapeutic potential, and clinical benefits of 4DMT's product candidates, as well as the plans, announcements and related timing for the clinical development of our clinical and preclinical product candidates, and statements regarding our estimated cash or anticipated cash runway. 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 risks and uncertainties that are described in greater detail in the section entitled "Risk Factors" in 4D Molecular Therapeutics' most recent Quarterly Report on Form 10-Q as well as any subsequent filings with the Securities and Exchange Commission. In addition, any forward-looking statements represent 4D Molecular Therapeutics' views only as of today and should not be relied upon as representing its views as of any subsequent date. 4D Molecular Therapeutics explicitly disclaims any obligation to update any forward-looking statements. No representations or warranties (expressed or implied) are made about the accuracy of any such forward looking statements.

Contacts:

Media:

Katherine Smith
Evoke Canale
Katherine.Smith@evokegroup.com

Investors:

Julian Pei
Head of Investor Relations and Corporate Communications
Investor.Relations@4DMT.com
267-644-5097