4D Molecular Therapeutics Announces Rare Disease Ophthalmology Product Candidate Portfolio Update, Including Initial Clinical Safety and Tolerability Data for 4D-110 for Choroideremia and 4D-125 for XLRP, and Termination of Roche Collaboration and License

June 24, 2021

- *4D-110: Initial clinical safety data at both of the two dose levels in the Phase 1 clinical trial indicate that 4D-110 was well-tolerated and did not result in any dose-limiting toxicity (n=6; all patients followed between one and nine months)*

- *4D-125: Initial clinical safety data at both of the two dose levels in the Phase 1 portion of a Phase 1/2 clinical trial indicate that 4D-125 was well-tolerated and did not result in any dose-limiting toxicity (n=6; all patients followed between four and nine months)*

- *4DMT will regain full-rights to 4D-110 as a result of Roche's termination of the Collaboration and License Agreement under which 4DMT had licensed to Roche certain rights to 4D-110*

EMERYVILLE, Calif., June 24, 2021 (GLOBE NEWSWIRE) -- 4D Molecular Therapeutics (Nasdaq: FDMT), a clinical-stage gene therapy company harnessing the power of directed evolution for targeted gene therapies, announced an update on their rare disease ophthalmology product candidate portfolio including Phase 1 dose escalation clinical trial safety and tolerability data with 4D-110 for choroideremia and 4D-125 for X-linked retinitis pigmentosa (XLRP) (n=12 patients total), and that the company received a notice of termination of the Collaboration and License Agreement by 4D-110 licensee Roche resulting in full rights to 4D-110 reverting to 4DMT.

Update on Roche Collaboration and License Agreement

Roche requested that 4DMT conclude the Roche-funded 4D-110 trial in advanced choroideremia patients as a result of Roche's assessment of a change in the risk-benefit profile. Subsequently, Roche sent a notice of termination without cause of the Collaboration and License Agreement, effective as of September 16, 2021. As a result, 4DMT will regain full rights to 4D-110.

4DMT has not changed its position on the potential of 4D-110 for choroideremia, a devastating blinding disease with no approved therapies. Based on the totality of the data generated to date, 4DMT intends to continue clinical development. The company plans to submit to FDA safety and efficacy data from the completed Phase 1 clinical trial along with a new clinical study protocol as soon as possible. 4DMT will conclude the Roche-funded clinical trial under the collaboration and plans to subsequently transfer previously treated patients onto a 4DMT-sponsored long-term follow-up study to continue monitoring biologic activity endpoints, safety and tolerability.

4DMT Rare Disease Ophthalmology Product Candidate Portfolio Update

"We believe the initial clinical tolerability and adverse event profile data in twelve patients from our two intravitreal rare disease ophthalmology clinical trials, performed under 4DMT INDs, demonstrate the potential of our intravitreal product platform. We expect to release initial 4D-110 biologic activity data in the fourth quarter of this year when at least six months of follow-up are available for all currently enrolled patients, and after the 90-day transition period with Roche is completed. We are pleased to regain full rights to our 4D-110 product candidate for choroideremia, and to develop it further within our wholly-owned ophthalmology product portfolio," said David Kirn, M.D., Chief Executive Officer, President and Co-founder. "We would like to thank our Roche colleagues for a highly productive collaboration and funding support for the 4D-110 choroideremia program. The 4D-110 program would not be where it is today without their contributions and outstanding commitment supporting the development of innovative new therapies for ophthalmology patients. Patients with these diseases, many of whom are children, are all eventually blinded by these devastating diseases that have no approved therapies."

"We are pleased to have completed all Phase 1 dose escalation trial enrollment on the Roche-funded 4D-110 clinical trial. We plan to conclude the Roche-funded clinical trial under the collaboration and subsequently transfer previously treated patients onto a long-term follow-up study to continue monitoring biological activity endpoints and safety," said Robert Kim, M.D., Senior Vice President of Clinical Research, Head of Clinical Ophthalmology at 4DMT. "We are committed to designing and initiating the next 4D-110 clinical trial, including treatment of earlier-stage patients, as soon as possible after reviewing the clinical data with our investigators and the FDA."

Initial Phase 1 Dose Escalation Safety and Tolerability Data Summary: 4D-110 for choroideremia and 4D-125 for X-linked retinitis pigmentosa

Clinical trial designs and enrollment

Both clinical trials employed standard "3+3" dose-escalation designed to assess the safety, tolerability and biologic activity of a single intravitreal injection of either 4D-110 or 4D-125 at two dose levels (3E11 or 1E12 vg/eye). A total of twelve patients were enrolled across dose escalation cohorts, including six who received 4D-110 (three at each dose level) and six who received 4D-125 (three at each dose level). Patients received a standard immunosuppression regimen with taper; adjustments were determined by investigators. The results described today are based on data cut-offs as of April 12, 2021 for 4D-110 and April 27, 2021 for 4D-125.

Initial Tolerability and Adverse Event Profile

4D-110 and 4D-125 were both well-tolerated as outlined in the treatment-emergent adverse event (AE) summary table below:

	4D-110	4D-125	Total
Patient # enrolled	6	6	12
Doses	3E11 or 1E12 vg/eye	3E11 or 1E12 vg/eye	-
Follow-up at data cut-off (months)	1-9 months	4-9 months	-
Dose-Limiting Toxicities (DLTs)	0 (0%)	0 (0%)	0 (0%)
Serious AE	0 (0%)	0 (0%)	0 (0%)
Any CTCAE Grade ≥ 3	0 (0%)	0 (0%)	0 (0%)
Retinal AE (Any Grade)	0 (0%)	0 (0%)	0 (0%)
Uveitis CTCAE Grade 2 (moderate)	1/6 (17%)	1/6 (17%)	2/12 (17%)
Uveitis CTCAE Grade 1 (mild)	4/6 (67%)	2/6 (33%)	6/12 (50%)

Expected Upcoming Milestones

- **4D-125:** Initial biologic activity data from the Phase 1/2 clinical trial of 4D-125 in XLRP are expected in the fourth quarter of 2021, following at least nine months follow-up for all currently enrolled patients.
- **4D-110:** Initial biologic activity data from the Phase 1 clinical trial of 4D-110 in choroideremia are expected in the fourth quarter of 2021, following at least six months follow-up for all currently enrolled patients and completion of the 90-day transition period with Roche. Additionally, after regaining full-rights to 4D-110, 4DMT plans to submit to FDA safety and efficacy data along with a new clinical study protocol, and to initiate a new clinical trial as soon as possible, that enrolls earlier stage patient populations.
- **4D-310:** Initial clinical data from the Phase 1/2 clinical trial of 4D-310 in Fabry disease are expected in the second half of 2021.
- **4D-150:** Initiation of a clinical trial with 4D-150 in wet AMD and diabetic macular edema is expected in the fourth quarter of 2021.
- **4D-710:** Initiation of a clinical trial with 4D-710 in cystic fibrosis lung disease is expected in the fourth quarter of 2021.

About 4DMT

4DMT is a clinical-stage company harnessing the power of directed evolution for targeted gene therapies. 4DMT seeks to unlock the full potential of gene therapy using its platform, Therapeutic Vector Evolution, which combines the power of directed evolution with approximately one billion synthetic capsid sequences to invent evolved vectors for use in targeted gene therapy products. The company is initially focused in three therapeutic areas: ophthalmology, cardiology, and pulmonology. The 4DMT targeted and evolved vectors are invented with the goal of being delivered through clinically routine, well-tolerated and minimally invasive routes of administration, transducing diseased cells in target tissues efficiently, having reduced immunogenicity and, where relevant, having resistance to pre-existing antibodies. 4DMT is currently conducting three clinical trials: 4D-125 is in a Phase 1/2 clinical trial for XLRP patients, 4D-110 is in a Phase 1 clinical trial for choroideremia patients and 4D-310 is in a Phase 1/2 clinical trial for Fabry disease patients.

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 regarding plans and timelines for the clinical development of 4D-310, 4D-125, 4D-110, 4D-150 and 4D-710, including the therapeutic potential and clinical benefits thereof; the estimated timing of clinical data being available for 4D-125's Phase 1/2 clinical trial, 4D-110's Phase 1 trial and 4D-310's Phase 1/2 clinical trial; the estimated timing of initiating the clinical trials for 4D-150 and 4D-710, and the estimated timing of initiating the next clinical trial for 4D-110; expectations regarding current and future interactions with the U.S. Food and Drug Administration (FDA); the estimated next steps in the development of 4D-110; 4D Molecular Therapeutics' ability to demonstrate the potential of its intravitreal product platform; the timing and whether 4D Molecular Therapeutics regains the rights to 4D-110 under the Roche Agreement; and 4D Molecular Therapeutics' strategy, business plans and focus. 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: the impact of COVID-19 on countries or regions in which we have operations or do business, as well as on the timing and anticipated results of our clinical trials, strategy and future operations; the delay of any current or planned clinical trials for the development of 4D Molecular Therapeutics' drug candidates, the risk that the results of our clinical trials, including any initial data therefrom, may not be predictive of future clinical trial results, including those from current and future clinical trials; 4D Molecular Therapeutics' ability to successfully demonstrate the safety and efficacy of its drug candidates; the timing and outcome of our planned interactions with regulatory authorities; and obtaining, maintaining and protecting our intellectual property. These and other risks and uncertainties are described in greater detail in the section entitled "Risk Factors" in 4D Molecular Therapeutics' most recent Quarterly Report on Form 10-Q filed on May 13, 2021, 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.

4D-310, 4D-125 and 4D-110 are our product candidates in clinical trials and have not yet been approved for marketing by the US FDA or any other regulatory authority. No representation is made as to the safety or effectiveness of 4D-310, 4D-125, or 4D-110 for the therapeutic use for which they are being studied.

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