

Subject Company:  
Longevity Acquisition Corp  
(Commission File No. 001-38637)

### **4D pharma Joins Landmark Parkinson's Progression Markers Initiative**

**A landmark study sponsored by The Michael J. Fox Foundation to better understand Parkinson's disease and accelerate the development of new treatments**

**4D pharma will play an important role as PPMI considers the microbiome as an area of focus**

**Leeds, UK, December 18, 2020**, - 4D pharma plc (AIM: DDDD), a pharmaceutical company leading the development of Live Biotherapeutic products (LBPs) - a novel class of drug derived from the microbiome, today announces that it has joined the Parkinson's Progression Markers Initiative (PPMI) as an industry partner. PPMI is a landmark study sponsored by The Michael J. Fox Foundation to better understand Parkinson's disease and accelerate the development of new treatments.

4D pharma representatives will contribute to the efforts of the PPMI by joining the Partner Scientific Advisory Board closely involved in the design and execution of the study. In addition, 4D pharma will also join a variety of PPMI Working Groups that provide a forum to discuss PPMI data and address Parkinson's clinical trial challenges with other PPMI industry and non-profit partners.

"The Michael J. Fox Foundation has made considerable contributions to the development of therapeutic solutions for the millions of people with Parkinson's disease. Joining the PPMI Scientific Advisory Board will enable 4D pharma to bring its leading expertise in Live Biotherapeutics and the gut-brain axis to the pioneering joint effort that is the PPMI", said Alex Stevenson, Chief Scientific Officer, 4D pharma. "This is an excellent forum in which to share our knowledge and scientific approach and to help shape the future of high-quality research into Parkinson's disease and other neurodegenerative conditions, while continuing to learn from leading experts in the field across industry, academia and non-profit organizations. 4D pharma will play an important role as PPMI considers the microbiome as an area of focus, following a growing body of evidence pointing to the gut microbiome as a new frontier in our understanding and treatment of Parkinson's disease."

"We are pleased to welcome 4D pharma as a partner on the Parkinson's Progression Markers Initiative. It is only with diverse expertise on the various aspects of this complex disease that we will better understand it and find solutions for patients," said MJFF Deputy CEO, Sohini Chowdhury. "There is a significant and growing interest in the field in understanding the role of the microbiome in Parkinson's disease and opportunities for therapeutic intervention. 4D pharma brings expertise in this novel area of research to our Scientific Advisory Board, and we look forward to their insights and contributions."

In addition to its contribution to PPMI, 4D pharma continues to make progress with regards to its own pipeline of Live Biotherapeutic candidates for Parkinson's disease. 4D pharma has previously published pre-clinical data demonstrating the neuroprotective effects of Live Biotherapeutics in an animal model of Parkinson's disease, and work investigating the mechanisms of these therapeutic effects. The Company continues to make progress in the planning and design of a first-in-human clinical trial in Parkinson's disease patients; this would be the first clinical trial of a Live Biotherapeutic in the treatment of Parkinson's.

---

## **About the Parkinson's Progression Markers Initiative**

PPMI is a landmark observational longitudinal clinical study launched by MJFF in 2010 to help identify, develop, and validate biomarkers of Parkinson's disease progression to further the development of disease-modifying therapies. PPMI is funded by MJFF and a consortium of key industry players, non-profit organizations and private individuals, and involves active participation of stakeholders from government, the biopharmaceutical industry and academia to collectively design, implement and fund this comprehensive and pioneering research program.

PPMI collects and analyses a suite of clinical, imaging and biological data over time to measure and track disease risk, onset and progression, to establish new biomarkers for use in clinical trials of disease-modifying therapies. The study is building on its 33 clinical sites and 1,400 enrolled volunteers, with plans to grow to more than 50 clinical sites in 13 countries and more than 4,000 participants.

For more information and to see 4D pharma's PPMI consortium peers visit <https://www.ppmi-info.org/about-ppmi/who-we-are/study-sponsors/>

## **About 4D pharma**

Founded in February 2014, 4D pharma is a world leader in the development of Live Biotherapeutics, a novel and emerging class of drugs, defined by the FDA as biological products that contain a live organism, such as a bacterium, that is applicable to the prevention, treatment or cure of a disease. 4D has developed a proprietary platform, MicroRx®, that rationally identifies Live Biotherapeutics based on a deep understanding of function and mechanism.

4D pharma's Live Biotherapeutic products (LBPs) are orally delivered single strains of bacteria that are naturally found in the healthy human gut. The Company has six clinical programs, namely a Phase I/II study of MRx0518 in combination with KEYTRUDA (pembrolizumab) in solid tumors, a Phase I study of MRx0518 in a neoadjuvant setting for patients with solid tumors, a Phase I study of MRx0518 in patients with pancreatic cancer, a Phase I/II study of MRx-4DP0004 in asthma, a Phase II study of MRx-4DP0004 in patients hospitalized with COVID-19, and Blautix® in Irritable Bowel Syndrome (IBS) which has completed a successful Phase II trial. Preclinical-stage programs include candidates for CNS disease such as Parkinson's disease and other neurodegenerative conditions. The Company has a research collaboration with MSD, a tradename of Merck & Co., Inc., Kenilworth, NJ, USA, to discover and develop Live Biotherapeutics for vaccines.

In October 2020 4D pharma announced its intention to merge with Longevity Acquisition Corporation (NASDAQ: LOAC), a special purpose acquisition company (SPAC), and seek a NASDAQ listing. The merger is expected to be completed and the NASDAQ listing of 4D pharma American Depositary Shares (ADSs) under the ticker symbol 'LBPS' is currently expected to become effective in early 2021, subject to approval of 4D Shareholders and Longevity Shareholders, and the SEC review process.

For more information, refer to <https://www.4dpharmapl.com>.

## **Forward-Looking Statements**

This announcement contains "forward-looking statements." All statements other than statements of historical fact contained in this announcement are forward-looking statements within the meaning of Section 27A of the United States Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the United States Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements are often identified by the words "believe," "expect," "anticipate," "plan," "intend," "foresee," "should," "would," "could," "may," "estimate," "outlook" and similar expressions, including the negative thereof. The absence of these words, however, does not mean that the statements are not forward-looking. These forward-looking statements are based on the Company's current expectations, beliefs and assumptions concerning future developments and business conditions and their potential effect on the Company. While management believes that these forward-looking statements are reasonable as and when made, there can be no assurance that future developments affecting the Company will be those that it anticipates.

---

All of the Company's forward-looking statements involve known and unknown risks and uncertainties, some of which are significant or beyond its control, and assumptions that could cause actual results to differ materially from the Company's historical experience and its present expectations or projections. The foregoing factors and the other risks and uncertainties that affect the Company's business, including those described in the documents filed by the Company with the US Securities and Exchange Commission ("SEC"), should be carefully considered. The Company wishes to caution you not to place undue reliance on any forward-looking statements, which speak only as of the date hereof. The Company undertakes no obligation to publicly update or revise any of its forward-looking statements after the date they are made, whether as a result of new information, future events or otherwise, except to the extent required by law.

#### **Additional Information about the Transaction and Where to Find it**

This press release is being made in respect of a proposed business combination involving 4D and Longevity. Following the announcement of the proposed business combination, 4D filed a registration statement on Form F-4 (the "Registration Statement") with the SEC. This press release does not constitute an offer to sell or the solicitation of an offer to buy or subscribe for any securities or a solicitation of any vote or approval nor shall there be any sale, issuance or transfer of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. The Registration Statement includes a preliminary prospectus with respect to 4D's ordinary shares and ADSs to be issued in the proposed transaction and a proxy statement of Longevity in connection with the merger. The information in the Registration Statement is not complete and may be changed. 4D may not sell the ordinary shares referenced in the Registration Statement until the Registration Statement becomes effective. The proxy statement/prospectus will be provided to the Longevity shareholders. 4D and Longevity also plan to file other documents with the SEC regarding the proposed transaction.

This press release is not a substitute for any prospectus, proxy statement or any other document that 4D or Longevity may file with the SEC in connection with the proposed transaction. Investors and security holders are urged to read the Registration Statement and, when they become available, any other relevant documents that will be filed with the SEC carefully and in their entirety because they will contain important information about the proposed transaction.

You may obtain copies of all documents filed with the SEC regarding this transaction, free of charge, at the SEC's website ([www.sec.gov](http://www.sec.gov)). In addition, investors and security holders will be able to obtain free copies of the Registration Statement and other documents filed with the SEC without charge, at the SEC's website ([www.sec.gov](http://www.sec.gov)) or by calling +1-800-SEC-0330.

#### **Participants in the Solicitation**

Longevity and its directors and executive officers and other persons may be deemed to be participants in the solicitation of proxies from Longevity's shareholders with respect to the proposed transaction. Information regarding Longevity's directors and executive officers is available in its annual report on Form 10-K for the fiscal year ended February 29, 2020, filed with the SEC on April 30, 2020. Additional information regarding the participants in the proxy solicitation relating to the proposed transaction and a description of their direct and indirect interests is contained in the Registration Statement.

---

4D and its directors and executive officers may also be deemed to be participants in the solicitation of proxies from the shareholders of Longevity in connection with the proposed transaction. A list of the names of such directors and executive officers and information regarding their interests in the proposed transaction is included in the Registration Statement.

**Contact Information:**

**4D Pharma**

Duncan Peyton, Chief Executive Officer +44 (0)113 895 0130

Investor Relations: [ir@4dpharmapl.com](mailto:ir@4dpharmapl.com)

**Investor Relations**

Julie Seidel, Stern Investor Relations, Inc. +1-212-362-1200

[Julie.seidel@sternir.com](mailto:Julie.seidel@sternir.com)

**N+1 Singer - Nominated Adviser and Joint Broker** +44 (0)20 7496 3000

Philip Davies / Justin McKeegan / Iqra Amin (Corporate Finance)

Tom Salvesen (Corporate Broking)

**Bryan Garnier & Co. Limited - Joint Broker** +44 (0)20 7332 2500

Dominic Wilson / Phil Walker

**Image Box Communications**

Neil Hunter / Michelle Boxall +44 (0)20 8943 4685

[neil@ibcomms.agency](mailto:neil@ibcomms.agency) / [michelle@ibcomms.agency](mailto:michelle@ibcomms.agency)

---