

# Landos Biopharma Announces Research Collaboration into the NLRX1 Pathway in Multiple Sclerosis with Johns Hopkins University School of Medicine

## August 26, 2021

BLACKSBURG, Va., Aug. 26, 2021 (GLOBE NEWSWIRE) -- Landos Biopharma, Inc. (NASDAQ: LABP), a late-clinical-stage biopharmaceutical company utilizing its LANCE<sup>®</sup> Advanced A.I. platform to develop novel oral therapeutics for patients with autoimmune diseases, today announced that it has entered into a research collaboration with Peter Calabresi, M.D., Director of the Multiple Sclerosis Center and Professor of Neurology at Johns Hopkins University (JHU) School of Medicine. This research funded by the National Institutes of Health (NIH) will focus on further validating the NLRX1 immunometabolic pathway in Multiple Sclerosis (MS).

"We are honored to collaborate with Dr. Calabresi to continue research on the NLRX1 pathway with the goal to develop disease-modifying precision therapies in central nervous system (CNS) disorders, including MS," said Dr. Josep Bassaganya-Riera, Chairman, President, and CEO of Landos. "Similar to our pioneering work on the NLRX1 pathway in autoimmune diseases and the recent positive, de-risking results for NX-13, our lead NLRX1 agonist for ulcerative colitis and Crohn's disease, we are excited to further investigate the translatability of these ground-breaking scientific discoveries in treating CNS diseases and look forward to advancing LABP-66 and other therapeutic candidates in our extensive inflammation and immunology portfolio into clinical testing."

Current treatments for MS are designed to target a single cell type in the brain. In contrast, Landos' candidate LABP-66 is designed to target the NLRX1 pathway in the CNS and in turn, promote beneficial effects in CD4+ T cells, microglia and neurons. Moreover, Landos' pioneering research on the importance of the NLRX1 pathway in immunometabolic control of CD4+ T cells and other autoimmune diseases is complementary to the research Dr. Calabresi is conducting at JHU. LABP-66 has the potential to become an improved treatment option for patients with MS and Alzheimer's Disease.

Landos' novel NLRX1 agonist, LABP-66, is an oral once-daily therapy in development for the treatment of MS, Alzheimer's Disease, and other debilitating CNS diseases. Approximately 1.0 million Americans suffer from MS, which is expected to grow to 1.2 million by 2028. The market for MS drugs is expected to increase from \$18.6 billion in 2021 to \$26.6 billion by the year 2028 at an average growth rate of 5.2% annually. Of note, a majority of these sales are from biologics (injectables); LABP-66 is an oral therapeutic candidate.

#### About LABP-66

LABP-66 is a once-daily, orally active, systemic small molecule therapeutic candidate which activates NLRX1, a mitochondria-associated receptor with the ability to modulate immune responses. By activating the NLRX1 pathway, LABP-66 increases autophagy and oxidative phosphorylation in immune cells while decreasing differentiation of effector CD4+ T cells, reactive oxygen species, inflammasome formation and production of inflammatory cytokines. LABP-66 recently entered IND-enabling studies and Landos expects to file for an IND in 2022. Oral treatment with LABP-66 has reduced markers of inflammation and neuronal cell stress in the CNS in addition to disease activity scores.

#### **About Landos Biopharma**

Landos Biopharma is a late-clinical-stage biopharmaceutical company utilizing its LANCE<sup>®</sup> Advanced A.I. platform to discover and develop novel oral therapeutics for patients with autoimmune diseases. LANCE has discovered new mechanisms of action, including the LANCL2, NLRX1 and PLXDC2 plus several additional undisclosed immunometabolic pathways. Landos has 17 active development programs targeting these novel pathways at the interface of immunity and metabolism across 14 indications. Lead asset omilancor targets the LANCL2 pathway and is a novel oral, gut-restricted small molecule drug candidate currently being prepared for global pivotal Phase 3 trials for the treatment of ulcerative colitis, in an active Phase 2 trial in Crohn's disease and, is anticipated to initiate Phase 1b studies in Eosinophilic Esophagitis and, in topical cream formulation, for psoriasis and atopic dermatitis. NX-13 targets the NLRX1 pathway and is a novel oral, gut-restricted small molecule drug candidate sare in development for the treatment of lupus nephritis, rheumatoid arthritis, Multiple Sclerosis, and diabetes. For more information, please visit <u>www.landosbiopharma.com</u>.

### **Cautionary Note on Forward-Looking Statements**

Any statements in this press release about future expectations, plans and prospects for Landos Biopharma, Inc. (the "Company"), including statements about the Company's strategy, clinical development and regulatory plans for its product candidates, the Company's anticipated milestones and future expectations and plans and prospects for the Company and other statements containing the words "anticipate", "plan", "expect", "may", "will", "could", the negatives thereof, variations thereon and similar expressions, or by discussions of strategy constitute forward-looking statements. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: the uncertainties inherent in the initiation and enrollment of future clinical trials, expectations of expanding ongoing clinical trials, availability and timing of data from ongoing clinical trials, expectations for regulatory approvals, other matters that could affect the availability or commercial potential of the Company's product candidates and other similar risks. Risks regarding our business are described in detail in our Securities and Exchange Commission ("SEC") filings, including in our Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, which are available on the SEC's website at www.sec.gov. Additional information will be made available in other filings that we make from time to time with the SEC. Such risks may be amplified by the impacts of the COVID-19 pandemic. In addition, the forward-looking statements 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, except as may be required by law. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date hereof.

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