Smart Immune Receives IRB Approval For Phase 1/2 Clinical Trial of Proprietary Allogeneic T-cell Product Smart-101 (ProTcell™) for AML and ALL

Trial to commence in November 2021

PARIS, France, Oct 13, 2021 – Smart Immune SAS, a T cell medicine company utilizing its proprietary ex-vivo biomimetic "thymus in a dish" technology to develop allogeneic T-cell progenitors Smart101 (ProTcell™) for rapid immune reconstitution, announced today that the institutional review board (IRB) of the Memorial Sloan Kettering Cancer Center (MSK) has approved the commencement of the Company's phase 1/2 clinical trial. MSK will start enrolling patients in November, 2021.

The Smart-101 study protocol (ClinicalTrials.gov Identifier: NCT04959903) encompasses two experimental arms in adult and pediatric leukemia patients, respectively, and will enroll up to 36 patients. Study subjects chosen are AML/ALL patients who are eligible for allogeneic hematopoetic stem cell transplant (HSCT) and will receive their routine stem-cell transplant of CD34+ cells at first, and then Smart-101 at approximately day 7 after initial transplant. In all cases, Smart-101 ProTcells will be cultured from the same donor from whom the patient has received the initial CD34+ HSCT. This trial will rely upon a prospectively generated control database of AML/ALL patients who undergo routine HSCT's at MSK. The principal investigator of this study is Dr. Jaap-Jan Boelens, MD, PhD at MSK.

"*This is an important milestone for the Company as it represents the first ever clinical trial for any T-cell progenitor product in the U.S. From working quietly on this technology at the Necker Children's Hospital in Paris for over a decade, to finally treating patients, I am proud of our journey and of the therapeutic versatility of these allogeneic T-cell progenitors that we have been able to reset rapidly a polyclonal T cell compartment to ultimately improve 1 year overall survival and non-relapses mortality,*" said Dr. Marina Cavazzana, the physician co-founder of Smart-Immune. "*As we treat very sick patients and hope to durably reconstitute their fragile immune systems, we plan to be cautious and measured in our development path-starting with first establishing unequivocal clinical proof of the efficacy and safety of our ProTcell™ that are devoid of any genetic engineering in this first phase of our development. Such proof can then pave the way for a more expedited clinical development of genetic engineered ProTcell™ in the future.*"

The primary outcome measures of the trial are at day 100 post-HSCT and include (i) cumulative adverse events through day 100, (ii) T-cell reconstitution at day 100 measured as CD4+ counts and (iii) chronic and acute GvHD. Secondary outcomes of this trial include long-term endpoints such as (i) T-cell reconstitution through 24 months, (ii) cumulative infections through 24 months and (iii) non-relapse mortality through 24 months. One-year and two-year disease-free survival and overall survival will also be reported.

"Multiple publications have formally demonstrated that Early T cell reconstitution is essential for reducing Transplantation-related Mortality, which continues to be a clear medical need. Finding strategies to better predict and/or expedite early T cell reconstitution will make allogeneic-bone marrow transplantation safer and more effective. We are thrilled to initiate the SMART 101 trial, which aims to expedite early T cell reconstitution by early infusion of T cell progenitor (ProTcell™)," said Dr Jaap Jan Boelens, Chief of the Pediatric Stem Cell Transplantation and Cellular Therapies Service, MSK.

This phase 1/2 marks the start of Smart-Immune's extensive 5-year clinical trial plan launched with the support of its partners, ILIFE Consulting for monitoring and project management and Venn Life Sciences for statistics and data management.

ProTcells will be investigated both as allogeneic unengineered T-cell progenitor medicine in diseases requiring immediate immune reconstitution after HSCTs, and as engineered T-cell therapy where ProTcells would carry a chimeric antigen receptor (CAR).

About Smart Immune

Smart Immune's mission is to make T-cell therapy accessible and affordable to all patients and, through its groundbreaking ProTcell™ platform, has developed clinical stage T-cell progenitors designed to improve prognosis for patients affected by malignant blood diseases or rare primary immunodeficiencies. The company is utilizing its unique ex-vivo biomimetic 'thymus in a dish' technology to culture specific T-cell progenitor subpopulations at scale and use them as cell or gene therapy. The company was founded in 2017 by Dr Isabelle André, Karine Rossignol, and Dr Marina Cavazzana from Hôpital Necker-Enfants Malades AP-HP, a consultant pediatric hematologist and a pioneer in vector-based therapies and hematopoietic stem cell treatments.

About ProTcell™

The Smart Immune ProTcell™ platform generates allogenic T-cell progenitors that provide fully functional polyclonal T-cells within 3 months following an allogeneic HSCT while also reducing graft versus host disease (GvHD), infections and relapses thereby improving morbidity and mortality and shifting the benefice risk ratio for allogeneic medicine. When infused, ProTcell™ migrate to the patient's thymus where they expand, are selected, and then differentiate, resulting in fully functional T-cells, tolerant to the patient's own immune system and reactive to viral, fungal, and malignant antigens. ProTcell™ has been accepted by the FDA as an Investigational New Drug (IND) for Acute Lymphocytic Leukemia (ALL) and Acute Myelocytic Leukemia (AML) and has also been granted fast-track designation under its expedited program for serious conditions. In 2021, the FDA granted orphan drug designation for ProTcell™ as a treatment to enhance cell engraftment in patients receiving hematopoietic stem cell transplant (HSCT) including hematologic malignancies and all forms of primary immunodeficiencies. ProTcell™ is currently being studies in two clinical trials in Europe, with two in the U.S. expected to start in Q4 2021. To learn more, please visit www.smart-immune.com

Media/Investor Contact
Jason Wong
Blueprint Life Science Group
jwong@bplifescience.com
(415) 375-3340 Ext. 4

Media Contact
Clare Evans
Smart Immune
clare.evans.ext@smart-immune.com
(403) 888-6869