Smart Immune Announces FDA Orphan Drug Status, IND Acceptance and Fast-Track Designation to Commence Phase 1/2 Clinical Trial of Proprietary Allogeneic T cell progenitor Product SMART 101 (ProTcell™) for AML and ALL

Phase 1/2 Trial to Begin By Fall 2021 at a Top US Cancer Center

---

PARIS, France, May 10th, 2021 – Smart Immune SAS, a T cell medicine company utilizing its proprietary ex-vivo biomimetic "thymus in a dish" technology to develop proprietary allogeneic T cell progenitor product SMART 101 (ProTcell™) for rapid reconstitution of T cell immunity, announced today that its Investigational New Drug (IND) for Acute lymphocytic leukemia (ALL) and Acute myelocytic leukemia (AML) has been accepted by the FDA. The FDA has also granted SMART 101 fast-track designation under its *Expedited Program for Serious Conditions*. Previously, the FDA granted orphan drug designation for SMART 101 (ProTcell™) as a "*treatment to enhance cell engraftment in patients receiving hematopoietic stem cell transplant (HSCT).*" This orphan drug status encompasses various conditions such as hematologic malignancies like AML and ALL, along with all forms of primary immunodeficiencies including, but not limited to severe combined immunodeficiency (SCID).

The acceptance of the IND by the FDA marks the start of Smart Immune's clinical development program in the U.S. whereby ProTcell™ will be investigated both as allogeneic non- engineered T cell progenitor medicine in diseases where overall survival and outcome is highly dependent on immediate immune reconstitution after HSCTs, and potentially as engineered T cell therapy. **Representing a decade of research and development, this is the first ever IND of any T cell progenitor product in the U.S.**
The ALL/AML IND encompasses a clinical trial across adult and pediatric leukemia patients receiving T cell depleted allo-HSCT and will initially enroll up to 36 patients. In this phase 1/2 clinical trial, safety and efficacy of ProTcell™ to rapidly give rise to T cell compartment in order to reduce infections, Graft versus Host Disease (GvHD), and eventually also 1-year non relapse mortality, will be assessed. If successful in clinical development, ProTcells™ could make Human Leucocyte Antigen (HLA) mismatched transplants as successful as HLA-identical, with the benefit of rapid immune-reconstitution and patient recovery and discharge.

These U.S. Smart Immune sponsored adult and pediatric leukemia studies will run in addition to the ongoing European studies of allogeneic ProTcell™ for:

- The rare, pediatric indication of Severe-Combined Immunodeficiency (SCID) where babies are born without T cells and the ProTcell™ therapy in combination with a haploidentical HSCT will allow a rapid and durable, long-term immune-reconstitution for patients lacking an HLA-identical donor.
- Relapsed/refractory AML where ProTcell™ will be derived from umbilical cord blood (UCB) - CD34+ hematopoietic stem cells (HSC) and administered together with

umbilical cord blood with the aim of demonstrating that the Company's biomimetic thymus is independent of the source of such $CD34^+$ HSCs in its ability to reliably generate therapeutic ProTcell™.

"*From refining 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 which should be able to reset rapidly a polyclonal T cell compartment,*" said Pr. Marina Cavazzana, physician and 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 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 clinical trials that are part of the FDA accepted U.S. IND are on track to begin in fall of 2021. Full clinical design of the trials, its clinical center and lead investigators will be announced and become available on www.clinicaltrials.gov prior to the start of the study.

About Smart Immune

Smart Immune was founded in 2017 by three women Dr. Isabelle André, Pr. Marina Cavazzana and Karine Rossignol around groundbreaking scientific work at the Imagine Institute of Genetic Diseases and Necker Enfants Malades Hospital over more than 10 years. Pr. Marina Cavazzana is known as a pediatric Hematologist and a pioneer in vector-based therapies and hematopoietic stem cell treatments. The Company is utilizing its unique ex-vivo biomimetic "thymus in a dish" technology to culture specific T cell progenitor subpopulations that are so short-lived in nature that until now they were unculturable at scale. These therapeutic T cells progenitor (ProTcell™) are cultured without exogenous genetic "engineering," and designed to empower the human immune system to fight infections and eradicate malignant disease from the body.

At first ProTcell™ will be investigated as adjunct to allo-HSCT with potential to overcome major allo-HSCT challenges like infection and GvHD. By actively reconstituting a fully polyclonal T cell population, ProTcell™ not only reduces infection and GvHD following HSCT, but also plays a role in fighting the underlying cancer with the potential to reduce relapse related mortality. Smart Immune is initially targeting the pediatric orphan indication Severe Combined Immune Deficiency (SCID) & oncology (AML). 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