



Media Contacts:
IB Communications
Tel [+44 \(0\)20 89434685](tel:+44(0)2089434685)
cellprothera@ibcomms.agency

CellProthera expanding into ischemic stroke following publication of positive preclinical results with its CD34+ stem cell platform

Collaboration with USF professor Cesar Borlongan demonstrated Cellprothera's stem cell therapy improved motor function, reduced infarct damage in rat model of ischemic stroke, in new paper published in *Stem Cells Translational Medicine*

Mulhouse, France, November 30, 2023 – CellProthera, a regenerative cell therapy developer specializing in ischemic diseases, today announces that preclinical data supporting an expansion of its clinical pipeline, utilizing the company's cell therapy platform for the treatment of ischemic stroke, has been published. *The study*, completed in conjunction with University of South Florida (USF) professor Cesar Borlongan, Ph.D., adds to the growing body of evidence showing the potential of expanded CD34+ stem cells to regenerate damaged tissue in multiple ischemic diseases.

Approximately 15 million stroke events are suffered each year worldwide, with a huge unmet need for a regenerative treatment focused on brain repair in conjunction with standard of care to clear clots. In the study, Dr. Borlongan – a world leader in stem cell therapy for stroke who is also Director of USF's Center of Excellence for Aging & Brain Repair – and his team tested the regenerative capabilities of CellProthera's stem cell therapy in an established preclinical rodent model of ischemic stroke. The therapy, which is based on expanded CD34+ stem cells known to promote blood vessel growth, triggered neurogenesis and angiogenesis and significantly improved behavioral recovery. Animals receiving the cell therapy had a significant reduction in infarct damage and cell loss compared to control animals. The partners also observed increases in extracellular vesicles that were consistent with the stem cells' secretion of exosomes containing pro-angiogenic and anti-apoptotic miRNAs, known to increase regeneration and revascularization in humans following severe heart attack.

"Dr. Borlongan's data is so promising that we feel obligated to build a program around our cell therapy platform, with the potential to help even more patients with ischemic diseases," said Matthieu de Kalbermatten, CEO, CellProthera. "We are now collecting the necessary preclinical and CMC data to support a first-in-man study in ischemic stroke, in addition to our lead clinical program in post-acute myocardial infarction."

The study, 'Probing multiple transplant delivery routes of CD+34 stem cells for promoting behavioral and histological benefits in experimental ischemic stroke', published in *Stem Cells Translational Medicine*.

About CellProthera

CellProthera is a regenerative cell therapy developer specializing in ischemic diseases with a leading program in myocardial infarction. CellProthera has developed a unique GMP-compliant cell expansion process as well as a proprietary automation technology for *in vitro* production of a large quantity of purified, CD34+ stem cells. Its lead therapy, ProtheraCytes, is an autologous cell therapy and has been developed for tissue reperfusion and salvage of damaged cardiac tissue. ProtheraCytes is registered as an Advanced Therapy Medicinal Product by the European Medicine Agency (EMA). CellProthera's proprietary technology platform comprises an automated expansion device called StemXpand(R) and its disposable kit StemPack(R). CellProthera is headquartered in France.