

September 3, 2018

Initiation of an Exploratory Clinical Trial with a Muse Cell Product
in Ischemic Stroke Patient

Life Science Institute, Inc.

Life Science Institute, Inc. (Head Office: Chiyoda-ku, Tokyo, President: Seiichi Kiso, hereinafter referred to as “the Company”) is pleased to announce the initiation of an exploratory clinical trial with the Muse cell-based product, CL2020 in ischemic stroke patient at Tohoku University Hospital in the middle of September this year. This is the second target disease for which an exploratory trial is being conducted with CL2020, following an exploratory trial that was initiated in acute myocardial infarction patient in January this year.

Muse cells (multilineage-differentiating stress enduring cells), which discovered by a team led by Professor Mari Dezawa at Tohoku University in 2010, are a new type of pluripotent stem cells that can be differentiated into various cell of human body. Muse cells are natural stem cells originally present in mesenchymal tissues of the body, and have advantageous characteristics, such as few concerns tumor generation, no need to induce differentiation to the target cell and the ability to migrate and accumulate at the site of an injury simply by intravenous administration to engraft and repair the injured tissue.

Cerebrovascular disease, including ischemic stroke is the second leading cause of hospitalization in Japan, and also the most frequent reason why patients require nursing care (accounts for almost 20% of patients who require nursing care based on the long-term care insurance system). Studies in animal ischemic stroke models confirmed that intravenous administration of CL2020 improves motor dysfunction. CL2020 might improve motor dysfunction by repairing damaged neuronal pathways, and therefore might be a new treatment option for ischemic stroke patient.

[Overview of the clinical trial]

Code name of the investigational product	CL2020
Target disease	Ischemic stroke
Objective of this trial	Investigate the safety and efficacy with single intravenous administration of CL2020 in ischemic stroke patient compared with placebo.

The Company will continue to develop Muse cells for various diseases in the future, for contributing to the improvement of patients' QOL, and to further develop its business operations for the realization of a *KAITEKI* society.