

Results of an Exploratory Clinical Trial with Muse cell-based product, CL2020, in Patients with Acute Myocardial Infarction Published in the *Circulation Journal* Online

Life Science Institute, Inc.

Life Science Institute, Inc. or LSII (Head office: Chiyoda-ku, Tokyo; President: Seiichi Kiso) is pleased to announce that results of an exploratory clinical trial in patients with acute myocardial infarction, or AMI, a First-in-Human trial with Muse cell-based product, CL2020, which has been conducted at GIFU UNIVERSITY HOSPITAL and other clinical sites in Japan since January 2018, were published in the *Circulation Journal* Online, an official journal of the Japanese Circulation Society.

This study was conducted to evaluate safety, tolerability, and efficacy of a single-dose intravenous administration of CL2020 in patients with AMI, whose cardiac function was not sufficiently improved after successful percutaneous coronary intervention, or PCI. As the result, CL2020 demonstrated its favorable safety and tolerability profiles up to 12 weeks after administration as primary endpoints. Regarding efficacy as a secondary endpoint, left ventricular ejection fraction or LVEF, one of the most commonly used measures of cardiac function, was markedly improved. The full publication is available at https://www.jstage.jst.go.jp/article/circj/84/7/84_CJ-20-0307/_article/-char/en

LSII expects that CL2020 could offer a novel treatment option for patients with AMI who did not respond adequately to conventional standard treatment. Based on the results of this exploratory clinical trial, LSII started a confirmatory clinical trial for CL2020 in patients with AMI in December 2019.

LSII is committed to contribute to people's health and well-being around the world by developing the next-generation technologies, including Muse cell-based product and to creation of a society where everyone can live a healthy and peaceful life, "KAITEKI".

About “Muse cells”

Muse cells (multilineage-differentiating stress enduring cells), discovered by Professor Mari Dezawa’s group at Tohoku University in 2010, are a novel type of non-tumorigenic pluripotent stem cells that can be differentiated into various kinds of cells in the body. Muse cells are endogenous reparative stem cells distributed in the peripheral blood, bone marrow and connective tissue of organs. Their advantageous characteristics are represented by low safety concerns, unnecessary of gene introduction or differentiation induction prior to administration and of surgical operation for delivering cells because of their specific ability to accumulate to the damaged site after intravenous administration, enabling treating patients only by intravenous drip of Muse cell preparation, one of the simple expedient approaches.