

SCAD Inc.'s Co-founder and Chief Advisor uses nanofiber-based scaffolds to obtain high-quality cardiac tissue-like constructs for drug assessment and transplantation

October 27, 2017. Together with a multidisciplinary research group from Kyoto University, Osaka University, Shinshu University, and the École Normale Supérieure, Prof. Norio Nakatsuji just published a paper on using human pluripotent stem cell-derived cardiac tissue-like constructs (CTLs) for drug assessment and regenerative cardiac therapy. They used aligned PLGA nanofiber-based scaffolds to obtain cardiac tissue-like 3D cell-devices with highly upregulated cardiac biomarkers and enhanced cardiac functions. Their high-quality CTLs demonstrated more robust drug responses than conventional 2D cultures, and great potentials for modeling tissue engraftments in vitro and for the repair of myocardial infarction in vivo. This research is published in [Stem Cell Reports](#).

Source:

Li, J., et al. (in press). Human pluripotent stem cell-derived cardiac tissue-like constructs for repairing the infarcted myocardium. Stem Cell Reports. DOI: <http://dx.doi.org/10.1016/j.stemcr.2017.09.007>