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Supplementary information

Vessel Graft Fabricated by the On-site Differentiation of Human Mesenchymal Stem Cells
Toward Vascular Cells on Vascular Extracellular Matrix Scaffold under Mechanical
Stimulations in A Rotary Bioreactor

Na Li^{1,2}, Alex P. Rickel^{1,2}, Hanna J. Sanyour^{1,2}, Zhongkui Hong^{1,2}*

¹Department of Biomedical Engineering, University of South Dakota, 4800 N Career Ave, Sioux

Falls, SD, USA

²BioSNTR, Sioux Falls, SD, USA

*To whom correspondence should be addressed:

Zhongkui Hong, Ph.D.,

Biomedical Engineering Department,

University of South Dakota,

4800 N Career Ave, Suite 221, Sioux Falls, SD 57107

Fax: (605) 782-3280

Tel: (605) 275-7468

E-mail: Zhongkui.Hong@usd.edu

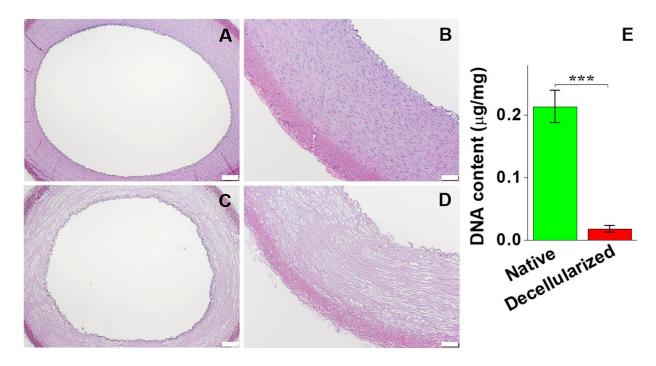


Fig. S1 Characterization of the decellularized carotid artery ECM scaffolds. HE staining of native carotid (A, B) and decellularized ECM (C, D) supported the complete removal of nucleic components (blue-purple) by decellularization treatment. DNA quantification analysis showed that the remaining DNA content in the decellularized scaffolds was significantly lower than that in native carotid (E). Data are expressed as mean \pm SD (n = 3). ***P < 0.001.

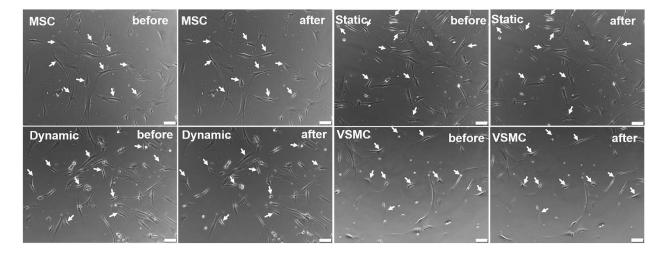


Fig. S2 Contractile response of four groups of cells to 50 mM KCl. The images represented the

cells before and after KCl treatment for 15 min. Arrows indicate the cells used for the quantification of the cell area reduction. Scale bars = $100 \, \mu m$.

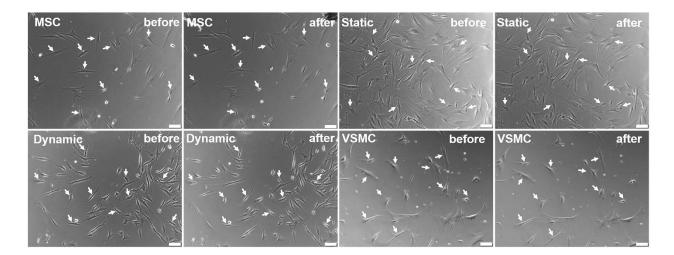


Fig. S3 Contractile response of four groups of cells to 1 mM carbachol. The images represented the cells before and after carbachol treatment for 15 min. Arrows indicate the cells used for the quantification of the cell area reduction. Scale bars = $100 \, \mu m$.