Supplementary Information

An *in vitro* model using spheroids-laden nanofibrous structures for attaining high degree of myoblast alignment and differentiation

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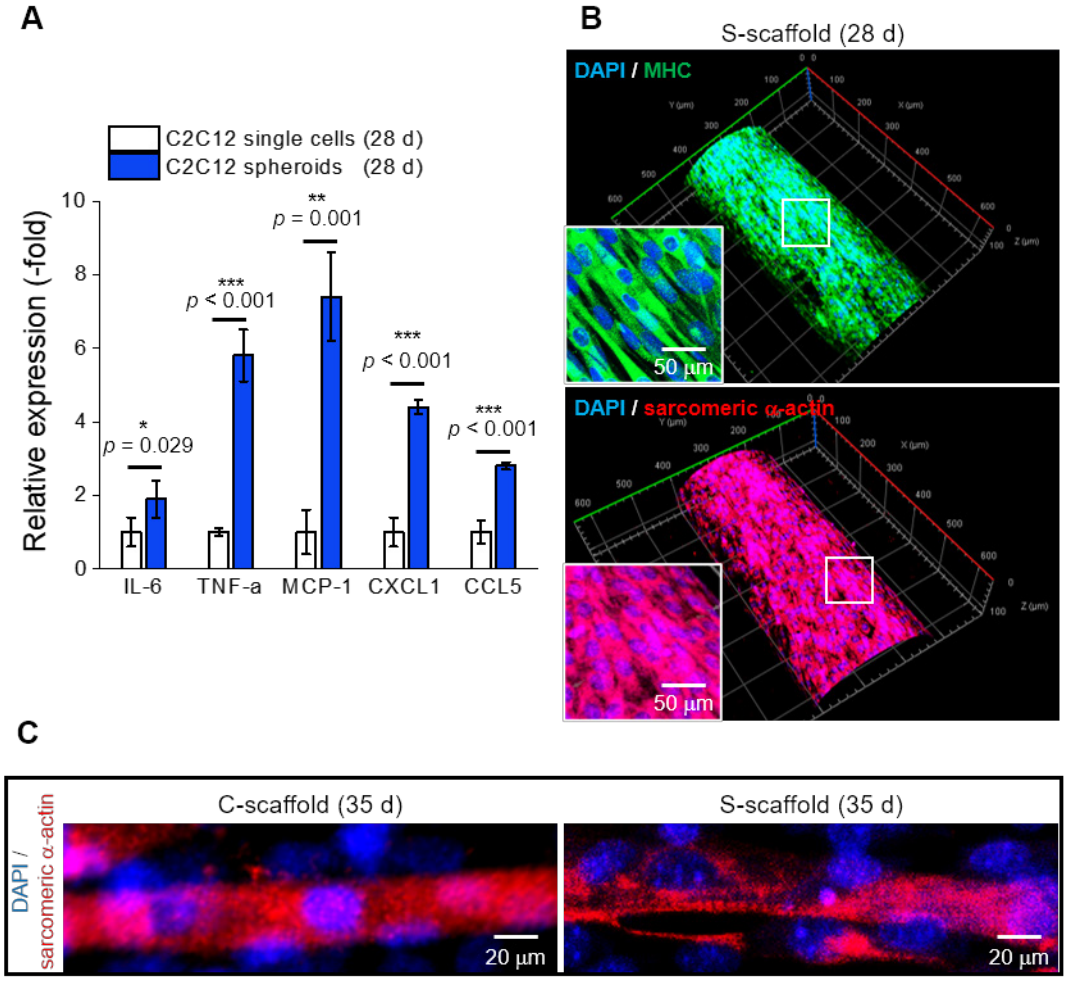

Figure S1. (A) Relative gene expression of the samples with electrospun C2C12 single cells/spheroids at 28 d (n = 5). (B) MYC and sarcomeric α-actin of S-scaffold at 28 d. (C) Sarcomeric α-actin of C-scaffold and S-scaffold at 35 d.

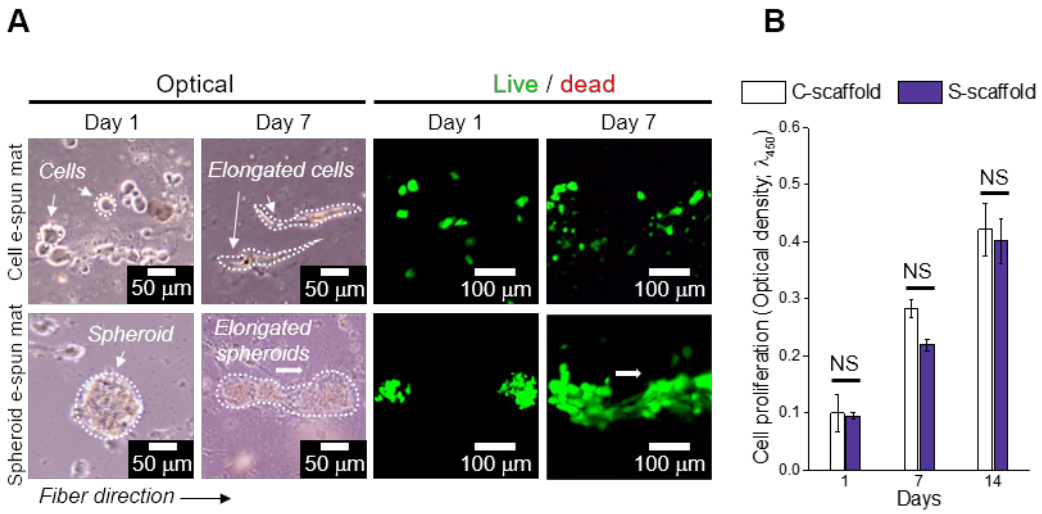

Figure S2. (A) Optical and live/dead images of cell e-spun and spheroid e-spun mat. (B) Optical density of cell proliferation for C-scaffold and S-scaffold.

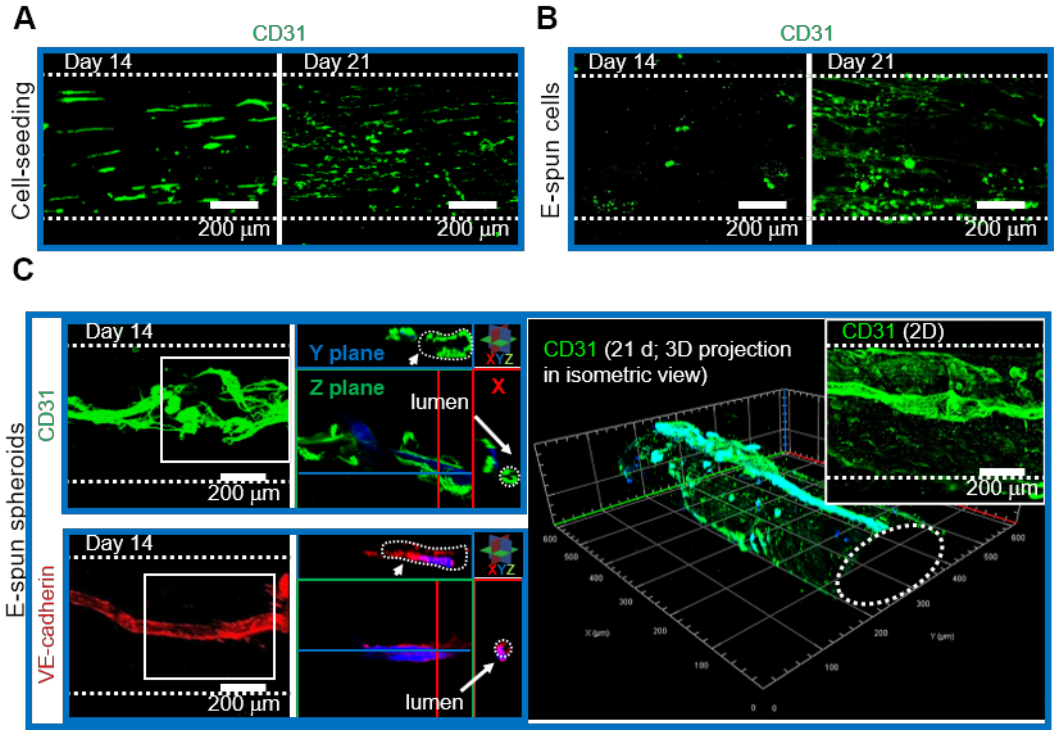

Figure S3. Fluorescence images of CD31 for (A) cell-seeded HUVECs and (B) cell-electrospun HUVECs at the culture-periods, 14 and 21 d. (C) Fluorescence images of CD31 (green) and VE-cadherin (red) of the electrospun HUVEC-spheroids at 14 and 21 d.

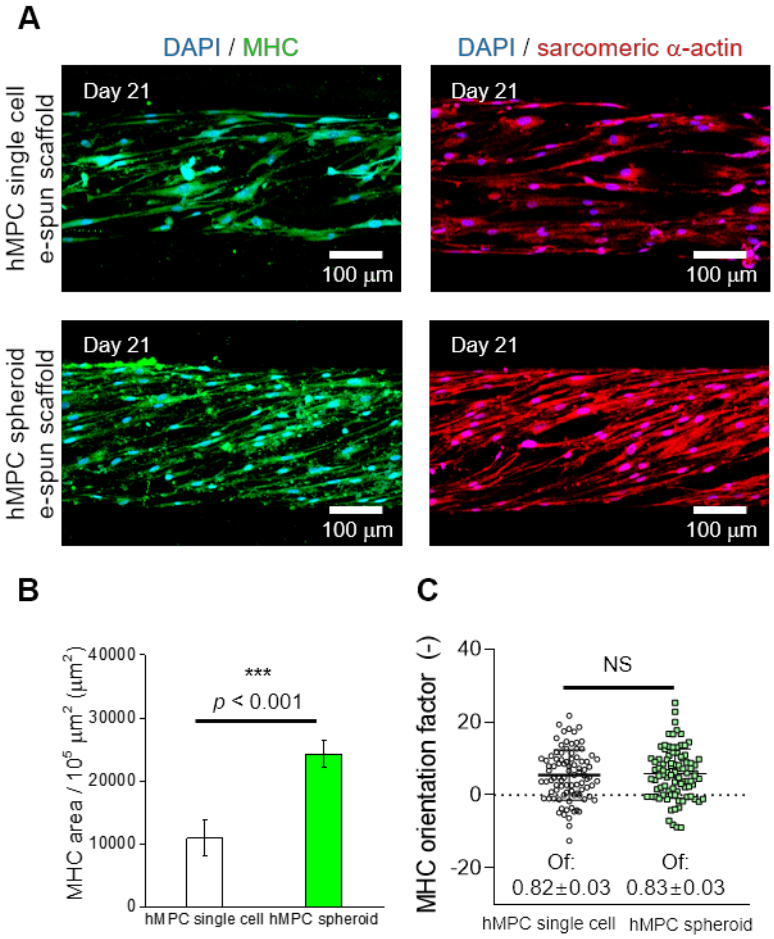

Figure S4. (A) Fluorescence images of MHC and sarcomeric α-actin for electrospun hMPC single cells and spheroids at 21 d. Analysis of MHCs with respect to (B) area and (C) orientation factor.