

Supplementary information for

**Engineering interconnected 3D vascular networks in hydrogels
using molded sodium alginate lattice as the sacrificial templates**

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This file includes:

Supplementary Fig.S1

Other Supporting Online Material for this manuscript includes the following:

Supplementary Movie 1

Supplementary Movie 2

Supplementary Movie 3

Supplementary Movie 4

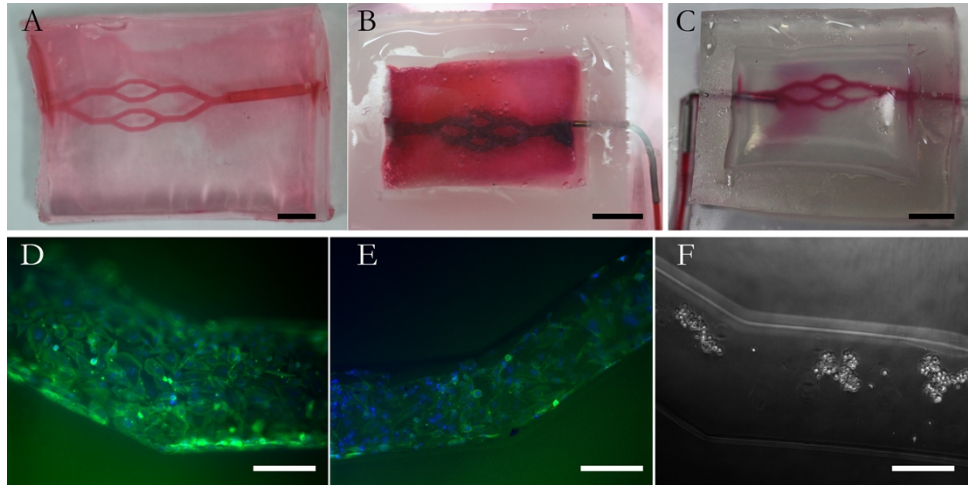


Fig.S1 Microfluidic channels in different matrix and cell cultured in channels.(A-C) Pictures of microfluidic channels in gelatin(A);collagen(B)and agarose(C); Fluorescence images of HUVECs cultured on the channels lining of gelatin(D);collagen(E) and agarose(F). Alexa Fluor 488 phalloidin (green), DAPI (blue). Scale bar: 2.0 mm(A-C); 200 μm (D-F);

Supplementary Movie 1. The process of microfluidic networks filling with red dye.

Supplementary Movie 2. The flow of Rhodamine-labelled microspheres solution with the flow rate of $200\mu\text{L}\cdot\text{h}^{-1}$ in monolayered microfluidic networks.

Supplementary Movie 3. The flow of Rhodamine-labelled microspheres solution with the flow rate of $200\mu\text{L}\cdot\text{h}^{-1}$ in multilayered 3D microfluidic networks.

Supplementary Movie 4. Different layers of HUVECs cultured in gelatin channels after 3 days under static conditions.