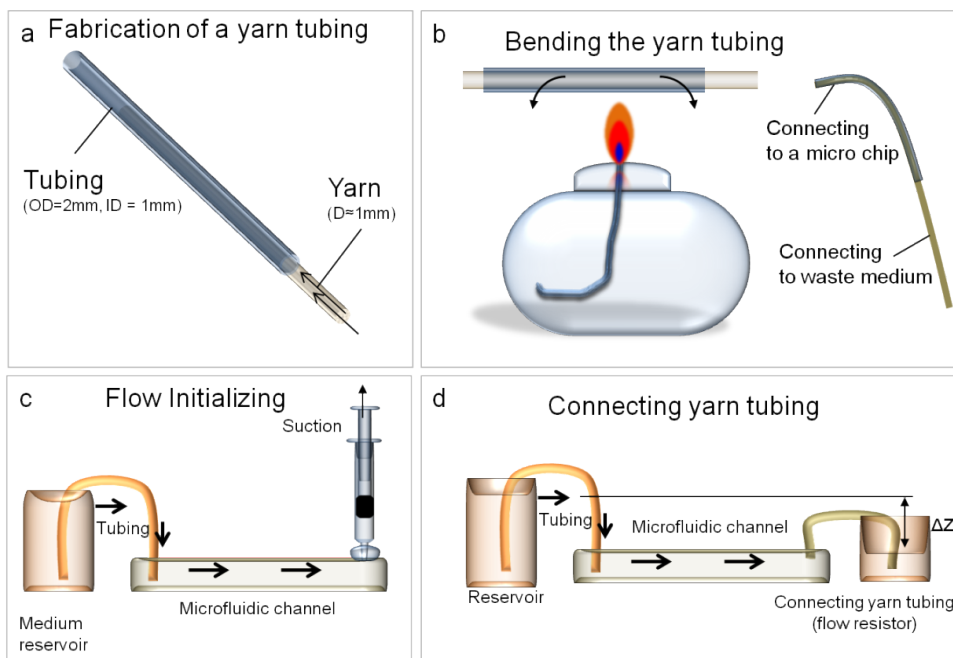
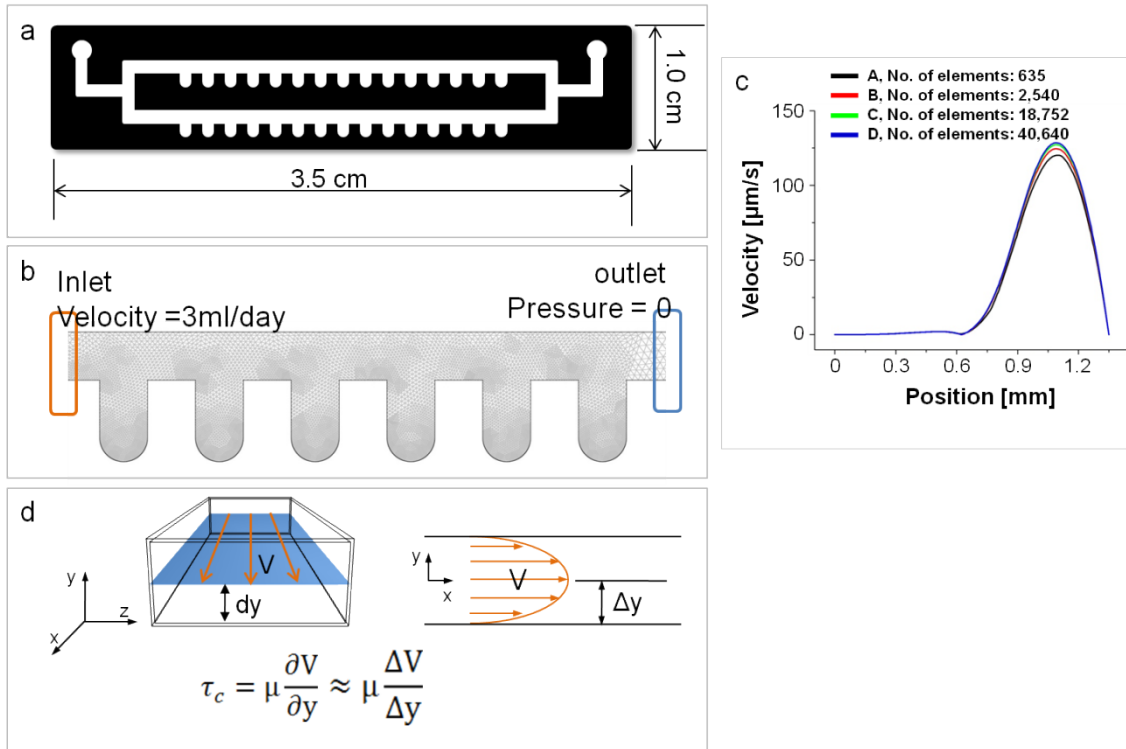


Supplementary Fig. 1
Fabrication and flow initialization through the YFR integrated into the microflow control system.



Supplementary Fig. 2

Dimensions of the microfluidic channel and CFD analysis setting.



Supplementary Fig. 3

Optical microscopy images of the endothelial cell alignment under flow or static conditions at day 5 of culturing.

