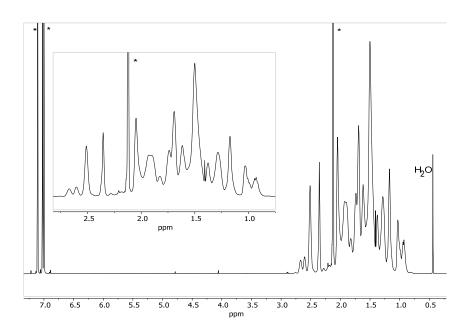
## **Supporting Information for**

In Vitro Thrombogenicity Test System with Cyclic Olefin Copolymer Substrate for Endothelial Layer Formation

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**Figure S1:** 700 MHz <sup>1</sup>H NMR spectrum of the COC-based substrate in toluene-d8 at 68 °C. \* indicates solvent peaks.

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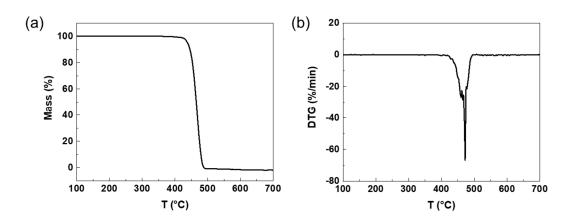
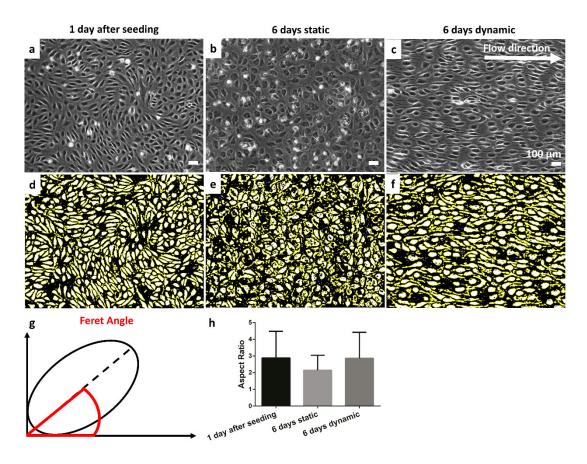


Figure S2: (a) TGA and (b) DTG curve of the COC-based substrate.



**Figure S3:** Quantification of endothelial cell (EC) alignment under static and dynamic culture conditions. EC were cultured for 1 day under static conditions (a) prior to the cultivation under quasi-static conditions (0.01 dyn  $\cdot$  cm<sup>-2</sup>, b) or laminar flow for six days (10 dyn  $\cdot$  cm<sup>-2</sup>, c). EC alignment was measured by the ImageJ software (d-f) and subsequent quantification of the Feret Angle (g). Feret Angle of statically cultured EC was greater than of EC cultivated under flow (h).