



Figure 2S. Image analysis of the angiogenesis assay. **a)** the vascular-like structures were stained with cell mask (green) and DAPI (blue) to quantify the angiogenic features, scale bar=100 μ M. **b)** an automated segmentation of vascular-like structures (white mask) to determine the tube skeleton (blue) and branching points (red dot) using Metamorph image analysis software (Molecular Device). **c)** The protocol steps includes nuclei segmentation using the DAPI channel (blue line), the segmentation of vascular-like structures (green) using the green cell mask channel (green line), and lumen (cavity) segmentation with lower density signal of green cell mask stain (red line) within the structure region.