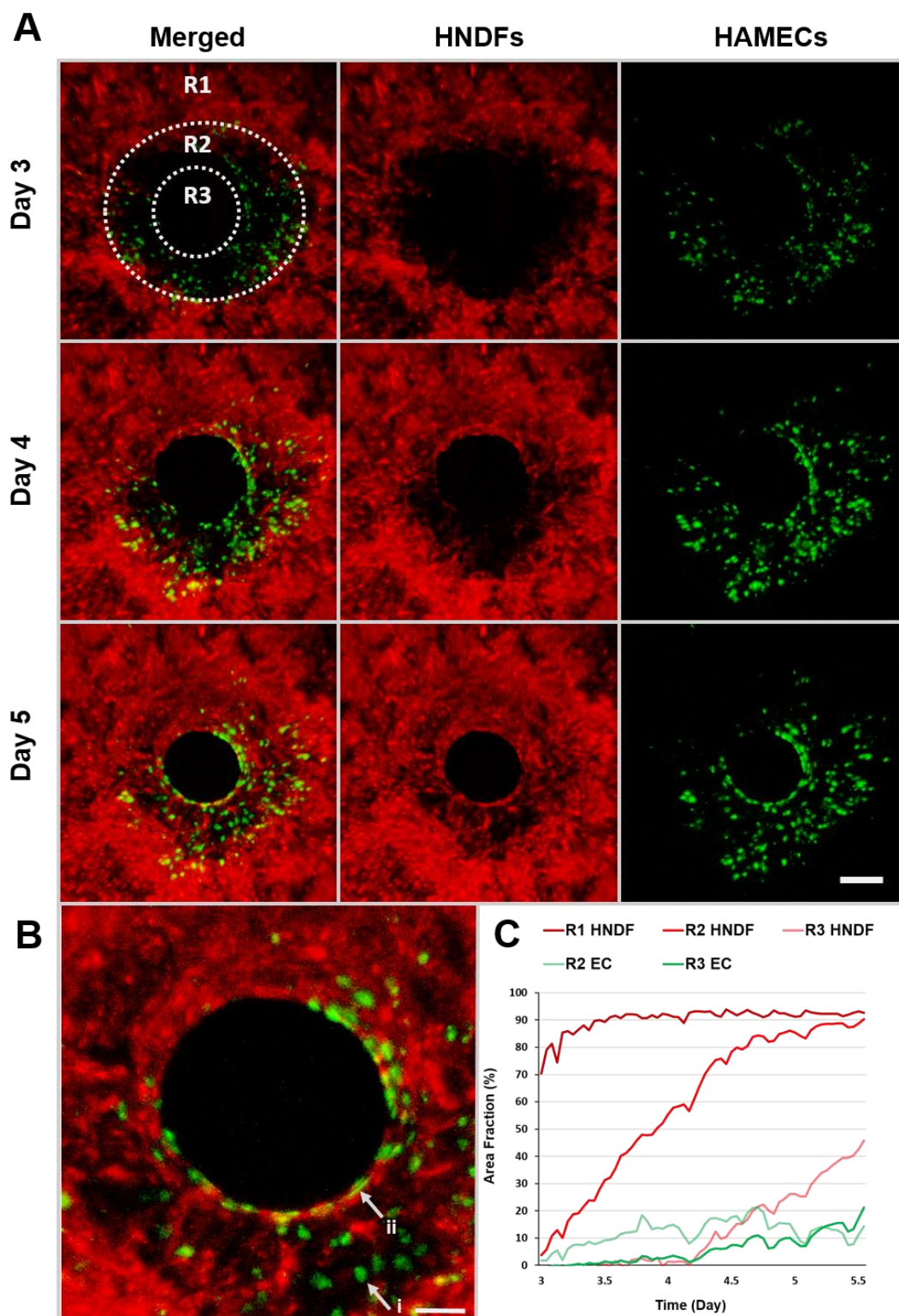
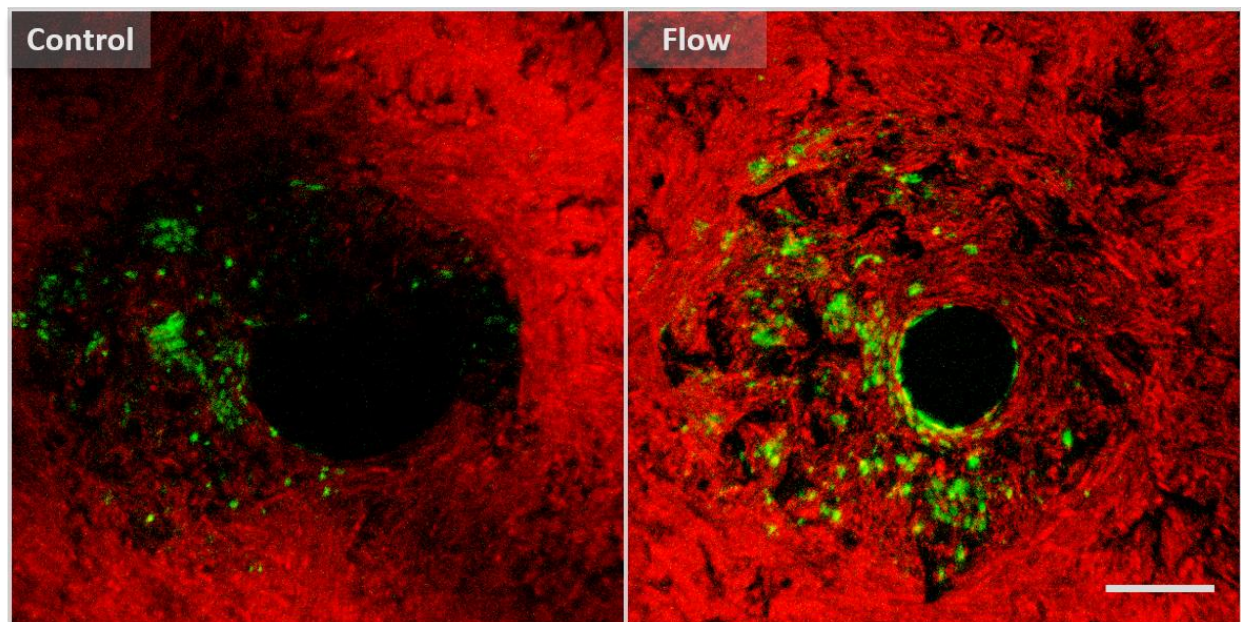
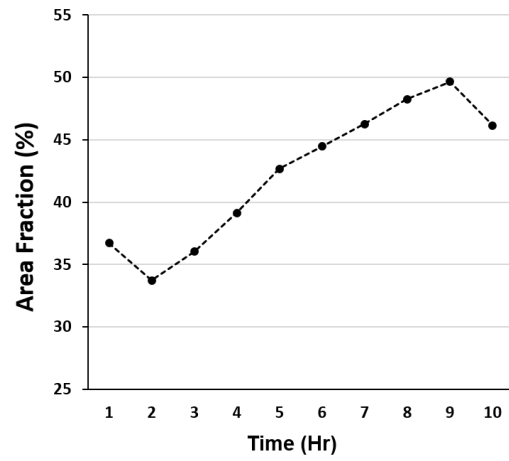




Supplementary Figure 1. (A) HAMEC (green) and HNDF (red) epifluorescence in a fused macro-channel construct after 3, 4 and 5 days of culture under flow conditions (scale bar - 500 μ m). In the upper left image, R1 refer to the outer scaffold area, R2 to the inner scaffold area and R3 to the inner hole. (B) Zoom into a macro-channel after 5 days of culture under flow conditions (scale bar - 200 μ m). Arrows are pointing on rounded (i) and disc shape (ii) EC morphology. (C) HAMEC (green) and HNDF (red) epifluorescence area fraction in R1, R2 and R3 areas within cultivation time under flow condition.



Supplementary Figure 2. HAMEC (green) and HNDF (red) epifluorescence in fused macro-channel constructs after 7 days of cultured under flow (0.1ml/min) and bypassed (control) conditions (scale bar - 500 μ m).



Supplementary Figure 3. HAMEC (green) epifluorescence area fraction measured in the lumen of a TEVG construct cultured under flow of 0.1ml/min.