

## Supplementary Figure 1: Schematic of occlusive thrombosis microfluidic device. Not to scale

The star  $(\nwarrow)$  marks the location of collagen  $\pm$  tissue factor

Flow rates of citrated blood and coagulation buffer are such that (a) they mix in a ratio of 9:1 blood:buffer, (b) initial shear rate across the collagen ± tissue factor patch is 1000 s<sup>-1</sup>. As the thrombus builds in the upper arm of the bifurcation, blood flow is diverted along the lower arm, allowing occlusion to occur in the upper arm.

EDTA added downstream of the collagen ± tissue factor patch quenches downstream coagulation. The chaotic mixers are required for effective mixing of blood and EDTA.

Full details can be found in Berry J et al. (2021) Lab on a Chip 21, 4104-4117.

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