

Supplemental Table 1. Velocity Measurements per Vessel Type

	Vessel Type	n	Diameter (μm)		Velocity (mm/s)		Shear Stress (dyne/cm^2)	
			Mean \pm SD	Range	Mean \pm SD	Range	Mean \pm SD	Range
Tissue #1	Venule	3	28 \pm 7.6	22 – 37	0.54 \pm 0.09	0.44 – 0.62	1.1 \pm 0.25	0.93 – 1.4
	Arteriole	4	19 \pm 7.2	11 – 27	1.0 \pm 0.25	0.84 – 1.4	3.3 \pm 1.3	1.7 – 4.8
Tissue #2	Venule	8	14 \pm 3.2	11 – 20	0.43 \pm 0.14	0.30 – 0.71	1.8 \pm 0.83	1.0 – 3.6
	Arteriole	3	12 \pm 1.9	10 – 14	0.56 \pm 0.26	0.27 – 0.78	2.6 \pm 1.2	1.5 – 3.8
Tissue #3	Venule	8	25 \pm 9.2	12 – 37	0.67 \pm 0.28	0.23 – 0.98	1.8 \pm 1.2	0.71 – 4.4
	Arteriole	3	16 \pm 4.2	12 – 20	1.4 \pm 0.42	0.96 – 1.7	4.9 \pm 0.40	4.6 – 5.3

SUPPLEMENTAL TABLE 1. Measured velocities and calculated wall shear stresses from a subset of arterioles and venules that were downstream of the main feeding arteriole and draining venule for three mesentery tissues. Arteriole and venule identity were confirmed based on flow directionality at vessel branch points.