

Supplementary Table S1. Mesh convergence study showing percentage variation in velocity and wall shear with respect to baseline value (9500 elements). **(A)** Percent error of Velocity (measured in MCA outlet) with respect to change in number of elements. **(B)** Percent error of Wall shear (measured vessel wall) with respect to change in number of elements.

(A)

Total Number of Mesh elements	Absolute Percentage Variation of velocity
6500	0.35
10000	0.52
12000	3.15
15500	4.02
18000	4.89

(B)

Total Number of Mesh elements	Absolute Percentage Variation of Wall Stress
6500	3.70
10000	1.85
12000	0.74
15500	7.40
18000	9.07