**Table S5:** Time averaged wall shear stress (TAWSS), oscillatory shear index (OSI) and particle relative residence time (RRT) for each region of the CoW at rest (see Figure 2A). Units for TAWWS = Pa, OSI = dimensionless and RRT = 1/Pa.

	LA1			RA1			LPComA			RPComA		
Case	TAWSS	OSI	RRT	TAWSS	OSI	RRT	TAWSS	OSI	RRT	TAWSS	OSI	RRT
1	6.07	0.01	0.17	4.52	0.02	0.23	6.88	0.03	0.15	2.74	0.17	0.56
2	2.06	0.01	0.49	5.24	0.01	0.19	1.93	0.05	0.57	5.56	0.02	0.19
3	3.35	0.01	0.31	0.72	0.28	3.15	3.53	0.07	0.33	2.68	0.29	0.88
4	2.68	0.03	0.40	1.71	0.03	0.62	4.53	0.24	0.42	4.29	0.22	0.42
5	12.83	0.01	0.08	3.07	0.09	0.40	9.93	0.12	0.13	6.98	0.21	0.25
6	7.01	0.02	0.15	1.41	0.14	0.98	9.38	0.03	0.11	4.02	0.20	0.41
7	3.64	0.01	0.28	1.05	0.14	1.30	1.78	0.18	0.87	1.39	0.27	1.58
8	2.27	0.03	0.46	2.01	0.04	0.54	4.88	0.12	0.27	4.99	0.13	0.27
9	3.64	0.29	0.65	6.88	0.01	0.15	1.10	0.23	1.67	*	*	*
10	2.16	0.04	0.50	2.74	0.02	0.38	16.0	0.15	0.09	*	*	*
11	9.30	0.01	0.11	1.96	0.04	0.55	4.76	0.03	0.22	0.74	0.15	1.92
12	9.12	0.01	0.11	1.31	0.13	1.03	*	*	*	1.85	0.22	0.96
Mean	5.34	0.04	0.31	2.72	0.08	0.79	5.88	0.11	0.44	3.53	0.19	0.74
SD	3.52	0.08	0.19	1.90	0.08	0.82	4.44	0.08	0.47	1.99	0.08	0.60

LA1=left anterior cerebral artery segment 1, RA1= right anterior cerebral artery segment 1, LPComA=left posterior communicating artery, RPComA=right posterior communicating artery, TAWSS=Calculated time averaged wall shear stress, OSI=oscillatory shear index and RRT=relative residence time.

<sup>\*</sup> Missing right posterior communicating artery in Cases 9 and 10 and missing left posterior communicating artery in case 12.