

**On-line Table 1: Comparison of peak velocity and volume flow rates in the major cerebral arteries between patients with ICAD and healthy volunteers**

Cerebral Arteries	Peak Velocity (m/s)			Volume Flow Rate (mL/s)		
	Patients with ICAD (n = 22)	Volunteers (n = 10)	P Value	Patients with ICAD (n = 22)	Volunteers (n = 10)	P Value
Left ICA	0.45 ± 0.11	0.48 ± 0.07	.4463	2.94 ± 1.10	3.79 ± 0.57	.0201 <sup>a</sup>
Right ICA	0.62 ± 0.15	0.51 ± 0.09	.046 <sup>a</sup>	4.48 ± 1.17	3.94 ± 0.58	.2550
Left ACA	0.48 ± 0.17	0.47 ± 0.10	.6320	1.44 ± 0.82	1.37 ± 0.51	.9134
Right ACA	0.45 ± 0.11	0.47 ± 0.07	.5864	1.67 ± 1.02	1.39 ± 0.56	.6477
Left MCA	0.45 ± 0.11	0.66 ± 0.12	.0005 <sup>b</sup>	1.64 ± 0.64	2.73 ± 0.65	.0005 <sup>b</sup>
Right MCA	0.62 ± 0.18	0.63 ± 0.08	.6547	2.98 ± 1.03	2.76 ± 0.68	.6256
Left PCA	0.42 ± 0.20	0.45 ± 0.07	.2304	1.65 ± 1.09	1.40 ± 0.54	.7297
Right PCA	0.39 ± 0.13	0.44 ± 0.07	.1082	1.23 ± 0.63	1.41 ± 0.57	.4279
BA	0.50 ± 0.21	0.54 ± 0.18	.6572	2.77 ± 1.67	2.50 ± 0.94	.8327

<sup>a</sup> Statistical significance between patients with ICAD and healthy volunteers with a P value < .05 (Mann-Whitney U test).

<sup>b</sup> Statistical significance between patients with ICAD and healthy volunteers with a P value < .01 (Mann-Whitney U test).

**On-line Table 2: Comparison of peak velocity and volume flow rates in the major cerebral arteries between patients with ICAD with ICA stenosis and healthy volunteers**

Cerebral Arteries	Peak Velocity (m/s)			Volume Flow Rate (mL/s)		
	Patients with ICAD with ICA Stenosis (n = 7)	Volunteers (n = 10)	P Value	Patients with ICAD with ICA Stenosis (n = 7)	Volunteers (n = 10)	P Value
Affected-side ICA	0.37 ± 0.10	0.48 ± 0.07	.0575	2.22 ± 1.02	3.79 ± 0.57	.0048 <sup>a</sup>
Contralateral ICA	0.67 ± 0.14	0.51 ± 0.09	.0248 <sup>b</sup>	5.68 ± 1.04	3.94 ± 0.58	.0031 <sup>a</sup>
Affected-side ACA	0.42 ± 0.10	0.47 ± 0.10	.1855	0.83 ± 0.45	1.37 ± 0.51	.0719
Contralateral ACA	0.48 ± 0.14	0.47 ± 0.07	.9157	2.25 ± 1.42	1.39 ± 0.56	.1858
Affected-side MCA	0.48 ± 0.11	0.66 ± 0.12	.0128 <sup>b</sup>	1.76 ± 0.79	2.73 ± 0.65	.0318 <sup>b</sup>
Contralateral MCA	0.69 ± 0.16	0.63 ± 0.08	.6605	3.25 ± 0.82	2.76 ± 0.68	.1613
Affected-side PCA	0.54 ± 0.27	0.45 ± 0.07	.6605	2.34 ± 1.41	1.40 ± 0.54	.1571
Contralateral PCA	0.44 ± 0.14	0.44 ± 0.07	.6256	1.52 ± 0.79	1.41 ± 0.57	.7396
BA	0.67 ± 0.24	0.54 ± 0.18	.2225	3.95 ± 1.91	2.50 ± 0.94	.0878

<sup>a</sup> Statistical significance between patients with ICAD with ICA stenosis and healthy volunteers with P < .01 (Mann-Whitney U test).

<sup>b</sup> Statistical significance between patients with ICAD with ICA stenosis and healthy volunteers with P < .05 (Mann-Whitney U test).

**On-line Table 3: Comparison of peak velocity and volume flow rates in the major cerebral arteries between patients with ICAD with MCA stenosis and healthy volunteers**

Cerebral Arteries	Peak Velocity (m/s)			Volume Flow Rate (mL/s)		
	Patients with ICAD with MCA Stenosis (n = 9)	Volunteers (n = 10)	P Value	Patients with ICAD with MCA Stenosis (n = 9)	Volunteers (n = 10)	P Value
Affected-side ICA	0.45 ± 0.09	0.48 ± 0.07	.6771	3.01 ± 0.93	3.79 ± 0.57	.0284 <sup>a</sup>
Contralateral ICA	0.57 ± 0.10	0.51 ± 0.09	.1809	4.43 ± 0.89	3.94 ± 0.58	.2230
Affected-side ACA	0.55 ± 0.19	0.47 ± 0.10	.6759	1.80 ± 0.91	1.37 ± 0.51	.3702
Contralateral ACA	0.47 ± 0.09	0.47 ± 0.07	.9092	1.38 ± 0.55	1.39 ± 0.56	.9394
Affected-side MCA	0.44 ± 0.13	0.66 ± 0.12	.0037 <sup>b</sup>	1.38 ± 0.42	2.73 ± 0.65	.0003 <sup>b</sup>
Contralateral MCA	0.69 ± 0.18	0.63 ± 0.08	.3979	3.31 ± 1.06	2.76 ± 0.68	.2512
Affected-side PCA	0.43 ± 0.14	0.45 ± 0.07	.7513	1.80 ± 0.99	1.40 ± 0.54	.3494
Contralateral PCA	0.43 ± 0.14	0.44 ± 0.07	.6985	1.35 ± 0.72	1.41 ± 0.57	.9159
BA	0.48 ± 0.17	0.54 ± 0.18	.5731	2.97 ± 1.69	2.50 ± 0.94	.5731

<sup>a</sup> Statistical significance between patients with ICAD with MCA stenosis and healthy volunteers with P < .05 (Mann-Whitney U test).

<sup>b</sup> Statistical significance between patients with ICAD with MCA stenosis and healthy volunteers with P < .01 (Mann-Whitney U test).

**On-line Table 4: Comparison of peak velocity and volume flow rates in the major cerebral arteries between patients with ICAD with BA stenosis and healthy volunteers**

Cerebral Arteries	Peak Velocity (m/s)			Volume Flow Rate (mL/s)		
	Patients with ICAD with BA Stenosis (n = 6)	Volunteers (n = 10)	P Value	Patients with ICAD with BA Stenosis (n = 6)	Volunteers (n = 10)	P Value
Left ICA	0.53 ± 0.10	0.48 ± 0.07	.4795	3.45 ± 1.16	3.79 ± 0.57	.5876
Right ICA	0.68 ± 0.21	0.51 ± 0.09	.0652	3.59 ± 0.76	3.94 ± 0.58	.3676
Left ACA	0.39 ± 0.08	0.47 ± 0.10	.1945	1.25 ± 0.55	1.37 ± 0.51	.8639
Right ACA	0.41 ± 0.12	0.47 ± 0.07	.2721	1.45 ± 0.83	1.39 ± 0.56	.8639
Left MCA	0.47 ± 0.07	0.66 ± 0.12	.0079 <sup>a</sup>	1.94 ± 0.53	2.73 ± 0.65	.0075 <sup>a</sup>
Right MCA	0.47 ± 0.10	0.63 ± 0.08	.0092 <sup>a</sup>	1.98 ± 0.48	2.76 ± 0.68	.0420 <sup>b</sup>
Left PCA	0.29 ± 0.05	0.45 ± 0.07	.0017 <sup>a</sup>	0.77 ± 0.32	1.40 ± 0.54	.0420 <sup>b</sup>
Right PCA	0.29 ± 0.06	0.44 ± 0.07	.0034 <sup>a</sup>	0.78 ± 0.29	1.41 ± 0.57	.0160 <sup>b</sup>
BA	0.36 ± 0.14	0.54 ± 0.18	.0500	1.17 ± 0.69	2.50 ± 0.94	.0127 <sup>b</sup>

<sup>a</sup> Statistical significance between patients with ICAD with BA stenosis and healthy volunteers with P < .01 (Mann-Whitney U test).

<sup>b</sup> Statistical significance between patients with ICAD with BA stenosis and healthy volunteers with P < .05 (Mann-Whitney U test).