

Table 1 Basic demographics of volunteers recruited into the study

Total number of volunteers	63
Mean age \pm SD	38.2 \pm 14.1
Gender	36 female, 27 male
Median height	170 (162.6 – 175) cm
Median weight	70 (61.5 – 82.5) kg
Median BMI	24.4 (22.0 – 26.9)
Median biceps circumference right	28.7 (25.6 – 31) cm
Median biceps circumference left	29 (25.7 – 30.5)
Median elbow circumference right	26 (25 – 28) cm
Median elbow circumference left	25.9 (24.5 – 27.5)

Table 2 - Median diameters (1st - 3rd quartile) of right (R) & left (L) arm vessels of male & female volunteers. Significance obtained using two sample t-test for difference in vessel diameter between male & female.

	All	All male	All female	Significance p
Brachial vein R	2.8 (2.3 – 3.4)	3.3 (2.6 – 3.7)	2.7 (2.0 – 3.2)	0.107
Basilic vein R	4.6 (3.9 – 5.7)	5.3 (4.3 – 6.3)	4.4 (3.7 – 5.2)	0.00910
Cephalic vein R	3.1 (2.5 – 4.3)	3.5 (2.8 – 4.3)	2.9 (2.3 – 4.0)	0.114
Brachial artery R	3.9 (3.2 – 4.5)	4.5 (4.0 – 5.1)	3.5 (3.0 – 3.9)	1.11x10 ⁻⁵
Brachial vein L	2.8 (2.2 – 3.5)	3.1 (2.5 – 3.9)	2.6 (2.2 – 3.3)	0.106
Basilic vein L	4.5 (3.8 – 5.2)	4.6 (4.2 – 6.1)	4.3 (3.6 – 4.9)	0.0159
Cephalic vein L	3.0 (2.2 – 4.0)	3.4 (2.8 – 4.4)	2.9 (2.0 – 3.7)	0.166
Brachial artery L	3.6 (3.0 – 4.3)	4.1 (3.5 – 4.9)	3.3 (2.9 – 3.8)	8.28x10 ⁻⁵

Table 3 - Effect of tourniquet application (n=15) on median diameter of right (R) & left (L) arm vessels. Significance obtained using Wilcoxon signed-rank test for vessel diameter difference with tourniquet applied.

	Baseline	Tourniquet applied	Median % difference	Significance p
Brachial vein R	3.0 mm	3.4 mm	+ 13.3%	0.262
Basilic vein R	4.5 mm	4.9 mm	+8.9%	0.329
Cephalic vein R	3.2 mm	4.4 mm	+37.5%	0.124
Brachial artery R	4.2 mm	4.1 mm	-11.9%	0.868
Brachial vein L	3.2 mm	3.2 mm	0%	0.350
Basilic vein L	5.0 mm	5.4 mm	+8%	0.221
Cephalic vein L	3.0 mm	3.7 mm	+23.3%	0.868
Brachial artery L	3.7 mm	3.5 mm	-5.4%	0.868