

1 Cerebral blood flow assessed with phase-contrast MRI during blood pressure changes with noradrenaline
 2 and labetalol: a trial in healthy volunteers – Supplementary material

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	Baseline	Noradrenaline	Δ of mean (95% CI)	p	Labetalol	Δ of mean (95% CI)	p
Systolic blood pressure, mmHg	130 (10)	154 (12)	24 (20-27)	<0.001	118 (12)	-12 (-15-[-9])	<0.001
Diastolic blood pressure, mmHg	64 (8)	78 (7)	14 (13-16)	<0.001	57 (7)	-7 (-9-[-5])	<0.001
Mean arterial pressure, mmHg	85 (8)	105 (8)	20 (18-22)	<0.001	76 (8)	-9 (-12-[-7])	<0.001
Pulse pressure, mmHg	66 (8)	76 (8)	9 (7-12)	<0.001	62 (8)	-5 (-7-[-2])	0.001
Heart rate, BPM	66 (12)	53 (9)	-12 (-17-[-8])	<0.001	72 (9)	7 (2-11)	0.009

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5 **Supplementary table 1** Hemodynamic characteristics; mean (SD).

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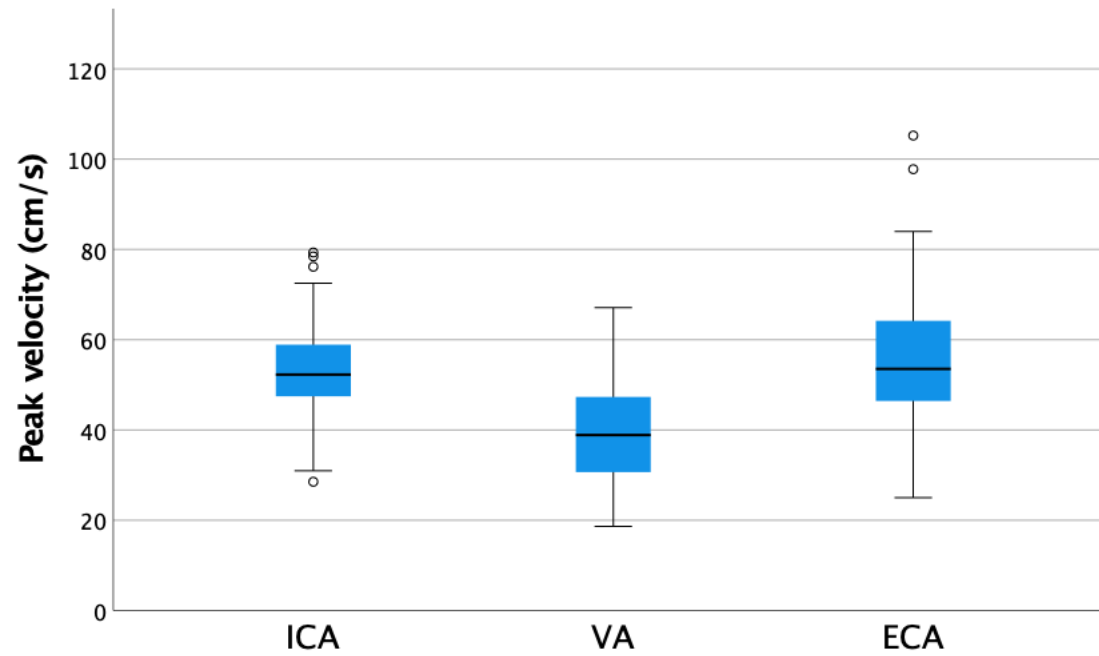
	Baseline	Noradrenaline	Δ of mean (95% CI)	p	Labetalol	Δ of mean (95% CI)	p
Cerebral blood flow, ml min ⁻¹	795 (148)	687 (129)	-104 (-136-[-72])	<0.001	799 (124)	5 (-19-29)	0.67
Cerebral blood flow, ml min 100g ⁻¹	67 (12)	58 (12)	-9 (-11-[-6])	<0.001	68 (10)	0.4 (-2-2)	0.68
External carotid arteries, ml min ⁻¹	201 (69)	172 (51)	-28 (-48-[-5])	0.009	288 (105)	88 (49-126)	<0.001
Cardiac output, ml min ⁻¹	6010 (1105)	5313 (956)	-698 (-1192-[-204])	0.008	6595 (847)	584 (105-1063)	0.02
Stroke volume, ml	93 (14)	101 (17)	8 (3-13)	0.002	93 (16)	0 (-6-6)	0.998
Descending aorta, ml min ⁻¹	4122 (858)	3226 (576)	-895 (-1285-[-505])	<0.001	4479 (667)	357 (11-703)	0.04
Systemic vascular resistance, dyn s cm ⁻⁵	1093 (216)	1542 (281)	449 (339-567)	<0.001	866 (116)	-228 (-308-[-147])	<0.001
Cerebrovascular resistance, mmHg ml min 100g ⁻¹	1.14 (0.25)	1.67 (0.35)	0.52 (0.44-0.61)	<0.001	0.99 (0.2)	-0.15 (-0.2-[-0.1])	<0.001

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2 **Supplementary table 2** Effects of noradrenaline and labetalol on cerebral and peripheral blood flow; mean (SD).

1 Supplementary Figure 1

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4 **Peak velocities.** Box and whiskers plots describing peak velocities in ICA (n=107), VA (n=108) and ECA (n=90). Lines in boxes = median; bounds
5 of boxes = 25th and 75th percentiles; whiskers = 10th and 90th percentiles. Abbreviations: ICA = internal carotid artery; VA = vertebral artery; ECA
6 = external carotid artery.