

Online Appendix Table 1: Correlations with Autonomic Testing

	Phase 2 Valsalva BP	Valsalva Ratio	Heart Rate Variability	Phase 4 Valsalva BP	Fall in SBP on Tilt	Fall in DBP on Tilt
Autonomic Tests						
Phase 2 Valsalva BP	1	0.20	0.36	0.50	-0.27	-0.10
Valsalva Ratio	0.20	1	0.64	0.19	-0.30	-0.05
Heart Rate Variability	0.36	0.64	1	0.24	-0.10	-0.01
Phase 4 Valsalva BP	0.50	0.19	0.24	1	-0.14	-0.01
Fall in SBP on Tilt	-0.27	-0.30	-0.10	-0.14	1	0.44
Fall in DBP on Tilt	-0.10	-0.05	-0.01	-0.01	0.44	1
Nerve Conductions						
Peroneal Amplitude	0.38	0.41	0.39	0.29	-0.29	-0.08
Peroneal Velocity	0.19	0.32	0.28	0.20	-0.36	-0.04
Sural Amplitude	0.16	0.52	0.42	0.19	0.40	-0.16
Sural Velocity	0.08	0.32	0.28	0.09	-0.23	-0.02
Peroneal Distal Latency	-0.15	-0.21	-0.22	-0.11	0.04	0.02
Sensory Testing						
Monofilament Right	-0.37	-0.38	-0.30	-0.26	0.35	-0.03
Vibration Detection Toe	-0.32	-0.30	-0.36	-0.23	0.18	-0.07
Vibration Detection Hand	-0.19	-0.17	-0.20	-0.21	0.11	-0.01
Cold-Pain Foot	0.32	0.03	0.09	0.21	-0.19	0.04
Cold-Pain Hand	0.13	-0.06	-0.08	0.10	-0.11	-0.03
Cold Detection Foot	0.27	0.36	0.27	0.44	-0.30	0.03
Cold Detection Hand	-0.04	0.04	0.03	0.08	-0.03	0.01
Heat-Pain Foot	-0.21	-0.22	-0.24	-0.21	0.27	0.06
Heat-Pain Hand	-0.10	-0.07	-0.01	-0.18	0.13	0.07
Heat Detection Foot	-0.15	-0.43	-0.37	-0.24	0.29	0.06
Heat Detection Hand	-0.11	-0.34	-0.29	-0.32	0.12	-0.08
Cutaneous Blood Flow						
Direct Blood Flow Arm	0.03	0.22	0.15	0.05	-0.18	-0.12
Direct Blood Flow Leg	0.21	0.28	0.16	0.10	-0.09	-0.10
Axon Reflex Blood Flow Arm	0.01	0.01	0.03	0.11	-0.03	-0.04
Axon Reflex Blood Flow Leg	0.11	0.27	0.14	0.10	-0.11	-0.12

This table highlights the relationships within and between the different testing modalities compared to autonomic testing. The following autonomic tests are performed: The blood pressure response to phase 2 and phase 4 of the Valsalva maneuver. The heart rate Valsalva ratio, the heart rate response to deep breathing and the systolic blood pressure (SBP) and diastolic blood pressure (DBP) drop during 10 minutes of upright tilt table testing. The largest correlation in each row is shown in bold.

Online Appendix Table 2: Correlations with Nerve Conduction Studies

	Peroneal Amplitude	Peroneal Velocity	Sural Amplitude	Sural Velocity	Peroneal Distal Latency
Autonomic Tests					
Phase 2 Valsalva BP	0.38	0.19	0.16	0.08	-0.15
Valsalva Ratio	0.41	0.32	0.52	0.32	-0.21
Heart Rate Variability	0.39	0.28	0.42	0.28	-0.22
Phase 4 Valsalva BP	0.29	0.20	0.19	0.09	-0.11
Fall in SBP on Tilt	-0.29	-0.36	-0.40	-0.23	0.04
Fall in DBP on Tilt	-0.08	-0.04	-0.16	-0.02	0.02
Nerve Conductions					
Peroneal Amplitude	1	0.50	0.51	0.37	-0.45
Peroneal Velocity	0.50	1	0.48	0.48	-0.43
Sural Amplitude	0.51	0.48	1	0.73	-0.18
Sural Velocity	0.37	0.48	0.73	1	-0.19
Peroneal Distal Latency	-0.45	-0.43	-0.18	-0.19	1
Sensory Testing					
Monofilament Right	-0.41	-0.34	-0.44	-0.35	0.23
Vibration Detection Toe	-0.27	-0.25	-0.28	-0.29	0.12
Vibration Detection Hand	-0.18	-0.01	-0.16	-0.13	-0.04
Cold-Pain Foot	0.17	0.21	0.14	0.03	-0.05
Cold-Pain Hand	0.02	0.04	-0.04	-0.09	0.13
Cold Detection Foot	0.29	0.21	0.29	0.19	-0.14
Cold Detection Hand	-0.06	0.06	0.08	0.06	-0.07
Heat-Pain Foot	-0.28	-0.30	-0.32	-0.30	0.10
Heat-Pain Hand	-0.01	-0.15	0.02	0.02	0.05
Heat Detection Foot	-0.38	-0.38	-0.42	-0.35	0.21
Heat Detection Hand	-0.30	-0.30	-0.37	-0.21	0.18
Cutaneous Blood Flow					
Direct Blood Flow Arm	0.13	0.17	0.33	0.23	-0.10
Direct Blood Flow Leg	0.23	0.17	0.19	0.12	-0.02
Axon Reflex Blood Flow Arm	0.01	0.09	0.11	0.15	-0.11
Axon Reflex Blood Flow Leg	0.25	0.19	0.24	0.17	-0.09

This table highlights the relationships within and between the different testing modalities compared to nerve conduction study parameters. The largest correlation in each row is shown in bold.

Online Appendix Table 3: Correlations with Sensory Testing

	MFR	VT	VH	CPF	CPH	CF	CH	HPF	HPH	HF	HH
Autonomic Tests											
Phase 2 Valsalva BP	-0.37	-0.32	-0.19	0.32	0.13	0.27	-0.4	-0.21	-0.10	-0.15	-0.11
Valsalva Ratio	-0.38	-0.30	-0.17	0.03	-0.06	0.36	0.04	-0.21	-0.07	-0.43	-0.34
Heart Rate Variability	-0.30	-0.36	-0.20	0.09	-0.08	0.27	0.03	-0.24	-0.01	-0.37	-0.29
Phase 4 Valsalva BP	-0.26	-0.23	-0.21	0.21	0.10	0.44	0.08	-0.21	-0.18	-0.24	-0.32
Fall in SBP on Tilt	0.35	0.18	0.11	-0.19	-0.12	-0.30	-0.3	0.27	0.13	0.29	0.12
Fall in DBP on Tilt	-0.03	-0.06	-0.01	0.04	-0.03	0.03	0.01	0.05	0.07	0.04	-0.08
Nerve Conductions											
Peroneal Amplitude	-0.41	-0.27	-0.18	0.17	0.02	0.29	-0.06	-0.28	-0.01	-0.38	-0.30
Peroneal Velocity	-0.34	-0.25	-0.01	0.21	0.04	0.21	0.06	-0.30	-0.15	-0.38	-0.30
Sural Amplitude	-0.44	-0.28	-0.16	0.14	-0.04	0.29	0.08	-0.32	0.02	-0.42	-0.37
Sural Velocity	-0.35	-0.29	-0.13	0.03	-0.09	0.19	.6	-0.30	0.02	-0.35	-0.21
Peroneal Distal Latency	0.23	0.12	-0.04	-0.05	0.13	-0.14	-0.07	0.10	0.05	0.21	0.18
Sensory Testing											
Monofilament Right	1	0.43	0.32	-0.12	-0.12	-0.41	-0.11	0.33	0.14	0.48	0.47
Vibration Detection Toe	0.43	1	0.40	-0.22	-0.19	-0.37	-0.01	0.25	0.10	0.45	0.18
Vibration Detection Hand	0.32	0.40	1	-0.09	-0.07	-0.32	0.03	0.15	0.05	0.30	0.22
Cold-Pain Foot	-0.12	-0.22	-0.09	1	0.53	0.30	0.01	-0.53	-0.56	-0.14	-0.13
Cold-Pain Hand	-0.12	-0.19	-0.07	0.53	1	0.15	0.04	-0.27	-0.59	0.01	-0.15
Cold Detection Foot	-0.41	-0.37	-0.32	0.30	0.15	1	0.29	-0.35	-0.20	-0.51	-0.55
Cold Detection Hand	-0.11	-0.01	0.03	0.01	0.04	0.29	1	-0.13	-0.09	-0.17	-0.29
Heat-Pain Foot	0.33	0.25	0.15	-0.53	-0.27	-0.35	-0.13	1	0.46	0.47	0.24
Heat-Pain Hand	0.14	0.10	0.05	-0.56	-0.59	-0.20	-0.09	0.46	1	0.12	0.29
Heat Detection Foot	0.48	0.45	0.30	-0.14	0.01	-0.51	-0.17	0.47	.012	1	.042
Heat Detection Hand	0.47	0.18	0.22	-0.13	-0.15	-0.55	-0.29	0.24	0.29	0.42	1
Cutaneous Blood Flow											
Direct Blood Flow Arm	-0.18	-0.18	-0.09	0.14	0.10	0.15	0.16	-0.10	-0.20	-0.15	-0.23
Direct Blood Flow Leg	-0.16	-0.07	-0.04	0.08	0.11	0.03	0.07	-0.20	-0.04	-0.25	-0.11
Axon Reflex Blood Flow Arm	-0.03	-0.08	-0.07	-0.07	-0.10	0.13	0.04	0.02	0.11	-0.10	-0.04
Axon Reflex Blood Flow Leg	-0.19*	-0.11	-0.09	0.09	0.04	0.10	0.04	-0.29	-0.07	-0.21	-0.14

This table highlights the relationships within and between the different testing modalities compared to sensory testing. The largest correlation in each row is shown in bold. Monofilament on the right (MLF), vibration detection at the toe (VT), vibration detection at the hand (VH), cold-pain detection at the foot (CPF), cold-pain detection at the hand (CPH), Cold detection at the foot (CF), heat-pain detection at the foot (HPF), heat-pain detection at the hand (HPH), heat detection at the foot (HF), heat detection at the hand (HH).

Online Appendix Table 4: Correlations with Cutaneous Blood Flow

	Direct Arm	Direct Leg	Indirect Arm	Indirect Leg
Autonomic Tests				
Phase 2 Valsalva BP	0.03	0.21	0.01	0.11
Valsalva Ratio	0.22	0.28	0.01	0.27
0.15	0.15	0.16	0.03	0.14
Phase 4 Valsalva BP	0.05	0.10	0.11	0.10
Fall in SBP on Tilt	-0.18	-0.09	-0.03	-0.11
Fall in DBP on Tilt	-0.12	-0.10	-0.04	-0.12
Nerve Conductions				
Peroneal Amplitude	0.13	0.23	0.01	0.25
Peroneal Velocity	0.17	0.17	0.09	0.19
Sural Amplitude	0.33	0.19	0.11	0.24
Sural Velocity	0.23	0.12	.015	0.17
Peroneal Distal Latency	-0.10	-0.03	-0.11	-0.09
Sensory Testing				
Monofilament Right	-0.18	-0.16	-0.03	-0.19
Vibration Detection Toe	-0.18	-0.06	-0.08	-0.11
Vibration Detection Hand	-0.09	-0.04	-0.07	-0.09
Cold-Pain Foot	0.14	0.08	-0.07	0.09
Cold-Pain Hand	0.10	0.11	-0.10	0.05
Cold Detection Foot	0.15	0.03	0.13	0.10
Cold Detection Hand	0.16	0.07	0.04	0.04
Heat-Pain Foot	-0.10	-0.20	0.02	-0.29
Heat-Pain Hand	-0.20	-0.04	0.11	-0.07
Heat Detection Foot	-0.15	-0.25	-0.10	-0.21
Heat Detection Hand	-0.23	-0.11	-0.04	-0.14
Cutaneous Blood Flow				
Direct Blood Flow Arm	1	0.21	0.04	0.17
Direct Blood Flow Leg	0.21	1	0.09	0.34
Axon Reflex Blood Flow Arm	0.04	0.09	1	0.12
Axon Reflex Blood Flow Leg	0.17	0.34	0.12	1

This table highlights the relationships within and between the different testing modalities compared to laser-Doppler flowmetry. The cutaneous direct (endothelial dependent) blood flow is measured at the arm and the leg. Indirect (axon reflex mediation, or endothelial independent) blood flow is measured at the arm and leg. The largest correlation in each row is shown in bold. *=P<0.05, **=P<0.01.