

Use of Valsalva Maneuver to Detect Late-Onset Delayed Orthostatic Hypotension

Short title: Valsalva Maneuver and Delayed Orthostatic Hypotension

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Figure S1

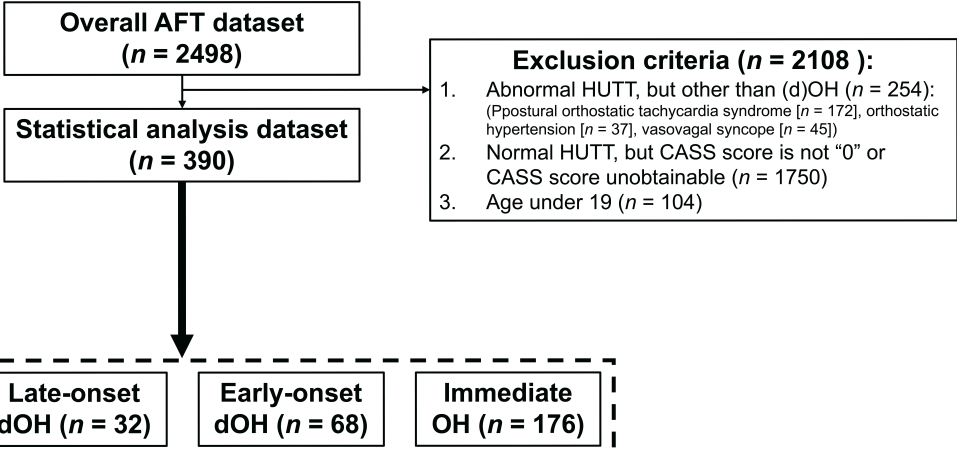
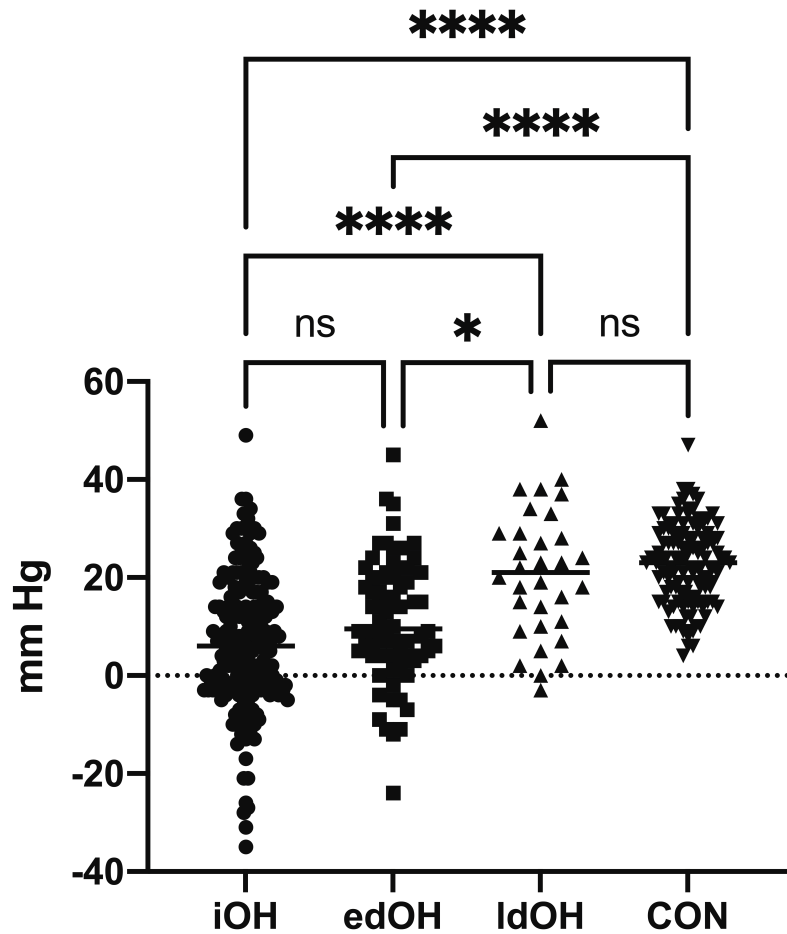


Figure S2

(A) $\Delta\text{DBP}_{\text{VM2}}$



(B) $\Delta\text{MBP}_{\text{VM2}}$

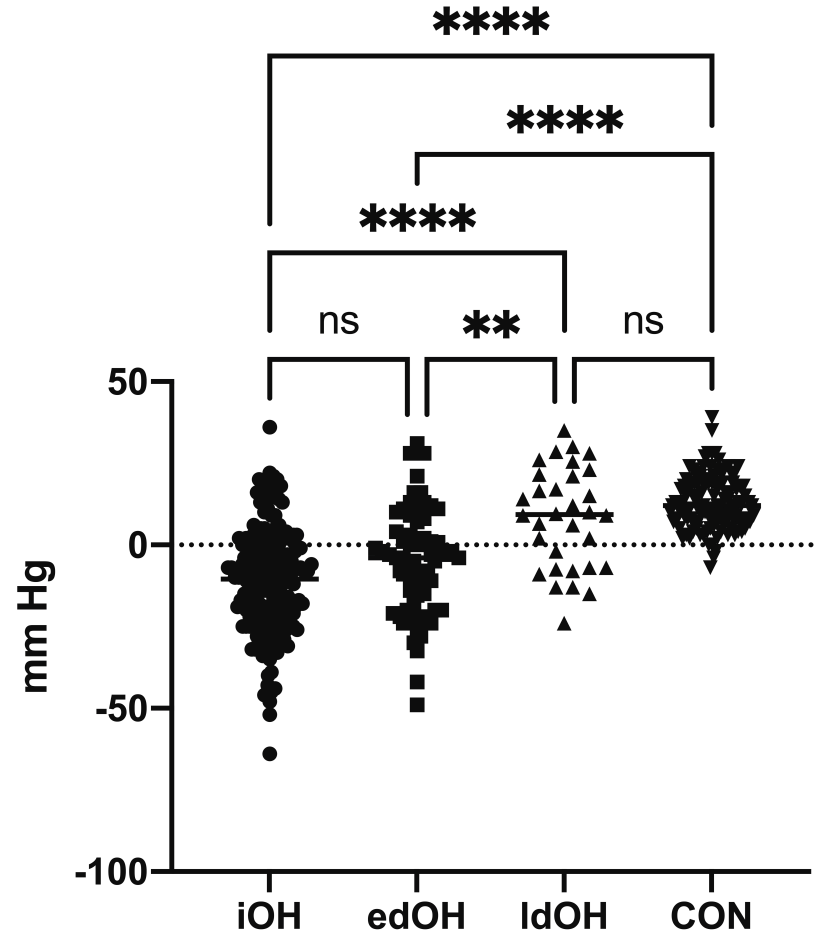
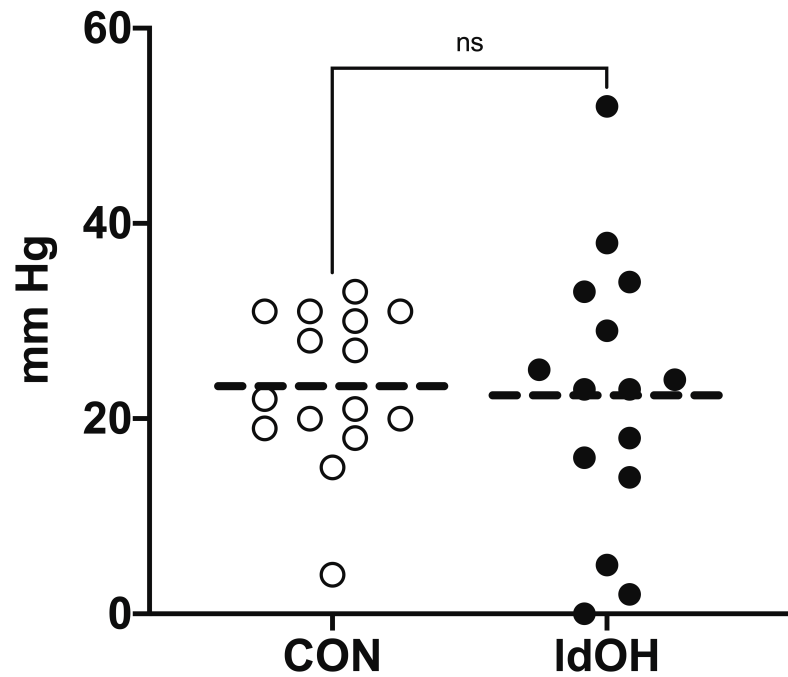


Figure S3

(A) $\Delta\text{DBP}_{\text{VM2}}$



(B) $\Delta\text{MBP}_{\text{VM2}}$

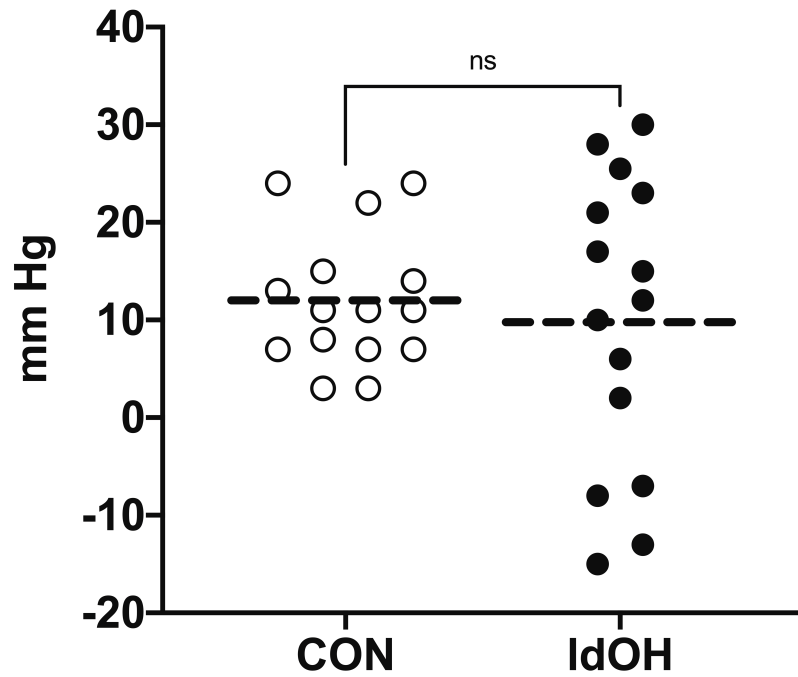
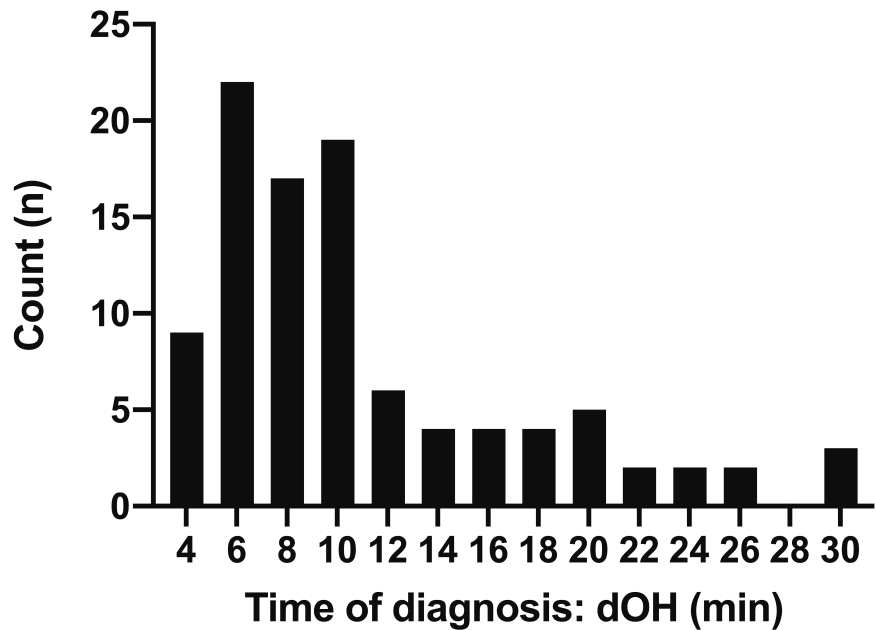


Figure S4

(A) Frequency distribution



(B) Accumulative frequency distribution

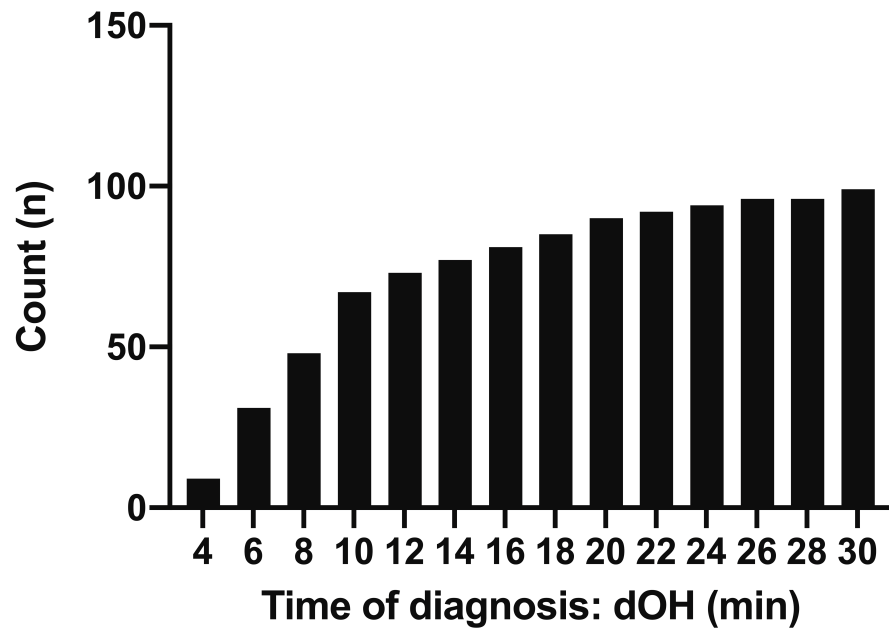
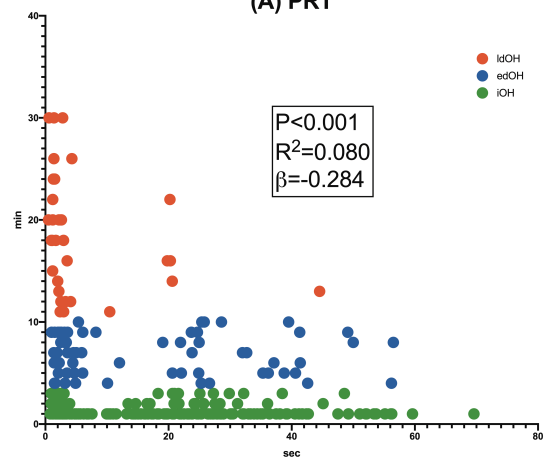
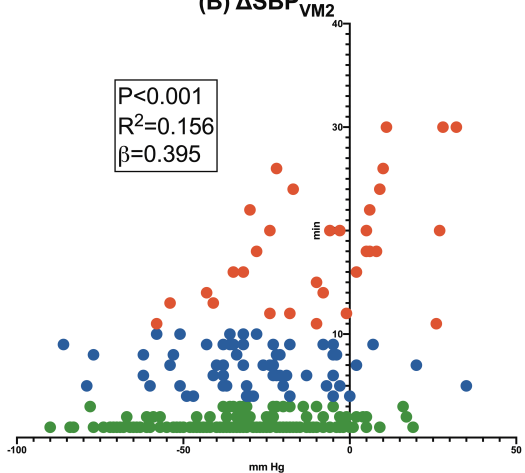


Figure S5

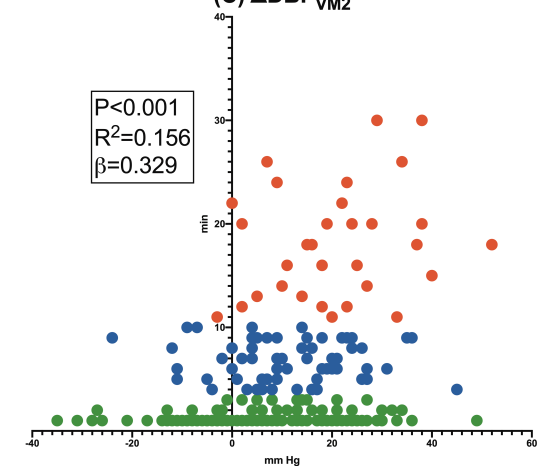
(A) PRT



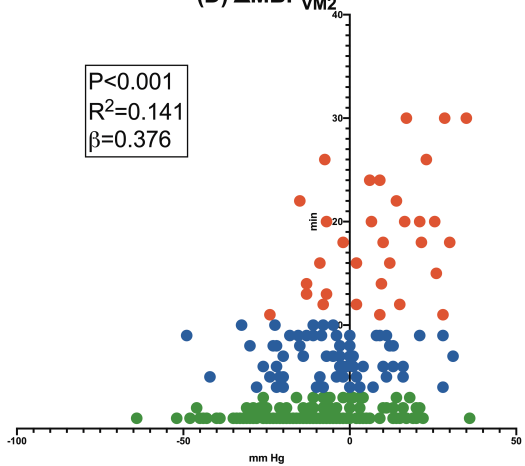
(B) ΔSBP_{VM2}



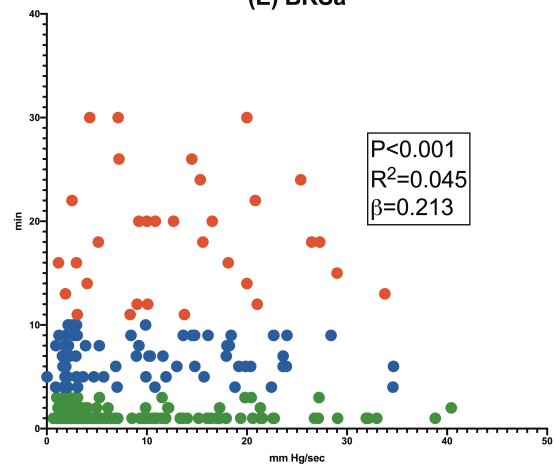
(C) ΔDBP_{VM2}



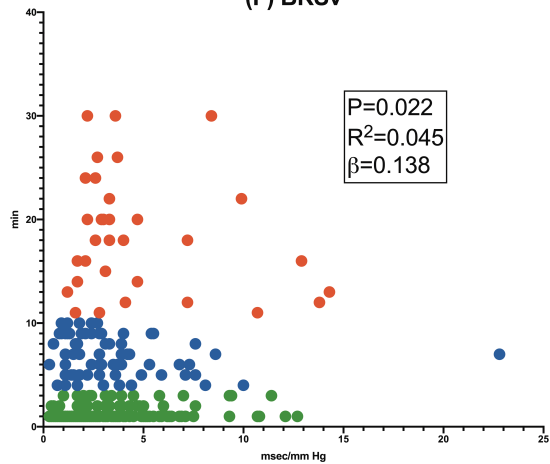
(D) ΔMBP_{VM2}



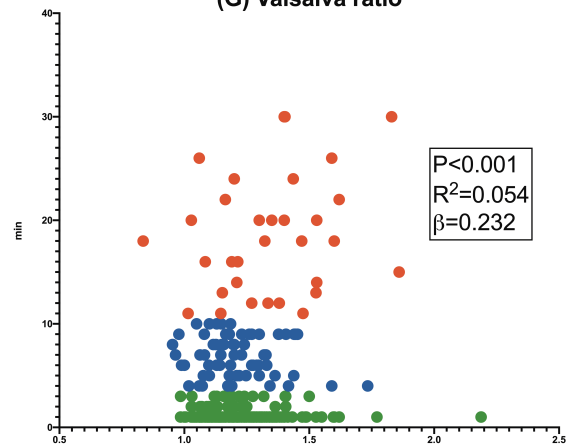
(E) BRSa



(F) BRSv



(G) Valsalva ratio



(H) ΔHR_{VM3}

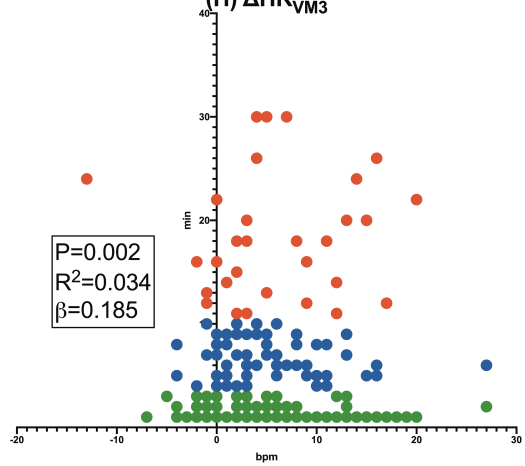


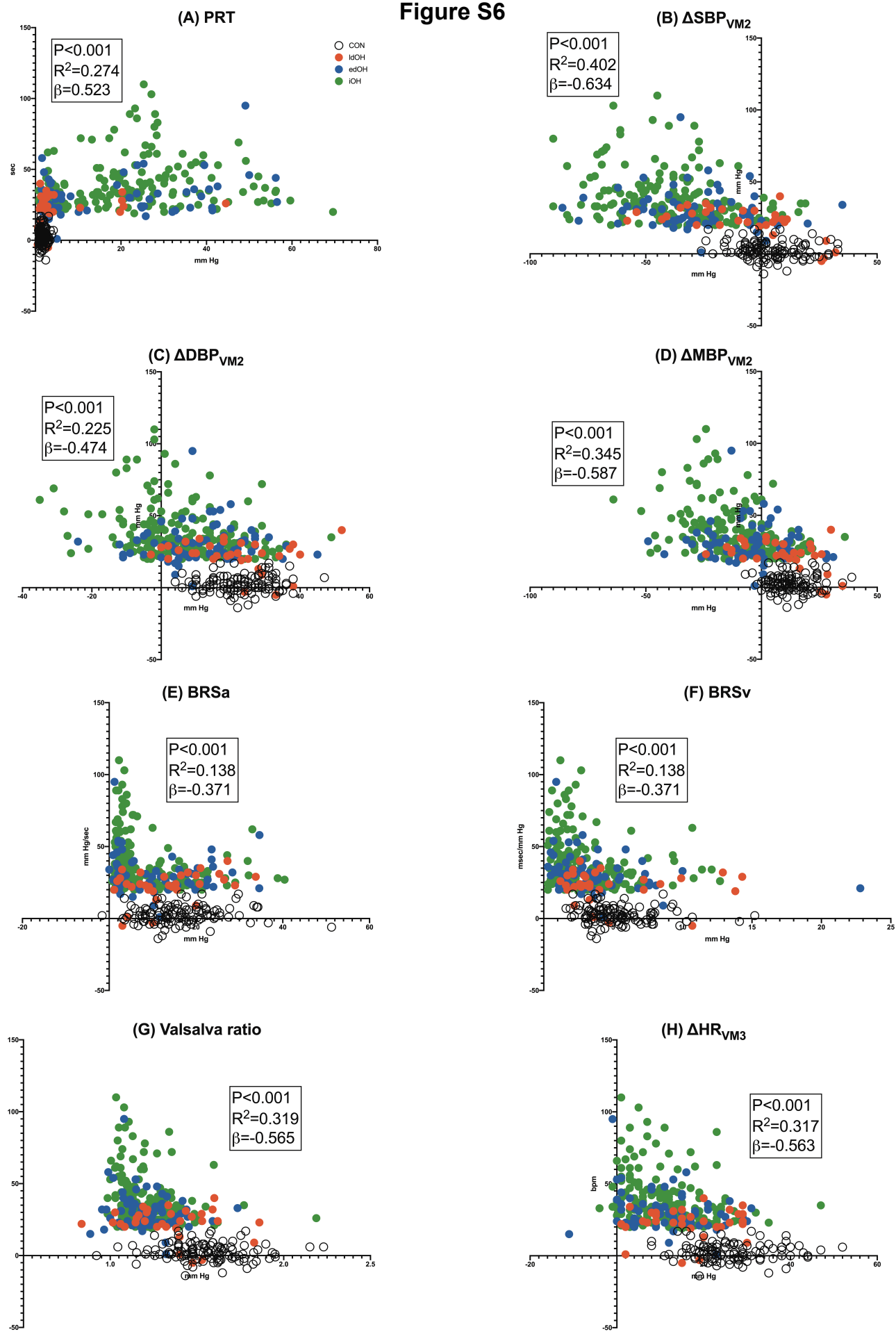
Figure S6

Figure S7

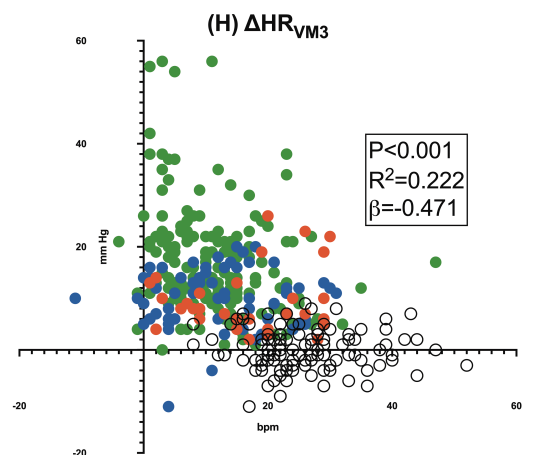
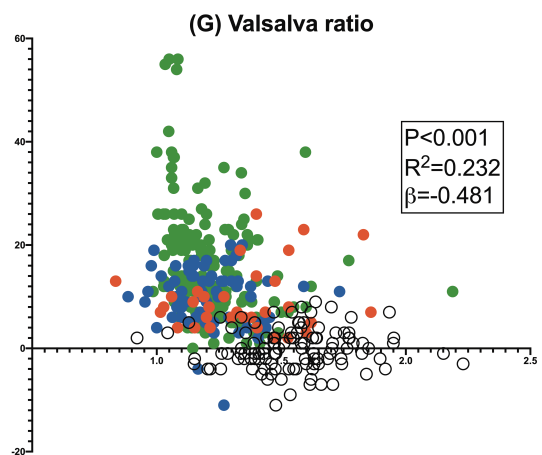
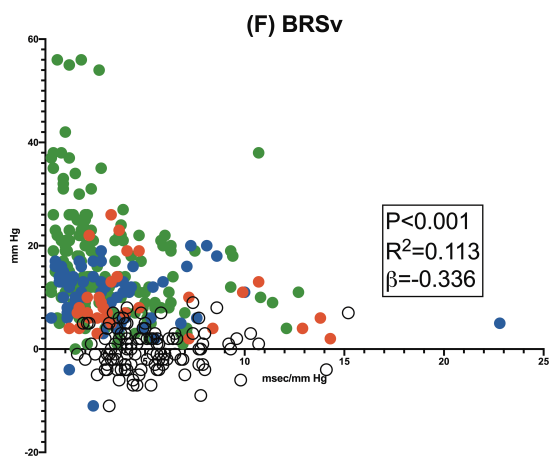
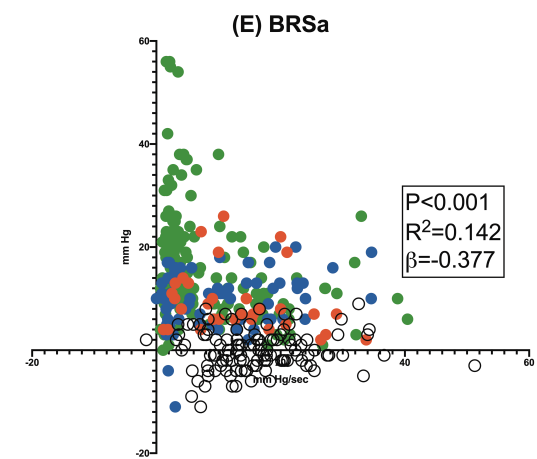
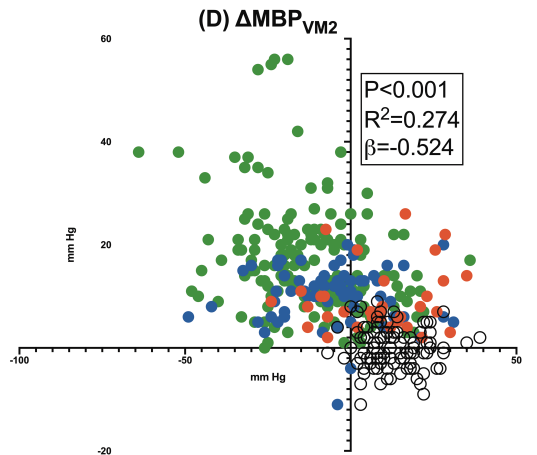
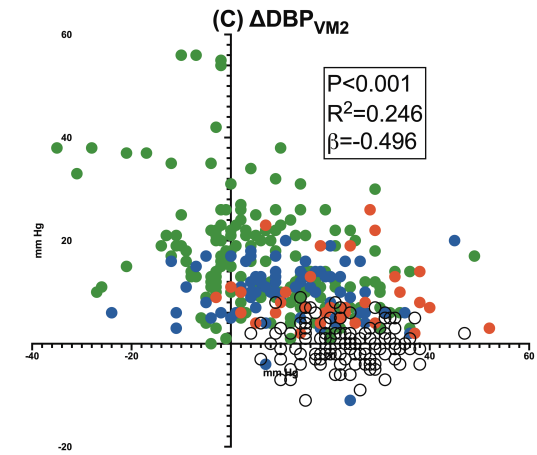
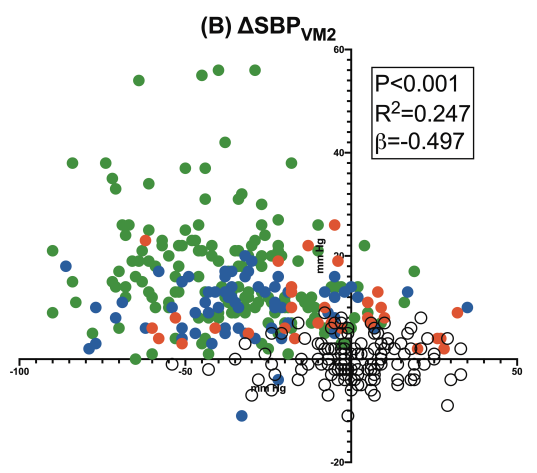
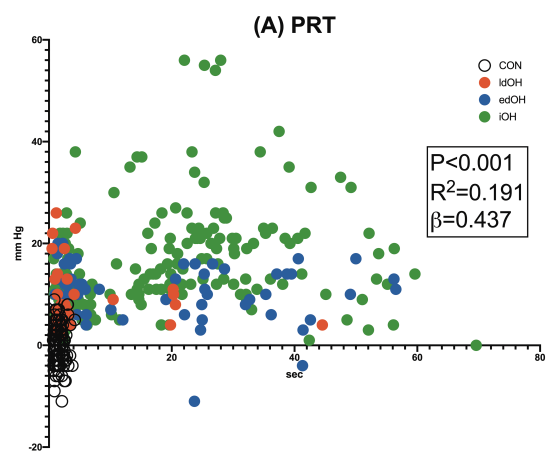


Table S1. Valsalva metrics and HUTT by groups.

	Controls (n = 114)	Late-onset dOH (onset > 10 min) (n = 32)	Early-onset dOH (onset 3-10 min) (n = 68)	Immediate OH (onset < 3 min) (n = 176)	P-value
PRT (sec)	1.7 ± 0.7	5.9 ± 9.4	16.3 ± 16.5	20 ± 15.4	<0.001
ΔSBP_{VM2} (mm Hg)	3.4 ± 12.2	-9 ± 23.7	-28.8 ± 22.5	-36.6 ± 22.9	<0.001
ΔDBP_{VM2} (mm Hg)	22.7 ± 8.3	20.8 ± 13.2	11.2 ± 12.7	6.6 ± 14	<0.001
ΔMBP_{VM2} (mm Hg)	12.9 ± 8.2	8.2 ± 15.4	-5.5 ± 16.1	-11.1 ± 16.5	<0.001
BRSa (mm Hg/msec)	16 ± 8.2	13.3 ± 8.9	10.4 ± 9	7.5 ± 8	<0.001
BRSv (msec/mm Hg)	5.2 ± 2.3	4.8 ± 3.7	3.4 ± 3.3	3.1 ± 2.5	<0.001
VR	1.5 ± 0.2	1.3 ± 0.2	1.2 ± 0.2	1.2 ± 0.2	<0.001
ΔHR_{VM3} (bpm)	26.1 ± 8.3	16.5 ± 9.1	11.9 ± 8.9	11.2 ± 7.9	<0.001
Baseline HR (bpm)	65.8 ± 7.6	64.8 ± 11.4	67.4 ± 11.3	69.6 ± 12.7	NS
HRVdb	14.7 ± 5.5	5.5 ± 3.9	5.5 ± 4.1	4.8 ± 3.2	<0.001
Time of diagnosis of OH (min)	-	18.5 ± 5.8	6.9 ± 1.9	1.3 ± 0.6	-
Magnitude of SBP drop during HUTT (mm Hg)	2.7 ± 5.8	22.8 ± 10.3	30.7 ± 13.2	38.4 ± 17.6	<0.001
Magnitude of DBP drop during HUTT (mm Hg)	0 ± 3.9	9.5 ± 6.3	10.2 ± 5.5	16.4 ± 10.4	<0.001

HRVdb, heart rate variability with deep breathing.