

Appendix:

Prior head-down tilt does not impair the cerebrovascular response to head-up tilt

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Table A1 – Comparison during HDT: Main effects and interactions from two-way repeated measures analysis of variance (ANOVA), statistical power and selected post-hoc comparisons for variables measured during baseline supine (BL, time = 0) and two periods of HDT (HDT1, HDT2, time = 0-7s and 8-15s) at three different angles (-10°, -25° and -55°). Only statistically significant comparisons are displayed for Time of HUT (5, 10, 15, 20, 40, 60s) within the Condition, or for Condition at any Time of HUT.

P-values for main effects and interactions during HDT									
	MFV	BP _{MCA}	CVRi	HR	MAP	SV	Q _{MF}	TPRi	P _{ETCO₂}
Condition	0.003	<0.001	<0.001	0.069	0.038	0.037	0.011	0.049	0.163
Time of HDT	0.062	<0.001	<0.001	0.001	<0.001	0.218	<0.001	<0.001	0.570
Condition * Time of HDT	0.164	<0.001	<0.001	0.002	0.613	0.002	<0.001	<0.001	.562
Power of performed test									
Condition	0.902	1	1	0.366	0.494	0.499	0.731	0.439	0.191
Time of HDT	0.389	1	1	0.959	0.998	0.139	0.999	0.998	0.05
Condition * Time of HDT	0.209	1	1	0.904	0.05	0.913	1	0.999	0.05

Abbreviations: MFV = middle cerebral artery mean flow velocity; BP_{MCA} = blood pressure at the level of the middle cerebral artery; HR = heart rate; MAP = mean arterial pressure; SV = stroke volume; Q_{MF} = cardiac output by Modelflow; TPRi = total peripheral resistance index calculated as MAP / CO.

Mean Flow Velocity

Comparisons for factor: **Condition for Prior HDT**

Comparison	Diff of Means	t	P	P<0.050
-10.000 vs. -55.000	5.875	3.983	0.003	Yes
-10.000 vs. -25.000	4.072	2.760	0.026	Yes

BP_{MCA}

Comparisons for factor: **Time of HDT within Prior HDT=-10**

Comparison	Diff of Means	t	P	P<0.05
BL vs. HDT1	6.800	5.440	<0.001	Yes
HDT1 vs. HDT2	3.443	2.755	0.018	Yes
BL vs. HDT2	3.356	2.686	0.011	Yes

Comparisons for factor: **Time of HDT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
BL vs. HDT1	14.551	11.643	<0.001	Yes
BL vs. HDT2	9.784	7.829	<0.001	Yes
HDT1 vs. HDT2	4.767	3.814	<0.001	Yes

Comparisons for factor: **Time of HDT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
BL vs. HDT1	28.133	22.509	<0.001	Yes
BL vs. HDT2	22.885	18.310	<0.001	Yes
HDT1 vs. HDT2	5.248	4.199	<0.001	Yes

Comparisons for factor: **Condition within Time=HDT1**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. -10.000	19.355	18.148	<0.001	Yes
-55.000 vs. -25.000	12.509	11.729	<0.001	Yes
-25.000 vs. -10.000	6.846	6.419	<0.001	Yes

Comparisons for factor: **Condition within Time=HDT2**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. -10.000	17.551	16.456	<0.001	Yes
-55.000 vs. -25.000	12.028	11.278	<0.001	Yes
-25.000 vs. -10.000	5.522	5.178	<0.001	Yes

Cerebrovascular Resistance index (CVRi)

Comparisons for factor: **Time of HDT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
2.000 vs. 0.000	0.228	5.378	<0.001	Yes
1.000 vs. 0.000	0.216	5.101	<0.001	Yes

Comparisons for factor: **Time of HDT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
1.000 vs. 0.000	0.527	12.430	<0.001	Yes

2.000 vs. 0.000	0.415	9.790	<0.001	Yes
1.000 vs. 2.000	0.112	2.640	0.011	Yes

Comparisons for factor: **Condition within Time=HDT1**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. -10.000	0.553	9.250	<0.001	Yes
-55.000 vs. -25.000	0.335	5.601	<0.001	Yes
-25.000 vs. -10.000	0.218	3.649	<0.001	Yes

Comparisons for factor: **Condition within Time=HDT2**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. -10.000	0.450	7.525	<0.001	Yes
-25.000 vs. -10.000	0.239	3.994	<0.001	Yes
-55.000 vs. -25.000	0.211	3.531	0.001	Yes

Heart Rate

Comparisons for factor: **Time of HDT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
BL vs. HDT2	3.685	3.175	0.008	Yes
BL vs. HDT1	3.668	3.160	0.006	Yes

Comparisons for factor: **Time of HDT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
BL vs. HDT1	6.361	5.480	<0.001	Yes
BL vs. HDT2	5.178	4.461	<0.001	Yes

Comparisons for factor: **Condition within Time=HDT1**

Comparison	Diff of Means	t	P	P<0.05
-10.000 vs. -55.000	4.785	3.296	0.007	Yes

Comparisons for factor: **Condition within Time=HDT2**

Comparison	Diff of Means	t	P	P<0.05
-10.000 vs. -55.000	4.762	3.280	0.008	Yes

Mean Arterial Pressure

Comparisons for factor: **Time of HDT**

Comparison	Diff of Means	t	P	P<0.050
HDT1 vs. HDT2	4.512	5.515	<0.001	Yes
BL vs. HDT1	2.911	3.558	0.004	Yes

Comparisons for factor: **Condition for Prior HDT**

Comparison	Diff of Means	t	P	P<0.050
-10.000 vs. -55.000	2.151	2.758	0.038	Yes

Stroke Volume

Comparisons for factor: **Time of HDT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
BL vs. HDT1	4.283	3.128	0.011	Yes
BL vs. HDT2	3.792	2.769	0.018	Yes

Comparisons for factor: **Condition within Time=HDT1**

Comparison	Diff of Means	t	P	P<0.05
-10.000 vs. -55.000	4.147	2.877	0.021	Yes

Comparisons for factor: **Condition within Time=HDT2**

Comparison	Diff of Means	t	P	P<0.05
-10.000 vs. -55.000	5.434	3.770	0.002	Yes
-25.000 vs. -55.000	4.891	3.393	0.004	Yes

Cardiac Output (Q_{MF})

Comparisons for factor: **Time of HDT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
BL vs. HDT1	0.290	3.187	0.008	Yes

Comparisons for factor: **Time of HDT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
BL vs. HDT1	0.712	7.827	<0.001	Yes
BL vs. HDT2	0.614	6.747	<0.001	Yes

Comparisons for factor: **Condition within Time=HDT1**

Comparison	Diff of Means	t	P	P<0.05
-10.000 vs. -55.000	0.641	4.329	<0.001	Yes
-25.000 vs. -55.000	0.434	2.932	0.014	Yes

Comparisons for factor: **Condition within Time=HDT2**

Comparison	Diff of Means	t	P	P<0.05
-10.000 vs. -55.000	0.687	4.640	<0.001	Yes
-25.000 vs. -55.000	0.465	3.141	0.008	Yes

Total Peripheral Resistance Index (TPRi)

Comparisons for factor: **Time of HDT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
BL vs. HDT1	160.189	3.780	0.002	Yes
HDT1 vs. HDT2	120.057	2.833	0.015	Yes

Comparisons for factor: **Time of HDT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
BL vs. HDT1	334.101	7.884	<0.001	Yes
BL vs. HDT2	190.573	4.497	<0.001	Yes
HDT1 vs. HDT2	143.527	3.387	0.002	Yes

Comparisons for factor: **Condition within Time=HDT1**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. -10.000	190.923	4.097	<0.001	Yes
-55.000 vs. -25.000	156.436	3.357	0.004	Yes

Comparisons for factor: **Condition within Time=HDT2**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. -10.000	147.123	3.157	0.010	Yes
-55.000 vs. -25.000	132.966	2.853	0.015	Yes

Table A2 – Comparison during HUT: Main effects and interactions from two-way repeated measures analysis of variance (ANOVA), statistical power and selected post-hoc comparisons for variables measured during the first minute of the head up tilt (HUT) position after prior supine rest (control, CON) or 15s of head down tilt (HDT) at three different angles (-10°, -25° and -55°). Only statistically significant comparisons are displayed for Time of HUT (5, 10, 15, 20, 40, 60s) within the Condition, or for Condition at any Time of HUT.

P-values for main effects and interactions during HUT										
	MFV	BP _{MCA}	CV _{Ri}	AutoregCI	HR	MAP	SV	CO	TP _{Ri}	P _{ET} CO ₂
Subject	<0.001		<0.001	0.025						
Condition	0.456	<0.001	<0.001	0.22	0.011	<0.001	<0.001	<0.001	<0.001	0.905
Condition * Subject										
Time of HUT	0.002	<0.001	<0.001	0.003	0.01	<0.001	<0.001	<0.001	<0.001	0.418
Time of HUT * Subj										
Condition * Time of HUT	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.847
Power of performed test										
Condition	0.05	0.998	0.999	0.603	0.722	0.998	0.949	1	1	0.05
Time of HUT	0.898	1	1	0.865	0.715	1	1	1	1	0.05
Condition * Time of HUT	1	1	1	0.999	0.992	1	1	1	1	0.05

Abbreviations: MFV = middle cerebral artery mean flow velocity; BP_{MCA} = blood pressure at the level of the middle cerebral artery; AutoregCI = autoregulation correction index; HR = heart rate; MAP = mean arterial pressure; SV = stroke volume; CO = cardiac output; TP_{Ri} = total peripheral resistance index calculated as MAP / CO.

Cerebral Mean Flow Velocity (MFV)

Comparisons for factor: **Time of HUT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
15.000 vs. 5.000	8.920	4.618	<0.001	Yes
10.000 vs. 5.000	7.701	3.988	0.001	Yes
40.000 vs. 5.000	5.911	3.060	0.034	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
15.000 vs. 5.000	14.300	7.404	<0.001	Yes
20.000 vs. 5.000	12.101	6.266	<0.001	Yes
40.000 vs. 5.000	11.328	5.865	<0.001	Yes
10.000 vs. 5.000	10.328	5.348	<0.001	Yes
60.000 vs. 5.000	9.176	4.751	<0.001	Yes

Comparisons for factor: **Condition within Time=5**

Comparison	Diff of Means	t	P	P<0.05
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CON vs. -55.000	13.650	6.982	<0.001	Yes
CON vs. -25.000	9.369	4.792	<0.001	Yes
-10.000 vs. -55.000	7.656	3.752	0.001	Yes
CON vs. -10.000	5.995	2.938	0.012	Yes

Blood Pressure at Middle Cerebral Artery (BP_{MCA})

Comparisons for factor: **Time of HUT within CON**

Comparison	Diff of Means	t	P	P<0.05
20.000 vs. 5.000	6.765	3.436	0.013	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-10**

Comparison	Diff of Means	t	P	P<0.05
40.000 vs. 5.000	13.856	7.037	<0.001	Yes
60.000 vs. 5.000	12.838	6.520	<0.001	Yes
20.000 vs. 5.000	12.191	6.192	<0.001	Yes
40.000 vs. 10.000	11.305	5.742	<0.001	Yes
15.000 vs. 5.000	10.395	5.280	<0.001	Yes
60.000 vs. 10.000	10.288	5.225	<0.001	Yes
20.000 vs. 10.000	9.640	4.896	<0.001	Yes
15.000 vs. 10.000	7.845	3.984	0.001	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
20.000 vs. 5.000	19.617	9.963	<0.001	Yes
40.000 vs. 5.000	19.566	9.937	<0.001	Yes
60.000 vs. 5.000	17.598	8.938	<0.001	Yes
15.000 vs. 5.000	15.074	7.656	<0.001	Yes
20.000 vs. 10.000	13.430	6.821	<0.001	Yes
40.000 vs. 10.000	13.379	6.795	<0.001	Yes
60.000 vs. 10.000	11.411	5.795	<0.001	Yes
15.000 vs. 10.000	8.887	4.514	<0.001	Yes
10.000 vs. 5.000	6.187	3.142	0.015	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
40.000 vs. 5.000	28.299	14.372	<0.001	Yes
20.000 vs. 5.000	26.808	13.615	<0.001	Yes
60.000 vs. 5.000	26.542	13.480	<0.001	Yes
15.000 vs. 5.000	21.597	10.969	<0.001	Yes
40.000 vs. 10.000	20.176	10.247	<0.001	Yes
20.000 vs. 10.000	18.686	9.490	<0.001	Yes
60.000 vs. 10.000	18.419	9.355	<0.001	Yes
15.000 vs. 10.000	13.474	6.843	<0.001	Yes

10.000 vs. 5.000	8.123	4.125	<0.001	Yes
40.000 vs. 15.000	6.702	3.404	0.006	Yes
20.000 vs. 15.000	5.212	2.647	0.046	Yes

Comparisons for factor: **Condition within Time=5**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	23.094	12.363	<0.001	Yes
-10.000 vs. -55.000	15.635	8.370	<0.001	Yes
CON vs. -25.000	13.455	7.203	<0.001	Yes
-25.000 vs. -55.000	9.638	5.160	<0.001	Yes
CON vs. -10.000	7.459	3.993	<0.001	Yes
-10.000 vs. -25.000	5.996	3.210	0.002	Yes

Comparisons for factor: **Condition within Time=10**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	16.063	8.599	<0.001	Yes
-10.000 vs. -55.000	10.063	5.387	<0.001	Yes
CON vs. -25.000	8.360	4.476	<0.001	Yes
-25.000 vs. -55.000	7.703	4.124	<0.001	Yes
CON vs. -10.000	6.000	3.212	0.004	Yes

Comparisons for factor: **Condition within Time=15**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	5.650	3.025	0.020	Yes

Cerebrovascular Resistance Index (CVRI)

Comparisons for factor: **Time of HUT within CON**

Comparison	Diff of Means	t	P	P<0.05
20.000 vs. 5.000	0.205	6.725	<0.001	Yes
20.000 vs. 10.000	0.171	5.614	<0.001	Yes
40.000 vs. 5.000	0.161	5.289	<0.001	Yes
15.000 vs. 5.000	0.145	4.745	<0.001	Yes
60.000 vs. 5.000	0.139	4.566	<0.001	Yes
40.000 vs. 10.000	0.128	4.177	<0.001	Yes
15.000 vs. 10.000	0.111	3.634	0.004	Yes
60.000 vs. 10.000	0.105	3.455	0.006	Yes

Comparisons for factor: **Time of HUT within -10**

Comparison	Diff of Means	t	P	P<0.05
40.000 vs. 10.000	0.258	8.463	<0.001	Yes
40.000 vs. 5.000	0.266	8.362	<0.001	Yes
20.000 vs. 10.000	0.246	8.046	<0.001	Yes
20.000 vs. 5.000	0.254	7.963	<0.001	Yes

60.000 vs. 10.000	0.216	7.066	<0.001	Yes
60.000 vs. 5.000	0.224	7.024	<0.001	Yes
15.000 vs. 5.000	0.142	4.455	<0.001	Yes
15.000 vs. 10.000	0.134	4.385	<0.001	Yes
40.000 vs. 15.000	0.124	4.078	<0.001	Yes
20.000 vs. 15.000	0.112	3.661	0.002	Yes
60.000 vs. 15.000	0.0818	2.681	0.042	Yes

Comparisons for factor: **Time of HUT within -25**

Comparison	Diff of Means	t	P	P<0.05
20.000 vs. 5.000	0.301	9.859	<0.001	Yes
20.000 vs. 10.000	0.300	9.837	<0.001	Yes
60.000 vs. 5.000	0.289	9.479	<0.001	Yes
60.000 vs. 10.000	0.289	9.457	<0.001	Yes
40.000 vs. 5.000	0.287	9.398	<0.001	Yes
40.000 vs. 10.000	0.286	9.376	<0.001	Yes
15.000 vs. 5.000	0.159	5.219	<0.001	Yes
15.000 vs. 10.000	0.159	5.197	<0.001	Yes
20.000 vs. 15.000	0.142	4.640	<0.001	Yes
60.000 vs. 15.000	0.130	4.260	<0.001	Yes
40.000 vs. 15.000	0.128	4.179	<0.001	Yes

Comparisons for factor: **Time of HUT within -55**

Comparison	Diff of Means	t	P	P<0.05
40.000 vs. 5.000	0.403	13.191	<0.001	Yes
60.000 vs. 5.000	0.395	12.926	<0.001	Yes
40.000 vs. 10.000	0.376	12.321	<0.001	Yes
60.000 vs. 10.000	0.368	12.056	<0.001	Yes
20.000 vs. 5.000	0.359	11.764	<0.001	Yes
20.000 vs. 10.000	0.333	10.893	<0.001	Yes
15.000 vs. 5.000	0.243	7.947	<0.001	Yes
15.000 vs. 10.000	0.216	7.077	<0.001	Yes
40.000 vs. 15.000	0.160	5.244	<0.001	Yes
60.000 vs. 15.000	0.152	4.979	<0.001	Yes
20.000 vs. 15.000	0.117	3.816	0.001	Yes

Comparisons for factor: **Condition within Time=5**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	0.263	8.125	<0.001	Yes
-10.000 vs. -55.000	0.221	6.532	<0.001	Yes
-25.000 vs. -55.000	0.142	4.394	<0.001	Yes
CON vs. -25.000	0.121	3.732	0.001	Yes

-10.000 vs. -25.000	0.0784	2.321	0.046	Yes
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Comparisons for factor: **Condition within Time=10**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	0.270	8.353	<0.001	Yes
-10.000 vs. -55.000	0.202	6.243	<0.001	Yes
CON vs. -25.000	0.154	4.759	<0.001	Yes
-25.000 vs. -55.000	0.116	3.593	0.002	Yes
-10.000 vs. -25.000	0.0858	2.650	0.020	Yes
CON vs. -10.000	0.0683	2.109	0.039	Yes

Comparisons for factor: **Condition within Time=15**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	0.165	5.105	<0.001	Yes
-10.000 vs. -55.000	0.120	3.704	0.002	Yes
CON vs. -25.000	0.106	3.284	0.007	Yes

Comparisons for factor: **Condition within Time=20**

Comparison	Diff of Means	t	P	P<0.05
-10.000 vs. -55.000	0.115	3.558	0.004	Yes
CON vs. -55.000	0.109	3.373	0.006	Yes
-25.000 vs. -55.000	0.0841	2.597	0.046	Yes

Autoregulation Correction Index (AutoregCI)

Comparisons for factor: **Time of HUT within CON**

Comparison	Diff of Means	t	P	P<0.05
5.000 vs. 20.000	0.259	3.316	0.018	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-10**

Comparison	Diff of Means	t	P	P<0.05
15.000 vs. 20.000	0.276	3.048	0.042	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
10.000 vs. 60.000	0.313	4.012	0.002	Yes
15.000 vs. 60.000	0.265	3.403	0.013	Yes
10.000 vs. 5.000	0.257	3.293	0.017	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
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15.000 vs. 5.000	0.326	4.177	<0.001	Yes
10.000 vs. 5.000	0.300	3.848	0.003	Yes
15.000 vs. 60.000	0.264	3.384	0.012	Yes
10.000 vs. 60.000	0.238	3.055	0.033	Yes

Comparisons for factor: **Condition within Time = 5**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -10.000	0.300	3.355	0.008	Yes
CON vs. -55.000	0.259	3.023	0.017	Yes
CON vs. -25.000	0.254	2.971	0.016	Yes

Comparisons for factor: **Condition within Time = 10**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. -10.000	0.273	3.186	0.013	Yes
-25.000 vs. -10.000	0.234	2.734	0.039	Yes

Comparisons for factor: **Condition within Time = 15**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. CON	0.279	3.255	0.010	Yes

Comparisons for factor: **Condition within Time=20**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. -10.000	0.382	4.008	<0.001	Yes
-25.000 vs. -10.000	0.276	2.787	0.034	Yes

Comparisons for factor: **Condition within Time = 40**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. -10.000	0.297	3.129	0.015	Yes

Heart Rate (HR)

Comparisons for factor: **Time of HUT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
10.000 vs. 20.000	6.638	3.644	0.006	Yes
60.000 vs. 20.000	5.739	3.150	0.029	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
10.000 vs. 20.000	9.569	5.253	<0.001	Yes
10.000 vs. 40.000	8.748	4.802	<0.001	Yes
10.000 vs. 60.000	6.706	3.681	0.005	Yes

5.000 vs. 20.000	5.521	3.031	0.036	Yes
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Comparisons for factor: **Condition within Time=5**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. -10.000	7.394	3.755	0.002	Yes
-55.000 vs. CON	7.113	3.612	0.003	Yes
-55.000 vs. -25.000	5.169	2.625	0.042	Yes

Comparisons for factor: **Condition within Time=10**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. CON	10.646	5.406	<0.001	Yes
-55.000 vs. -10.000	8.595	4.364	<0.001	Yes
-55.000 vs. -25.000	6.748	3.427	0.004	Yes

Comparisons for factor: **Condition within Time=15**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. CON	7.800	3.961	0.001	Yes
-55.000 vs. -10.000	6.209	3.153	0.012	Yes
-55.000 vs. -25.000	5.177	2.629	0.042	Yes

Mean Arterial Pressure (MAP)

Comparisons for factor: **Time of HUT within CON**

Comparison	Diff of Means	t	P	P<0.05
20.000 vs. 5.000	6.926	3.546	0.009	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-10**

Comparison	Diff of Means	t	P	P<0.05
40.000 vs. 5.000	13.801	7.066	<0.001	Yes
60.000 vs. 5.000	13.034	6.673	<0.001	Yes
20.000 vs. 5.000	12.308	6.301	<0.001	Yes
40.000 vs. 10.000	11.190	5.729	<0.001	Yes
15.000 vs. 5.000	10.430	5.340	<0.001	Yes
60.000 vs. 10.000	10.423	5.336	<0.001	Yes
20.000 vs. 10.000	9.697	4.964	<0.001	Yes
15.000 vs. 10.000	7.819	4.003	<0.001	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
20.000 vs. 5.000	19.826	10.150	<0.001	Yes
40.000 vs. 5.000	19.502	9.985	<0.001	Yes
60.000 vs. 5.000	17.817	9.122	<0.001	Yes

15.000 vs. 5.000	15.281	7.824	<0.001	Yes
20.000 vs. 10.000	13.485	6.904	<0.001	Yes
40.000 vs. 10.000	13.161	6.738	<0.001	Yes
60.000 vs. 10.000	11.476	5.876	<0.001	Yes
15.000 vs. 10.000	8.940	4.577	<0.001	Yes
10.000 vs. 5.000	6.341	3.246	0.011	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
40.000 vs. 5.000	28.652	14.669	<0.001	Yes
20.000 vs. 5.000	27.352	14.003	<0.001	Yes
60.000 vs. 5.000	27.223	13.937	<0.001	Yes
15.000 vs. 5.000	22.101	11.315	<0.001	Yes
40.000 vs. 10.000	20.168	10.326	<0.001	Yes
20.000 vs. 10.000	18.868	9.660	<0.001	Yes
60.000 vs. 10.000	18.740	9.594	<0.001	Yes
15.000 vs. 10.000	13.618	6.972	<0.001	Yes
10.000 vs. 5.000	8.484	4.343	<0.001	Yes
40.000 vs. 15.000	6.551	3.354	0.007	Yes
20.000 vs. 15.000	5.251	2.688	0.041	Yes
60.000 vs. 15.000	5.122	2.622	0.040	Yes

Comparisons for factor: **Condition within Time=5**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	23.939	12.304	<0.001	Yes
-10.000 vs. -55.000	16.253	8.353	<0.001	Yes
CON vs. -25.000	13.861	7.124	<0.001	Yes
-25.000 vs. -55.000	10.079	5.180	<0.001	Yes
CON vs. -10.000	7.687	3.951	<0.001	Yes
-10.000 vs. -25.000	6.174	3.173	0.002	Yes

Comparisons for factor: **Condition within Time=10**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	16.703	8.585	<0.001	Yes
-10.000 vs. -55.000	10.380	5.335	<0.001	Yes
CON vs. -25.000	8.767	4.506	<0.001	Yes
-25.000 vs. -55.000	7.936	4.079	<0.001	Yes
CON vs. -10.000	6.323	3.250	0.004	Yes

Comparisons for factor: **Condition within Time=15**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	6.193	3.183	0.013	Yes

Stroke Volume (SV)

Comparisons for factor: **Time of HUT within CON**

Comparison	Diff of Means	t	P	P<0.05
5.000 vs. 60.000	13.523	5.955	<0.001	Yes
5.000 vs. 40.000	11.477	5.054	<0.001	Yes
5.000 vs. 20.000	10.192	4.488	<0.001	Yes
5.000 vs. 10.000	6.952	3.061	0.033	Yes
5.000 vs. 15.000	6.804	2.996	0.037	Yes
15.000 vs. 60.000	6.718	2.958	0.037	Yes
10.000 vs. 60.000	6.571	2.894	0.041	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-10**

Comparison	Diff of Means	t	P	P<0.05
5.000 vs. 60.000	24.117	10.620	<0.001	Yes
5.000 vs. 40.000	20.249	8.917	<0.001	Yes
10.000 vs. 60.000	17.292	7.614	<0.001	Yes
5.000 vs. 20.000	14.850	6.539	<0.001	Yes
10.000 vs. 40.000	13.424	5.911	<0.001	Yes
5.000 vs. 15.000	12.370	5.447	<0.001	Yes
15.000 vs. 60.000	11.747	5.173	<0.001	Yes
20.000 vs. 60.000	9.267	4.081	<0.001	Yes
10.000 vs. 20.000	8.024	3.534	0.004	Yes
15.000 vs. 40.000	7.879	3.470	0.004	Yes
5.000 vs. 10.000	6.825	3.006	0.016	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
5.000 vs. 60.000	24.565	10.817	<0.001	Yes
5.000 vs. 40.000	20.386	8.977	<0.001	Yes
10.000 vs. 60.000	19.331	8.512	<0.001	Yes
5.000 vs. 20.000	15.214	6.699	<0.001	Yes
10.000 vs. 40.000	15.152	6.672	<0.001	Yes
15.000 vs. 60.000	12.456	5.485	<0.001	Yes
5.000 vs. 15.000	12.109	5.332	<0.001	Yes
10.000 vs. 20.000	9.979	4.394	<0.001	Yes
20.000 vs. 60.000	9.351	4.118	<0.001	Yes
15.000 vs. 40.000	8.278	3.645	0.002	Yes
10.000 vs. 15.000	6.874	3.027	0.015	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
5.000 vs. 60.000	24.372	10.732	<0.001	Yes
10.000 vs. 60.000	22.698	9.995	<0.001	Yes

5.000 vs. 40.000	20.056	8.832	<0.001	Yes
10.000 vs. 40.000	18.383	8.095	<0.001	Yes
15.000 vs. 60.000	14.595	6.427	<0.001	Yes
5.000 vs. 20.000	14.479	6.376	<0.001	Yes
10.000 vs. 20.000	12.806	5.639	<0.001	Yes
15.000 vs. 40.000	10.280	4.527	<0.001	Yes
20.000 vs. 60.000	9.893	4.356	<0.001	Yes
5.000 vs. 15.000	9.776	4.305	<0.001	Yes
10.000 vs. 15.000	8.103	3.568	0.003	Yes

Comparisons for factor: **Condition within Time=5**

Comparison	Diff of Means	t	P	P<0.05
-25.000 vs. CON	11.771	5.264	<0.001	Yes
-55.000 vs. CON	9.826	4.394	<0.001	Yes
-10.000 vs. CON	9.260	4.141	<0.001	Yes

Comparisons for factor: **Condition within Time=10**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. CON	15.104	6.755	<0.001	Yes
-25.000 vs. CON	13.489	6.032	<0.001	Yes
-10.000 vs. CON	9.386	4.197	<0.001	Yes
-55.000 vs. -10.000	5.718	2.557	0.037	Yes

Comparisons for factor: **Condition within Time=15**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. CON	6.854	3.065	0.018	Yes
-25.000 vs. CON	6.467	2.892	0.024	Yes

Comparisons for factor: **Condition within Time=20**

Comparison	Diff of Means	t	P	P<0.05
-25.000 vs. CON	6.750	3.018	0.020	Yes

Cardiac Output (Q_{MF})

Comparisons for factor: **Time of HUT within CON**

Comparison	Diff of Means	t	P	P<0.05
5.000 vs. 60.000	0.742	4.479	<0.001	Yes
5.000 vs. 40.000	0.693	4.184	<0.001	Yes
5.000 vs. 20.000	0.661	3.990	0.001	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-10**

Comparison	Diff of Means	t	P	P<0.05
5.000 vs. 60.000	1.489	8.989	<0.001	Yes
5.000 vs. 40.000	1.366	8.245	<0.001	Yes

10.000 vs. 60.000	1.130	6.820	<0.001	Yes
5.000 vs. 20.000	1.076	6.494	<0.001	Yes
10.000 vs. 40.000	1.007	6.076	<0.001	Yes
5.000 vs. 15.000	0.856	5.168	<0.001	Yes
10.000 vs. 20.000	0.717	4.325	<0.001	Yes
15.000 vs. 60.000	0.633	3.821	0.002	Yes
15.000 vs. 40.000	0.510	3.077	0.018	Yes
10.000 vs. 15.000	0.497	2.999	0.020	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
5.000 vs. 60.000	1.737	10.483	<0.001	Yes
5.000 vs. 40.000	1.635	9.872	<0.001	Yes
10.000 vs. 60.000	1.514	9.139	<0.001	Yes
10.000 vs. 40.000	1.413	8.528	<0.001	Yes
5.000 vs. 20.000	1.398	8.438	<0.001	Yes
10.000 vs. 20.000	1.175	7.094	<0.001	Yes
5.000 vs. 15.000	0.938	5.659	<0.001	Yes
15.000 vs. 60.000	0.799	4.823	<0.001	Yes
10.000 vs. 15.000	0.715	4.316	<0.001	Yes
15.000 vs. 40.000	0.698	4.212	<0.001	Yes
15.000 vs. 20.000	0.460	2.778	0.031	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
10.000 vs. 60.000	2.109	12.727	<0.001	Yes
5.000 vs. 60.000	2.024	12.216	<0.001	Yes
10.000 vs. 40.000	1.920	11.589	<0.001	Yes
5.000 vs. 40.000	1.835	11.077	<0.001	Yes
10.000 vs. 20.000	1.559	9.408	<0.001	Yes
5.000 vs. 20.000	1.474	8.897	<0.001	Yes
15.000 vs. 60.000	1.208	7.290	<0.001	Yes
15.000 vs. 40.000	1.019	6.151	<0.001	Yes
10.000 vs. 15.000	0.901	5.438	<0.001	Yes
5.000 vs. 15.000	0.816	4.926	<0.001	Yes
15.000 vs. 20.000	0.658	3.970	<0.001	Yes
20.000 vs. 60.000	0.550	3.319	0.005	Yes

Comparisons for factor: **Condition within Time=5**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. CON	1.315	8.277	<0.001	Yes
-25.000 vs. CON	1.064	6.695	<0.001	Yes
-10.000 vs. CON	0.714	4.494	<0.001	Yes

-55.000 vs. -10.000	0.601	3.783	<0.001	Yes
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Comparisons for factor: **Condition within Time=10**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. CON	1.826	11.489	<0.001	Yes
-25.000 vs. CON	1.267	7.972	<0.001	Yes
-55.000 vs. -10.000	1.045	6.578	<0.001	Yes
-10.000 vs. CON	0.780	4.911	<0.001	Yes
-55.000 vs. -25.000	0.559	3.516	0.001	Yes
-25.000 vs. -10.000	0.487	3.062	0.003	Yes

Comparisons for factor: **Condition within Time=15**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. CON	0.976	6.144	<0.001	Yes
-55.000 vs. -10.000	0.641	4.036	<0.001	Yes
-25.000 vs. CON	0.603	3.797	0.001	Yes

Comparisons for factor: **Condition within Time=20**

Comparison	Diff of Means	t	P	P<0.05
-55.000 vs. CON	0.502	3.161	0.012	Yes

Total Peripheral Resistance index (TPRi)

Comparisons for factor: **Time of HUT within CON**

Comparison	Diff of Means	t	P	P<0.05
20.000 vs. 5.000	323.072	4.704	<0.001	Yes
40.000 vs. 5.000	317.495	4.623	<0.001	Yes
60.000 vs. 5.000	311.815	4.540	<0.001	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-10**

Comparison	Diff of Means	t	P	P<0.05
60.000 vs. 5.000	651.920	9.492	<0.001	Yes
40.000 vs. 5.000	641.187	9.336	<0.001	Yes
60.000 vs. 10.000	571.833	8.326	<0.001	Yes
40.000 vs. 10.000	561.101	8.170	<0.001	Yes
20.000 vs. 5.000	485.162	7.064	<0.001	Yes
20.000 vs. 10.000	405.075	5.898	<0.001	Yes
15.000 vs. 5.000	378.174	5.506	<0.001	Yes
15.000 vs. 10.000	298.087	4.340	<0.001	Yes
60.000 vs. 15.000	273.746	3.986	<0.001	Yes
40.000 vs. 15.000	263.014	3.829	0.001	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-25**

Comparison	Diff of Means	t	P	P<0.05
60.000 vs. 5.000	775.251	11.288	<0.001	Yes
40.000 vs. 5.000	765.740	11.149	<0.001	Yes
20.000 vs. 5.000	664.814	9.680	<0.001	Yes
60.000 vs. 10.000	646.902	9.419	<0.001	Yes
40.000 vs. 10.000	637.390	9.280	<0.001	Yes
20.000 vs. 10.000	536.465	7.811	<0.001	Yes
15.000 vs. 5.000	429.897	6.259	<0.001	Yes
60.000 vs. 15.000	345.354	5.028	<0.001	Yes
40.000 vs. 15.000	335.843	4.890	<0.001	Yes
15.000 vs. 10.000	301.547	4.391	<0.001	Yes
20.000 vs. 15.000	234.917	3.420	0.005	Yes

Comparisons for factor: **Time of HUT within Prior HDT=-55**

Comparison	Diff of Means	t	P	P<0.05
60.000 vs. 5.000	959.982	13.977	<0.001	Yes
40.000 vs. 5.000	916.422	13.343	<0.001	Yes
60.000 vs. 10.000	856.931	12.477	<0.001	Yes
40.000 vs. 10.000	813.371	11.843	<0.001	Yes
20.000 vs. 5.000	738.815	10.757	<0.001	Yes
20.000 vs. 10.000	635.765	9.257	<0.001	Yes
60.000 vs. 15.000	483.433	7.039	<0.001	Yes
15.000 vs. 5.000	476.549	6.939	<0.001	Yes
40.000 vs. 15.000	439.873	6.405	<0.001	Yes
15.000 vs. 10.000	373.498	5.438	<0.001	Yes
20.000 vs. 15.000	262.267	3.819	0.001	Yes
60.000 vs. 20.000	221.167	3.220	0.007	Yes
40.000 vs. 20.000	177.606	2.586	0.033	Yes

Comparisons for factor: **Condition within Time=5**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	640.815	10.156	<0.001	Yes
CON vs. -25.000	467.711	7.412	<0.001	Yes
-10.000 vs. -55.000	359.329	5.695	<0.001	Yes
CON vs. -10.000	281.487	4.461	<0.001	Yes
-10.000 vs. -25.000	186.224	2.951	0.008	Yes
-25.000 vs. -55.000	173.105	2.743	0.007	Yes

Comparisons for factor: **Condition within Time=10**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	690.613	10.945	<0.001	Yes
CON vs. -25.000	492.209	7.801	<0.001	Yes
CON vs. -10.000	354.248	5.614	<0.001	Yes
-10.000 vs. -55.000	336.365	5.331	<0.001	Yes
-25.000 vs. -55.000	198.404	3.144	0.005	Yes
-10.000 vs. -25.000	137.961	2.186	0.032	Yes

Comparisons for factor: **Condition within Time=15**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	361.242	5.725	<0.001	Yes
-10.000 vs. -55.000	260.953	4.136	<0.001	Yes
CON vs. -25.000	234.789	3.721	0.001	Yes

Comparisons for factor: **Condition within Time=20**

Comparison	Diff of Means	t	P	P<0.05
CON vs. -55.000	225.072	3.567	0.004	Yes