Additional File 3: Contribution of Moderate TBI to Composite Data.

Analysis of HBOT Data

This document presents the results of statistical analyses carried out on the final data set. All descriptive tables present summaries in the following formats:
for numerical variables:

Mean ± Standard Deviation (Number of Subjects)

Median (Minimum – Maximum)

for numerical variables representing changes between two time points:

Mean Change ± Standard Deviation of Changes (Number of Subjects)

Median Change (Minimum Change – Maximum Change)

p value for significance of change

for categorical variables:

Count (Percentage of Total)

The designation **(np)** appearing after or below a p value indicates that a non-parametric test (like the Mann-Whitney U test) was performed instead of the classical test (like the Student t test).

Nominally significant p values (p ≤ 0.05) are highlighted in **red** text;

p values approaching significance (p<0.10) are highlighted in **orange** text.

No adjustments for multiplicity were applied, so each p value has a 1-in-20 chance of being significant (p≤0.05) purely from random fluctuations alone, in the absence of any real effect.

To conserve horizontal space in the tables, variables are identified by brief names.

Baseline / Demographics

The analytical population of 29 subjects was divided into two groups based on whether the severity of the injury was considered **Mild** (*up to 30 minutes* of unconsciousness) or **Moderate** (*30 or more minutes* of unconsciousness). The p value in the rightmost column of the table indicates whether the variable was significantly different between mildly injured and moderately injured patients.

Variable	Mild	Moderate	Total	*P*-val
Age	30.3 ± 7.8 (24) 29.5 (21 – 51)	31.0 ± 6.7 (5) 29 (24 – 39)	30.4 ± 7.5 (29) 29 (21 – 51)	0.664 (np)

Sex
   Female
   Male
   Total
	
	2 (8%)
	22 (92%)
	24 (100%)
		
		0 (0%)
		5 (100%)
		5 (100%)
			
			2 (7%)
			27 (93%)
			29 (100%)
				
				1.000

Delay to treat- **ment**	3.31 ± 1.20 (24) 3.38 (1.25 – 5.83)	3.53 ± 1.39 (5) 2.92 (2.08 – 5.33)	3.35 ± 1.21 (29) 3.25 (1.25 – 5.83)	0.718

Unconc				
<1min	10 (42%)	0 (0%)	10 (34%)	
1-2min	5 (21%)	0 (0%)	5 (17%)	
1Hour	0 (0%)	1 (20%)	1 (3%)	
1min	7 (29%)	0 (0%)	7 (24%)	
1min?	1 (4%)	0 (0%)	1 (3%)	
2-3min	1 (4%)	0 (0%)	1 (3%)	
2Hour	0 (0%)	1 (20%)	1 (3%)	
4-5Hours	0 (0%)	1 (20%)	1 (3%)	
8-10Hour	0 (0%)	1 (20%)	1 (3%)	
9Hours	0 (0%)	1 (20%)	1 (3%)	
Total	24 (100%)	5 (100%)	29 (100%)	
Service				
Army	13 (54%)	2 (40%)	15 (52%)	0.651
Marine	11 (46%)	3 (60%)	14 (48%)	
Total	24 (100%)	5 (100%)	29 (100%)	
Duty				
Active	7 (29%)	4 (80%)	11 (38%)	**0.054**
Retired	17 (71%)	1 (20%)	18 (62%)	
Total	24 (100%)	5 (100%)	29 (100%)	
Months of Service	70 ± 75 (24) 38 (9 – 300)	81 ± 68 (5) 60 (23 – 197)	72 ± 73 (29) 42 (9 – 300)	0.371 (np)
Blasts (number)	4.3 ± 5.7 (24) 2 (1 – 25)	5.6 ± 9.7 (5) 1 (1 – 23)	4.5 ± 6.3 (29) 2 (1 – 25)	0.667 (np)
PriorTBI	1.33 ± 2.33 (24) 0.5 (0 – 10)	1.00 ± 0.71 (5) 1 (0 – 2)	1.28 ± 2.14 (29) 1 (0 – 10)	0.559 (np)
Diagnosis:				
TBI	3 (12%)	0 (0%)	3 (10%)	1.000
TBI/PTSD	21 (88%)	5 (100%)	26 (90%)	
Total	24 (100%)	5 (100%)	29 (100%)	
PTSD				
No	3 (12%)	0 (0%)	3 (10%)	1.000
Yes	21 (88%)	5 (100%)	26 (90%)	
Total	24 (100%)	5 (100%)	29 (100%)	
Tobacco-packs per day	0.28 ± 0.53 (24) 0 (0 – 2)	0.20 ± 0.27 (5) 0 (0 – 0.5)	0.27 ± 0.50 (29) 0 (0 – 2)	1.000 (np)
Alcohol				
0:None/Rare	16 (67%)	2 (40%)	18 (62%)	
1: Occasional	3 (12%)	1 (20%)	4 (14%)	0.366
2: Modest	4 (17%)	1 (20%)	5 (17%)	
3: Moderate	1 (4%)	1 (20%)	2 (7%)	
Total	24 (100%)	5 (100%)	29 (100%)	
Psycho-Active Medications				
No	7 (29%)	0 (0%)	7 (24%)	0.296
Yes	17 (71%)	5 (100%)	22 (76%)	
Total	24 (100%)	5 (100%)	29 (100%)	

HBOT (total number)	39.75 ± 0.61 (24) 40 (38 – 40)	39.60 ± 0.89 (5) 40 (38 – 40)	39.72 ± 0.65 (29) 40 (38 – 40)	0.826 (np)
HBOT (total calendar days)	31.2 ± 4.9 (24) 30 (23 – 44)	29.2 ± 0.8 (5) 29 (28 – 30)	30.9 ± 4.5 (29) 30 (23 – 44)	0.483 (np)

Imaging
  Abnormal
  Normal
  Total
	
	6 (25%)
	18 (75%)
	24 (100%)
		
		2 (40%)
		3 (60%)
		5 (100%)
			
			8 (28%)
			21 (72%)
			29 (100%)
				0.597

Psycho-Active Med Change
  Decr
  Incr
  NoChg
  Stop
  Total
	
	8 (33%)
	3 (12%)
	13 (54%)
	0 (0%)
	24 (100%)
		
		1 (20%)
		0 (0%)
		1 (20%)
		3 (60%)
		5 (100%)
			
			9 (31%)
			3 (10%)
			14 (48%)
			3 (10%)
			29 (100%)
				0.008

Middle Ear Barotrauma
  No
  Yes
  Total
	
	18 (75%)
	6 (25%)
	24 (100%)
		
		5 (100%)
		0 (0%)
		5 (100%)
			
			23 (79%)
			6 (21%)
			29 (100%)
				0.553

Upper Respiratory Infection
  No
  Yes
  Total
	
	18 (75%)
	6 (25%)
	24 (100%)
		
		5 (100%)
		0 (0%)
		5 (100%)
			
			23 (79%)
			6 (21%)
			29 (100%)
				0.553

Symptom Change
  No
  Yes
  Total
	
	16 (67%)
	8 (33%)
	24 (100%)
		
		3 (60%)
		2 (40%)
		5 (100%)
			
			19 (66%)
			10 (34%)
			29 (100%)
				1.000

RPCSQ-pre HBOT	38.1 ± 7.9 (24) 39.5 (18 – 52)	32.0 ± 13.9 (5) 34 (14 – 47)	37.0 ± 9.2 (29) 39 (14 – 52)	0.184
RPCSQ-post HBOT	24.7 ± 12.3 (24) 24.5 (0 – 49)	18.0 ± 10.3 (5) 21 (6 – 31)	23.5 ± 12.1 (29) 23 (0 – 49)	0.270
PCLM-pre HBOT	64.0 ± 15.2 (24) 67 (21 – 84)	61.0 ± 20.8 (5) 68 (32 – 80)	63.4 ± 15.9 (29) 68 (21 – 84)	0.713
PCLM-post HBOT	47.7 ± 16.4 (24) 45.5 (17 – 81)	42.8 ± 18.4 (5) 47 (23 – 61)	46.8 ± 16.5 (29) 46 (17 – 81)	0.559
Combat Experience Scale	29.4 ± 10.6 (24) 29 (9 – 58)	33.4 ± 5.8 (5) 35 (26 – 40)	30.1 ± 10.0 (29) 29 (9 – 58)	0.426
Education	13.13 ± 2.24 (24) 12.5 (9 – 19)	12.90 ± 1.34 (5) 12 (12 – 15)	13.09 ± 2.09 (29) 12 (9 – 19)	0.953 (np)

Handed
  Left
  Right
  Total
	
	2 (8%)
	22 (92%)
	24 (100%)
		
		0 (0%)
		5 (100%)
		5 (100%)
			
			2 (7%)
			27 (93%)
			29 (100%)
				1.000

Michigan Alcohol Screening Test	1.83 ± 1.66 (24) 1 (0 – 5)	2.00 ± 1.22 (5) 2 (0 – 3)	1.86 ± 1.57 (29) 2 (0 – 5)	0.702 (np)
Drug Abuse Screening Test	0.71 ± 0.91 (24) 0.5 (0 – 3)	0.60 ± 1.34 (5) 0 (0 – 3)	0.69 ± 0.97 (29) 0 (0 – 3)	0.420 (np)
Disabilty Rating Scale	1.58 ± 1.18 (24) 1.25 (0 – 3)	1.80 ± 1.15 (5) 1.5 (0.5 – 3)	1.62 ± 1.15 (29) 1.5 (0 – 3)	0.678 (np)
Percent Back to Normal Rating	128 ± 349 (24) 45 (0 – 1,750)	74 ± 35 (5) 84 (21 – 107)	119 ± 318 (29) 50 (0 – 1,750)	0.298 (np)

Race
  Asian
  Black
  Hispanic
  White
  Total
	0 (0%)
	0 (0%)
	3 (12%)
	21 (88%)
	24 (100%)
		1 (20%)
		1 (20%)
		0 (0%)
		3 (60%)
		5 (100%)
			1 (3%)
			1 (3%)
			3 (10%)
			24 (83%)
			29 (100%)
				
				0.041