Table 1. Patient Characteristics

Characteristic	N = 671[1]
Age (years)	
Median (IQR)	6.0 (2.0, 13.0)
Gender, n (%)	
Male	431 (64%)
Female	240 (36%)
Race & Ethnicity, n (%)	
Non-Hispanic White	340 (51%)
Non-Hispanic Black	192 (29%)
Hispanic	102 (15%)
Other	37 (6%)
Height (cm)	
Median (IQR)	123.0 (92.0, 158.0)
Weight (kg)	
Median (IQR)	23.0 (14.0, 50.0)
Head Circumference (cm)	
Mean (±SD)	45.4 (±7.4)

[1]Mean (±SD), Median (IQR) or Frequency (%)
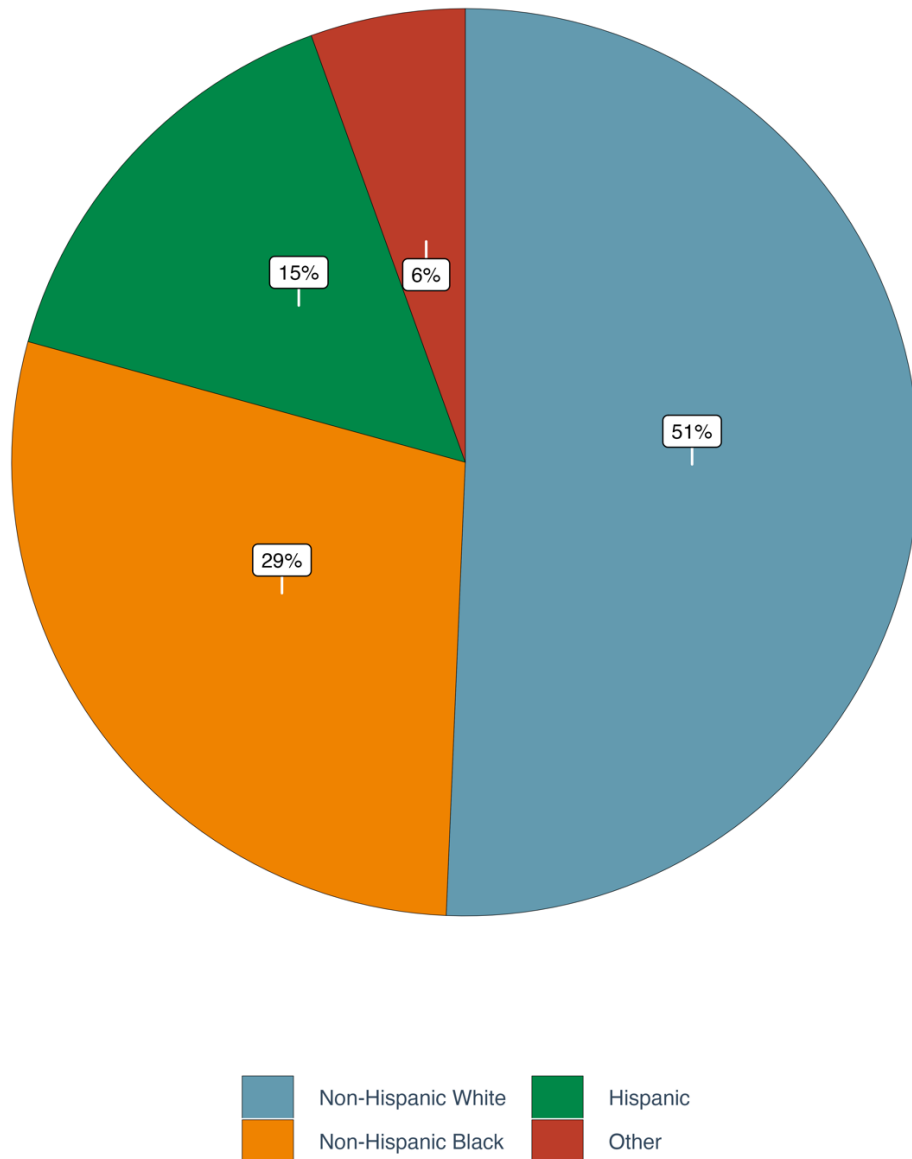
Study Population by Race and Ethnicity

Figure 1. Study Population by Race and Ethnicity. In the United States, the majority of severe TBI patient are of non-Hispanic White race. The "Other" group consists of 14 Asian, 11 multiracial, 9 Alaska Native/Inuit, and 4 Native Hawaiian/Pacific Islander patients.

Table 2. Baseline Characteristics of the Study Cohort Stratified by Race and Ethnicity

Characteristic	Overall, N = 671[1]	Non-Hispanic White, N = 340[1]	Non-Hispanic Black, N = 192[1]	Hispanic, N = 102[1]	Other, N = 37[1]	p-value[2]
Age (years)						**<0.001**
Median (IQR)	6.0 (2.0, 13.0)	8.5 (3.0, 14.0)	4.0 (1.0, 9.0)	5.5 (2.0, 12.0)	4.0 (2.0, 11.0)	
Gender, n (%)						0.452
Male	431 (64%)	223 (66%)	126 (66%)	62 (61%)	20 (54%)	
Female	240 (36%)	117 (34%)	66 (34%)	40 (39%)	17 (46%)	
Height (cm)						**<0.001**
Median (IQR)	123.0 (92.0, 158.0)	133.0 (100.0, 163.0)	112.0 (85.0, 144.0)	118.0 (91.5, 156.0)	112.8 (94.2, 152.3)	
Weight (kg)						**<0.001**
Median (IQR)	23.0 (14.0, 50.0)	30.0 (15.5, 56.5)	19.0 (13.0, 36.2)	21.0 (13.8, 45.4)	19.2 (14.8, 47.0)	
Head Circumference (cm)						0.392
Mean (±SD)	45.4 (±7.4)	46.4 (±7.2)	45.6 (±5.9)	41.8 (±9.9)	46.0 (±7.0)	
Cause, n (%)						0.088
MVA	357 (53%)	187 (55%)	107 (56%)	49 (48%)	14 (38%)	
Inflicted	140 (21%)	59 (17%)	46 (24%)	26 (25%)	9 (24%)	
Fall	102 (15%)	53 (16%)	22 (11%)	16 (16%)	11 (30%)	
Other Accidental	72 (11%)	41 (12%)	17 (9%)	11 (11%)	3 (8%)	
Type of TBI, n (%)						0.403
Closed	589 (88%)	294 (86%)	173 (90%)	90 (88%)	32 (86%)	
Penetrating	60 (9%)	33 (10%)	17 (9%)	8 (8%)	2 (5%)	
Crush	20 (3%)	12 (4%)	2 (1%)	3 (3%)	3 (8%)	
Blast	2 (0%)	1 (0%)	0 (0%)	1 (1%)	0 (0%)	
Mechanism, n (%)						**0.003**
Impact	431 (64%)	213 (63%)	140 (73%)	61 (60%)	17 (46%)	
Fall	99 (15%)	54 (16%)	18 (9%)	14 (14%)	13 (35%)	
Accel/Decel	66 (10%)	35 (10%)	17 (9%)	12 (12%)	2 (5%)	
Gunshot	45 (7%)	21 (6%)	15 (8%)	7 (7%)	2 (5%)	
Crush	15 (2%)	8 (2%)	0 (0%)	4 (4%)	3 (8%)	
Unknown	9 (1%)	4 (1%)	2 (1%)	3 (3%)	0 (0%)	
Other	6 (1%)	5 (1%)	0 (0%)	1 (1%)	0 (0%)	
Concerns for AHT, n (%)	111 (17%)	46 (14%)	36 (19%)	23 (23%)	6 (16%)	0.134
Admission GCS Score, Median (IQR)	5.0 (3.0, 7.0)	5.0 (3.0, 7.0)	5.0 (3.0, 7.0)	5.5 (3.0, 7.0)	6.0 (3.0, 7.0)	0.505
Abbreviated Injury Score						0.195
Median (IQR)	8.0 (6.0, 12.0)	8.0 (6.0, 12.0)	8.0 (6.0, 11.0)	7.0 (5.0, 10.0)	8.0 (6.0, 10.0)	
PRISM III						0.489
Median (IQR)	14.0 (8.0, 21.0)	13.0 (8.0, 20.2)	15.0 (9.8, 21.0)	13.0 (7.2, 21.0)	11.0 (7.0, 21.0)	
Monitor placed after 24hrs, n (%)	35 (14%)	18 (14%)	11 (13%)	5 (16%)	1 (9%)	0.954
Surgical Evacuation, n (%)	184 (27%)	82 (24%)	44 (23%)	40 (39%)	18 (49%)	**<0.001**
Surgical Decompression, n (%)	216 (32%)	104 (31%)	58 (30%)	38 (37%)	16 (43%)	0.260
ICU Length of Stay						0.228
Median (IQR)	12.0 (6.0, 18.0)	11.5 (6.0, 17.0)	12.0 (7.0, 19.0)	12.0 (7.2, 21.0)	13.0 (6.0, 21.0)	
Hospital Length of Stay						0.293
Median (IQR)	18.0 (10.0, 30.0)	16.5 (8.0, 30.0)	19.0 (11.0, 29.0)	20.0 (14.0, 30.8)	21.0 (8.0, 28.0)	
GOS-E Peds Available, n (%)	519 (77%)	278 (82%)	133 (69%)	80 (78%)	28 (76%)	**0.011**
GOS-E Peds, Median (IQR)	5.0 (3.0, 8.0)	5.0 (3.0, 8.0)	6.0 (3.0, 8.0)	5.0 (3.0, 6.0)	5.0 (2.0, 8.0)	0.527
Died, n (%)	134 (20%)	79 (23%)	35 (18%)	12 (12%)	8 (22%)	0.072
Discharge Location, n (%)						**0.040**
Rehabilitation Facility	381 (57%)	188 (55%)	111 (58%)	65 (64%)	17 (46%)	
Home	147 (22%)	70 (21%)	42 (22%)	25 (25%)	10 (27%)	
N/A - Patient Died	130 (19%)	77 (23%)	35 (18%)	11 (11%)	7 (19%)	
Other Hospital	12 (2%)	5 (1%)	3 (2%)	1 (1%)	3 (8%)	

[1]Mean (±SD), Median (IQR) or Frequency (%)
[2]Kruskal-Wallis rank sum test; Pearson's Chi-squared test; One-way ANOVA,
Motor vehicle accident (MVA), traumatic brain injury (TBI), acceleration/deceleration injury (Accel/Decel), abusive head trauma (AHT), Glasgow coma scale (GCS), pediatric risk of mortality III score (PRISM III), Glasgow outcome scale – extended pediatric (GOS-E Peds)

Table 2.1. Baseline Characteristics of the Study Cohort Stratified by Race and Ethnicity in 'Other'

Characteristic	Overall, N = 37[1]	Alaska Native or Inuit, N = 9[1]	Asian, N = 14[1]	Multi-racial, N = 10[1]	Native Hawaiian or Pacific Islander, N = 4[1]
Age (years)					
Median (IQR)	4.0 (2.0, 11.0)	4.0 (2.0, 9.0)	7.0 (2.8, 14.8)	3.0 (2.0, 3.8)	10.5 (6.2, 14.0)
Gender, n (%)					
Male	20 (54%)	4 (44%)	6 (43%)	6 (60%)	4 (100%)
Female	17 (46%)	5 (56%)	8 (57%)	4 (40%)	0 (0%)
Height (cm)					
Median (IQR)	112.8 (94.2, 152.3)	123.6 (106.2, 144.5)	122.4 (104.0, 154.9)	101.0 (92.5, 107.9)	151.5 (122.5, 166.5)
Weight (kg)					
Median (IQR)	19.2 (14.8, 47.0)	20.0 (14.9, 47.0)	26.0 (15.9, 47.5)	15.9 (12.8, 18.6)	42.5 (25.0, 58.8)
Head Circumference (cm), Mean (±SD)	46.0 (±7.0)	NA (±NA)	NA (±NA)	46.0 (±7.0)	NA (±NA)
Cause, n (%)					
MVA	14 (38%)	4 (44%)	6 (43%)	2 (20%)	2 (50%)
Fall	11 (30%)	5 (56%)	5 (36%)	1 (10%)	0 (0%)
Inflicted	9 (24%)	0 (0%)	2 (14%)	6 (60%)	1 (25%)
Other Accidental	3 (8%)	0 (0%)	1 (7%)	1 (10%)	1 (25%)
Type of TBI, n (%)					
Closed	32 (86%)	9 (100%)	12 (86%)	8 (80%)	3 (75%)
Crush	3 (8%)	0 (0%)	2 (14%)	0 (0%)	1 (25%)
Penetrating	2 (5%)	0 (0%)	0 (0%)	2 (20%)	0 (0%)
Blast	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Mechanism, n (%)					
Impact	17 (46%)	2 (22%)	5 (36%)	7 (70%)	3 (75%)
Fall	13 (35%)	6 (67%)	6 (43%)	1 (10%)	0 (0%)
Crush	3 (8%)	0 (0%)	2 (14%)	0 (0%)	1 (25%)
Accel/Decel	2 (5%)	1 (11%)	1 (7%)	0 (0%)	0 (0%)
Gunshot	2 (5%)	0 (0%)	0 (0%)	2 (20%)	0 (0%)
Concerns for AHT, n (%)	6 (16%)	0 (0%)	1 (7%)	4 (40%)	1 (25%)
Admission GCS Score, Median (IQR)	6.0 (3.0, 7.0)	6.0 (6.0, 7.0)	6.0 (3.0, 6.8)	6.5 (3.8, 7.0)	3.0 (3.0, 3.8)
Abbreviated Injury Score					
Median (IQR)	8.0 (6.0, 10.0)	8.0 (7.0, 10.0)	8.0 (5.0, 10.0)	7.5 (6.2, 9.5)	8.0 (5.0, 12.0)
PRISM III					
Median (IQR)	11.0 (7.0, 21.0)	10.0 (7.0, 12.0)	10.0 (7.0, 19.8)	13.5 (9.2, 17.8)	26.5 (24.2, 30.8)
Monitor placed after 24hrs, n (%)	1 (9%)	1 (20%)	0 (0%)	0 (0%)	0 (0%)
Surgical Evacuation, n (%)	18 (49%)	2 (22%)	7 (50%)	7 (70%)	2 (50%)
Surgical Decompression, n (%)	16 (43%)	2 (22%)	5 (36%)	7 (70%)	2 (50%)
ICU Length of Stay					
Median (IQR)	13.0 (6.0, 21.0)	10.0 (9.0, 17.0)	7.5 (3.2, 20.5)	17.5 (9.5, 23.8)	11.0 (2.5, 19.2)
Hospital Length of Stay					
Median (IQR)	21.0 (8.0, 28.0)	17.0 (14.0, 33.0)	17.0 (5.0, 23.5)	23.0 (21.2, 31.0)	11.0 (2.5, 26.8)
GOS-E Peds Available, n (%)	28 (76%)	8 (89%)	8 (57%)	9 (90%)	3 (75%)
GOS-E Peds, Median (IQR)	5.0 (2.0, 8.0)	2.5 (2.0, 6.5)	5.0 (1.8, 8.0)	5.0 (2.0, 6.0)	8.0 (7.5, 8.0)
Died, n (%)	8 (22%)	2 (22%)	3 (21%)	1 (10%)	2 (50%)
Discharge Location, n (%)					
Rehab	17 (46%)	2 (22%)	7 (50%)	7 (70%)	1 (25%)
Home	10 (27%)	4 (44%)	3 (21%)	2 (20%)	1 (25%)
N/A - Patient Died	7 (19%)	1 (11%)	3 (21%)	1 (10%)	2 (50%)
Other Hospital	3 (8%)	2 (22%)	1 (7%)	0 (0%)	0 (0%)

[1]Mean (±SD), Median (IQR) or Frequency (%)

Motor vehicle accident (MVA), traumatic brain injury (TBI), acceleration/deceleration injury (Accel/Decel), abusive head trauma (AHT), Glasgow coma scale (GCS), pediatric risk of mortality III score (PRISM III), Glasgow outcome scale – extended pediatric (GOS-E Peds)