

On-line Table 1: Breakdown of susceptibility map datasets collected across the subject groups^a

Group	Total Sessions	Total Sessions Collected (by Visit)			Individualized Sessions Collected (No. of Subjects)						
		1 (24 hr)	2 (8 days)	3 (6 mo)	1-2-3	1-2	1-3	2-3	1	2	3
Injured	61/81	21	23	17	13	6	1	2	1	2	1
Control	68/81	26	23	19	16	7	2	0	1	0	1

^a Data-loss breakdown: Two of the 56 subjects (1 injured and 1 control) did not complete any MRI scans. From the remaining 54 subjects, 136 of a maximum of 162 QSM sets were included in the present analysis. Fifteen of 26 missing sets were due to subjects missing ≥ 1 of the 3 time-point imaging sessions. Four of 26 missing sets were due to scanner errors or raw data-saving failures. Seven of 26 missing sets were due to quality control failure, as described in the "Materials and Methods" section. The only notable deviation of subject participation between the groups is at the 24-hour imaging time point. This discrepancy is expected, due to the additional challenges in bringing in concussed subjects within 24 hours of their injuries. The only missing data point in the 24-hour control set is due to a quality control failure. The right half of the table outlines the collection of longitudinal data points across the subjects (ie, 13 injured and 16 control subjects attended all 3 imaging sessions).

On-line Table 2: Selective cohort statistics computed at each time point using subjects who had susceptibility maps that were included in the present analysis^a

Metric	Control						Injured						P					
	24 Hours			8 Days			6 Months			24 Hours					8 Days			6 Months
	No.	Mean (95% CI)	No.	Mean (95% CI)	No.	Mean (95% CI)	No.	Mean (95% CI)	No.	Mean (95% CI)	No.	Mean (95% CI)	No.	Mean (95% CI)	No.	Mean (95% CI)	No.	Mean (95% CI)
Age (yr)	26	18.0 (17.3–18.6)	23	18.1 (17.4–18.7)	18	17.9 (17.0–18.7)	21	17.1 (17.0–18.4)	23	18.8 (17.2–18.4)	17	17.5 (16.6–18.2)	52	53	47			
Weight (lbs)	26	72.0 (70.9–73.0)	23	71.6 (70.5–72.7)	18	72.1 (70.8–73.4)	21	71.2 (69.8–72.6)	23	71.7 (70.2–73.1)	17	71.7 (70.0–73.5)	36	96	7			
Height (in)	26	202.2 (186.4–218.1)	23	197.3 (182.1–212.5)	18	199.6 (180.9–218.4)	21	215.1 (190.6–239.6)	23	221.3 (197.0–245.6)	17	216.4 (186.4–246.4)	36	09	32			
Y.I.S. (yr)	26	8.2 (7.1–9.3)	23	8.5 (7.5–9.6)	18	8.0 (6.6–9.4)	21	8.9 (7.3–10.6)	23	9 (7.6–10.4)	17	8.1 (6.6–9.5)	43	61	95			
G.P.A.	26	3.3 (3.1–3.4)	23	3.3 (3.1–3.4)	18	3.3 (3.1–3.5)	20	3.2 (2.9–3.4)	23	3.1 (2.9–3.4)	16	3.1 (2.8–3.5)	54	33	38			
SAC	26	26.1 (25.3–26.9)	23	27.5 (26.9–28.2)	18	27.3 (26.4–28.2)	21	24.5 (23.3–25.7)	23	26.9 (25.8–28.0)	16	26.9 (25.7–28.0)	03 ^b	32	56			
BESS	25	12.3 (10.5–14.2)	22	10.1 (8.0–12.2)	18	11.9 (9.8–14.1)	18	14.1 (11.9–16.3)	23	11.8 (9.7–13.8)	17	11.8 (9.6–14.1)	2	23	94			
SCAT	26	3.0 (1.8–4.1)	23	1.9 (0.6–3.2)	18	2.3 (0.8–3.8)	21	27.2 (19.3–35.2)	23	5.3 (1.7–8.8)	17	1.2 (0.4–2.0)	<.001 ^b	07	18			
RTP (days)		NA		NA		NA	17	14.9 (11.5–18.4)	20	14.6 (11.6–17.4)	13	14.4 (10.6–18.1)	NA	NA	NA			
P.SRC (total No.)	26	8	23	7	18	5	21	12	23	14	17	10	09	05	09			

Note:—Y.I.S. indicates years in sport; G.P.A., academic grade point average on a 4.0-point scale; P.SRC, number of previous sports-related concussions; NA, not applicable; BESS, Balance Error Scoring System.

^a The number of subjects analyzed for each metric varied depending on the intersection of susceptibility map inclusion and availability of metric data for the subject. The final 3 columns provide time-point-resolved group statistical test *P* values (2-tailed *t* tests for all metrics except for P.SRC, which used a Mann-Whitney *U* test). Of note, none of the cohort statistics, when intersected with QSM data inclusion at each time point, show different results from the general statistics presented in Tables 2 and 3.

^b Significant.