

Supplemental Table 1. Intra- and inter-observer reliability correlation for multi-reader and multi-run validation testing.

Observers	Intra- & inter-observer reliability (ICC)	95% Confidence interval	p-value
A1 vs A2	0.999	0.996-1.00	<0.0001
B1 vs B2	0.998	0.992-0.999	<0.0001
C1 vs C2	0.993	0.976-0.998	<0.0001
D1 vs D2	0.997	0.990-0.999	<0.0001
A1, B1, C1, D1	0.997	0.993-0.999	<0.0001
A2, B2, C2, D2	0.998	0.995-0.999	<0.0001

Supplemental Table 2. Comparison statistics for the epidural fat volume measurements and distribution between the two MRI techniques.

Fat Volume	Normal Group (Mean \pm SD in mm³)	Parallel Group (Mean \pm SD in mm³)	Paired t-test p-value	Correlation Coefficient (p-value)
Total	4873 \pm 2336	5050 \pm 2285	0.2	0.98 (<0.001)
L2 – L5 Only	3451 \pm 1646	3401 \pm 1605	0.51	0.99 (<0.001)
Top (L1-L3)	1216 \pm 675	1295 \pm 645	0.13	0.97 (<0.001)
Bottom (L4-S1)	3657 \pm 1872	3755 \pm 1903	0.4	0.98 (<0.001)
L2 Only	365 \pm 191	379 \pm 230	0.48	0.97 (<0.001)
L3 Only	551 \pm 254	600 \pm 221	0.21	0.88 (<0.001)
L4 Only	782 \pm 427	764 \pm 527	0.76	0.95 (<0.001)
L5 Only	1347 \pm 771	1202 \pm 776	0.05	0.96 (<0.001)