Supplemental Table 1. Histological Scores.

2 Cartilage collagen matrix loss and osteophytes were not found in any histological image;

3 therefore, these measures were not included in the table. Other values are shown as mean

4 +/- 95% confidence interval (C.I.). Comparison for MIA versus saline animals at each week

5 are from the Tukey HSD test, whereas the comparison for MIA and saline animals for all

weeks is the p-value associated with the ANOVA main effect.

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Measure	MIA-injected knee	Saline-injected knee	p-value
	Mean ± 95% C.I.	Mean ± 95% C.I.	(MIA/Saline)
Cartilage degeneration	W1: 0.16-1.20-2.24	W1: 0.00-0.00-0.00	**W1: 0.0240
score on the medial third	W2: 0.04–0.83–1.62	W2: -0.28-0.40-1.08	W2: 0.8195
of the medial	W4: 0.12–1.00–1.88	W4: 0.00-0.00-0.00	W4: 0.1068
compartment	All: 0.61–1.00–1.39	All: -0.06–0.13–0.31	**All: 0.0003
Cartilage degeneration	W1: -0.36-0.20-0.76	W1: 0.00-0.00-0.00	W1: 0.9192
score on the central third	W2: -0.21-0.33-0.88	W2: 0.00-0.00-0.00	W2: 0.5818
of the medial	W4: -0.36-0.20-0.76	W4: 0.00-0.00-0.00	W4: 0.9319
compartment	All: 0.01-0.25-0.49	All: 0.00-0.00-0.00	All: 0.0505
Cartilage degeneration	W1: -0.24-1.00-2.24	W1: -0.26-0.17-0.60	W1: 0.2264
score on the lateral third	W2: 0.00-0.00-0.00	W2: 0.00-0.00-0.00	W2: 1.000
of the medial	W4: 0.29–1.40–2.51	W4: -0.28-0.40-1.08	W4: 0.1201
compartment	All: 0.25–0.75–1.25	All: -0.03–0.19–0.40	**All: 0.0077
Calcified cartilage and	W1: 0.12-1.00-1.88	W1: -0.08-0.50-1.07	W1: 0.5618
subchondral bone	W2: 0.65–1.20–1.76	W2: -0.05-0.75-1.55	W2: 0.7502
damage score	W4: 0.25–0.80–1.36	W4: 0.00-0.00-0.00	W4: 0.1461

	All: 0.70–1.00–1.30	All: 0.12-0.40-0.68	**All: 0.0038
Synovial reaction score	W1: 2.99-4.33-5.57	W1: -0.02-0.39-0.80	**W1: 0.0002
	W2: 2.05–3.44–4.84	W2: -0.39-0.80-1.99	**W2: 0.0002
	W4: 2.72–3.80–4.88	W4: -0.09-0.53-1.16	**W4: 0.0002
	All: 3.24–3.83–4.43	All: 0.23-0.56-0.90	**All: <0.000
	W1: 352–396–439	W1: 251–301–351	**W1: 0.0222
Medial joint capsule	W2: 406–430–454	W2: 255–317–379	**W2: 0.0043
repair (µm)	W4: 399–495–591	W4: 307–325–343	**W4: 0.0002
	All: 407–440–472	All: 292–314–335	**All: <0.000
Growth plate thickness	W1: 145–154–163	W1: 159–173–188	W1: 0.1912
under the medial half of	W2: 129–140–150	W2: 120–138–156	W2: 1.0000
the medial compartment	W4: 137–152–167	W4: 133–147–160	W4: 0.5956
(µm)	All: 141–148–154	All: 146–155–164	All: 0.3266
Growth plate thickness	W1: 112–127–142	W1: 140–154–168	**W1: 0.006
under the lateral half of	W2: 107–115–122	W2: 99–114–130	W2: 1.0000
the medial compartment	W4: 115–125–134	W4: 125–137–149	W4: 0.9927
(µm)	All: 116–122–128	All: 129–138–146	**All: 0.0036