

SUPPLEMENTARY TABLE S3. CARTILAGE AND CORTICAL VOLUME OF INTEREST DATA SET FOR BONE MICROCOMPUTED TOMOGRAPHY MEASUREMENTS AND CARTILAGE HISTOLOGICAL SCORES

Group	Time point (weeks)	BMD (g/cm ³)	BV/TV (%)	i.S (mm ²)	BS/BV (mm ⁻¹)	Obj.N	Cartilage morphology	Cartilage thickness	Cartilage regularity	Chondrocytes clustering	Neocartilage cell and GAG	Adjacent cell and GAG
BMP-2	6	0.11	11.03	3.58	50.21	245	2.00	2.00	1.00	2.33	2.33	2.33
BMP-2	6	0.05	2.76	1.00	61.22	242	1.00	1.00	0.67	2.33	0.33	1.00
BMP-2	6	0.06	5.63	2.62	50.21	206	1.67	1.67	0.67	1.67	1.67	2.33
BMP-2	6	0.24	21.89	6.57	35.66	188	2.50	2.00	2.00	1.50	2.00	1.00
BMP-2	6	0.39	35.36	6.69	23.39	222	3.00	2.00	3.00	2.00	3.00	3.00
BMP-2	6	0.38	36.16	8.72	25.47	185	3.00	2.00	2.33	1.33	3.00	3.00
BMP-2	6	0.30	24.14	6.48	49.04	534	2.67	1.67	1.00	1.33	2.33	2.00
BMP-2	6	0.27	26.69	6.39	42.77	313	2.67	2.00	2.00	1.33	2.67	1.33
BMP-2	6	0.30	25.80	5.12	42.60	257	2.00	2.00	2.00	2.00	2.00	2.33
BMP-2	6	0.19	13.98	3.41	35.08	172	3.00	2.00	2.67	2.33	3.00	2.67
Both	6	0.18	14.78	4.01	44.22	333	1.67	2.33	0.33	2.00	2.67	2.67
Both	6	0.27	28.50	6.20	34.06	140	2.00	2.00	1.50	2.50	2.67	2.00
Both	6	0.19	19.48	5.88	36.84	265	2.00	2.00	0.67	2.00	2.67	3.00
Both	6	0.30	29.17	6.82	47.92	352	2.67	2.00	1.33	1.67	2.67	3.00
Both	6	0.14	19.65	5.47	28.71	64	1.33	1.67	1.67	1.67	1.00	1.33
Both	6	0.23	23.92	4.77	31.46	107	2.00	1.67	2.00	1.67	2.00	2.00
Both	6	0.01	3.99	3.59	56.26	134	1.67	2.00	0.00	2.00	1.00	2.00
Both	6	0.08	5.81	1.68	59.35	384	2.00	2.00	1.33	2.33	1.67	2.67
Both	6	0.39	40.09	8.77	28.87	221	2.33	2.00	2.00	1.67	1.67	2.00
Both	6	0.34	37.01	7.60	33.09	148	2.33	2.00	2.00	2.33	2.33	2.33
Both	6	0.15	9.95	4.55	40.50	217	2.67	1.67	1.33	1.33	3.00	3.00
Both	6	0.37	38.18	8.52	27.92	187	2.00	2.00	2.00	1.33	2.00	2.00
IGF-1	6	0.00	11.25	4.38	40.57	70	1.33	1.33	0.00	1.00	2.00	2.00
IGF-1	6	0.14	13.98	4.98	40.53	224	3.00	2.33	2.00	1.67	3.00	2.67
IGF-1	6	0.49	57.86	10.98	22.97	34	2.67	2.00	1.33	2.33	3.00	3.00
IGF-1	6	0.49	54.55	11.20	27.84	103	3.00	1.33	2.00	1.33	3.00	3.00
IGF-1	6	0.35	36.18	9.10	29.80	82	1.50	2.50	2.00	1.50	1.00	2.00
IGF-1	6	0.52	58.03	10.97	26.43	102	2.00	2.00	1.50	2.00	1.50	1.50
IGF-1	6	0.09	14.52	4.05	32.93	121	1.33	2.33	2.00	2.00	1.00	2.00
IGF-1	6	0.10	11.64	3.21	35.87	89	2.00	2.00	1.33	1.33	2.33	3.00
IGF-1	6	-0.01	8.48	3.64	49.91	218	1.00	1.33	0.00	1.67	1.00	2.00
IGF-1	6	0.12	18.79	4.80	29.43	104	3.00	2.00	0.00	1.67	3.00	2.00
IGF-1	6	0.28	23.04	6.20	34.85	269	3.00	2.00	2.00	2.00	3.00	3.00
IGF-1	6	0.32	34.15	7.32	32.44	135	2.67	2.00	1.33	2.00	2.33	2.00
BMP-2	12	0.78	82.50	13.82	9.59	14	1.67	1.00	0.67	1.67	0.67	2.67
BMP-2	12	0.51	57.73	9.69	10.29	9	2.00	2.00	2.00	1.67	1.67	2.67
BMP-2	12	0.52	55.24	12.27	24.04	259	1.67	1.67	1.67	2.00	1.33	3.00
BMP-2	12	0.66	70.81	14.57	14.71	170	2.67	1.33	1.67	1.67	1.33	3.00
BMP-2	12	0.46	49.72	8.93	20.53	94	3.00	2.00	1.00	2.00	2.00	2.00
BMP-2	12	0.43	46.86	8.84	19.84	33	3.33	1.00	2.00	1.33	2.67	3.00
BMP-2	12	0.45	45.69	8.16	17.09	113	2.33	1.67	2.00	1.67	2.00	3.00

(continued)

SUPPLEMENTARY TABLE S3. (CONTINUED)

Group	Time point (weeks)	BMD (g/cm ³)	BV/TV (%)	i.S. (mm ²)	BS/BV (mm ⁻¹)	Obj.N	Cartilage morphology	Cartilage thickness	Cartilage regularity	Chondrocytes clustering	Neocartilage cell and GAG	Adjacent cell and GAG
BMP-2	12	0.58	65.50	14.01	19.49	176	1.67	2.00	1.33	2.00	0.67	2.33
BMP-2	12	0.07	6.08	3.12	43.77	179	1.00	2.00	2.50	2.00	2.50	2.00
BMP-2	12	0.31	31.94	8.64	27.00	84	2.00	2.00	2.00	1.67	1.67	2.00
BMP-2	12	0.45	50.28	10.44	22.81	72	2.33	1.00	0.00	1.00	1.33	2.00
BMP-2	12	0.41	48.07	8.72	20.41	24	2.67	1.67	1.33	1.33	2.00	3.00
Both	12	0.55	64.38	11.07	12.95	46	1.67	1.00	2.00	2.00	1.33	2.00
Both	12	0.80	86.51	13.68	7.00	4	2.33	1.00	1.67	1.67	1.00	2.00
Both	12	0.29	12.51	4.12	42.95	244	1.33	1.33	0.00	2.33	1.33	3.00
Both	12	0.48	54.12	11.39	17.07	43	2.00	1.00	0.50	1.00	2.00	3.00
Both	12	0.75	78.64	15.16	8.84	100	2.50	2.00	3.00	1.50	1.50	3.00
Both	12	0.56	63.82	13.48	19.06	159	3.33	2.00	2.33	2.67	2.67	3.00
Both	12	0.34	44.14	10.47	19.35	48	2.33	2.67	0.67	1.67	1.67	2.00
Both	12	0.41	48.91	9.23	15.33	40	1.67	1.00	1.33	2.33	0.67	2.67
Both	12	0.63	73.44	14.03	17.18	161	2.67	1.67	2.00	2.33	1.67	2.67
Both	12	0.59	65.37	14.45	14.97	78	3.33	2.33	2.00	2.33	2.33	2.33
Both	12	0.56	55.56	12.91	14.87	143	3.67	2.33	3.00	1.67	2.67	3.00
Both	12	0.43	43.41	9.90	25.53	189	1.67	1.33	2.67	2.00	1.67	2.67
IGF-1	12	0.28	30.86	6.14	27.68	231	3.00	1.33	1.33	1.67	2.67	2.67
IGF-1	12	0.45	58.88	8.97	20.10	35	1.33	1.00	1.00	1.67	1.33	2.33
IGF-1	12	0.21	23.66	5.57	36.98	189	1.00	1.67	0.67	2.00	2.00	2.33
IGF-1	12	0.58	64.56	10.89	15.60	82	1.67	1.67	1.67	1.67	2.00	3.00
IGF-1	12	0.14	13.77	5.21	38.32	247	1.67	2.00	1.00	2.00	2.00	2.67
IGF-1	12	0.51	58.05	11.36	20.66	90	2.33	2.33	2.00	1.67	2.00	3.00
IGF-1	12	0.40	45.73	9.74	20.46	104	1.00	1.67	2.00	2.33	1.33	3.00
IGF-1	12	0.62	70.94	12.24	13.72	24	2.67	1.00	2.33	1.67	1.67	3.00
IGF-1	12	0.26	27.69	6.46	23.85	32	1.00	2.33	1.33	1.67	1.33	3.00
IGF-1	12	0.26	22.86	6.64	29.41	155	3.00	2.33	2.33	2.00	3.00	3.00
IGF-1	12	0.40	40.41	8.17	24.36	168	2.67	2.33	2.33	2.00	2.00	3.00
IGF-1	12	0.72	83.00	15.00	10.83	10	2.00	2.33	3.00	1.67	1.33	2.67

BMP-2, bone morphogenetic protein-2; C&C, cartilage and cortical; IGF-1, insulin-like growth factor-1.