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Supplementary table 1 Pairwise comparisons of the micro-computed tomography parameters

Variable / Comparison <sup>†</sup>		Difference	SE	Lower CL	Upper CL	p-value
<b>Bone volume (mm<sup>3</sup>)</b>						
CBM-Fiber <sub>d</sub>	DBM-Fiber	98.80	4.30	86.82	110.78	<.0001*
CBM-Fiber <sub>v</sub>	DBM-Fiber	88.63	4.30	76.66	100.61	<.0001*
CBM-Particulate <sub>v</sub>	DBM-Fiber	56.59	4.30	44.61	68.57	<.0001*
CBM-Particulate <sub>d</sub>	DBM-Fiber	52.74	4.30	40.76	64.72	<.0001*
CBM-Fiber <sub>d</sub>	CBM-Particulate <sub>d</sub>	46.06	4.30	34.09	58.04	<.0001*
CBM-Fiber <sub>d</sub>	CBM-Particulate <sub>v</sub>	42.21	4.30	30.24	54.19	<.0001*
CBM-Fiber <sub>v</sub>	CBM-Particulate <sub>d</sub>	35.90	4.30	23.92	47.87	<.0001*
CBM-Fiber <sub>v</sub>	CBM-Particulate <sub>v</sub>	32.05	4.30	20.07	44.02	<.0001*
CBM-Fiber <sub>d</sub>	CBM-Fiber <sub>v</sub>	10.17	4.30	-1.81	22.15	0.1349
CBM-Particulate <sub>v</sub>	CBM-Particulate <sub>d</sub>	3.85	4.30	-8.13	15.83	0.8977
<b>Total volume (mm<sup>3</sup>)</b>						
CBM-Fiber <sub>d</sub>	DBM-Fiber	195.11	11.39	163.36	226.86	<.0001*
CBM-Fiber <sub>v</sub>	DBM-Fiber	188.90	11.39	157.15	220.65	<.0001*
CBM-Particulate <sub>v</sub>	DBM-Fiber	131.43	11.39	99.69	163.18	<.0001*
CBM-Particulate <sub>d</sub>	DBM-Fiber	125.02	11.39	93.27	156.77	<.0001*
CBM-Fiber <sub>d</sub>	CBM-Particulate <sub>d</sub>	70.09	11.39	38.35	101.84	<.0001*
CBM-Fiber <sub>v</sub>	CBM-Particulate <sub>d</sub>	63.88	11.39	32.13	95.63	<.0001*
CBM-Fiber <sub>d</sub>	CBM-Particulate <sub>v</sub>	63.68	11.39	31.93	95.43	<.0001*
CBM-Fiber <sub>v</sub>	CBM-Particulate <sub>v</sub>	57.46	11.39	25.71	89.21	<.0001*
CBM-Particulate <sub>v</sub>	CBM-Particulate <sub>d</sub>	6.42	11.39	-25.33	38.16	0.9800
CBM-Fiber <sub>d</sub>	CBM-Fiber <sub>v</sub>	6.22	11.39	-25.53	37.97	0.9822
<b>Bone volume fraction</b>						
CBM-Fiber <sub>d</sub>	DBM-Fiber	0.10	0.01	0.07	0.13	<.0001*

CBM-Fiber <sub>v</sub>	DBM-Fiber	0.08	0.01	0.06	0.11	<.0001*
CBM-Particulate <sub>v</sub>	DBM-Fiber	0.05	0.01	0.03	0.08	<.0001*
CBM-Fiber <sub>d</sub>	CBM-Particulate <sub>d</sub>	0.05	0.01	0.03	0.08	<.0001*
CBM-Particulate <sub>d</sub>	DBM-Fiber	0.05	0.01	0.02	0.08	<.0001*
CBM-Fiber <sub>d</sub>	CBM-Particulate <sub>v</sub>	0.05	0.01	0.02	0.08	<.0001*
CBM-Fiber <sub>v</sub>	CBM-Particulate <sub>d</sub>	0.04	0.01	0.01	0.06	0.0052*
CBM-Fiber <sub>v</sub>	CBM-Particulate <sub>v</sub>	0.03	0.01	0.00	0.06	0.0207*
CBM-Fiber <sub>d</sub>	CBM-Fiber <sub>v</sub>	0.02	0.01	-0.01	0.04	0.4028
CBM-Particulate <sub>v</sub>	CBM-Particulate <sub>d</sub>	0.00	0.01	-0.02	0.03	0.9907
<b>Bone mineral density</b>						
CBM-Particulate <sub>d</sub>	DBM-Fiber	19.00	6.49	0.91	37.10	0.0346*
CBM-Particulate <sub>d</sub>	CBM-Fiber <sub>d</sub>	18.04	6.49	-0.05	36.14	0.0510
CBM-Particulate <sub>d</sub>	CBM-Fiber <sub>v</sub>	17.93	6.49	-0.16	36.02	0.0533
CBM-Particulate <sub>v</sub>	DBM-Fiber	15.28	6.49	-2.81	33.38	0.1382
CBM-Particulate <sub>v</sub>	CBM-Fiber <sub>d</sub>	14.32	6.49	-3.77	32.42	0.1873
CBM-Particulate <sub>v</sub>	CBM-Fiber <sub>v</sub>	14.21	6.49	-3.88	32.30	0.1939
CBM-Particulate <sub>d</sub>	CBM-Particulate <sub>v</sub>	3.72	6.49	-14.37	21.81	0.9787
CBM-Fiber <sub>v</sub>	DBM-Fiber	1.07	6.49	-17.02	19.17	0.9998
CBM-Fiber <sub>d</sub>	DBM-Fiber	0.96	6.49	-17.13	19.06	0.9999
CBM-Fiber <sub>v</sub>	CBM-Fiber <sub>d</sub>	0.11	6.49	-17.98	18.21	1.0000

SE, standard error; CL, confidence limit; CBM, cellular bone matrix; DBM, demineralized bone matrix. <sup>†</sup>Subscripts denote viable (v) or devitalized (d) state; Values pertaining to second column from left were subtracted from the first column; Results are ordered based on the magnitude of difference.

Supplementary table 2 Comparison of grafts between time-zero and six weeks using the micro-computed tomography parameters

Variable / Comparison <sup>†</sup>		Score Mean Difference	SE	Z	p-Value	95% CI	
						Lower	Upper
<b>Bone volume fraction</b>							
CBM-Fiber <sub>d</sub>	CBM-Fiber (baseline)	10.3056	3.869396	2.66335	0.0077*	0.036500	0.139400
CBM-Fiber <sub>v</sub>	CBM-Fiber (baseline)	9.1389	3.868139	2.36261	0.0181*	0.023900	0.122500
CBM-Particulate <sub>d</sub>	CBM-Particulate (baseline)	2.5278	3.869396	0.65327	0.5136	-0.019700	0.034600
CBM-Particulate <sub>v</sub>	CBM-Particulate (baseline)	2.5278	3.869396	0.65327	0.5136	-0.020100	0.049200
DBM-Fiber (baseline)	DBM-Fiber	-10.3056	3.869396	-2.66335	0.0077*	-0.286900	-0.172300
<b>Bone mineral density</b>							
DBM-Fiber (baseline)	DBM-Fiber	10.3056	3.869396	2.66335	0.0077*	96.205	172.813
CBM-Particulate <sub>d</sub>	CBM-Particulate (baseline)	-5.6389	3.869396	-1.45730	0.1450	-37.159	13.616
CBM-Particulate <sub>v</sub>	CBM-Particulate (baseline)	-6.8056	3.869396	-1.75882	0.0786	-36.777	4.072
CBM-Fiber <sub>d</sub>	CBM-Fiber (baseline)	-9.9167	3.869396	-2.56285	0.0104*	-78.517	-19.725
CBM-Fiber <sub>v</sub>	CBM-Fiber (baseline)	-10.3056	3.869396	-2.66335	0.0077*	-80.553	-17.943

SE, standard error; CI, confidence interval; CBM, cellular bone matrix; DBM, demineralized bone matrix.

<sup>†</sup>Subscripts denote viable (v) or devitalized (d) state; Values pertaining to second column from left were subtracted from the first column; Results are ordered based on score mean difference.