

Supplementary Materials

Enhanced Regeneration of Bone Defects Using Sintered Porous Ti6Al4V Scaffolds Incorporated with Mesenchymal Stem Cells and Platelet-Rich Plasma

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Tables

Table S1. The sequences of primers

Primer	Sequence 5' to 3'
h GAPDH-F	GCCTTCCGTGTCCCCACTGC
h GAPDH-R	GGCTGGTGGTCCAGGGGTCT
hRUNX2-F	CAGTCTTACCCCTCCTACCT
hRUNX2-R	AGTTCTGAAGCACCTGCCT
hALP-F	TGACAGCTGCCAGGATCCTA
hALP-R	CTTTCTTGGCCCGATTCATC
hBSP-F	CTGCTACAACACTGGGCTAT
hBSP-R	CCTTCTTCTCCATTGTCTCC
hCol-1-F	ATGACCGATGGATTCCCGTTC
hCol-1-R	ACGCTGTTCTTGCAGTGATAGGT
hOC-F	CACTCCTCGCCCTATTGGC
hOC-R	CCCTCCTGCTTGGACACAAAG

Table S2. The ELISA results of PRP released growth factors

Growth Factors	PRP (ng/ml)	Whole Blood (ng/ml)	Times
PDGH-AB	80.96±15.45	14.98±5.23	5.4
TGF-β1	70.6±10.54	18.58±4.56	3.8
IGF-1	62.27±6.39	18.87±3.29	3.3
b-FGF	0.856±0.293	0.329±0.157	2.6

Figures

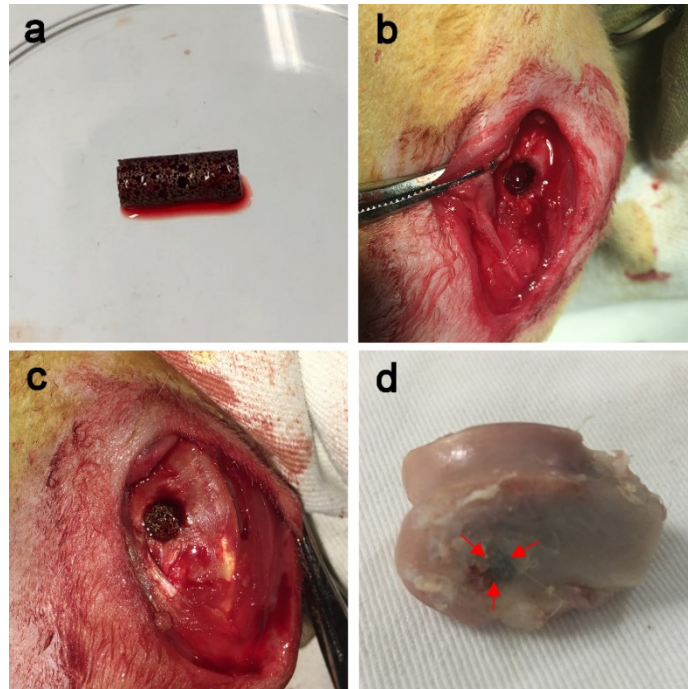


Fig.S1. (a) Exterior morphology of Ti6Al4V/MSC/PRP construct; (b) and (c) the surgical procedures; (d) The retrieved femora and implant.

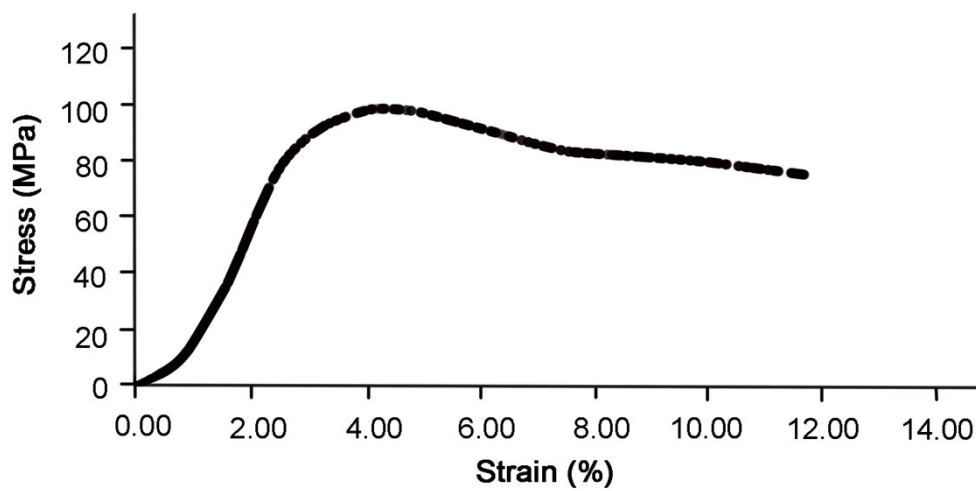


Fig.S2. Stress-strain curves of the two type of porous samples.

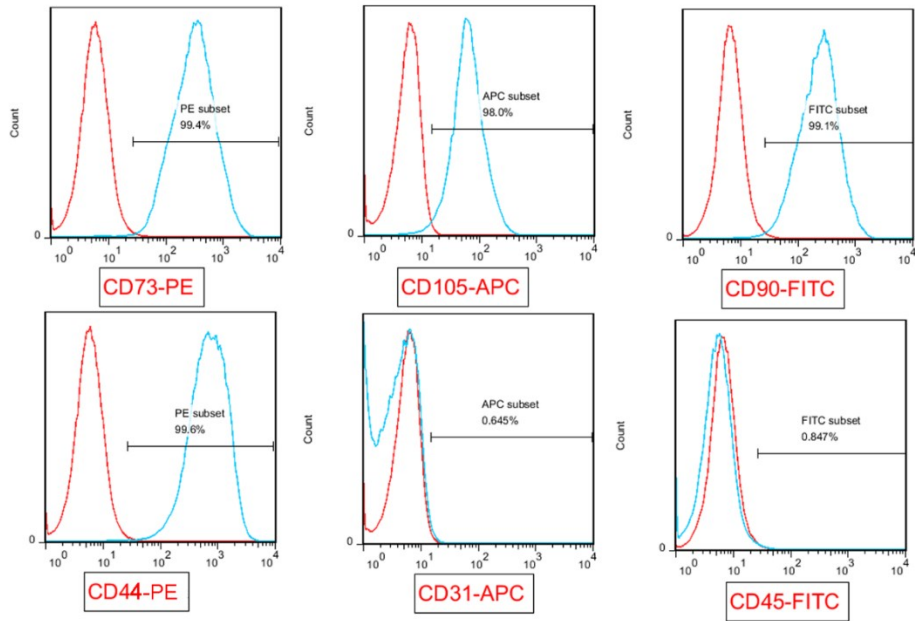


Fig.S3 Immunophenotypes of MSCs: markers of CD73, CD105, CD90, CD44, CD31, and CD45.

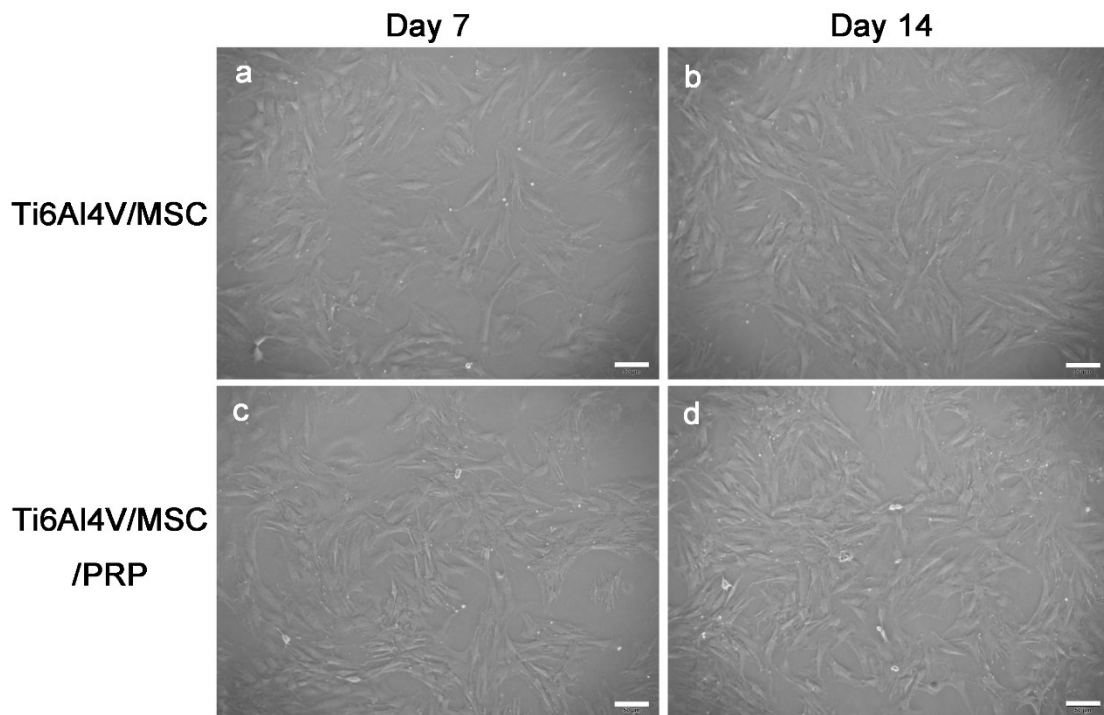


Fig.S4. The morphologies of MSCs at 7 days and 14 days in the two groups.