Supporting Information

Mesenchymal stem cells-derived microvesicles mediate

BMP2 gene delivery and enhance bone regeneration

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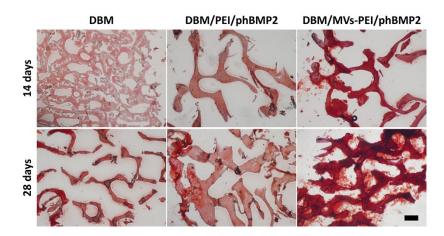


Fig. S1 Histological assays of the scaffolds after MSCs culture for 14 days and 28 days. Mineral deposition of scaffolds was detected by Alizarin Red S staining. Scale bar, 100 μ m.

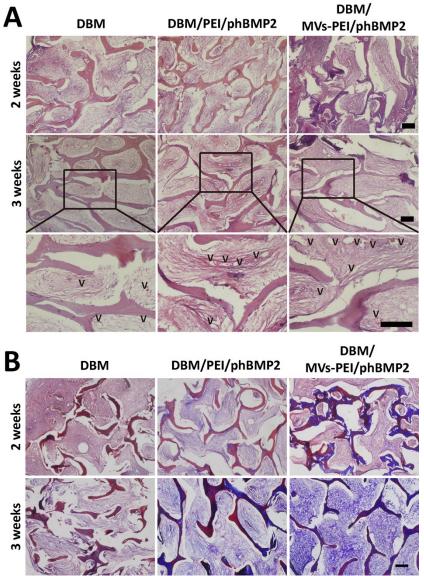


Fig. S2 Histological examination of the scaffolds after subcutaneous implantation for 2 weeks and 3 weeks. (A) H&E staining. (B) Masson's trichrome staining. V, Vessel. Scale bar, 100 μ m.

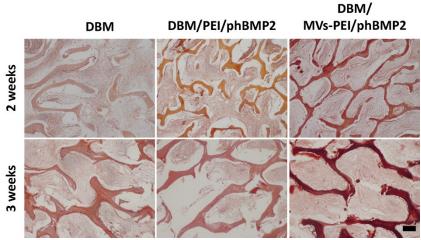


Fig. S3 The histological image of Alizarin Red S staining of the scaffolds after subcutaneous implantation for 2 weeks and 3 weeks. Scale bar, $100 \mu m$.

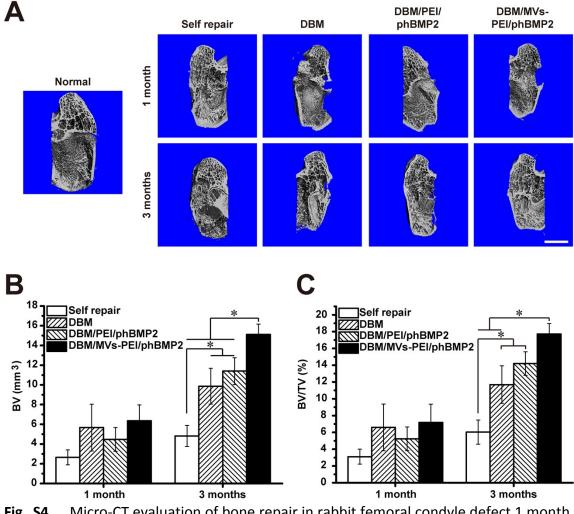


Fig. S4Micro-CT evaluation of bone repair in rabbit femoral condyle defect 1 month,2 months and 3 months post-implantation. (A) Cross-sectional images. Scale bar, 5 mm.(B) Bone volume (BV). (C) Bone volume (BV)/total volume (TV) * p < 0.05.