Jawbone microenvironment promotes periodontium regeneration by regulating the function of periodontal ligament stem cells

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Figure S1. Identification of PDLSCs, JBMSCs and IBMSCs. Single cell formed cell colonies in three cell types after 10 days of culture (A). Mineralized nodules stained by Alizarin Red after 28 days of osteogenic induction (B). Lipid droplets stained by Oil-red O after 21 days of adipogenic induction (C).



Figure S2. Cell surface markers of PDLSCs, JBMSCs and IBMSCs analyzied by flow cytometry. All three MSCs expressed CD29, CD90 and CD105 positively; and CD31, CD34 and CD45 negatively. In addition, PDLSCs expressed Stro-1, and IBMSCs and JBMSCs expressed CD146 positively.



Figure S3. Proliferation and cell cycle assay of PDLSCs on Ti in indirect co-culture system. FCM assay for cell cycle (A) and EdU-Apollo567 (B) staining for proliferation showed no significant difference between experiment groups (P >0.05).MTT (C) showed slight higher proliferation of PDLSCs, indirectly co-cultured with JBMSCs at day 3, 4 and 5 (P

<0.05). and Diagrammatic sectional drawing of indirect co-culture system (D). The data are shown as the mean±SD; * P < 0.05, n=3.