Supporting Information

Siddappa et al. 10.1073/pnas.0711190105

Fig. S1. (a) Percentage ALP-positive cells in hMSCs grown in basic medium (Con), osteogenic medium (Dex), basic medium supplemented with 1 mM db-cAMP (cAMP), or osteogenic medium supplemented with 1 mM db-cAMP (Dex+cAMP). (b) Percentage ALP-positive cells grown in basic medium (Con), osteogenic medium (Dex), basic medium supplemented with forskolin (Forskolin), or osteogenic medium supplemented with forskolin (Dex+Forskolin).
hMSCs were grown in basic medium, basic medium supplemented with 1 mM db-cAMP (cAMP), osteogenic medium (Dex), or osteogenic medium supplemented with 1 mM db-cAMP (Dex + cAMP). Expression was analyzed by qPCR and is expressed as fold induction compared with cells grown in basic medium. The data were analyzed by using two-way ANOVA, and statistical significance is indicated compared with cells grown in basic medium. *, P < 0.05.
Fig. S3. (a) Methylene blue staining of hMSC-seeded scaffolds grown in basic medium (Con) or basic medium supplemented with 1 mM db-cAMP (cAMP) for 4 days. Note the less intensely stained db-cAMP-treated construct, indicating reduced cell numbers. (b) Quantitative Alamar blue assay for cell number analysis. The data were analyzed by using one-way ANOVA followed by Dunnet’s multiple-comparison test. Statistical significance is indicated compared with cells grown in basic medium (Con). *, $P < 0.05$.
Fig. S4. A light microscopic image (Left) and polarized light microscopic image (Right) showing areas of polarized light indicating the presence of lamellar bone that has been remodeled by osteoclasts and osteoblasts.
Table S1. Donor information of hMSCs used in the study

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