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Author Correction: Convergence of TGF β and BMP signaling in regulating human bone marrow stromal cell differentiation

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This Article contains errors. In Figure 6C the OS image for SCR siRNA is incorrectly duplicated as the Figure 8C OS image for CNT. The correct Figure 8 and its accompanying legend appear below.

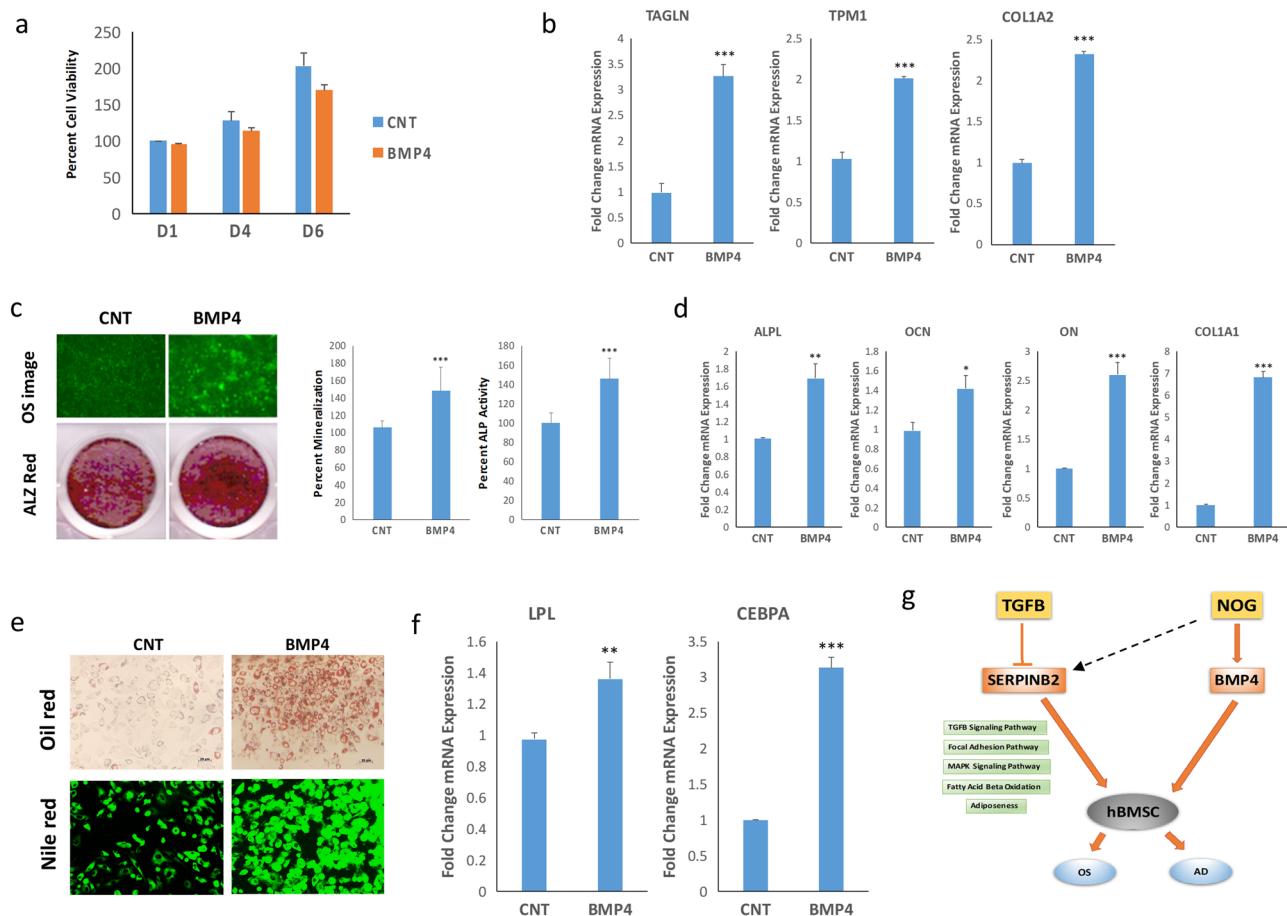


Figure 8. Effect of exogenous BMP4 on osteoblastic and adipocytic differentiation of hBMSC^{-Bone} cells. (a) Quantification of cell viability of hBMSC-Bone cells in the presence or absence of recombinant BMP4. (b) qRT-PCR quantification for TAGLN, TPM1, and Col1A2 in hBMSC^{-Bone} cells in the presence or absence of recombinant BMP4. The expression of each target gene was normalized to GAPDH. Data are presented as mean \pm SD from three independent experiments, $n=9$; *** $p<0.0005$. (c) OsteoImage™ staining (20 \times magnification) of hBMSC^{-Bone} cells which were induced into the osteoblast in the presence or absence of recombinant BMP4. The lower panel shows Alizarin Red S staining. The quantification of mineralized matrix formation for vehicle or recombinant BMP4-treated hBMSC^{-Bone} cells is shown (right panel). Data are presented as relative mean mineralization \pm SD from three independent experiments, $n=9$; * $p<0.0005$. (d) qRT-PCR quantification of ALPL, OCN, ON, and COL1A1 osteogenic markers in hBMSC^{-Bone} cells in the presence or absence of recombinant BMP4 under osteogenic induction conditions. The expression of each target gene was normalized to GAPDH. Data are presented as the means \pm SD from three independent experiments, $n=9$; * $p<0.05$, ** $p<0.005$, *** $p<0.0005$. (e) hBMSC^{-Bone} cells were differentiated into adipocytes for 7 days under the indicated experimental conditions. Upper panel shows fluorescence Nile red staining of mature oil filled adipocytes (20 \times magnification), whilst the lower panel shows Oil red O staining for adipocytes (20 \times magnification). The lower panel shows the relative quantification of Nile red staining of mature oil-filled adipocytes. (f) qRT-PCR quantification for LPL and CEBPA adipocytic markers. The expression of each target gene was normalized to GAPDH. Data are presented as mean \pm SD from three independent experiments, $n=9$; ** $p<0.005$, *** $p<0.0005$. (g) Schematic model illustrating the convergence of BMP and TGF β in regulating hBMSC differentiation.



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