

**Figure S1.** Graphs depict the osteogenic medium + vitD<sub>3</sub> over the osteogenic medium at day 14 and day 21. (**A**) Effect of vitD<sub>3</sub> on the *RUNX2* expression. vitD<sub>3</sub> had more effect on the long bone cells, which is significantly different on day 21. (**B**) Effect of vitD<sub>3</sub> on the *DMP-1* expression. vitD<sub>3</sub> had more effect on long bone cells, which is significantly different on day 21. (**C**) Alizarin red staining for the calcium deposits. No calcium deposits were visible for both the alveolar bone cells and the long bone cells. Significance was measured using a 2-way ANOVA with Bonferroni post-tests. \* = p < 0.05.



**Figure S2.** Graphs depict osteogenic medium over the basic or the osteogenic medium + vitD<sub>3</sub> over the osteogenic medium. (**A**) Osteogenic medium significantly increased the expression of *IL-6* in the long bone cells. Supplementation of vitD<sub>3</sub> upregulated the *IL-6* expression in both the alveolar bone cells and the long bone cells. (**B**) Effect of vitD<sub>3</sub> on the *COX2* expression. VitD<sub>3</sub> had more effect on the long bone cells, which is significantly different on day 21. Significance was measured using 2-way ANOVA with Bonferroni post-tests. \* = p < 0.05.



**Figure S3.** Graph depicts the basic medium + vitD<sub>3</sub> over the basic medium. Effect of vitD<sub>3</sub> on the *COX2* expression. On day 14, vitD<sub>3</sub> significantly upregulated the *COX2* expression. Significance was measured using 2-way ANOVA with Bonferroni post-tests. \* = p < 0.05.



**Figure S4.** Graphs depict the basic medium + vitD<sub>3</sub> over the basic medium. (A) Effect of vitD<sub>3</sub> on the *DC stamp* expression. Significance was measured using 2-way ANOVA with Bonferroni post-tests.