Supplementary Information

The effect of mineral coating morphology on mesenchymal stem cell attachment and expansion

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Supplementary Fig. 1 (a) Crystallinity index of mineral coatings compared with hydroxyapatite (HA). (b) Schematic representation of calculating crystallinity index. The heights of the absorption peaks at 603 cm⁻¹ and 565 cm⁻¹ from baseline are summed and divided by the height of the valley between them.



Supplementary Fig. 2 Calcium/Phosphorous (Ca/P) ratio of mineral coatings.



Supplementary Fig. 3 XRD patterns of mineral coatings. The peaks at 26° and 31° correspond to the planes of hydroxyapatite (\blacktriangle).



Cell density

Supplementary Fig. 4 SEM images of hMSC after a 4 day incubation on 2×-2.5 (left), 3.5×-2 (middle), and 5×1.5 (right) mineral coatings. Scale bar = 50 µm. C and M indicate hMSC and

CaP mineral respectively.