Supporting Information for publication

Osteoinductive material to fine-tune paracrine crosstalk of mesenchymal stem cells with endothelial cells and osteoblasts

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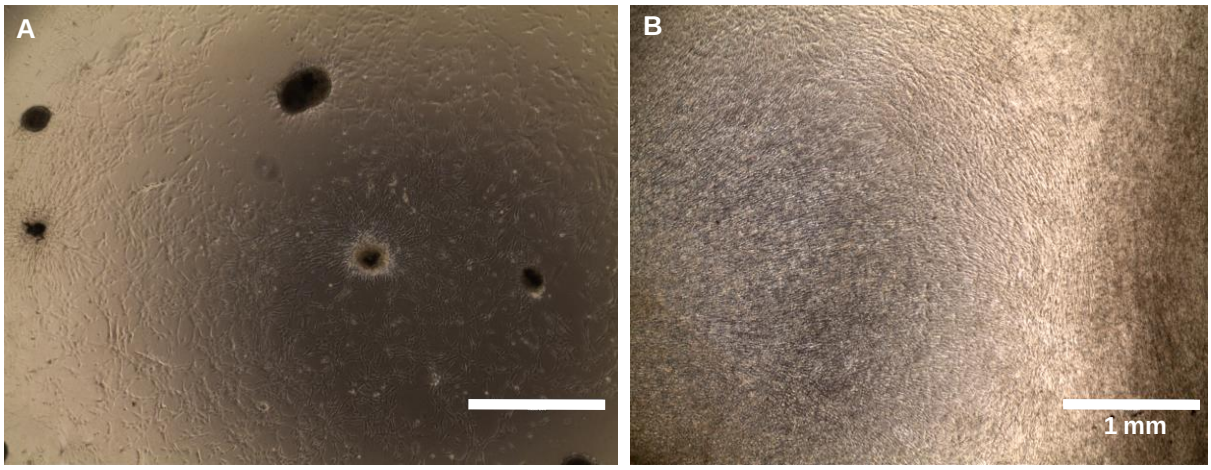

Figure S1: *MSCs behaviour*. A and B: Representative optical images showing MSCs accretions on bone-mimetic material (A) and cellular layer on glass (B) (scale bar 1 mm).

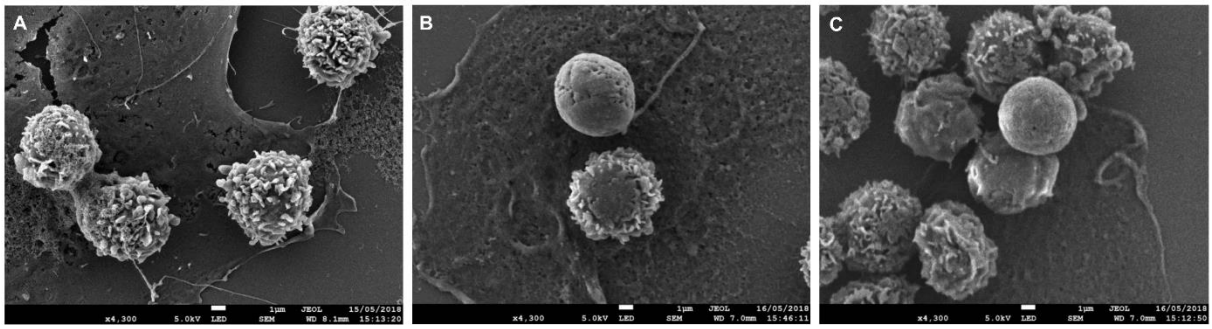

Figure S2: *Endothelial cell inflammatory phenotype.* Endothelial cell/neutrophil interaction imaged by scanning electron microscopy (scale bars = 1 μm), showing rounded and less activated neutrophils in contact of CM_g stimulated (A) and unstimulated HUVECs (B), and elongated and activated neutrophils in contact with TNF-α stimulated HUVECs (C).

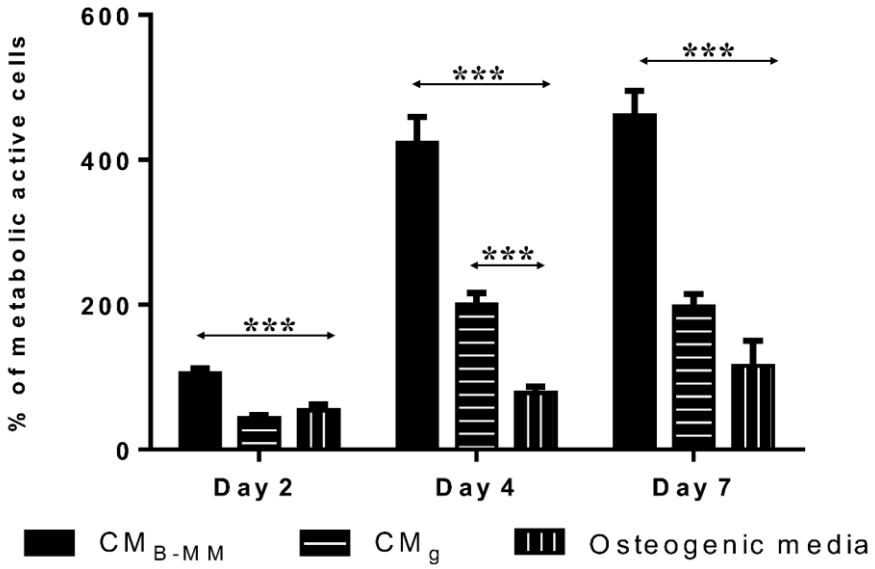

Figure S3: *Indirect MSCs/pre-osteoblasts crosstalk.* Pre-osteoblast (OBs) proliferation in presence of MSCs conditioned media (MSCs-CM) and osteogenic media. Results normalized to un-stimulated OBs, showing a significant increase in OB proliferation in presence of MSCs-CM cultured on bone-mimetic material compared to osteogenic media and inert glass. (MSCs and OBs, $n = 6$ and $= 3$, respectively, Mann Whitney test).