

Supporting information for

An In Vitro Evaluation of Novel Low-Pressure Spark Plasma Sintered HA-BG Composite Scaffolds for Bone Tissue Engineering

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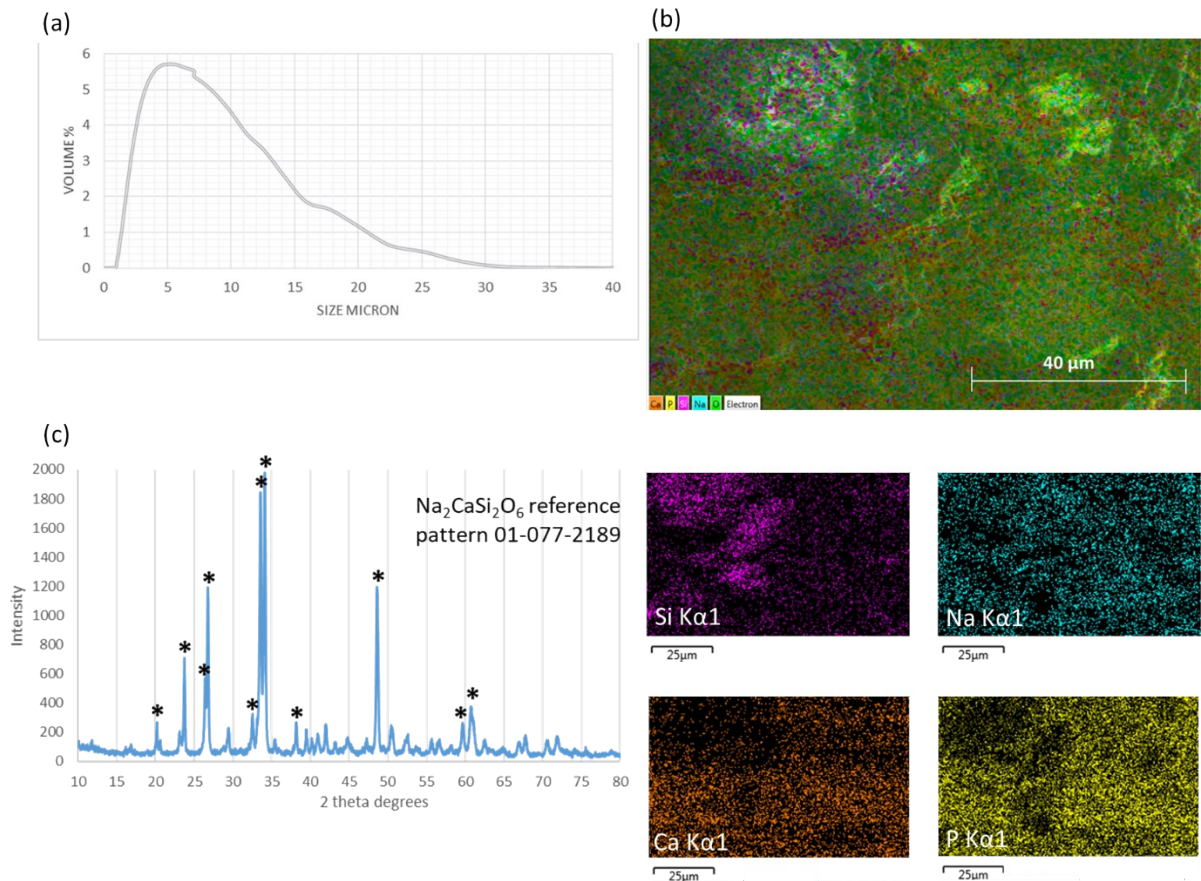


Figure S1: Physiochemical characteristics. (a) Ball milled bioglass particle size distribution, (b) Elemental mapping of HB 20 S and (c) XRD pattern of bioglass.

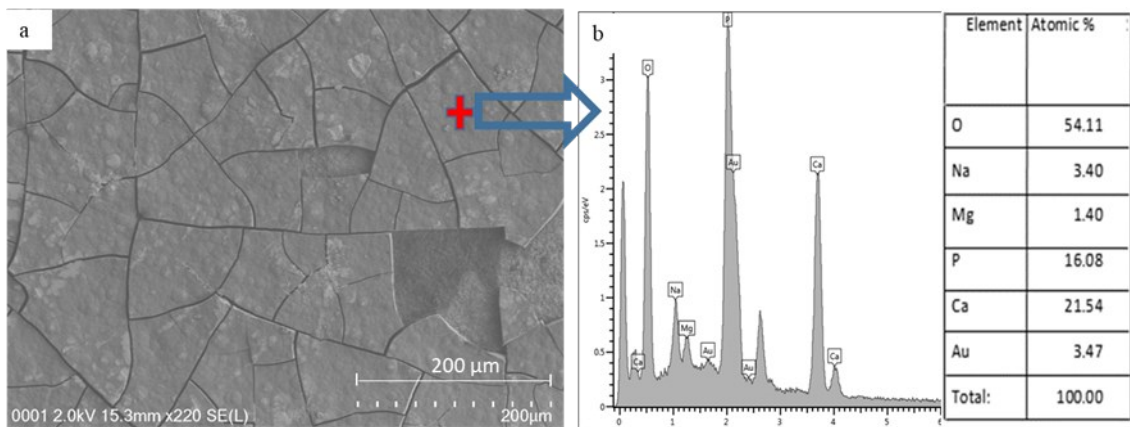


Figure S2: The *In vitro* bioactivity analysis on HB 0 S. (a) FESEM image of apatite layer and (b) EDAX spectra.

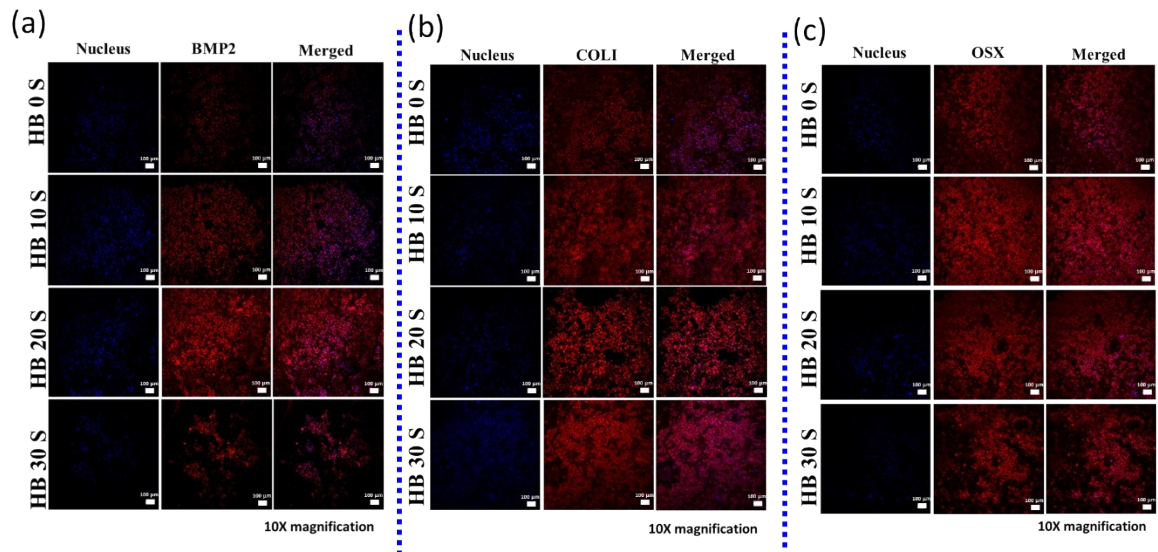


Figure S3: Confocal images of the osteogenic intra-and extra-cellular proteins secreted on the periphery of HA-BG composite scaffolds seeded hBMSCs. (a) Bone morphogenetic protein-2 (BMP2), (b) Type-1 collagen (COL1) and (c) Osterix (OSX). (Images: 10X magnification).

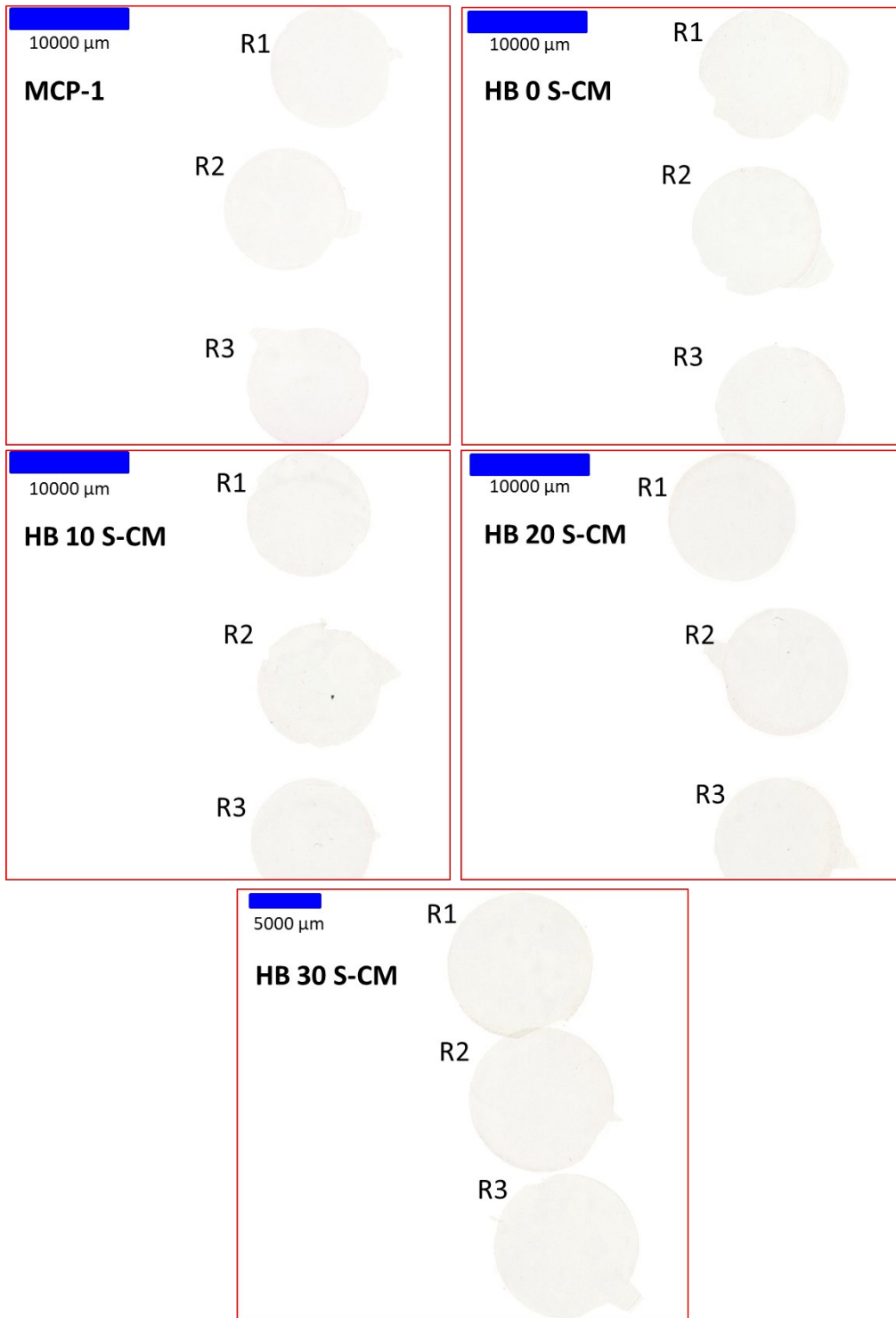


Figure S4: Haematoxylin and Eosin (H&E) stained insert membrane (IM) retrieved after 3 hours migration assay. The monocyte migrating out from the 3-µm pores onto basolateral site of IM in response to HB 0 S-CM, HB 10 S-CM, HB 20 S-CM and HB 30 S-CM. Monocyte Chemoattractant Protein-1 (MCP-1) was used as a positive control. The experiment was run in triplicate. The images were captured and analysed using Digital Slide Viewer (CaseViewer 2.3).

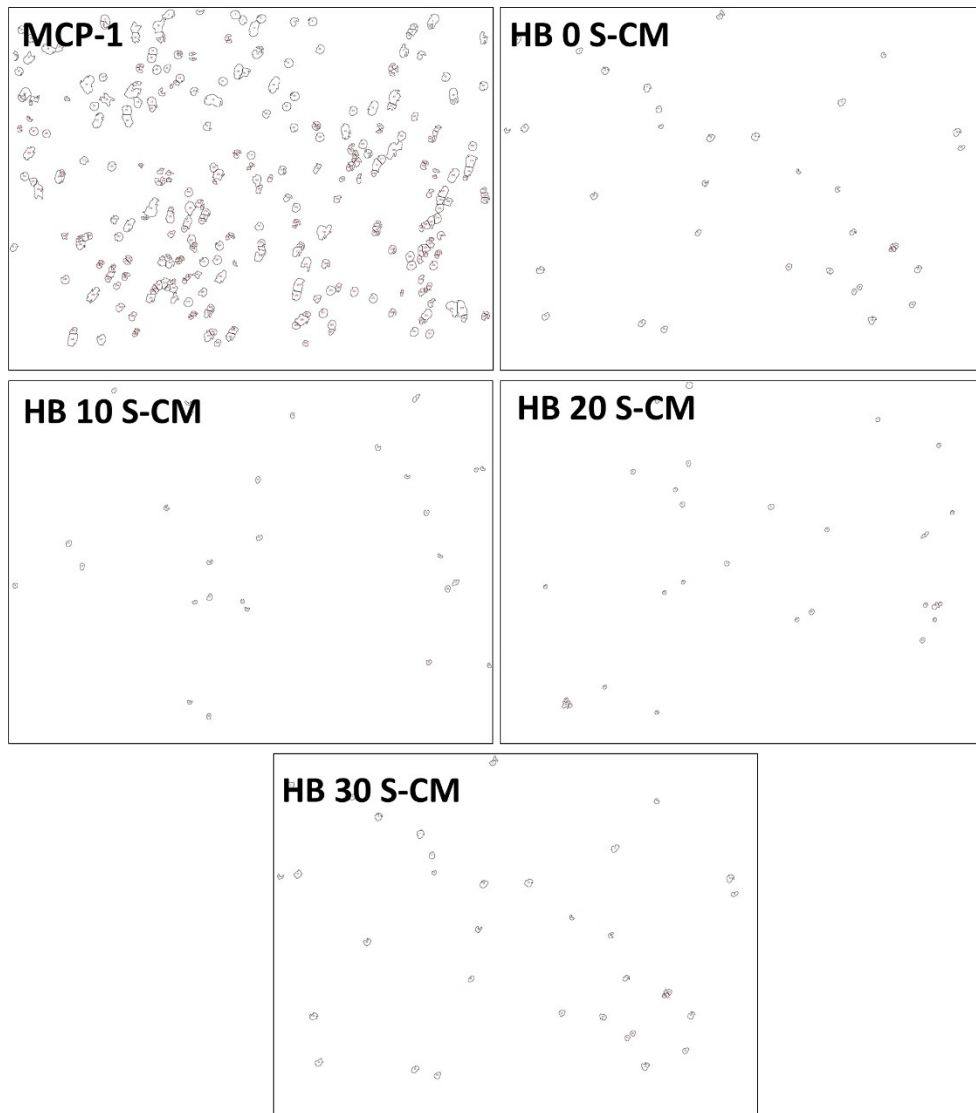


Figure S5: Post analysis of bright field images of migrated monocytes using Image-J analysis tool with an established plugin. These monocytes migrated in response to different stimuli including Monocyte Chemoattractant Protein-1 (MCP-1, positive control), HB 0 S-CM, HB 10 S-CM, HB 20 S-CM and HB 30 S-CM.