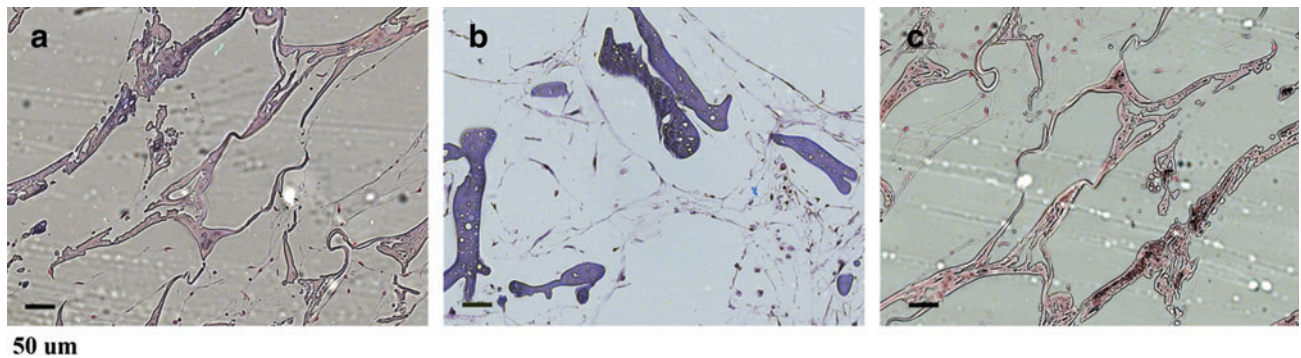


**SUPPLEMENTAL FIG. S1.** Scanning electron microscopy images of the different treatment groups cultured with human mesenchymal stem cells at week 2. Figure 1 (a), (b), (c), and (d) shows the presence of cells within scaffolds in groups 1 (control), 2 (5× lysine and proline), 3 (low oxygen), and 4 (combined effect of low oxygen, 5× lysine and proline), respectively, at 200× (scale bars = 100 μm).



**SUPPLEMENTAL FIG. S2.** Images of (a) collagen type I immunostaining, (b) hematoxylin and eosin staining, and (c) von Kossa staining of the groups at week 2, under light microscope at 20×. All scale bars = 50 μm. The image shows less collagen (brown) and calcium (black) deposition at week 2 than at week 7 (Fig. 2).