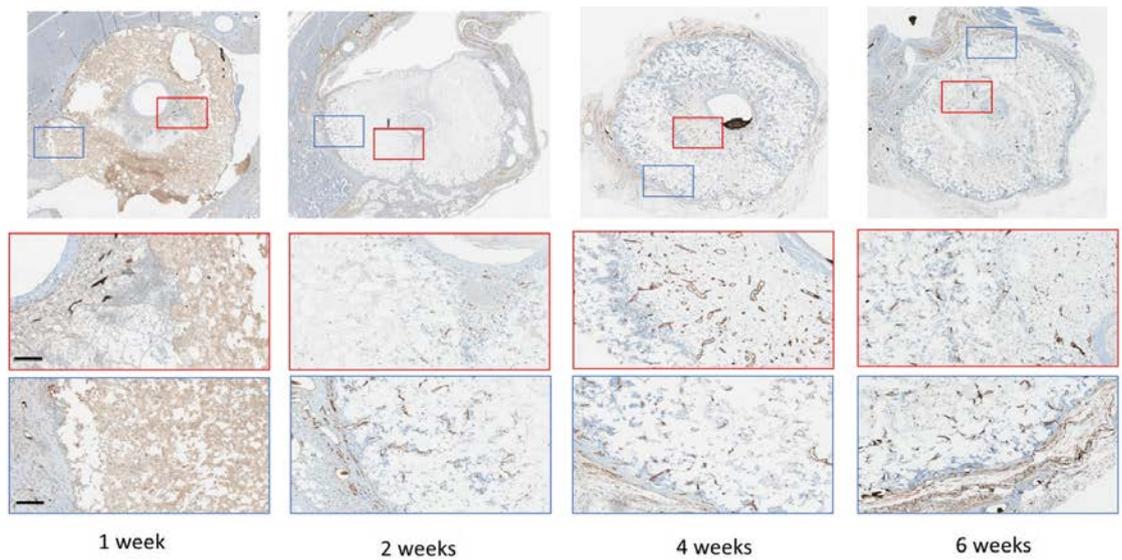
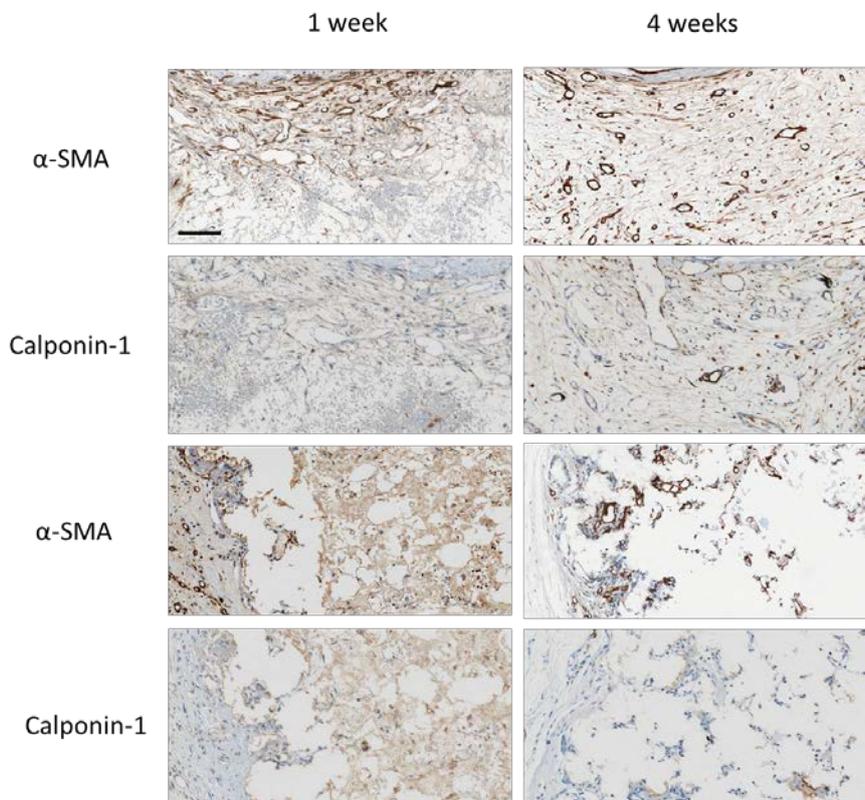


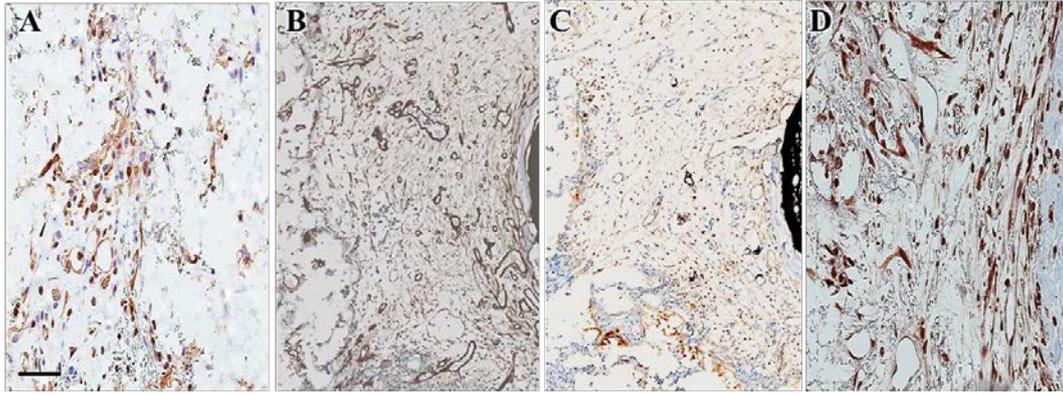
SUPPLEMENTARY FIGURES



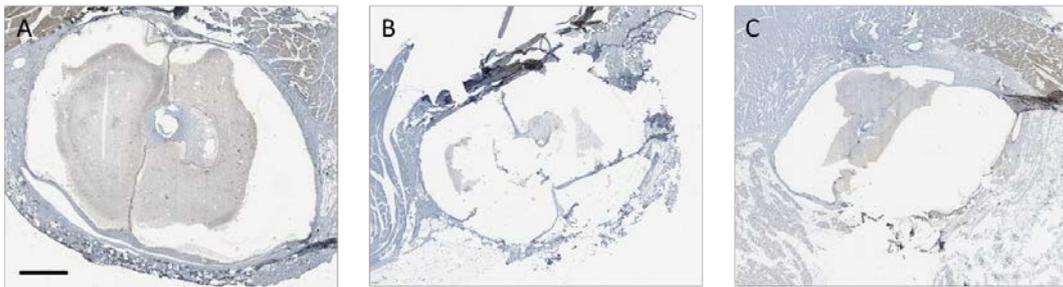
**Figure S1.** Decalcified immunohistochemistry (IHC) showing CD34 staining around blood vessels in monetite scaffolds implanted for up to 6 weeks. The black substance inside vessels in 1 week and 6 week samples is Microfill contrast agent.



**Figure S2.** Decalcified immunohistochemistry: The 1st and 4th weeks after implant with vein, the expression of  $\alpha$ -SMA and Calponin-1. high magnification Scale bar 200  $\mu$ m showing co-localisation of at least a population of the cells inside the scaffold.



**Figure S3.** IHC of cells inside monetite scaffold at 1 wk. Rapid invasion by A) F4/80+ (macrophages,) B) αSMA+, C) Calponin-1+ D) IL8+ cells, Scale bar 30 μm.



**Figure S4.** Decalcified immunohistochemistry (IHC) staining of NLRP3 expression. A) Brushite, B) MgP, C) CaSO<sub>4</sub>. Scale bars 1 mm.