Supplemental material to: "Evaluation of scaffold microstructure and comparison of cell seeding methods using micro-CT based tools"

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Supplementary data file 1: Effect of micro-CT imaging parameters on distinguishing the iron-labelled microspheres from the composite scaffolds
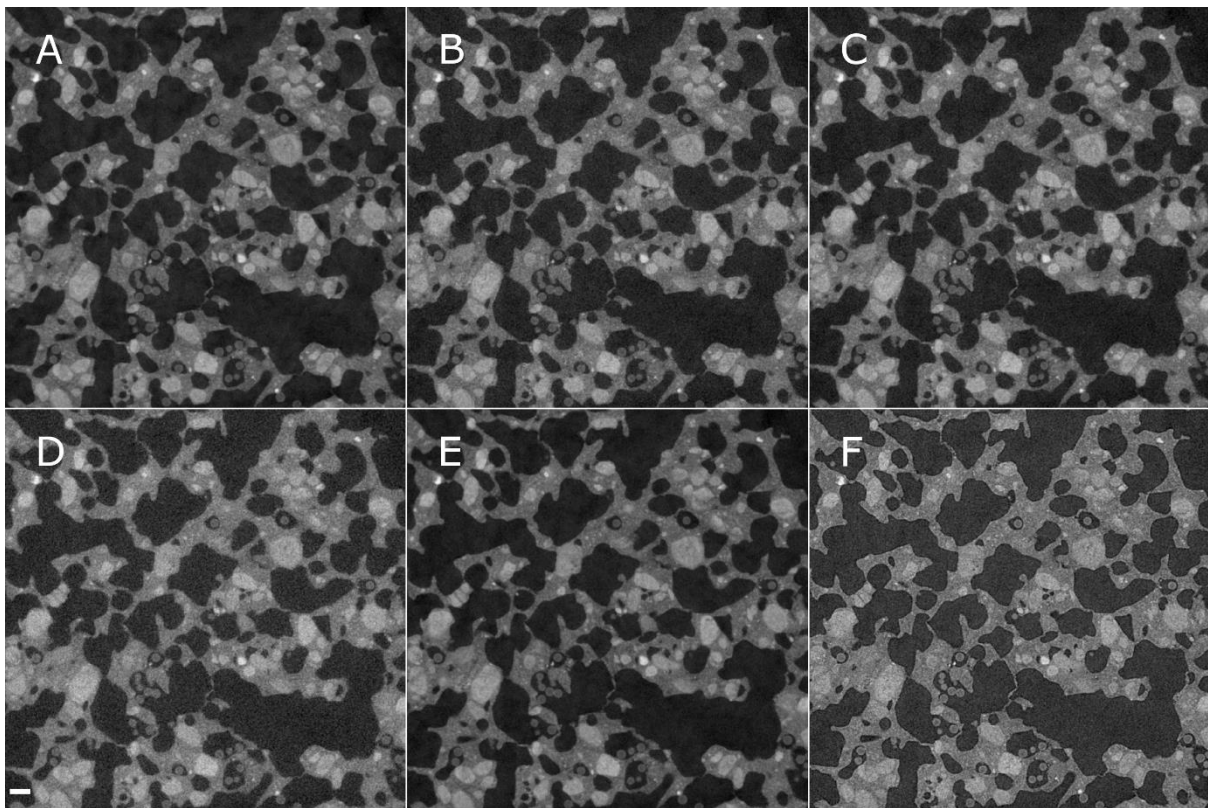
Supplementary Figure 1. Composite scaffold imaged with different imaging parameters. Contrast to noise ratios (CNRs) were calculated for easier comparison. Inline phase-contrast image (f) has rather poor contrast, but edges have been enhanced as expected. Scale bar is 200 µm.

$$CNR = \frac{Mean\ object\ intensity - Mean\ background\ intensity}{Standard\ deviation\ of\ background}$$

(a) Voltage 40 kV, power 10 W, CNR = 10.3, (b) Voltage 80 kV, power 6 W, CNR = 7.7, (c) Voltage 80 kV, power 10 W, CNR = 8.3, (d) Voltage 140 kV, power 10 W, CNR = 6.5, (e) Voltage 40 kV, power 10 W, filter, CNR = 11.2, (f) Voltage 100 kV, power 10 W, inline phase-contrast, CNR = 6.0.