



Exploratory Full-Field Strain Analysis of Regenerated Bone Tissue from Osteoinductive Biomaterials

Marta Peña Fernández ¹, Cameron Black ², Jon Dawson ², David Gibbs ^{2,3}, Janos Kanczler ², Richard O.C. Oreffo ² and Gianluca Tozzi ^{1,*}

- ¹ School of Mechanical and Design Engineering, University of Portsmouth, Portsmouth PO1 3DJ, UK
- ² Bone & Joint Research Group, Centre for Human Development Stem Cells and Regeneration, Faculty of Medicine, University of Southampton, Southampton SO16 6YD, UK
- ² School of Maritime Science and Engineering, Solent University, Southampton SO14 0YN, UK
- * Correspondence: Gianluca.tozzi@port.ac.uk; Tel.: +44-(0)-239284-2514



Figure S1. Strain uncertainties analysis. Relationship between (**a**) mean absolute strain error (MAER) and (**b**) standard deviation of the error (SDER) of the strain components with the sub-volume size for the specimens (n = 6). Median values are also reported.



Figure S2. Random errors analysis. (**a**) Displacement random errors and (**b**) random errors of each strain component for the analysed specimens for a final sub-volume size of 40 voxels. Bars represent the median value whereas error bars represent the standard deviation accounting for the total number of specimens (n = 6).





Figure S3. Correlations between mechanical and microstructural parameters for the total number of specimens (n = 6). Scatterplots showing linear correlations at (top) apparent level (stiffness, average TMD, BV/TV and Tb.Th) and (bottom) tissue level (local compressive strain, TMD, BV/TV and local thickness). Pearson correlation coefficients (R) are indicated.



Figure S4. Thickness and mineralization differences between regions highly and lowly strained (mean of all the specimens, n = 6). Local thickness (left) and average TMD (right) of the highly and lowly strain regions at the maximum apparent compression (3%). p-values indicate significant difference based on Wilcoxon signed rank tests for paired samples. Mean ± standard deviation among the six specimens are shown.



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