Electronic Supplementary Material (ESI) for Biomaterials Science. This journal is © The Royal Society of Chemistry 2023

Supplemental Information

to

A comparative analysis of 3D printed scaffolds consisting of poly(lactic-*co*-glycolic) acid and different bioactive mineral fillers: aspects of degradation and cytocompatibility

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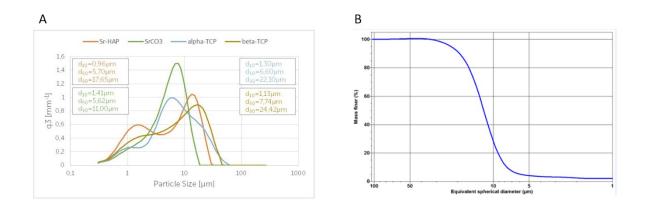
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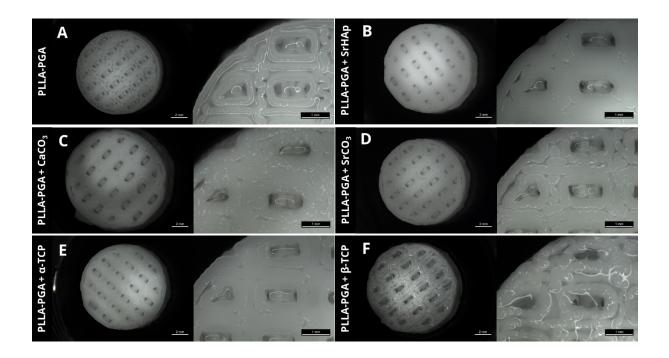
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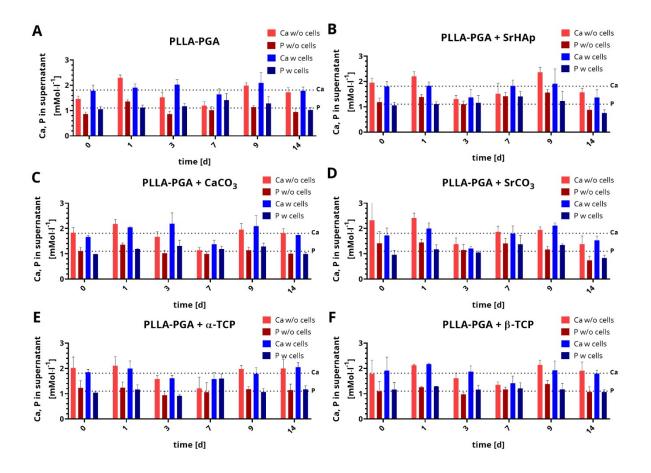
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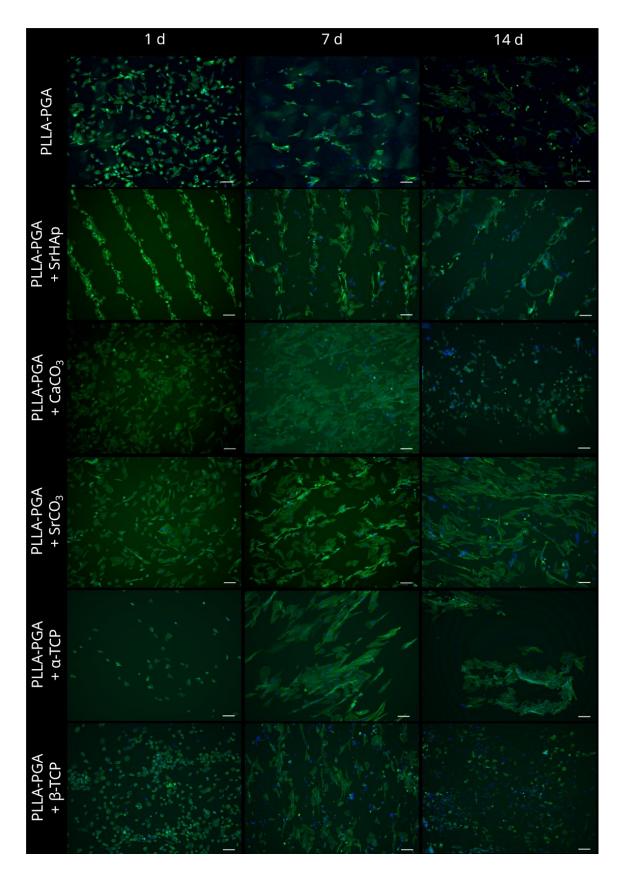
Supplemental Figure S1. Particle size distribution of SrHAp, SrCO3, α -TCP and β -TCP provided by INNOTERE (Radebeul, Germany) (A), and of CaCO3 obtained from Schaefer Kalk (Diez, Germany); the average diameter of the CaCO3 particles is given by Schaefer Kalk as 12 μ m (B).



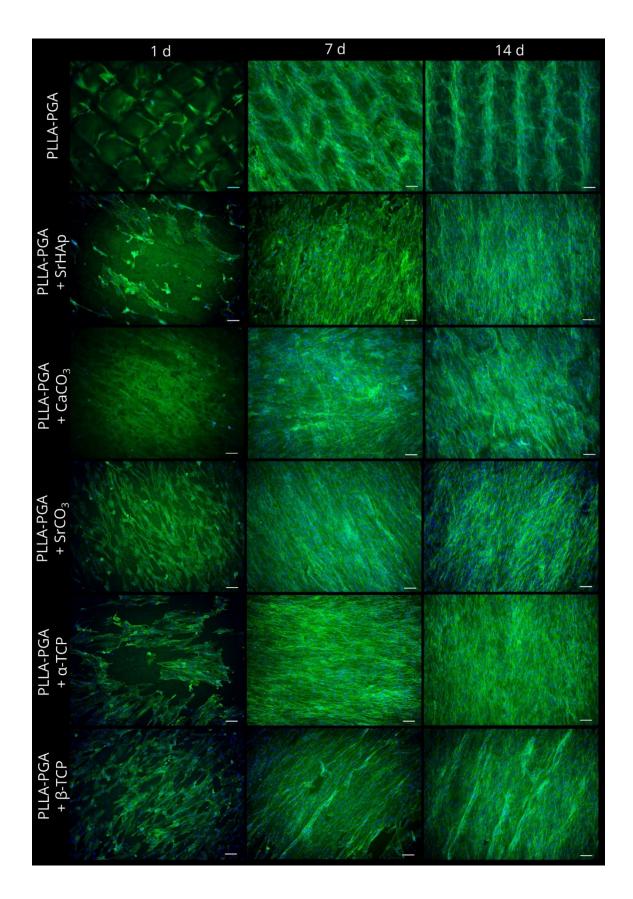
Supplemental Figure S2. Stereo microscopic images of 3D printed porous PLLA-PGA-based scaffolds containing various mineral filler materials after incubation in simulated body fluid for 70 days. Scale bars represent 2 mm (left image) and 1 mm (right image).



Supplemental Figure S3. Investigation of the release/uptake of calcium and phosphorus ions in presence of hDPSC seeded onto different PLLA-PGA-based bulk scaffolds with various mineral filler materials. Displayed are the calcium and phosphorus concentrations in the supernatants of cell-seeded (blue) and plain (red) scaffolds at the respective time points. The blue and red dotted lines indicate the basic levels of calcium and phosphorus of fresh cell culture medium (n=3, mean \pm SD. Two-way ANOVA showed no significant differences in the period of investigation).



Supplemental Figure S4. Fluorescence microscopic images of SaOS-2 cells on PLLA-PGA-based bulk scaffolds. The scaffolds were seeded with 4×10^4 cells each and cultivated in osteogenic cell culture medium. Cytoskeletons are stained with Alexa Fluor 488 Phalloidin (displayed in green) and cell nuclei are stained with DAPI (blue). Scale bars represent 100 μ m.



Supplemental Figure S5. Fluorescence microscopic images of hDPSC on PLLA-PGA-based bulk scaffolds. The scaffolds were seeded with 4×10^4 cells each and cultivated in osteogenic cell culture medium. Cytoskeletons are stained with Alexa Fluor 488 Phalloidin (displayed in green) and cell nuclei are stained with DAPI (blue). Scale bars represent 100 μ m.