



Supplementary Figure 1. Permanent deformation at each applied compressive strain amplitude for (a) *Aligned 1* ($d=0.3\text{mm}$; $s=1.0\text{mm}$), (b) *Aligned 2* ($d=0.3\text{mm}$; $s=1.5\text{mm}$), (c) *Aligned 3* ($d=0.12\text{mm}$; $s=1.5\text{mm}$), (d) *Single Offset* ($d=0.12\text{mm}$; $s=1.5\text{mm}$) and (e) *Double Offset* ($d=0.12\text{mm}$; $s=1.5\text{mm}$) scaffold geometries.