

Figure S1: Vector field visualisation of peak interstitial fluid velocity during load **(a)** and unload **(b)**. Cross sections at $Z = 0.5$ with contour plots of pore pressure, p , and unit length fluid flow vectors, \mathbf{V} , represented by the red arrows (right). Regions in compression experience an influx of fluid during loading, while the reverse happens in regions in tension.

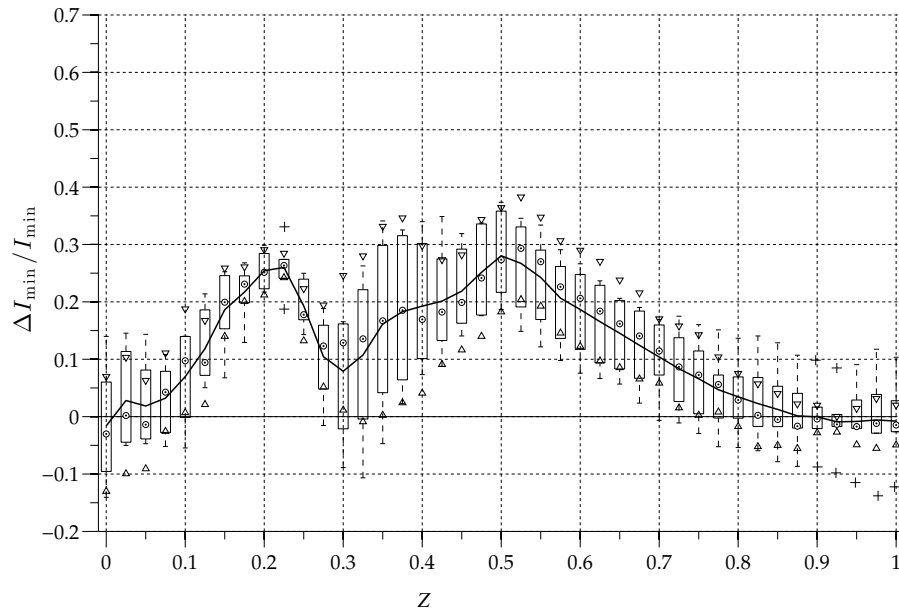


Figure S2: Boxplot representation of tibial changes in second moment of area about the minor axis, as a function of the normalised diaphyseal length Z .

References

Pereira, A. F., 2014. Cortical bone adaptation: A finite-element study of the mouse tibia. Ph.D. thesis, Imperial College London, Lisbon.