COMPUTATIONAL BONE BIOMECHANICS

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Key words: Bone, CT scans, verification and validation, biomechanics

ABSTRACT

Reliable prediction of bone's mechanical response and fracture by numerical methods is a field of active research and much effort is invested to verify and validate the numerical results by in-vitro experiments. Furthermore, due to the complex structure of the bone, its mechanical response is investigated over multiple scales - from the cell level to lamela/osteon level up to the organ level.

The aim of this minisymposium is to bring together researchers that use advanced numerical methods to predict bone mechanics as well as these involved in validating such models by experimentation, to present their recent research results.

In addition contributions associated with patient-specific bone simulation and their relevance to clinical practice are especially encouraged.