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Paper Title: Mechanical and biological performance of biphasic calcium phosphate typed bone substitute for high tibia osteotomy

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Abstract

An ideal scaffold for high tibia osteotomy (HTO) surgery should possess a suitable degradation rate, acceptable mechanical strength, and biocompatibility. Biphasic calcium phosphate (BCP) is one of the choices that have been used to address these issues. Previously, BCP could adjust the ratio between hydroxyapatite (HA) and beta-tricalcium phosphate (β -TCP) to tailor the degradation and mechanical strength properties for each application. This paper aims to discover a new method for fabricating BCP scaffolds that can precisely control the purity of HA and β -TCP and adjust the HA/ β -TCP ratio to find the best condition suitable for HTO patients.
