Analysing the role of magnetic features in additive manufactured scaffolds for enhanced bone tissue regeneration

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Summary: The concept of magnetic guidance has opened a wide range of perspectives in the field of tissue regeneration. Accordingly, the aim of the current research was to design magnetic responsive scaffolds for enhanced bone tissue regeneration.

In particular, magnetic nanocomposite scaffolds were additively manufactured using 3D fibre deposition technique. The mechanical and functional properties of the fabricated scaffolds were first assessed. The role of magnetic features on the biological performances was properly analysed.