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Review article

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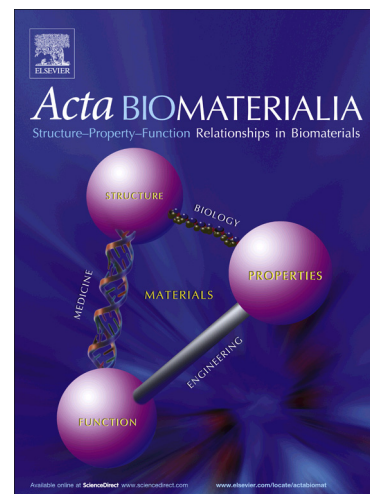
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Regenerating bone with bioactive glass scaffolds: A review of *in vivo* studies in bone defect models

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Abstract:

Large bone defects resulting from fractures and disease are a medical concern, being often unable to heal spontaneously by the body's repair mechanisms. Bone tissue engineering (BTE) is a promising approach for treating bone defects through providing a template to guide osseous regeneration. 3D scaffolds with microstructure mimicking host bone are necessary in common BTE strategies. Bioactive glasses (BGs) attract researchers' attention as BTE scaffolds as they are osteoconductive and osteoinductive in certain formulations. *In vivo* animal models allow understanding and evaluation of materials' performance in the complex physiological environment, being an inevitable step before clinical trials. The aim of this paper is to review for the first time published research investigating the *in vivo* osseous regenerative capacity of 3D BG scaffolds in bone defect animal models, to better understand and evaluate the progress and future

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