

Title (en)

USE OF BIOACTIVE GLASS COMPOSITIONS TO STIMULATE OSTEOBLAST PRODUCTION

Title (de)

VERWENDUNG VON BIOAKTIVEN GLASZUSAMMENSETZUNGEN ZUR STIMULIERUNG DER OSTEOBLASTPRODUKTION

Title (fr)

UTILISATION DE COMPOSITIONS DE VERRE BIOACTIF POUR LA STIMULATION DE LA PRODUCTION D'OSTEOBLASTE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO0204606A1] Compositions comprising bioactive glass compositions or extracts thereof which include ions in an appropriate concentration and ratio that they enhance osteoblast production, and methods of preparation and use thereof, are disclosed. The compositions can be included in implantable devices that are capable of inducing tissue formation in autogeneic, allogeneic and xenogeneic implants, for example as coatings and/or matrix materials. Examples of such devices include prosthetic implants, sutures, stents, screws, plates, tubes, and the like. Aqueous extracts of the bioactive glass compositions, which extracts are capable of stimulating osteoblast production, are also disclosed. The compositions can be used, for example, to induce local tissue formation from a progenitor cell in a mammal, for accelerating allograft repair in a mammal, for promoting in vivo integration of an implantable prosthetic device to enhance the bond strength between the prosthesis and the existing target tissue at the joining site, and for treating tissue degenerative conditions.

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Cited by

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