

# Accepted Manuscript

Strontium and bisphosphonate coated iron foam scaffolds for osteoporotic fracture defect healing

Seemun Ray, Ulrich Thormann, Marlen Eichelroth, Matthäus Budak, Christoph Biehl, Markus Rupp, Ursula Sommer, Thaqif El Khassawna, Francisca I. Alagboso, Marian Kampschulte, Marcus Rohnke, Anja Henß, Klaus Pepler, Vanessa Linke, Peter Quadbeck, Axel Voigt, Florian Stenger, Daniel Karl, Reinhard Schnettler, Christian Heiss, Katrin S. Lips, Volker Alt



PII: S0142-9612(17)30778-0

DOI: [10.1016/j.biomaterials.2017.11.049](https://doi.org/10.1016/j.biomaterials.2017.11.049)

Reference: JBMT 18387

To appear in: *Biomaterials*

Received Date: 29 May 2017

Revised Date: 23 November 2017

Accepted Date: 28 November 2017

Please cite this article as: Ray S, Thormann U, Eichelroth M, Budak Matthä, Biehl C, Rupp M, Sommer U, El Khassawna T, Alagboso FI, Kampschulte M, Rohnke M, Henß A, Pepler K, Linke V, Quadbeck P, Voigt A, Stenger F, Karl D, Schnettler R, Heiss C, Lips KS, Alt V, Strontium and bisphosphonate coated iron foam scaffolds for osteoporotic fracture defect healing, *Biomaterials* (2018), doi: 10.1016/j.biomaterials.2017.11.049.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Strontium and bisphosphonate coated iron foam scaffolds for osteoporotic fracture defect healing**

Seemun Ray<sup>1\*</sup>, Ulrich Thormann<sup>1,2\*</sup>, Marlen Eichelroth<sup>1</sup>, Matthäus Budak<sup>1,2</sup>, Christoph Biehl<sup>1,2</sup>, Markus Rupp<sup>1,2</sup>, Ursula Sommer<sup>1</sup>,Thaqif El Khassawna<sup>1</sup>, Francisca. I. Alagboso<sup>1</sup>, Marian Kampschulte<sup>3</sup>, Marcus Rohnke<sup>4</sup>, Anja Henß<sup>4</sup>, Klaus Pepler<sup>4</sup>, Vanessa Linke<sup>4</sup>, Peter Quadbeck<sup>5</sup>, Axel Voigt<sup>6</sup>, Florian Stenger<sup>6</sup>, Daniel Karl<sup>1</sup>, Reinhard Schnettler<sup>1,2</sup>, Christian Heiss<sup>1,2</sup>, Katrin S. Lips<sup>1</sup>, Volker Alt<sup>1,2</sup>

\* Shared first co-authorship as both authors contributed equally to this work.

<sup>1</sup> Laboratory of Experimental Trauma Surgery, Justus-Liebig-University, Giessen, Germany

<sup>2</sup> Department of Trauma Surgery, University Hospital Giessen-Marburg GmbH, Campus Giessen, Germany

<sup>3</sup> Department of Experimental Radiology, University Hospital Giessen-Marburg GmbH, Campus Giessen, Germany

<sup>4</sup> Institute of Physical Chemistry, Justus-Liebig-University Giessen, Giessen, Germany

<sup>5</sup> Fraunhofer Institute for Manufacturing Technologies and Advanced Materials IFAM, Branch Lab Dresden, Winterbergstraße 28, 01277

<sup>6</sup> Institute of Scientific Computing, Technische Universität Dresden, Zellescher Weg 12-14, 01069 Dresden, Germany

**Corresponding author:**

Prof. Dr. Dr. med. Volker Alt

Department of Trauma Surgery

University Hospital Giessen-Marburg GmbH, Campus Giessen

Rudolf-Buchheim-Str. 7

35385 Giessen

Germany

Email: volker.alt@chiru.med.uni-giessen.de

Tel.: +49(0)641 985 44 601

Fax: +49 (0)641 985 44 609

Download English Version:

<https://daneshyari.com/en/article/6484701>

Download Persian Version:

<https://daneshyari.com/article/6484701>

[Daneshyari.com](https://daneshyari.com)