

# Accepted Manuscript

Effect of ultrasound on bone fracture healing: A computational bioregulatory model

Maria G. Vavva, Konstantinos N. Grivas, Aurélie Carlier, Demosthenes Polyzos, Liesbet Geris, Hans Van Oosterwyck, Dimitrios I. Fotiadis



PII: S0010-4825(18)30172-0

DOI: [10.1016/j.combiomed.2018.06.024](https://doi.org/10.1016/j.combiomed.2018.06.024)

Reference: CBM 3004

To appear in: *Computers in Biology and Medicine*

Received Date: 2 March 2018

Revised Date: 23 June 2018

Accepted Date: 23 June 2018

Please cite this article as: M.G. Vavva, K.N. Grivas, Auré. Carlier, D. Polyzos, L. Geris, H. Van Oosterwyck, D.I. Fotiadis, Effect of ultrasound on bone fracture healing: A computational bioregulatory model, *Computers in Biology and Medicine* (2018), doi: 10.1016/j.combiomed.2018.06.024.

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.

1 **Effect of ultrasound on bone fracture healing: A computational bioregulatory model**

2

3 Maria G. Vavva<sup>1</sup>, Konstantinos N. Grivas<sup>1</sup>, Aurélie Carlier<sup>2,3</sup>, Demosthenes Polyzos<sup>1</sup>,  
4 Liesbet Geris<sup>2,3</sup>, Hans Van Oosterwyck<sup>2,3</sup>, Dimitrios I. Fotiadis<sup>4,5,\*</sup>

5 <sup>1</sup>Dept. of Mechanical Engineering and Aeronautics, University of Patras, GR 26500

6 Patras, Greece; konstantinos.grivas@gmail.com; marvavva@gmail.com;

7 polyzos@mech.upatras.gr

8 <sup>2</sup>Dept. of Mechanical Engineering, KU Leuven, Celestijnenlaan 300C – PB 2419, B-3001

9 Leuven, Belgium; aurelie.carlier@kuleuven.be; liesbet.geris@ulg.ac.be;

10 hans.vanoosterwyck@kuleuven.be

11 <sup>3</sup>MERLN Institute for Technology-inspired Regenerative Medicine, Maastricht

12 University, Universiteitssingel 40, 6229 ER, Maastricht, The Netherlands

13 <sup>4</sup>Dept. of Materials Science and Engineering, University of Ioannina, GR 45110,

14 Ioannina, Greece

15 <sup>5</sup>Foundation for Research and Technology–Hellas, Institute of Molecular Biology and

16 Biotechnology, Department of Biomedical Research, GR 45110 Ioannina, Greece;

17 fotiadis@cc.uoi.gr

18

19 \* Corresponding author. Address: Unit of Medical Technology and Intelligent

20 Information Systems, Dept. of Materials Science and Engineering, University of

21 Ioannina, GR 45110 Ioannina, Greece. Tel.: +30 26510 09006; fax: +30 26510 08889. E-

22 mail address: fotiadis@cc.uoi.gr

23

Download English Version:

<https://daneshyari.com/en/article/6920401>

Download Persian Version:

<https://daneshyari.com/article/6920401>

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