### Accepted Manuscript

The synthesis, characterization and *in vivo* study of mineral substituted hydroxyapatite for prospective bone tissue rejuvenation applications

Dharman Govindaraj, Mariappan Rajan, Murugan A. Munusamy, Abdullah A. Alarfaj, Kishor Kumar Sadasivuni, S. Suresh Kumar

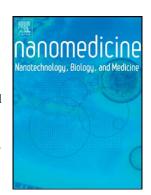
PII: S1549-9634(17)30147-8

DOI: doi: 10.1016/j.nano.2017.07.017

Reference: NANO 1638

To appear in: Nanomedicine: Nanotechnology, Biology, and Medicine

Received date: 6 March 2017 Revised date: 10 July 2017 Accepted date: 28 July 2017



Please cite this article as: Govindaraj Dharman, Rajan Mariappan, Munusamy Murugan A., Alarfaj Abdullah A., Sadasivuni Kishor Kumar, Kumar S. Suresh, The synthesis, characterization and *in vivo* study of mineral substituted hydroxyapatite for prospective bone tissue rejuvenation applications, *Nanomedicine: Nanotechnology, Biology, and Medicine* (2017), doi: 10.1016/j.nano.2017.07.017

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.

## ACCEPTED MANUSCRIPT

# The synthesis, characterization and *in vivo* study of mineral substituted hydroxyapatite for prospective bone tissue rejuvenation applications

Dharman Govindaraj<sup>a</sup>, Mariappan Rajan\*<sup>a</sup>, Murugan A. Munusamy<sup>b</sup>, Abdullah A. Alarfaj<sup>b</sup>, Kishor Kumar Sadasivuni<sup>c</sup>, and S. Suresh Kumar<sup>d</sup>

\*, Biomaterials in Medicinal Chemistry Lab, Department of Natural Products Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai, 625021, India.

<sup>b</sup>Department of Botany and Microbiology, College of Science, King Saud University, Riyadh, Kingdom of Saudi Arabia.

<sup>c</sup>Department of Mechanical & Industrial Engineering, College of Engineering, Qatar University, P O Box 2713, Doha, Qatar.

<sup>d</sup>Department of Medical Microbiology and Parasitology, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Serdang, Malaysia.

\*Corresponding author: Mariappan Rajan, Biomaterials in Medicinal Chemistry Lab, Department of Natural Products Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai, 625021, India. Email: rajanm153@gmail.com

**Declaration of conflict of interest:** No conflict of interest was reported by the authors of this article.

Funding: This work was supported by the Department of Science and Technology, Science and Engineering Research Board (Ref: YSS/2015/001532; New Delhi, India); University Grants Commission (UGC), Government of India, under the plan of "UGC-MRP" (F.No.- 43-187/2014 (SR); the PURSE program (purchase of SEM and FT-IR); and UPE programs (purchase of TEM). The authors would like to extend their sincere appreciation to the Deanship of Scientific Research at King Saud University for its funding of this research through Research Group project No. RG-1435-057.

#### Download English Version:

# https://daneshyari.com/en/article/7238890

Download Persian Version:

https://daneshyari.com/article/7238890

<u>Daneshyari.com</u>