Accepted Manuscript

Systemic and Local Toxicity of Metal Particles Released from Hip Prostheses: A Review of Experimental Approaches

Divya Rani Bijukumar, Abhijith Segu, Júlio Cesar Matias de Souza, XueJun Li, Mark Barba, Louis Mercuri, Joshua Jacobs, Mathew Thoppil Mathew

Nanotechnology, Biology, and Medicine

PII: S1549-9634(18)30010-8

DOI: https://doi.org/10.1016/j.nano.2018.01.001

Reference: NANO 1733

To appear in:

Received date: 1 June 2017

Revised date: 22 December 2017 Accepted date: 2 January 2018

Please cite this article as: Divya Rani Bijukumar, Abhijith Segu, Júlio Cesar Matias de Souza, XueJun Li, Mark Barba, Louis Mercuri, Joshua Jacobs, Mathew Thoppil Mathew, Systemic and Local Toxicity of Metal Particles Released from Hip Prostheses: A Review of Experimental Approaches. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Nano(2018), https://doi.org/10.1016/j.nano.2018.01.001

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

Systemic and Local Toxicity of Metal Particles Released from Hip Prostheses: A Review of Experimental Approaches

Divya Rani Bijukumar, PhD¹ Abhijith Segu, MS¹, Júlio Cesar Matias de Souza, PhD², XueJun Li, PhD¹, Mark Barba, MD¹,³, Louis Mercuri, PhD⁴, Joshua Jacobs, MD⁴, Mathew Thoppil Mathew, PhD¹,⁴*

¹Regenerative Medicine and Disability Research Lab, Department of Biomedical Sciences, University of Illinois College of Medicine at Rockford, IL-61007, USA

²Departamento de Engenharia Mecânica (DEM, Center for Microelectromechanical Systems,

University of Minho. Guima, Portugal

³OrthoIllinois, Rockford, IL-61107, USA

⁴Department of Orthopedics, Rush University Medical Center, Chicago, IL-60612, USA

*Corresponding author:

Dr. Mathew Thoppil Mathew University of Illinois College of Medicine at Rockford 1601 Parkview Avenue Rockford, IL 61107

Phone: +1 815 395 5883 (O) +1 312 8521089 ®

Email: <u>mtmathew@uic.edu</u>

Acknowledgments: The authors acknowledge financial support from Blazer foundation for the Regenerative Medicine and Disability lab at Department of Biomedical Sciences, UIC College of Medicine at Rockford and NIH R01 grant (R01 AR070180 (Mathew PI).

Conflict of interests: The authors confirm that there is no conflict of interest.

Word Count:

Abstract - 150

Manuscript Text - 6553 (excluding references), 11,618 (including references)

Figures - 5

Supplementary Tables - 2

References - 162

Download English Version:

https://daneshyari.com/en/article/7238536

Download Persian Version:

https://daneshyari.com/article/7238536

<u>Daneshyari.com</u>