

Accepted Manuscript

Human embryonic stem cells and macroporous calcium phosphate construct for bone regeneration in cranial defects in rats

Xian Liu, Ping Wang, Wenchuan Chen, Michael D. Weir, Chunyun Bao, Hockin H.K. Xu

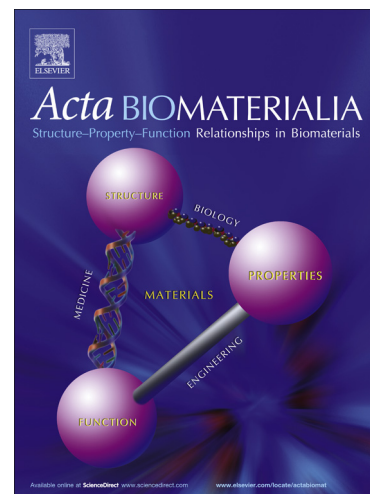
PII: S1742-7061(14)00283-9
DOI: <http://dx.doi.org/10.1016/j.actbio.2014.06.027>
Reference: ACTBIO 3284

To appear in: *Acta Biomaterialia*

Received Date: 7 March 2014
Revised Date: 9 June 2014
Accepted Date: 17 June 2014

Please cite this article as: Liu, X., Wang, P., Chen, W., Weir, M.D., Bao, C., Xu, H.H.K., Human embryonic stem cells and macroporous calcium phosphate construct for bone regeneration in cranial defects in rats, *Acta Biomaterialia* (2014), doi: <http://dx.doi.org/10.1016/j.actbio.2014.06.027>

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.



Human embryonic stem cells and macroporous calcium phosphate construct for bone regeneration in cranial defects in rats

Xian Liu^{1,2#}, Ping Wang^{1,2#}, Wenchuan Chen^{1,2},

Michael D. Weir¹, Chunyun Bao², Hockin H. K. Xu^{1,3-5*}

¹ Biomaterials & Tissue Engineering Division, Department of Endodontics, Prosthodontics and Operative Dentistry, University of Maryland Dental School, Baltimore, MD 21201, USA

² State Key Laboratory of Oral Diseases, West China Hospital of Stomatology, Sichuan University, Chengdu, Sichuan 610041, China

³ Mechanical Engineering Department, University of Maryland Baltimore County, Baltimore, MD 21250, USA

⁴ Center for Stem Cell Biology and Regenerative Medicine, University of Maryland School of Medicine, Baltimore, MD 21201, USA

⁵ University of Maryland Marlene and Stewart Greenebaum Cancer Center, University of Maryland School of Medicine, Baltimore, MD 21201, USA

For: *Acta Biomaterialia*

(Submitted in March 2014; revised and resubmitted in June 2014)

Correspondence:

Dr. Hockin H. K. Xu, Professor, Director of Biomaterials & Tissue Engineering Division, Department of Endodontics, Prosthodontics and Operative Dentistry, University of Maryland Dental School, Baltimore, MD 21201 (Email: hxu@umaryland.edu). Dr. Chongyun Bao, Professor, West China College of Stomatology, Sichuan University, China (Email: cybao9933@yahoo.com.cn).

Running Head: Human embryonic stem cells for bone regeneration in cranial defects

Keywords: Calcium phosphate cement; Human embryonic stem cells; Human platelet concentration; Bone regeneration; Athymic rats; Critical-sized cranial defect.

These two authors contributed equally.

Download English Version:

<https://daneshyari.com/en/article/10159028>

Download Persian Version:

<https://daneshyari.com/article/10159028>

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