## **RESEARCH REPORTS**

**Biomaterials & Bioengineering** 

## B. Xu<sup>1,2+</sup>, J. Zhang<sup>1+</sup>, E. Brewer<sup>1</sup>, Q. Tu<sup>1</sup>, L. Yu<sup>2</sup>, J. Tang<sup>1</sup>, P. Krebsbach<sup>3</sup>, M. Wieland<sup>4</sup>, and J. Chen<sup>1\*</sup>

<sup>1</sup>Division of Oral Biology, Tufts University School of Dental Medicine, One Kneeland Street, Boston, MA 02111, USA; <sup>2</sup>Department of Stomatology, Huashan Hospital, Fudan University, Shanghai, China; <sup>3</sup>Department of Biologic and Materials Sciences, University of Michigan School of Dentistry, Ann Arbor, MI, USA; and <sup>4</sup>Institute Straumann AG, Basel, Switzerland; <sup>+</sup>authors contributing equally to this work; \*corresponding author, jk.chen@ tufts.edu

J Dent Res 88(11):1003-1007, 2009

## **APPENDIX**

## Osterix Enhances BMSCassociated Osseointegration of Implants



Appendix Figure. (A,C) Seven days after implantation, active cartilage-bone cells were observed gathering between the bone-implant interfaces. (A) 40x; (C) 200x. (B,D) Twenty-one days after implantation, the newly formed cartilage and woven bone have been replaced by lamellar bone. The new lamellar bone was still in the form of trabecular bone. (B) 40x; (D) 200x. (E) MicroCT analysis showed that, 21 days after implantation, implants were successfully integrated with the host bone tissues. However, the bone mineral density of the newly formed bone was still lower than that of the host bone.