

Supporting information

Systemic Administration of Enzyme-Responsive Growth Factor Nanocapsules for Promoting Bone Repair

Hongzhao Qi,^{a,b,‡} Lijun Yang,^{d,‡} Xueping Li,^{a,‡} Xiaolei Sun,^{a,c} Jin Zhao,^a Xin Hou,^a Zhaoyang Li,^a Xubo Yuan,^{a,*} Zhenduo Cui,^a Xianjin Yang^{a,*}

a Tianjin Key Laboratory of Composite and Functional Materials, School of Materials Science and Engineering, Tianjin University, Tianjin 300072, China

b Institute for Translational Medicine, Qingdao University, Qingdao 266021, China

c Department of Orthopaedics, Tianjin Hospital, Tianjin 300211, China

d College of Materials Science and Engineering, Qingdao University of Science and Technology, Qingdao 266042, China

‡These authors contributed equally to this work.

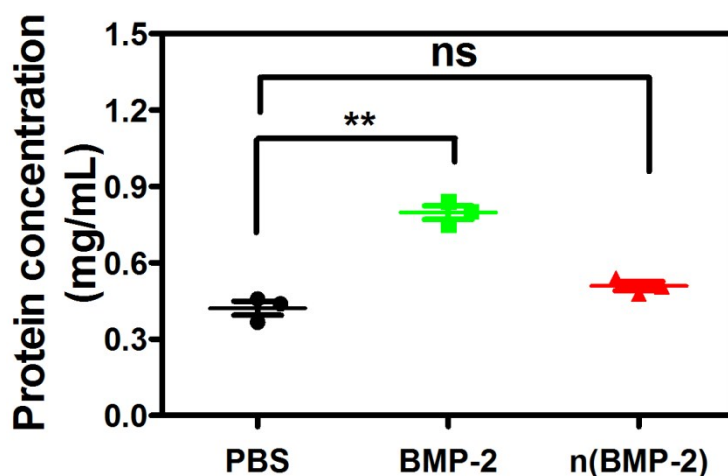


Figure S1. Quantitative measurements of serum proteins adsorbed by n(BMP-2) and native BMP-2 after incubation with rat serum at 37°C for 30 min (**P<0.01).

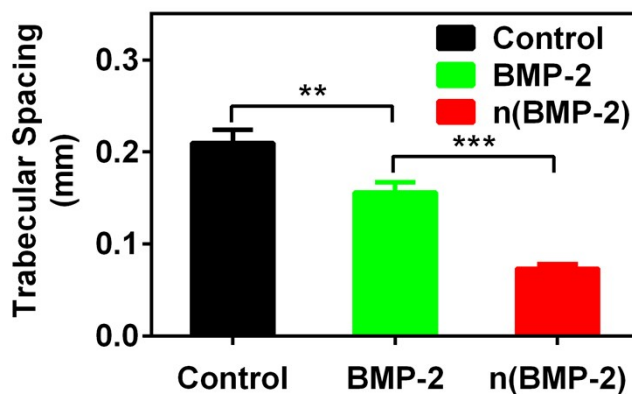


Figure S2. Semi-quantitative analysis of trabecular spacing (**P<0.01, ***P<0.001)

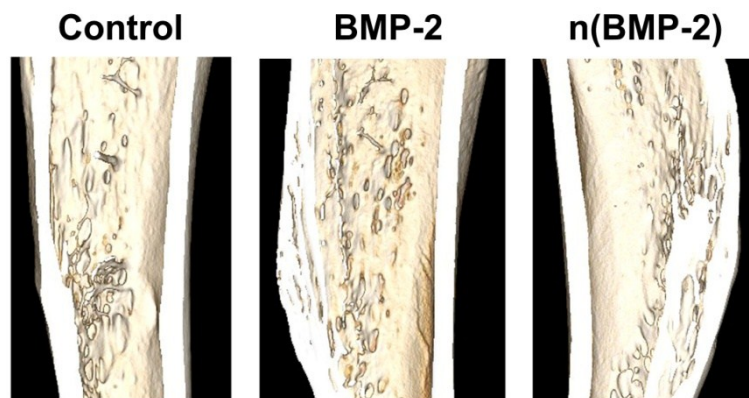


Figure S3. Micro-CT images of representative rat tibias after eight weeks of therapy.

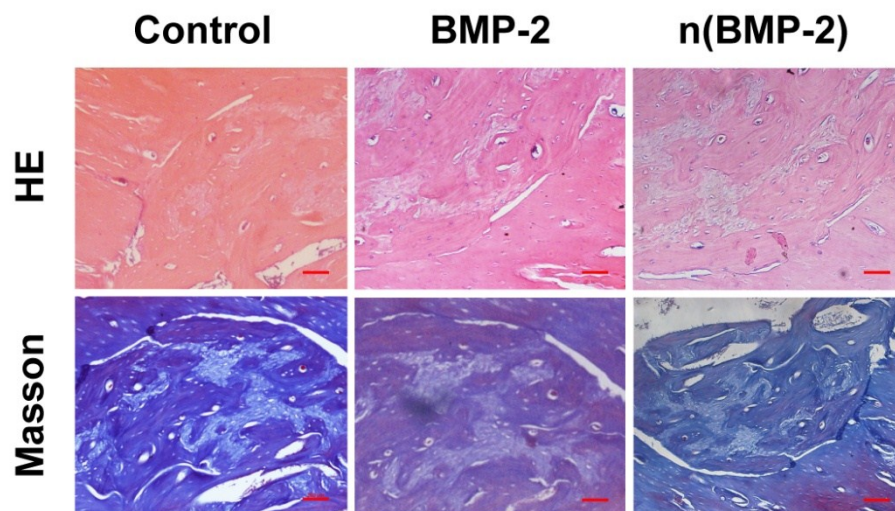


Figure S4. HE and Masson staining analysis of bone formation in each group after eight weeks of therapy, the bar was 200 μ m.

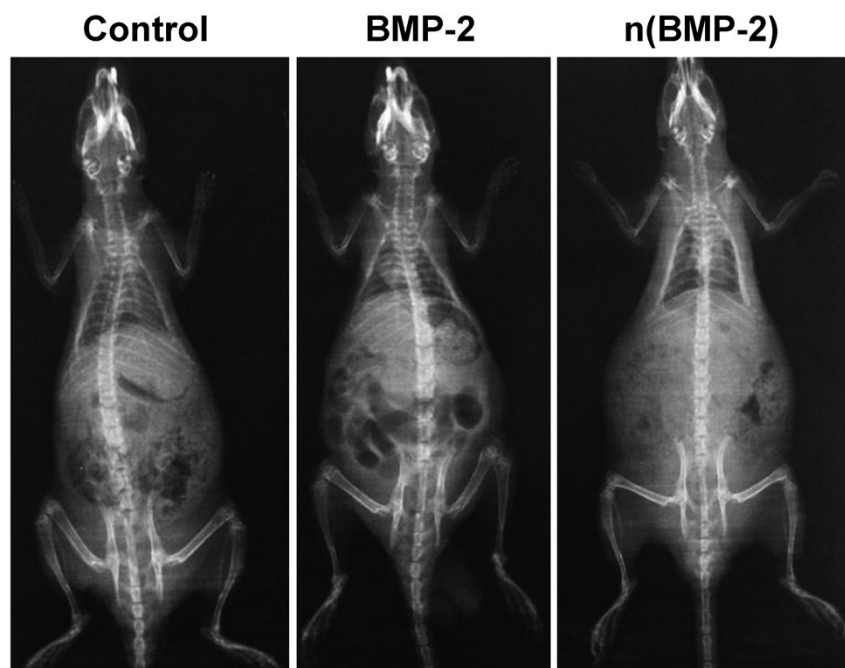


Figure S5. X-ray observation of rats after eight weeks of therapy.

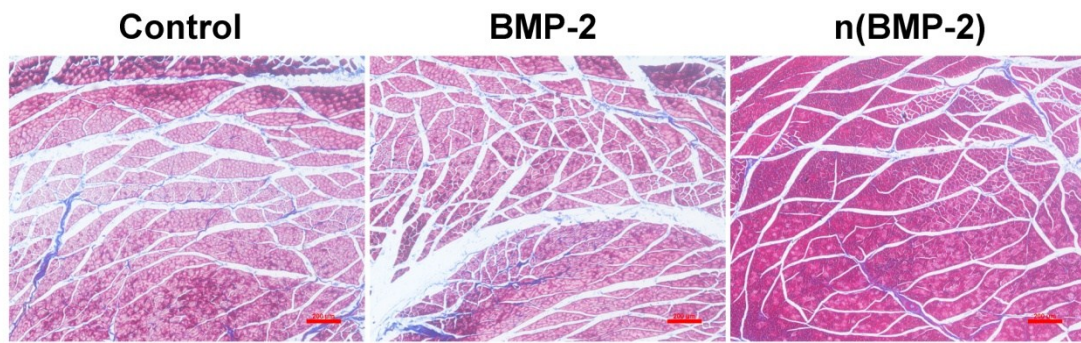


Figure S6. HE staining analysis of muscular tissue near bone injury site, the bar was 200 μm .