

Supporting Information

A pH-neutral bioactive glass empowered gelatin-chitosan composite scaffold for skull defect repairing

Bin Zhu^{†a}, Yu Liu^{†b}, Yanlei Zhao^c, Xinyu Dou^b, Linbang Wang^b, Shuyuan Min^b, Xiaoguang Liu^{*b} and Dong Qiu^{*dc}

^a *Department of Orthopaedics, Beijing Friendship Hospital, Capital Medical University, Beijing, 100050, P.R. China.*

^b *Department of Orthopaedics, Peking University Third Hospital, Beijing, 100191, P.R. China.*

^c *College of Chemistry, Beijing Normal University, Beijing, 100875, P.R. China.*

^d *Beijing National Laboratory for Molecular Sciences, State Key Laboratory of Polymer Physics and Chemistry CAS Research/Education Center for Excellence in Molecular Sciences, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, P.R. China.*

^e *School of Chemical Sciences, University of Chinese Academy of Sciences, Beijing 100190, P.R. China.*

[†] Bin Zhu and Yu Liu contributed equally to this work and should be considered co-first authors.

* Corresponding author. E-mail addresses: xgliuspine@sina.com (Xiaoguang Liu),
dqiu@iccas.ac.cn (Dong Qiu)

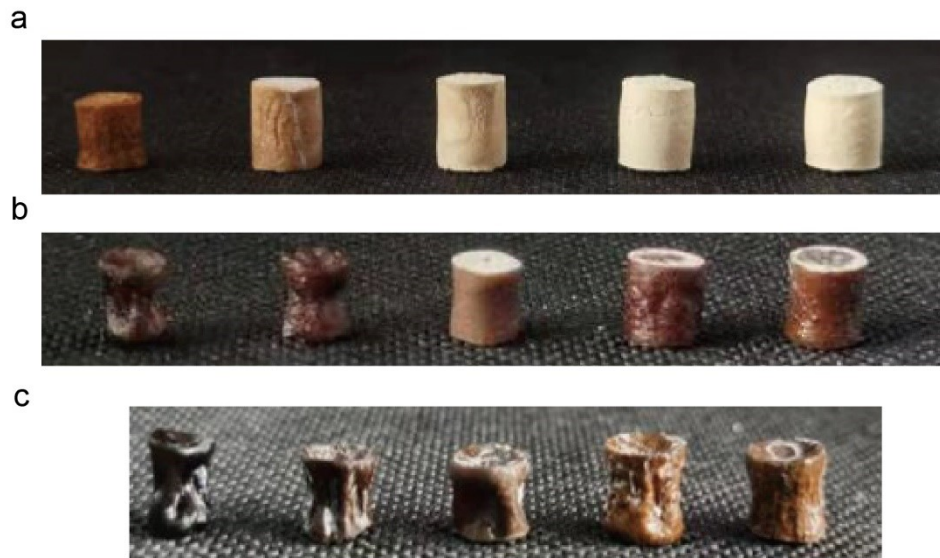


Figure S1. Images of composite scaffolds prepared with different cross-linking methods and different amounts of PSC. a) 1wt% glutaraldehyde solution cross-linked. b) 20wt% sodium phytate solution cross-linked. c) 1wt% glutaraldehyde and 20wt% sodium phytate mixed solution co-cross-linked. The PSC dosages from left to right were 0, 10, 20, 30, and 40wt% respectively.

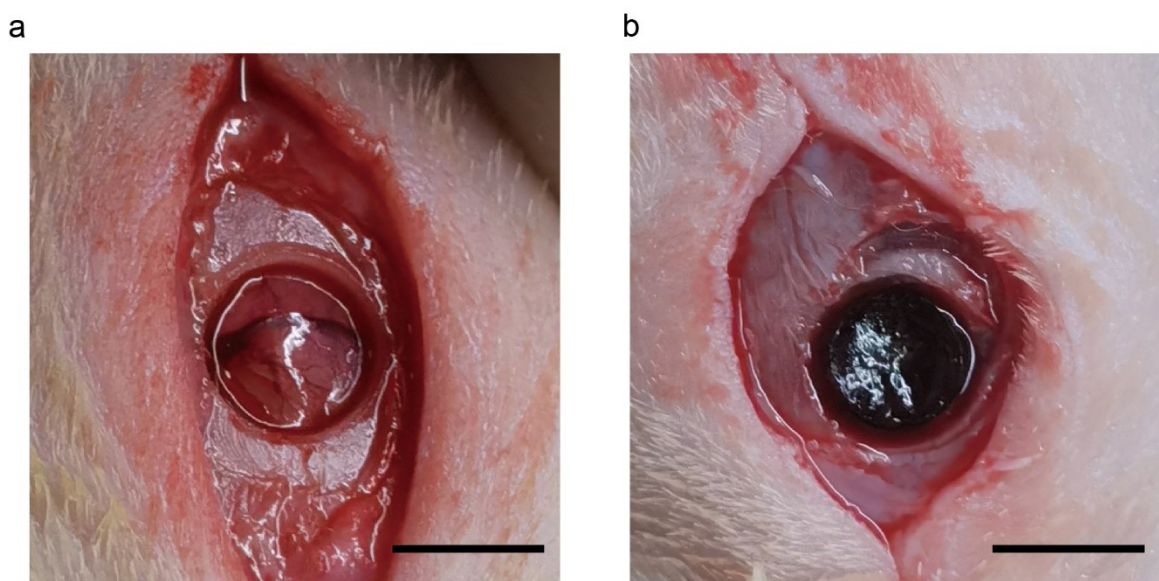


Figure S2. Images of rat skull defect model of rat. a) the full-thickness skull defect at the top of the skull. b) Composite scaffolds were implanted to repair the defect. Scale bar: 5mm.

