**Supporting information**

**Fabrication and characterization of 3D printing Ta-GelMA-BG scaffolds by chemical crosslinking processing for promotion osteointegration**

Fujian Zhao a1, Xiongfa Ji b1, Yang Yan c, d, Zhen Yang c, d, Xiaofeng Chen c, d, Limin Ma b\*

a Stomatological Hospital, Southern Medical University, Guangzhou 510280, China

b Department of Orthopedics, Guangdong Provincial People’s Hospital, Guangdong Academy of Medical Sciences, Guangzhou 510080, China

c Department of Biomedical Engineering, School of Materials Science and Engineering, South China University of Technology, Guangzhou 510641, China

d National Engineering Research Center for Tissue Restoration and Reconstruction, South China University of Technology, Guangzhou 510006, China

*\*Corresponding authors: E-mail: malimin7@126.com (Limin Ma)*

1 These authors contributed equally to this work.

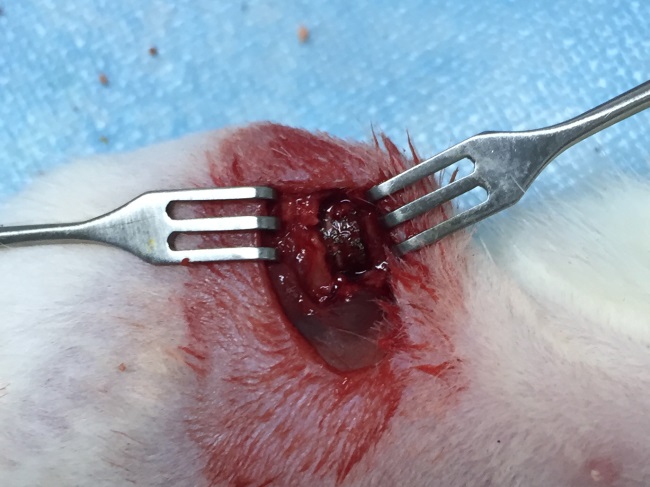


Figure. S1 Surgical placement of materials placed on critical-size bone defect of rat.

Table S1 mBMSCs related gene primer pairs used in the RT-qPCR.

|  |  |
| --- | --- |
| **Genes** | **Primer sequences** |
| ALP | Forward:5'-TGCCTACTTGTGTGGCGTGAA-3’ |
| Reverse:5'-TCACCCGAGTGGTAGTCACAATG-3’ |
| OPN | Forward:5'-GCAGTCTTCTGCGGCAGGCA-3’ |
| Reverse:5'-CACCGGGAGGGAGGAGGCAA-3’ |
| OCN | Forward:5'-AGCAGCTTGGCCCAGACCTA-3’ |
| Reverse:5'-TAGCGCCGGAGTCTGTTCACTAC-3’ |
| COLⅠ | Forward:5'-ATGCCGCGACCTCAAGATG-3' |
| Reverse:5'-TGAGGCACAGACGGCTGAGTA-3' |
| RUNX2 | Forward:5'-CACTGGCGGTGCAACAAGA-3' |
| Reverse:5'-TTTCATAACAGCGGAGGCATTTC-3' |
| GAPDH | Forward:5'-CTCCCACTCTTCCACCTTCG -3’ |
| Reverse:5'-TTGCTGTAGCCGTATTCATT -3’ |