

Supplementary material

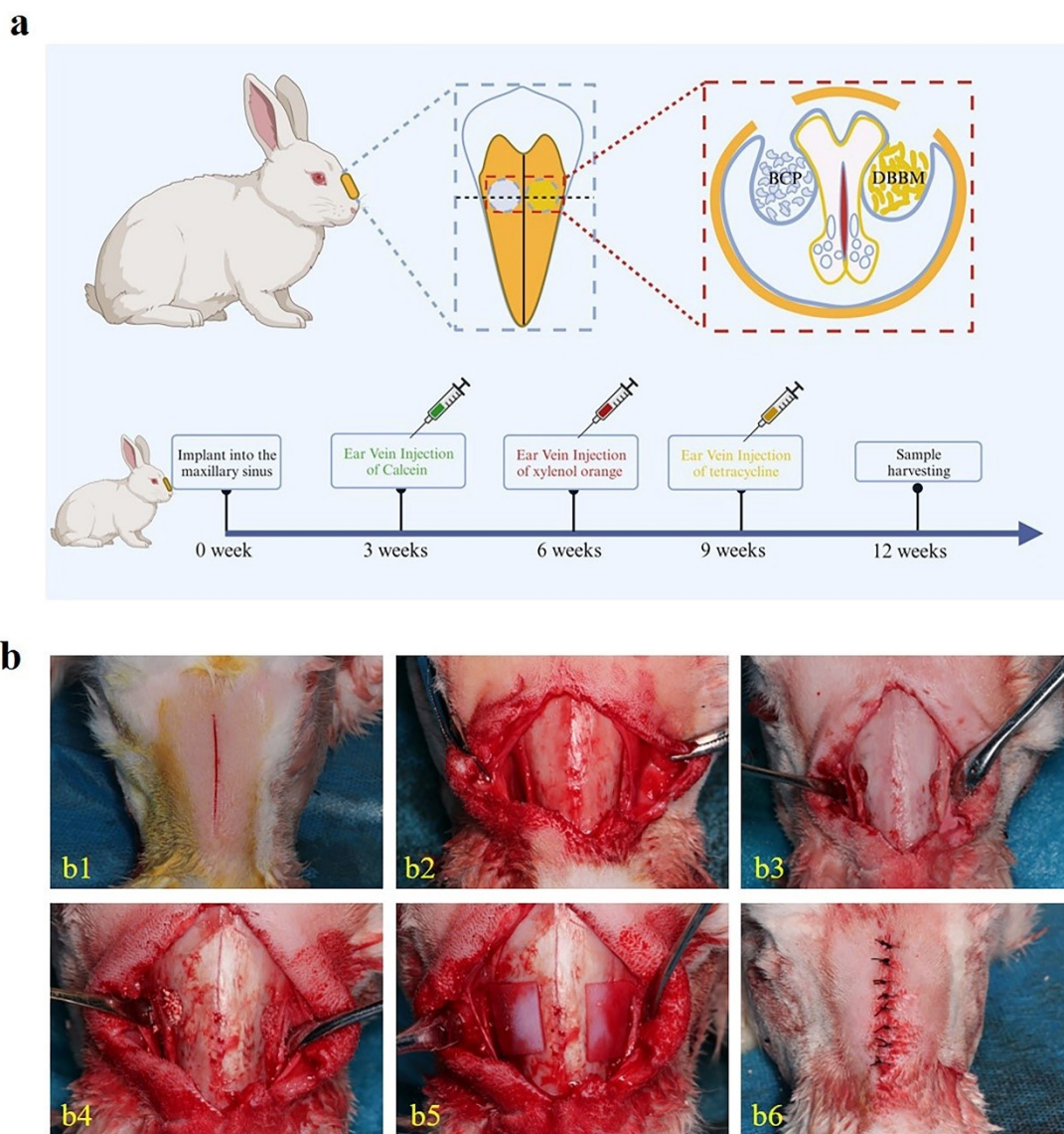


Figure S1. Surgical procedure diagram;(a) The surgical procedural diagram (b1) After shaving and being disinfected, a vertical incision of 3.0-3.5 cm is made along the midline of the nasal dorsum. (b2) The skin was incised, and the periosteum was detached to expose the bony surface. (b3) A circular bone window with a diameter of 5 mm was created at a point 0.5 cm outside the midline, 2 cm below the nasofrontal suture. (b4) Equal volumes of BCP and Bioss were respectively implanted beneath the elevated maxillary sinus mucosa on the right and left sides in rabbits. (b5) The bone

window was covered with an absorbable membrane. (b6) The periosteum and skin were sutured in layers for proper alignment.

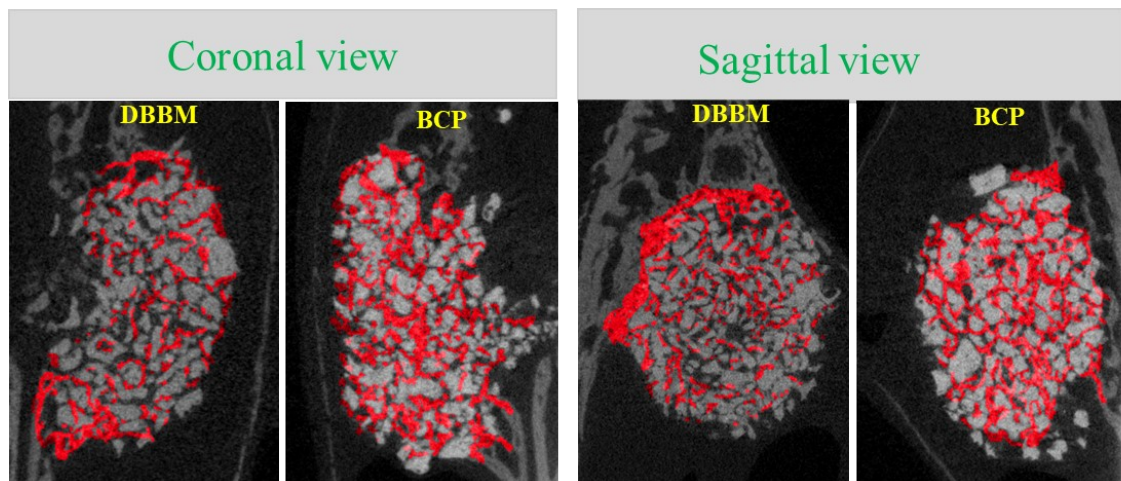


Figure S2. Representative Micro-CT images from both sagittal and coronal perspectives (newly formed bone was pseudo-colored to red)

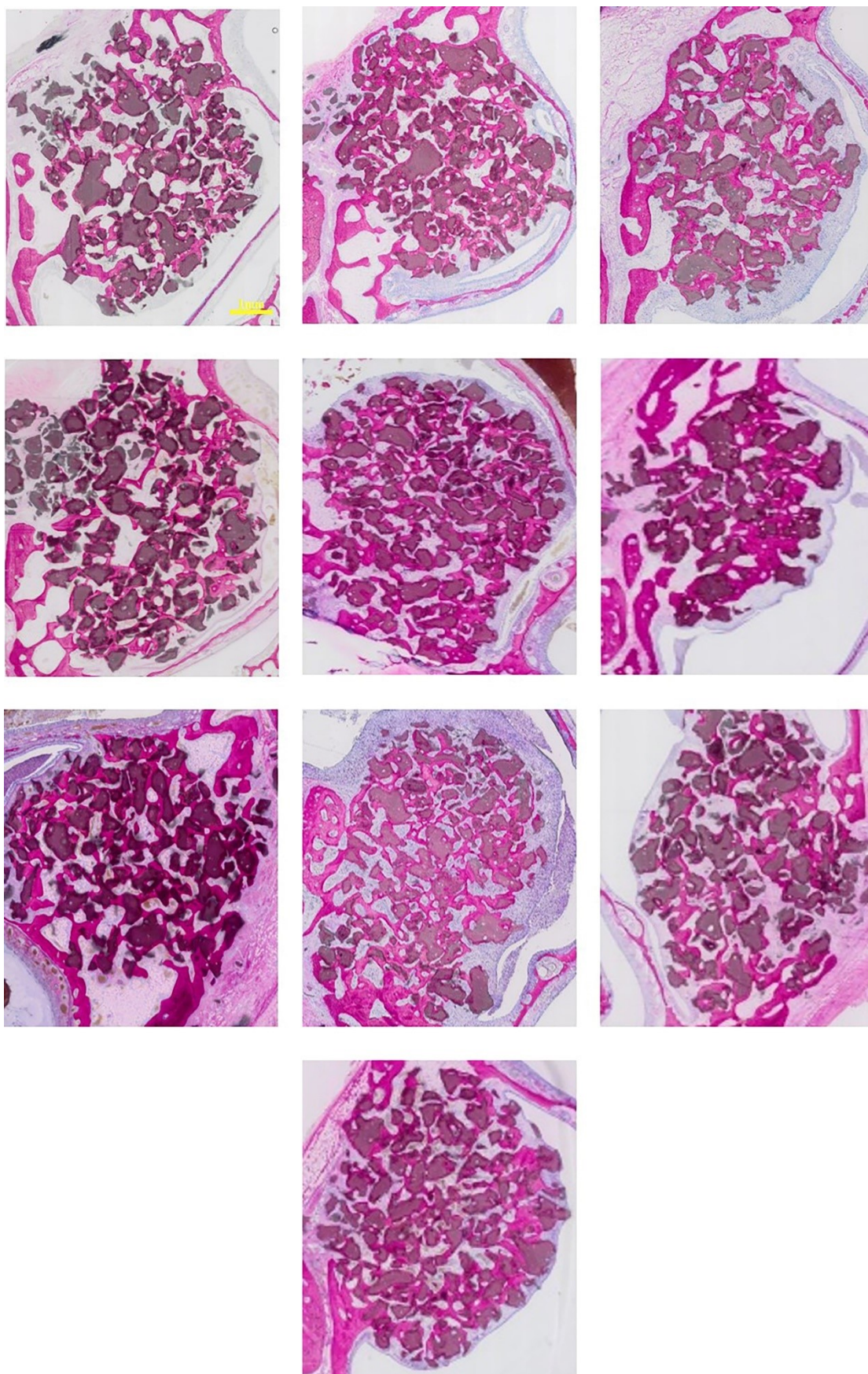


Figure S3. Overview of BCP section staining

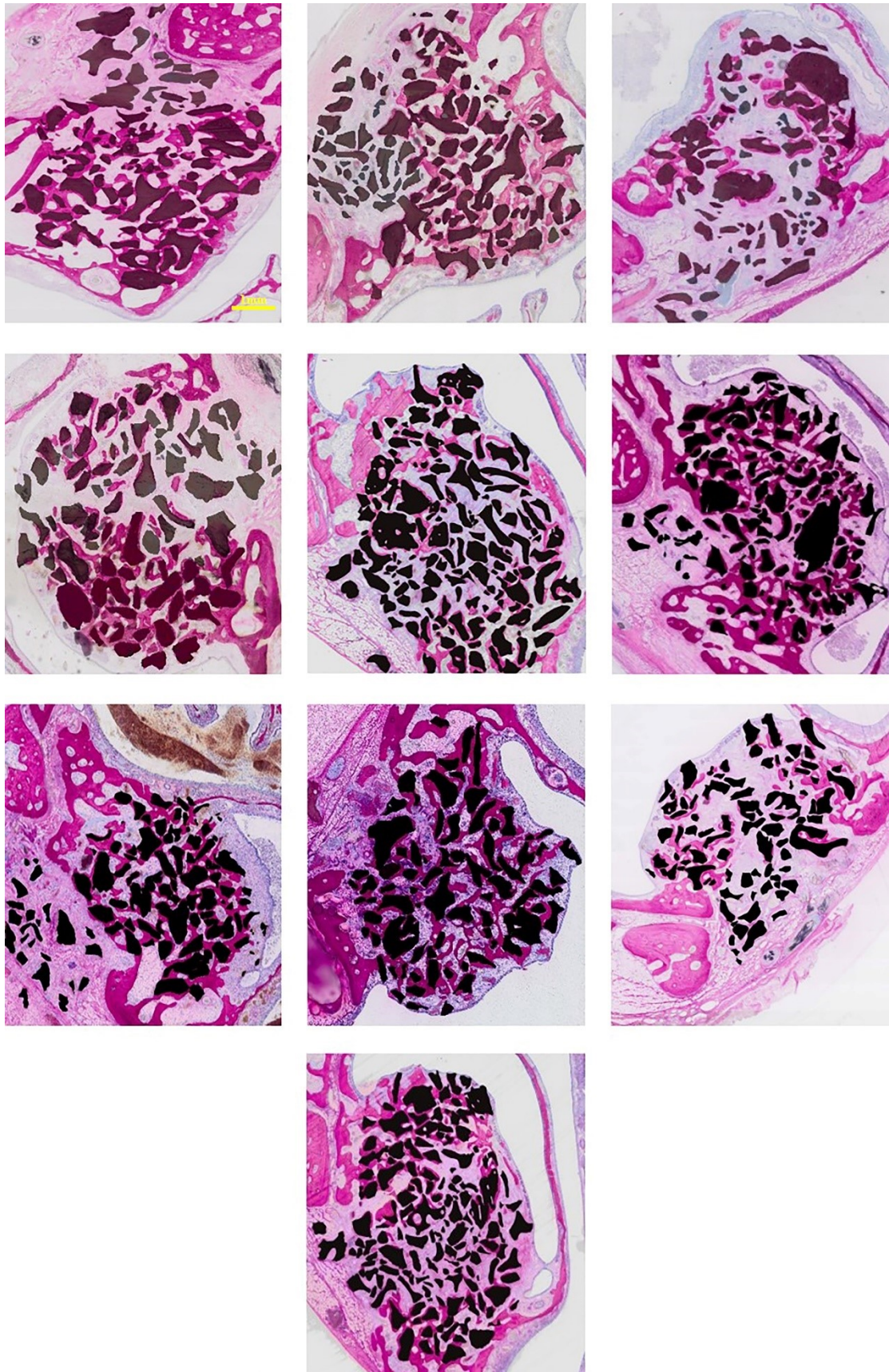


Figure S4. Overview of DBBM section staining

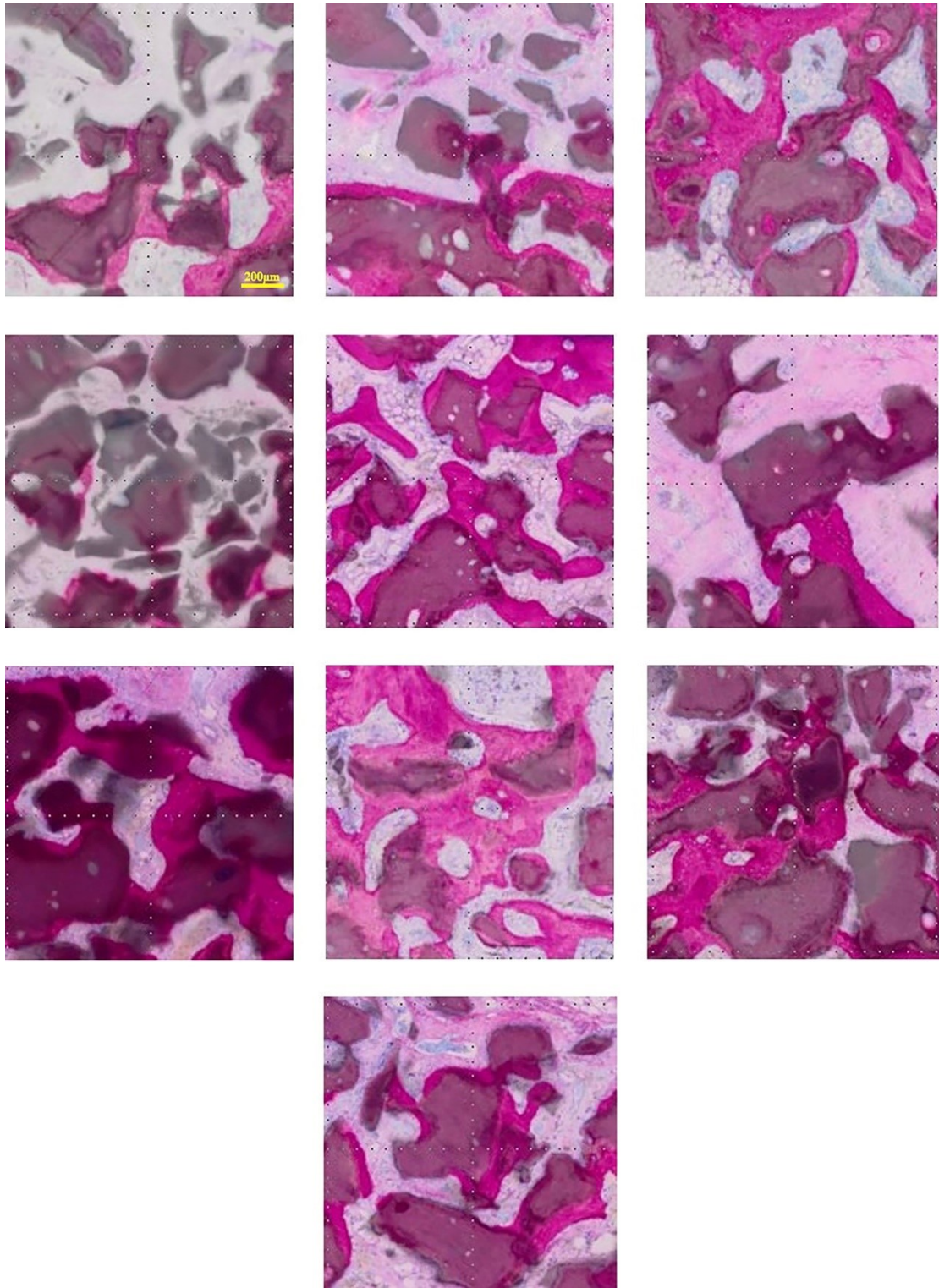


Figure S5. Overview of window of the defect in BCP section staining

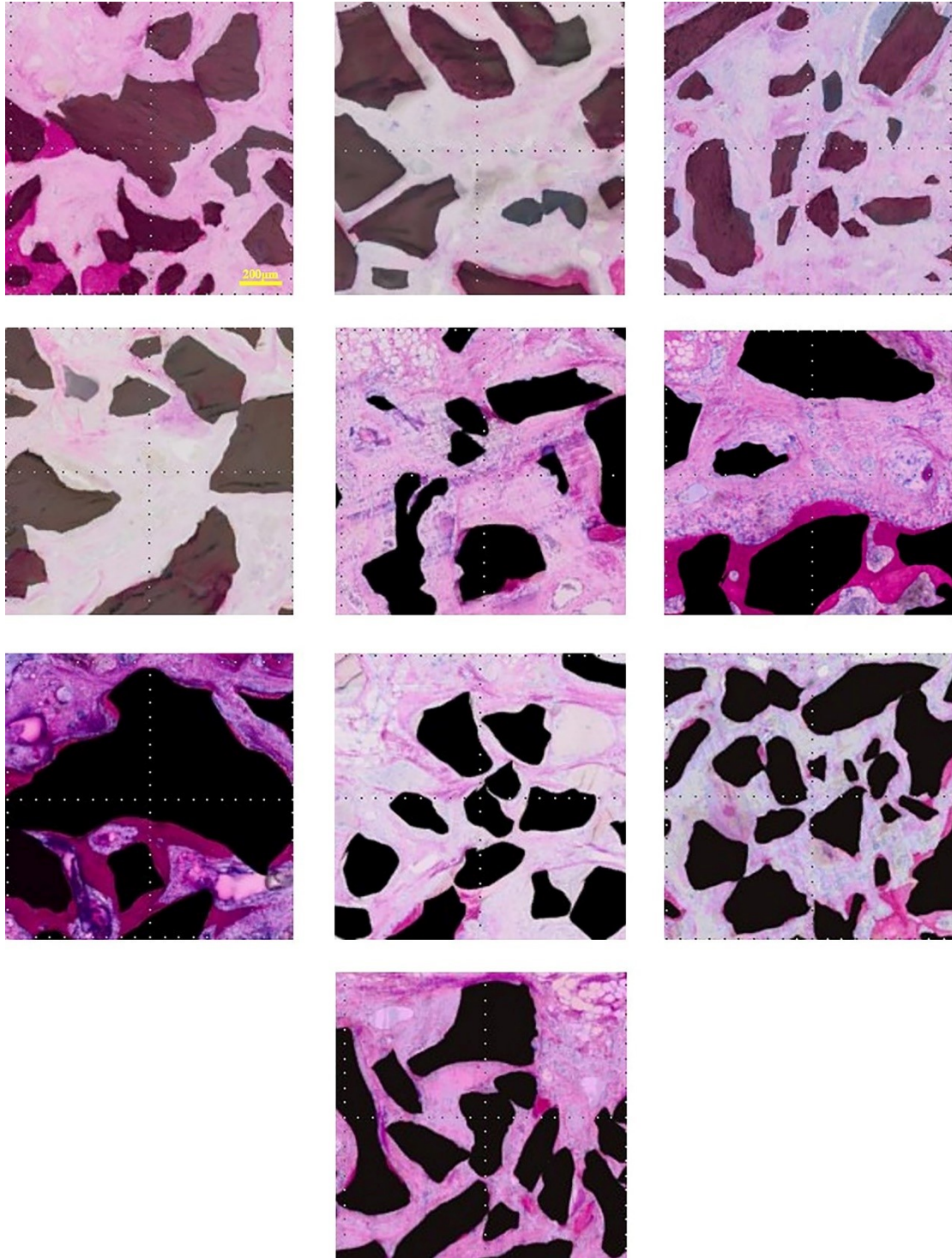


Figure S6. Overview of window of the defect in DBBM section staining

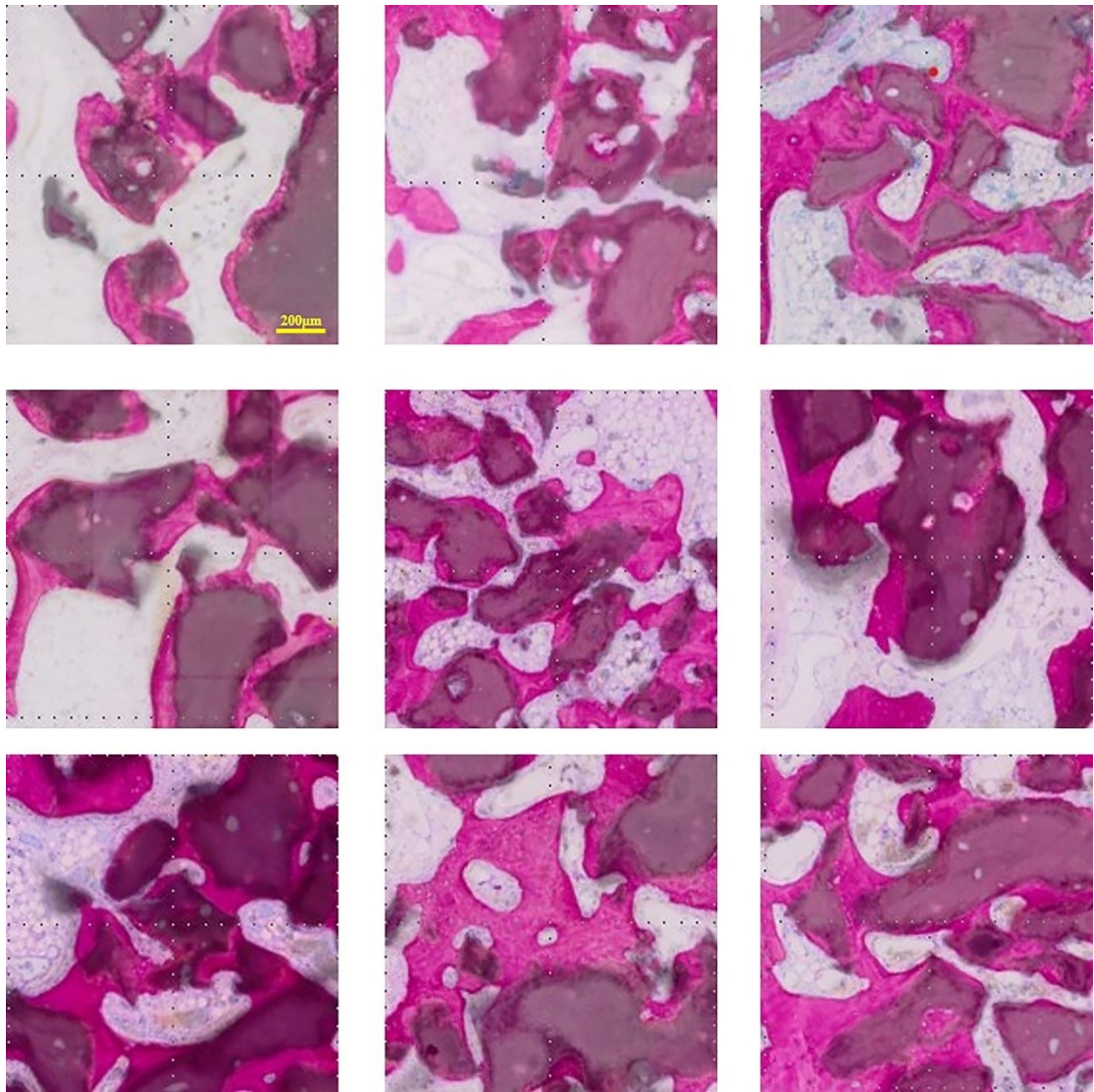


Figure S7. Overview of nearby host bone(B1) in BCP section staining

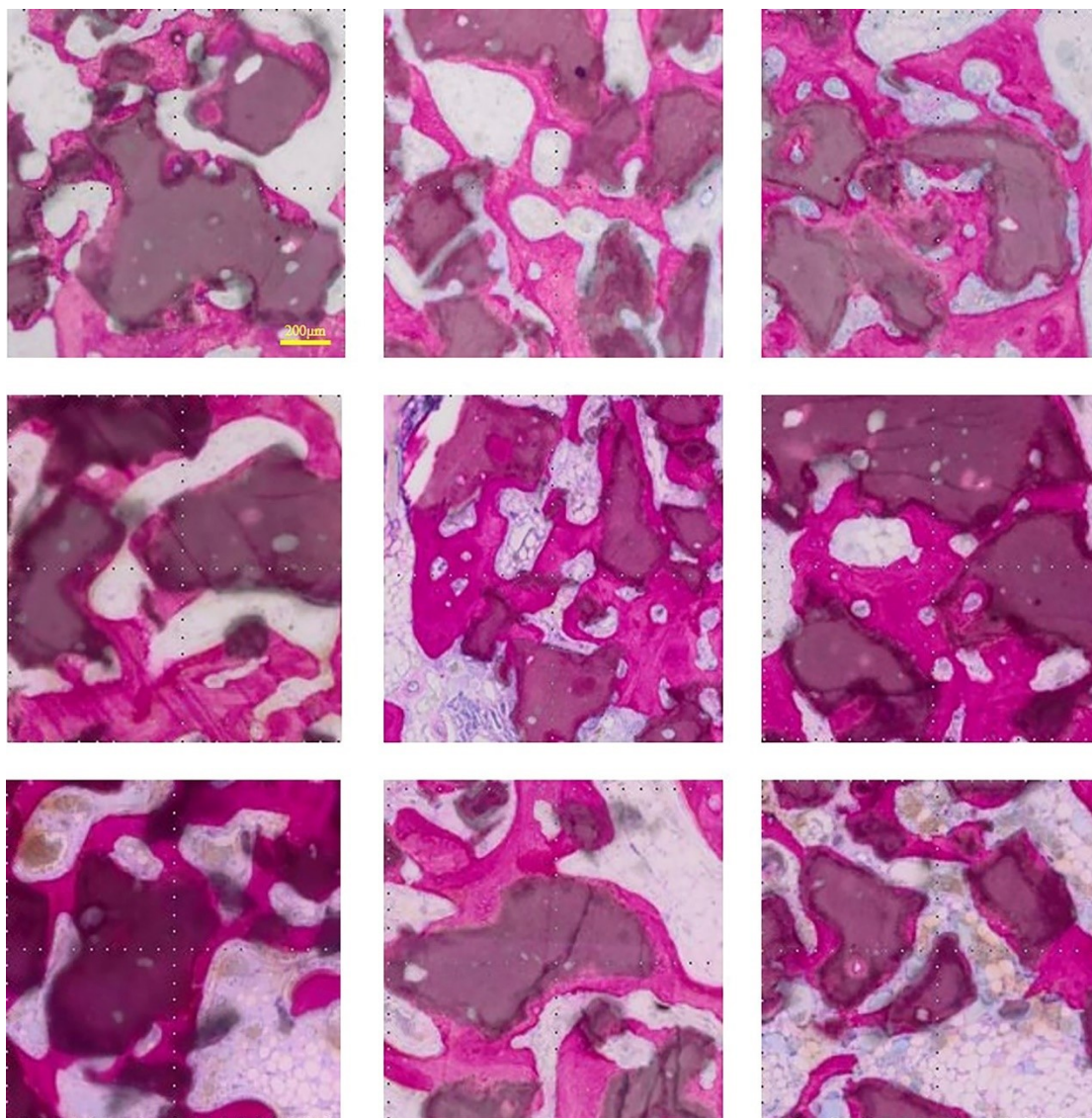


Figure S8. Overview of nearby host bone (B2) in BCP section staining

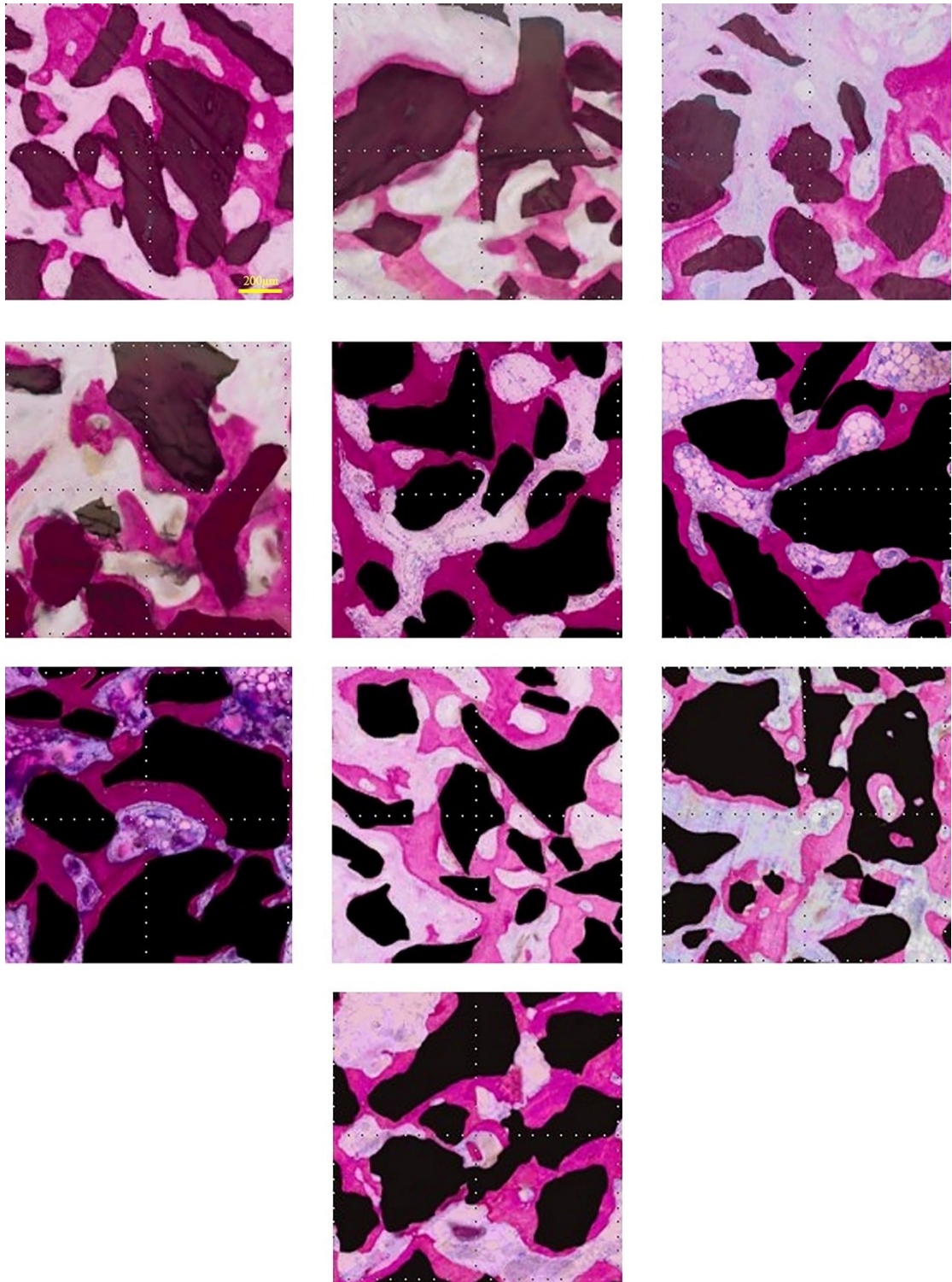


Figure S9. Overview of nearby host bone (B1) in DBBM section staining

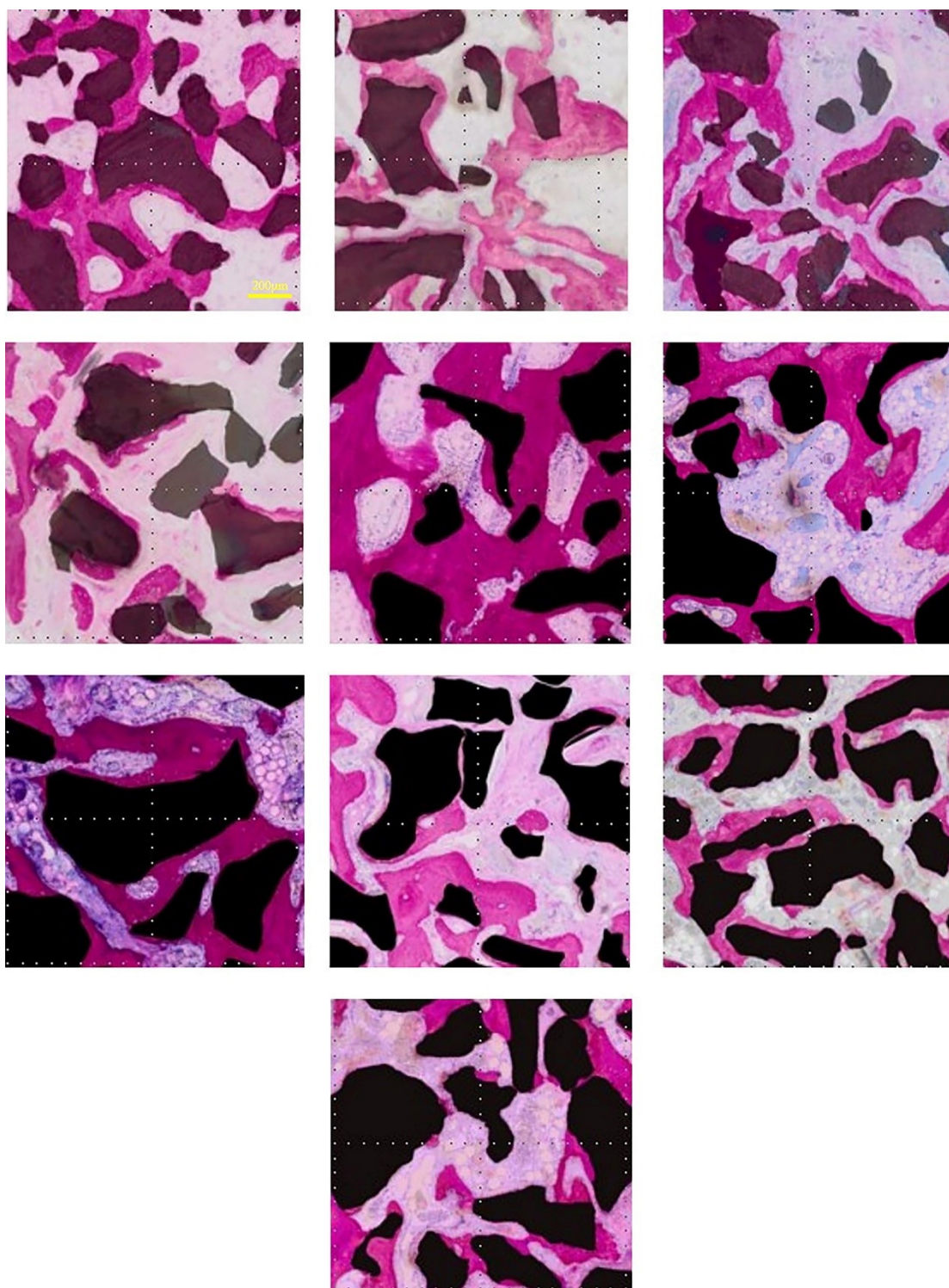


Figure S10. Overview of nearby host bone (B2) in DBBM section staining

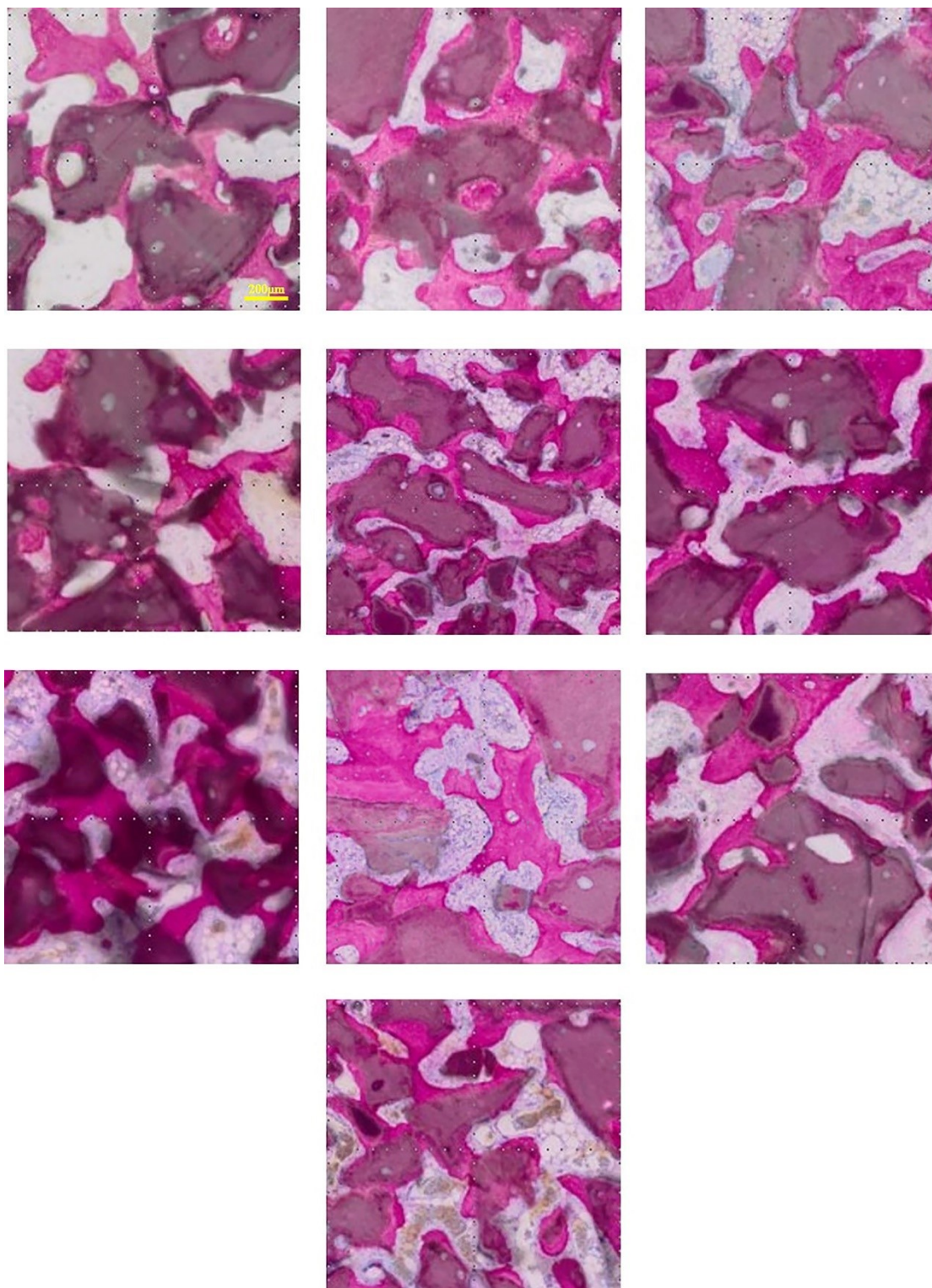


Figure S11. Overview of center of implants in BCP section staining

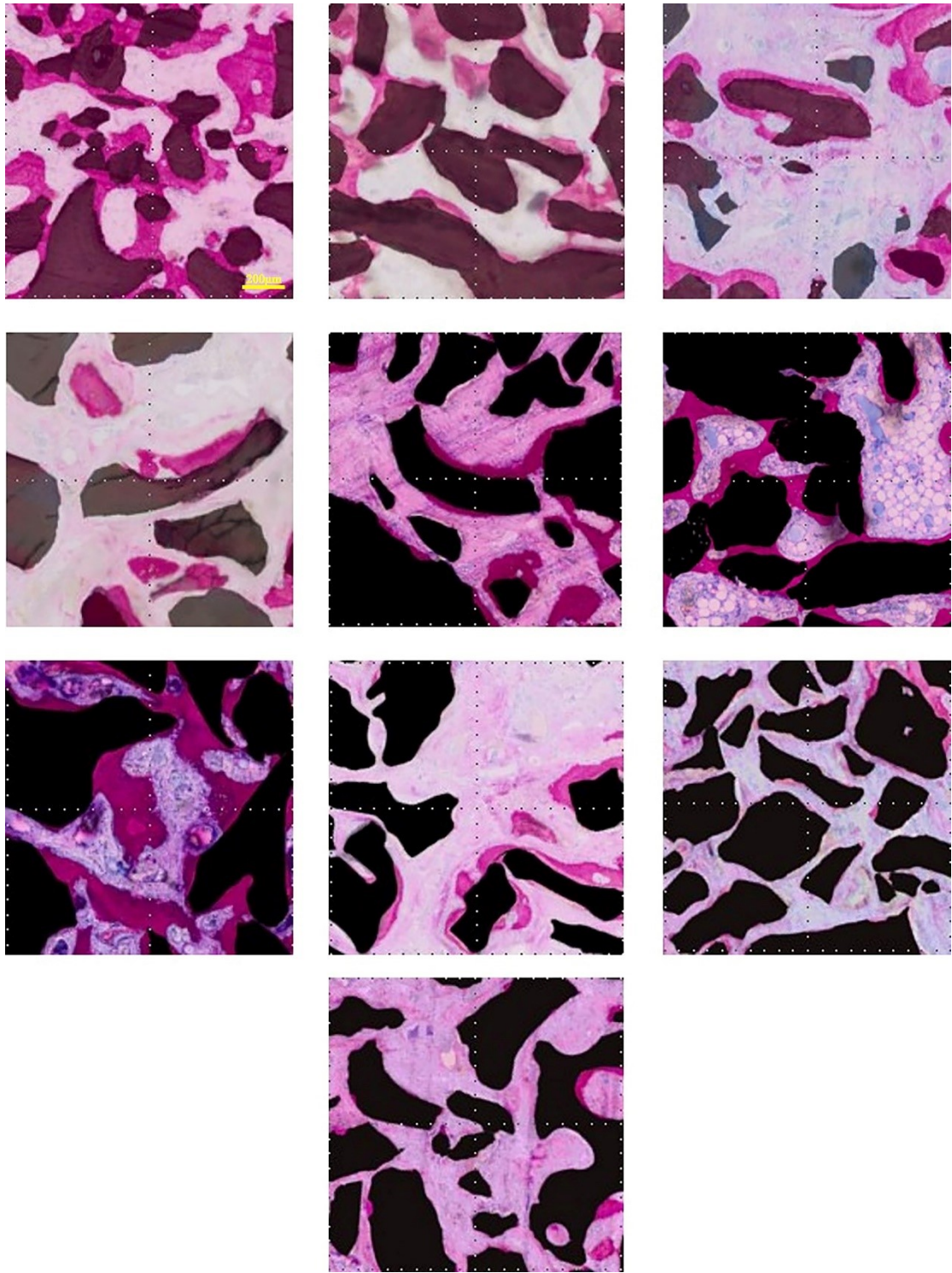


Figure S12. Overview of center of implants in DBBM section staining

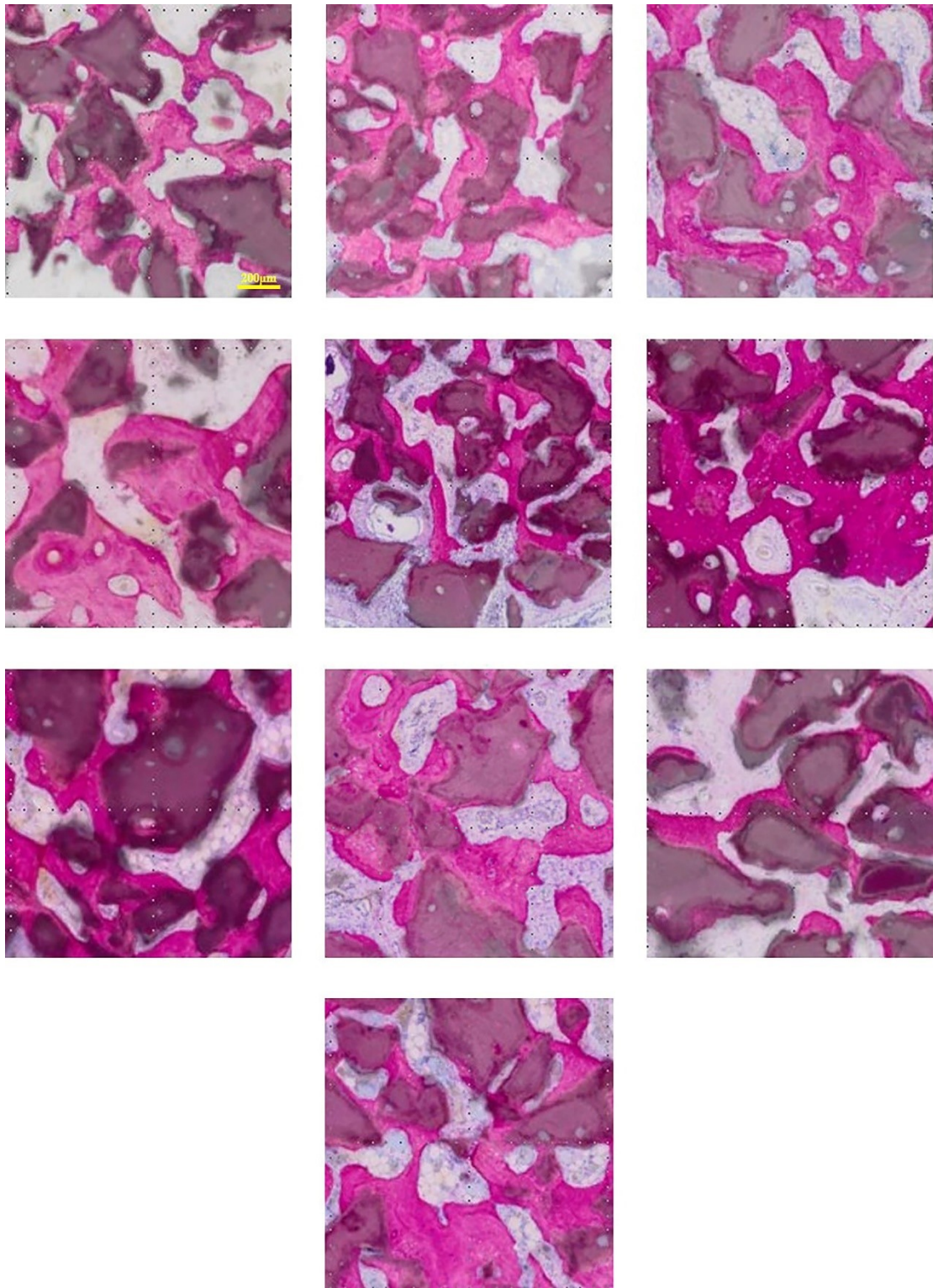


Figure S13. Overview of close to sinus membrane in BCP section staining.

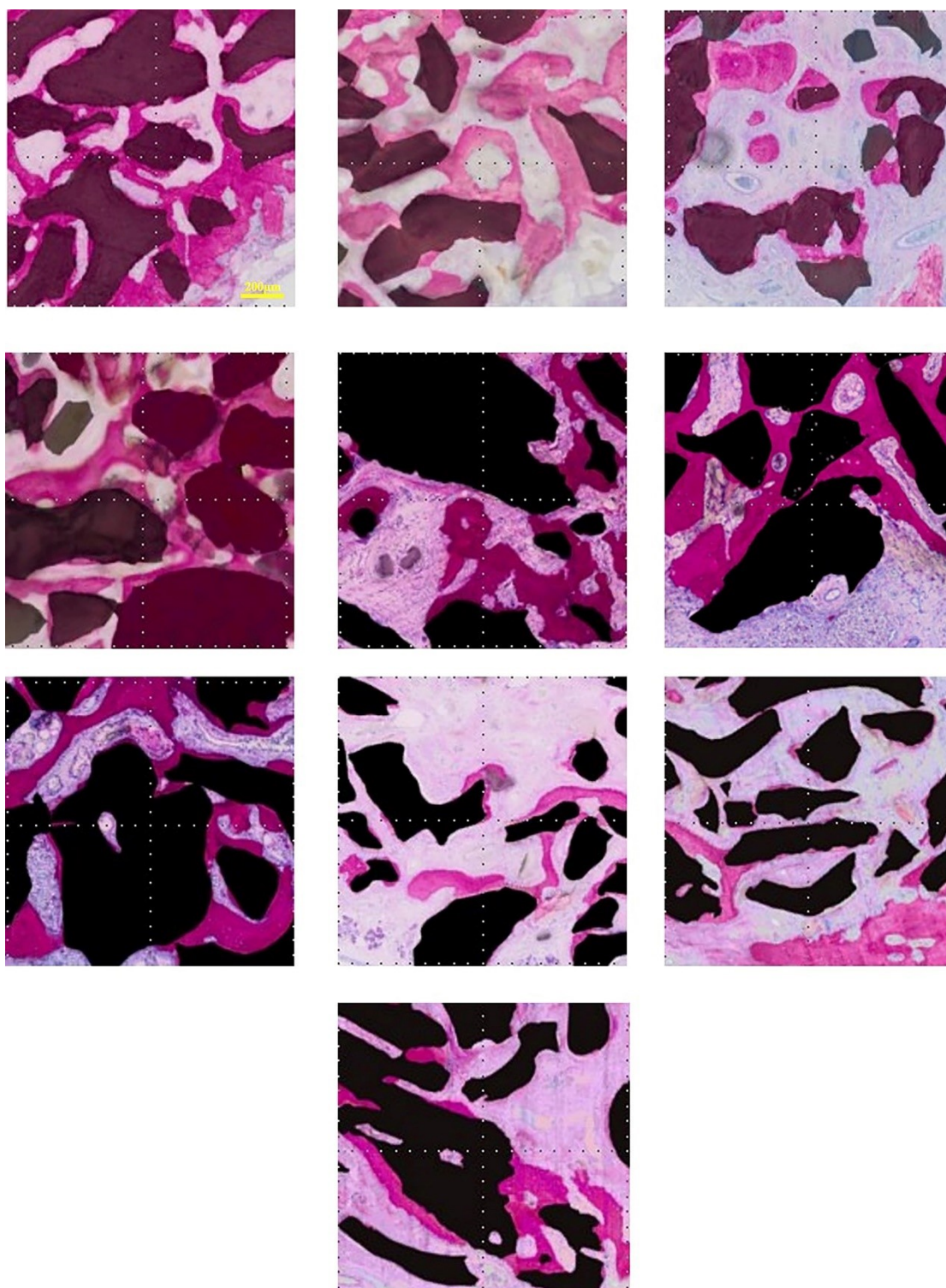


Figure S14. Overview of membrane area in DBBM section staining.

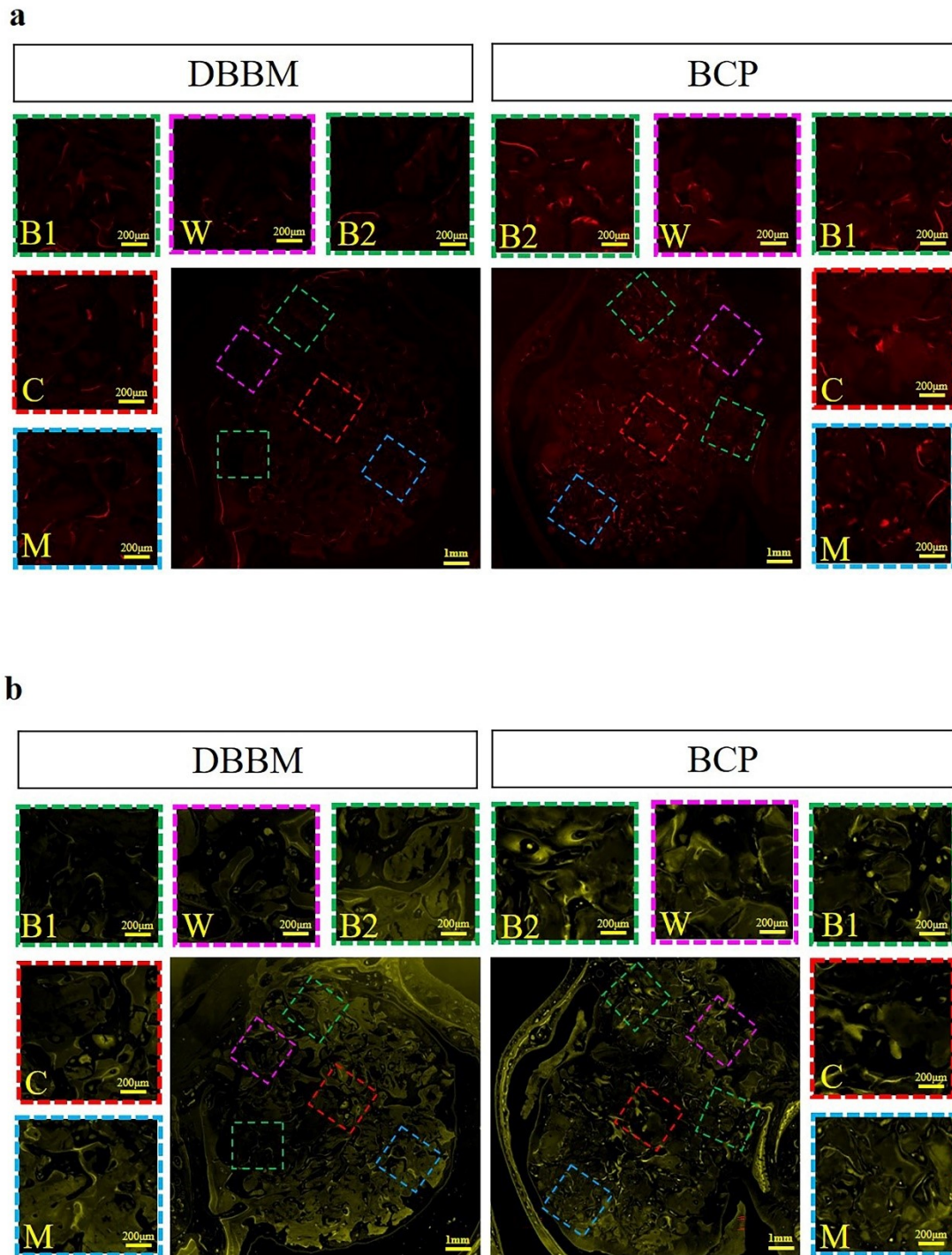


Figure S15. Histology of fluorochrome labels by separated regions. (a) Fluorescent labeling (red) of osteogenesis in BCP and DBBM. (b) fluorescent labeling (yellow) of osteogenesis in BCP and DBBM.

Table S1. Primer pairs used in the qPCR

		Primer sequences (5'-3')
<i>Ctsk</i>	Forward Reverse	AGCAGAACGGAGGCATTGACTC CCCTCTGCATTTAGCTGCCTTTG
<i>Trap</i>	Forward Reverse	GCGACCATTGTTAGCCACATACG CGTTGATGTGCGCACAGAGGGAT
<i>Mmp9</i>	Forward Reverse	GCTGACTACGATAAGGACGGCA TAGTGGTGCAGGCAGAGTAGGA
<i>Runx2</i>	Forward Reverse	CCTGAACTCTGCACCAAGTCCT TCATCTGGCTCAGATAGGAGGG
<i>Colla1</i>	Forward Reverse	CCTCAGGGTATTGCTGGACAAC CAGAAGGACCTTGTTTGCCAGG
<i>Bsp</i>	Forward Reverse	AATGGAGACGGCGATAGTTCCG GGAAAGTGTGGAGTTCTCTGCC
<i>Alp</i>	Forward Reverse	CCAGAAAGACACCTTGACTGTGG TCTTGTCCTGTCGCTCACCAT
<i>C3</i>	Forward Reverse	CGCAACGAACAGGTGGAGATCA TGGAAGTAGCGATTCTTGGCG
<i>Sphk1</i>	Forward Reverse	GCTTCTGTGAACCACTATGCTGG ACTGAGCACAGAATAGAGCCGC
<i>Bmp-2</i>	Forward Reverse	AGAGACCCAAGTTCCCAGAAGC TCTCCTCAGCACACTGTGCAGT
<i>Pdgf-bb</i>	Forward Reverse	AATGCTGAGCGACCACTCCATC TCGGGTCATGTTCAAGTCCAGC
<i>Gapdh</i>	Forward Reverse	CATCACTGCCACCCAGAAGACTG ATGCCAGTGAGCTTCCCGTTCAG