



SUPPLEMENTARY FIG. S3. TBI permits BMSC engraftment and new bone formation. (**A**, **B**) Representative fluorescence micrographs of the proximal tibia marrow space in irradiation-preconditioned BMSC-transplanted tibiae at 1.32×10^7 cells/mL 4 weeks post-transplantation. (**A**, **B1**, **2**) Osteocalcin (OCN)-positive osteoblasts lining trabecular structures with few of them co-expressing GFP (arrows); maturing osteocytes embedded in the bone matrix, some of them also co-expressing E11 (arrows) (M: marrow, T: trabecular bone, $40\times$, scale bar $40\ \mu\text{m}$, GFP=green, OCN=red (**A1**, **2**), E11=red (**B1**, **2**), 4',6-diamidino-2-phenylindole [DAPI]=blue, $n=7$ animals per group).