

Figure S1. PADI2 is weakly expressed in normal mouse retinal tissue. Expression of PADI2 in normal retina tissue of mouse (magnification, x200). Scale bar, 50 μ m. GCL, ganglion cell layer; ONL, outer nuclear layer; INL, inner nuclear layer; PADI2, protein arginine deiminase II.

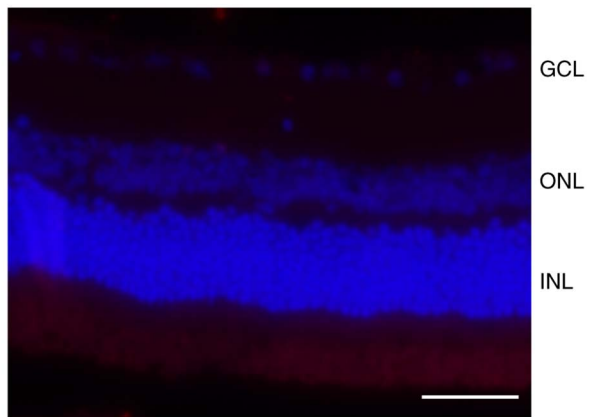


Figure S2. PADI2 inhibition suppresses proliferation, invasion and wound healing in Y79 cells. (A) Fluorescence intensity of the proliferation marker BrdU in Y79 cells treated with DMSO and 2 μ M BB-Cl-amidine for 48 h, as determined by immunofluorescence assay. Representative immunostaining images (left) and graph of BrdU/DAPI fluorescence ratio (right) are shown (magnification, x63). Scale bar, 10 μ m (n=4). (B) Invasion ability of Y79 cells treated with DMSO and 2 μ M BB-Cl-amidine for 48 h, as determined by Transwell invasion assay. Representative immunostaining images (left) and graphs of invasive cells (right) are shown (magnification, x10). Scale bar, 500 μ m. (C) Wound healing abilities of Y79 cells treated with DMSO and 2 μ M BB-Cl-amidine for 48 h, as evaluated by wound healing assay. Representative immunostaining images (left) and graphs of wound healing area (right) are shown (magnification, x10). Scale bar, 300 μ m (n=3). Bars indicate SEM. ** $P \leq 0.01$ and *** $P \leq 0.001$, as determined by (A and B) unpaired Student's t-test and (C) two-way ANOVA with post-hoc Bonferroni test.

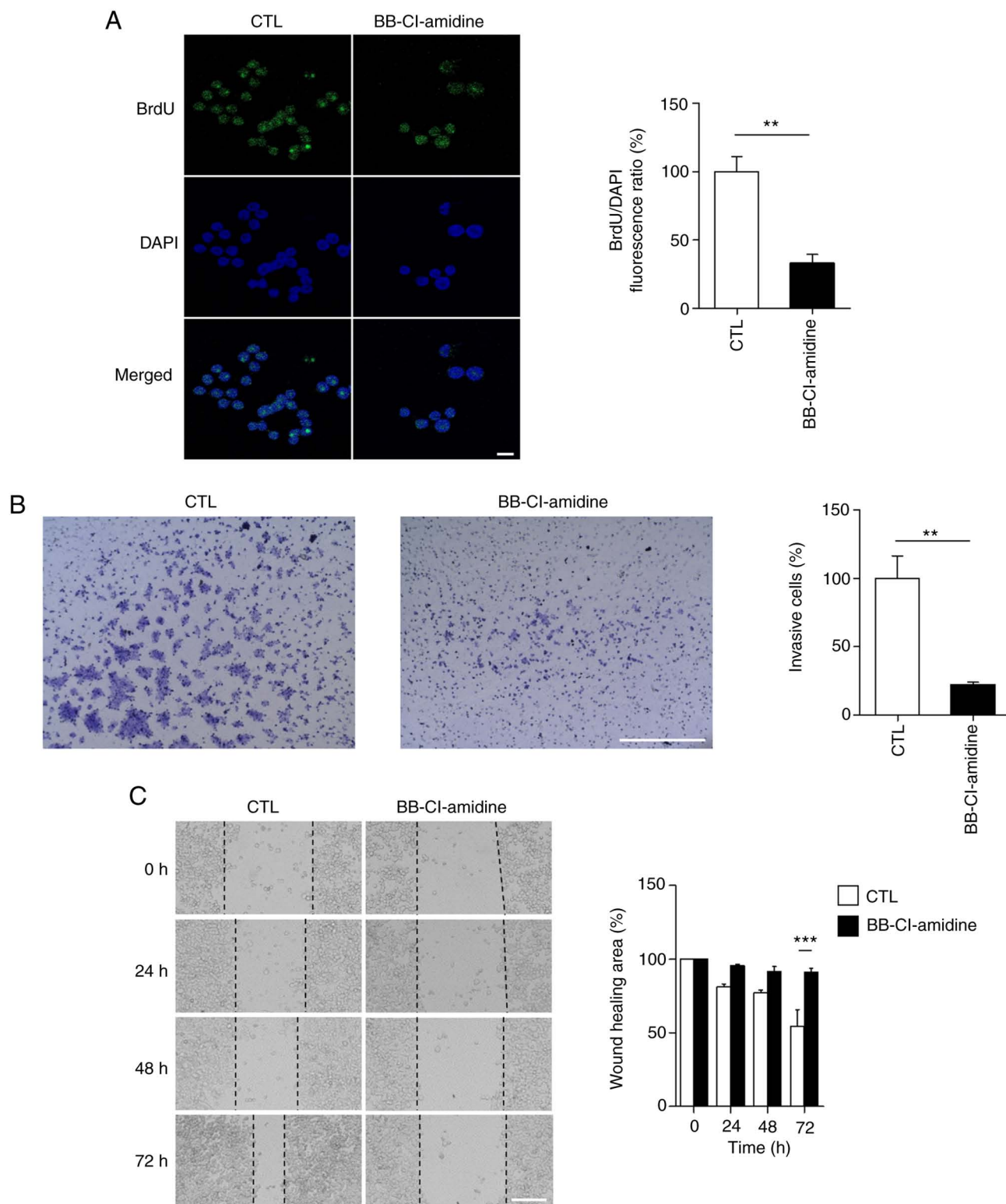


Figure S3. PADI2 inhibition induces apoptosis in WERI-Rb-1 cells. (A) Expression of cleaved poly (ADP-ribose) polymerase protein in WERI-Rb-1 cells treated with DMSO and BB-Cl-amidine (1 and 2 μM) for 48 h, as determined by western blotting. (B) Proportion of total apoptotic WERI-Rb-1 cells treated with DMSO and BB-Cl-amidine (1 and 2 μM) for 48 h, as determined by annexin V-FITC/propidium iodide staining (n=4). Bars represent SEM. * $P \leq 0.05$, as determined by one-way ANOVA with post-hoc Bonferroni test in panel B.

