## Supplementary information for

## Halting progressive neurodegeneration in advanced retinitis pigmentosa

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Supplemental Figure 1. Progressive degeneration in untreated mutant retinas. Mutant retinas were analyzed at 2-, 4- and 8-weeks of age (x axes), using immunostaining and quantitative analyses of histological sections. (A-C) Anti-rhodopsin antibody (red) labels rod OSs. (D-F) Anti-cone arrestin antibody (green) label cones. Nuclei were stained with Hoechst dye (blue). (G-J) Quantification of rod OS length, ONL thickness, cone OS length, and cone number. Each grey dot represents an individual untreated mutant retina; each blue diamond represents an individual 20-week-old wild-type retina. (n = 3, for each time point). Horizontal lines represent the group means. A linear regression model was fit to compare groups. Significant differences between treated and untreated mutant groups are labeled as follows: \*, P < 0.05; \*\*, P < 0.01; and \*\*\*, P < 0.001. OS, outer segment; ONL, outer nuclear layer; INL, inner nuclear layer. Scale bars = 30 µm.



Supplemental Figure 2. Progressive increase in glial reactivity in untreated mutant retinas. Mutant retinas were sectioned and immunostained at 2, 4 and 8-weeks of age (x axes). (A-C) Anti-GFAP antibody (red) to label reactive phenotype in Müller glia; nuclei were stained with Hoechst dye (blue). Immunohistochemistry was performed in 3 mice for every group. A representative immunostaining is shown. ONL, outer nuclear layer; INL, inner nuclear layer; GCL, ganglion cell layer. Scale bar =  $30 \mu m$ .