

Supplementary Figure 1. Western Blot: GFAP and MBP expression in optic nerve following crush injury. (A) Schematic diagram of the optic nerve regions dissected out for protein extraction used for western blot. “region surrounding lesion” represents area spanning 1-3 mm from the optic disk. “Distal nerve region” represents area spanning 3-5mm from the optic disk. Proteins were extracted 5 and 56 days after crush injury, and underwent western blot analysis. (B) Representative western blots showing the level of GFAP, MBP and beta-actin expression. Cntl 5d and Cntl 56d, age matched intact optic nerve region equivalent to either the “region surrounding lesion” or “distal nerve region”. Quantification of GFAP (C) and MBP (D) expression. Values are presented as ratio of GFAP or MBP to beta-actin. n=2 for control groups; n=3 for injury groups. ***, p<0.001, two-way ANOVA, Bonferroni’s post-test.

Supplementary Figure 2. Immunohistochemical staining of WT mouse optic nerve after crush injury. Representative optic nerve sections from two WT mice (case #1 and case #2) subjected to AAV-CNTF injection immediately after crush and perfusion at 21 days post-injury. Antibodies against MBP and GFAP were used. Arrows point to crush site. Notice weak and scattered MBP immunoreactivity in the crush site. Scale bars, 100 μ m.

Supplementary Figure 3. Immunohistochemical staining of Bax KO mouse optic nerve after crush injury. Representative optic nerve sections from two Bax KO mice (case #1 and case #2) subjected to AAV-CNTF injection immediately after crush and perfusion at 21 days post-injury. Antibodies against MBP and GFAP were used. Arrows point to crush site. Notice relatively stronger and intense MBP immunoreactivity in the crush site compared to WT tissues in the Supplemental Figure 2. Scale bars, 100 μ m.