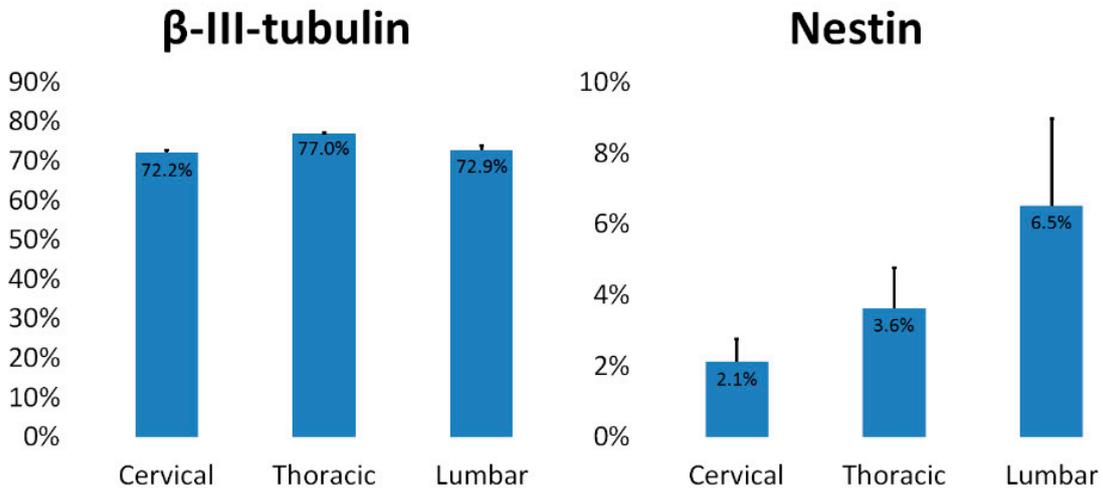
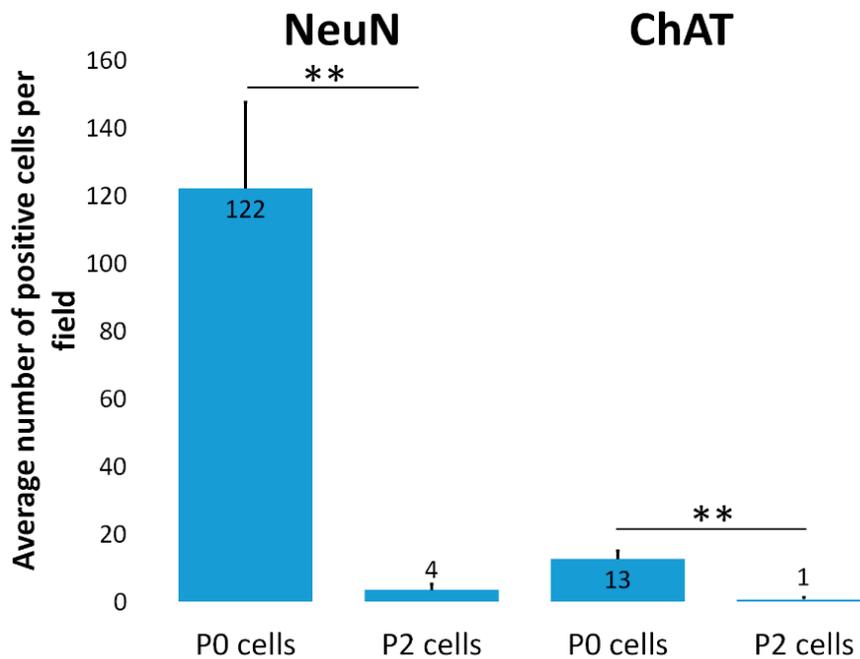


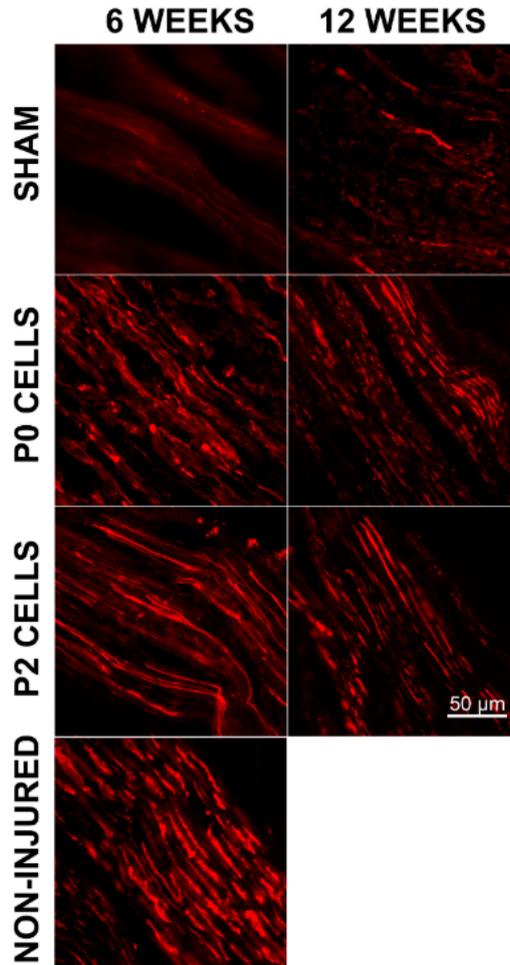
# P0 CELLS



**Figure S1.** Quantitative in vitro characterization of fetal cells (P0 cells) isolated from different segments of E14.5 embryo spinal cords. Approximately  $\frac{3}{4}$  of the cells expressed neuronal marker III- $\beta$ -tubulin while no significant differences were seen between the cells from the different spinal cord segments. Number of Nestin<sup>+</sup> progenitor cells increased from Cervical < Thoracic < Lumbar though the differences were not significant.



**Figure S2.** Quantitative characterization of grafted cells in vivo. Number of NeuN<sup>+</sup>GFP<sup>+</sup> cells and ChAT<sup>+</sup>GFP<sup>+</sup> cells was significantly higher in the P0 cell graft compared to the P2 cell graft. \*\*  $p < 0.001$ . Quantification is done for 6 weeks timepoint.  $n = 5-6$  in each group.



**Figure S3.** Musculocutaneous nerve longitudinal sections distal to the cell graft showing NF200<sup>+</sup> axons 6 and 12 weeks after nerve injury. Very few axons were seen in the sham group while the cell-grafted nerves show numerous thin NF200-positive axons extended towards the target muscle. Thick axons in the non-injured nerve are shown for comparison.