

Motor axonopathies in a mouse model of Duchenne muscular dystrophy

Justin S. Dhindsa¹, Angela L. McCall¹, Laura M. Strickland¹, Anna F. Fusco¹, Amanda F. Kahn¹, Mai K. Elmallah^{1*}

¹Division of Allergy, Immunology, and Pulmonary Medicine, Department of Pediatrics, Duke University Medical Center Box 2644, Durham, North Carolina 27710, USA

*Correspondence: mai.elmallah@duke.edu

Supplementary Figures

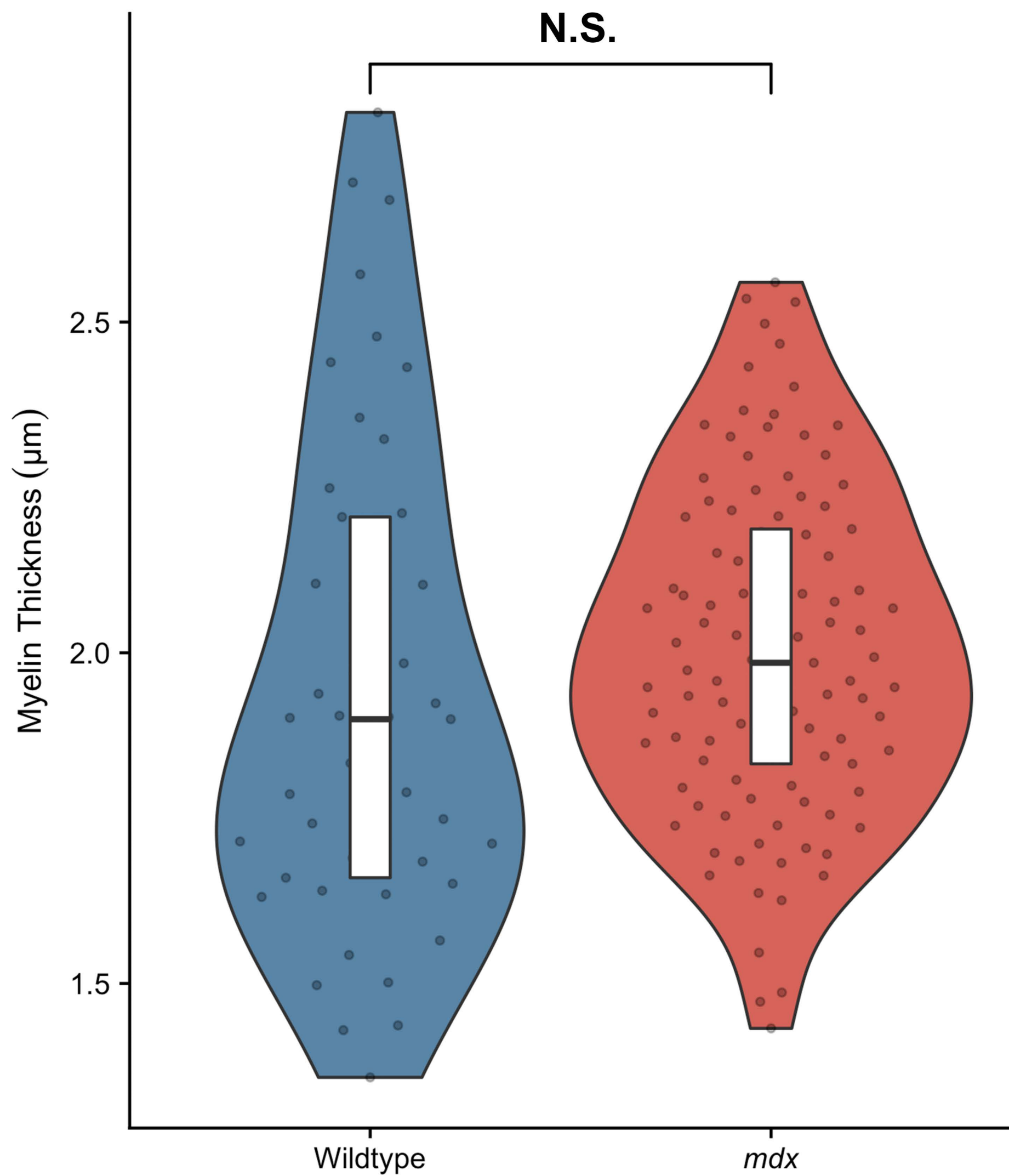
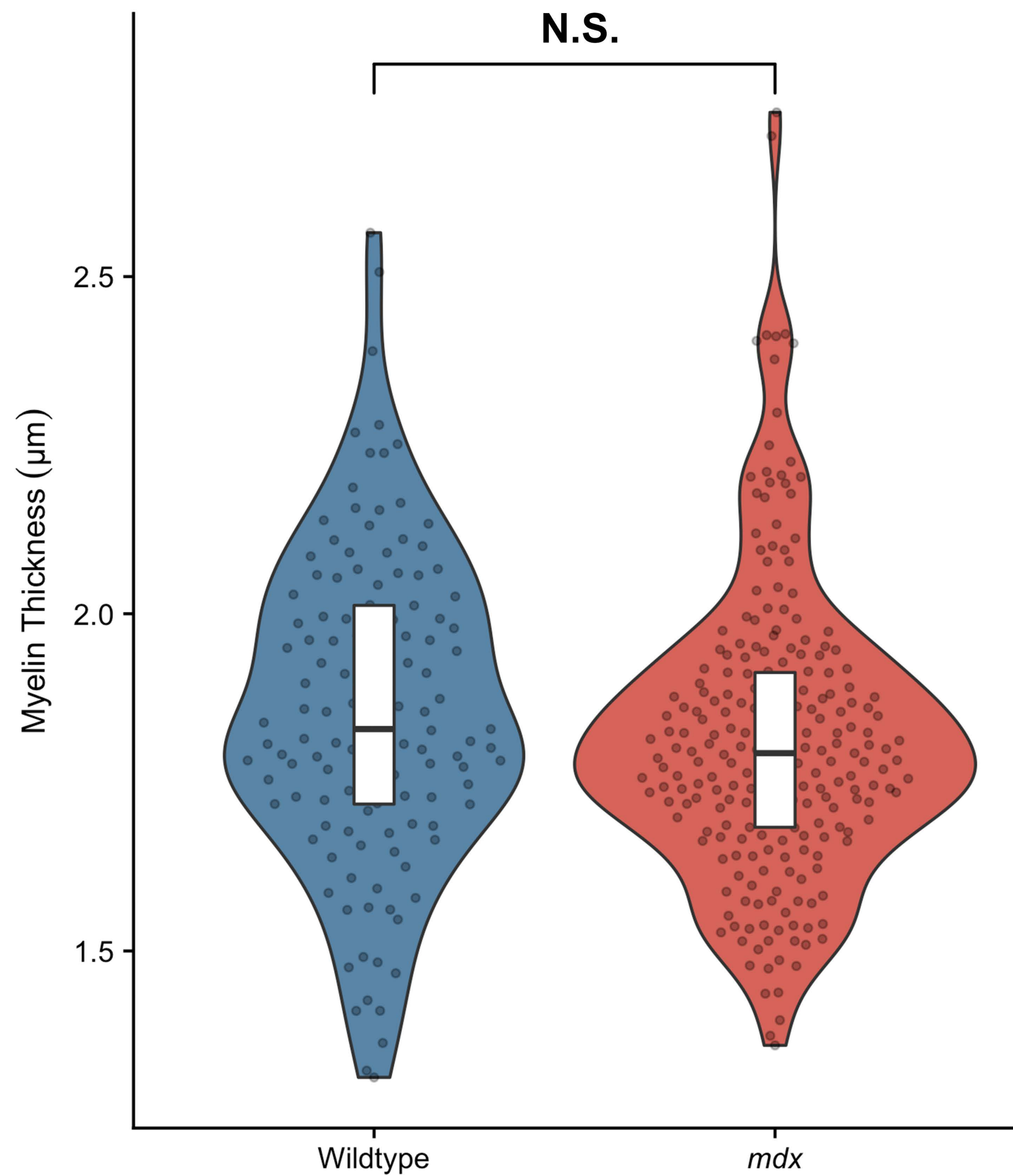
Supplemental Figure Titles and Legends

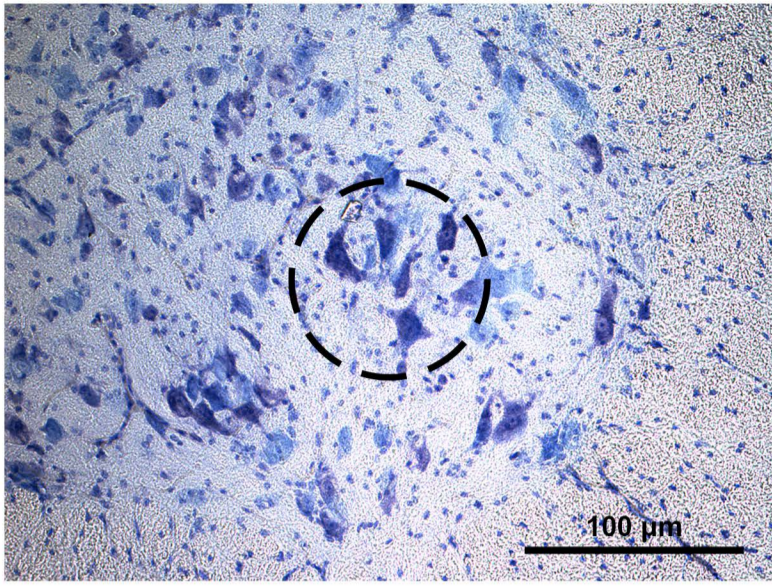
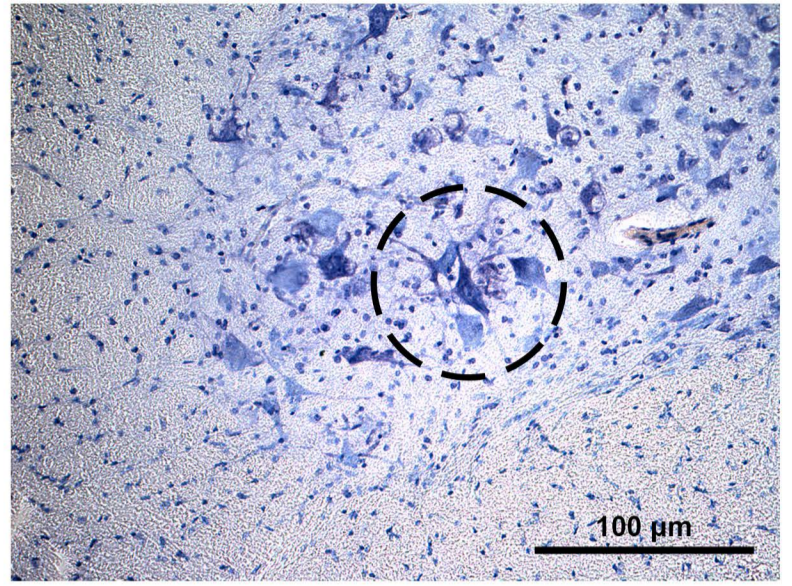
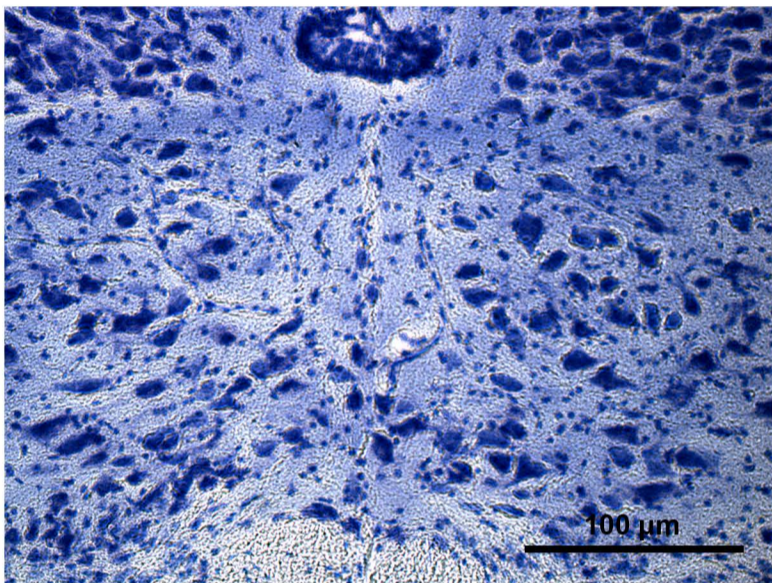
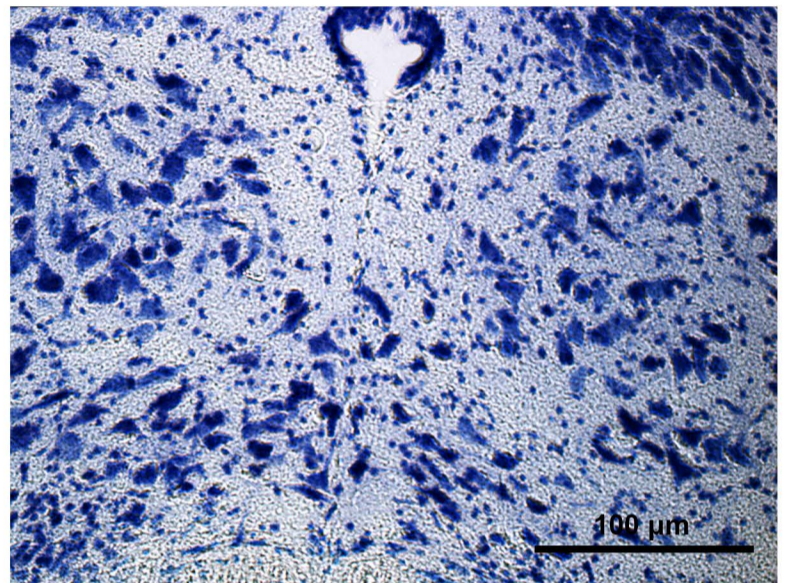
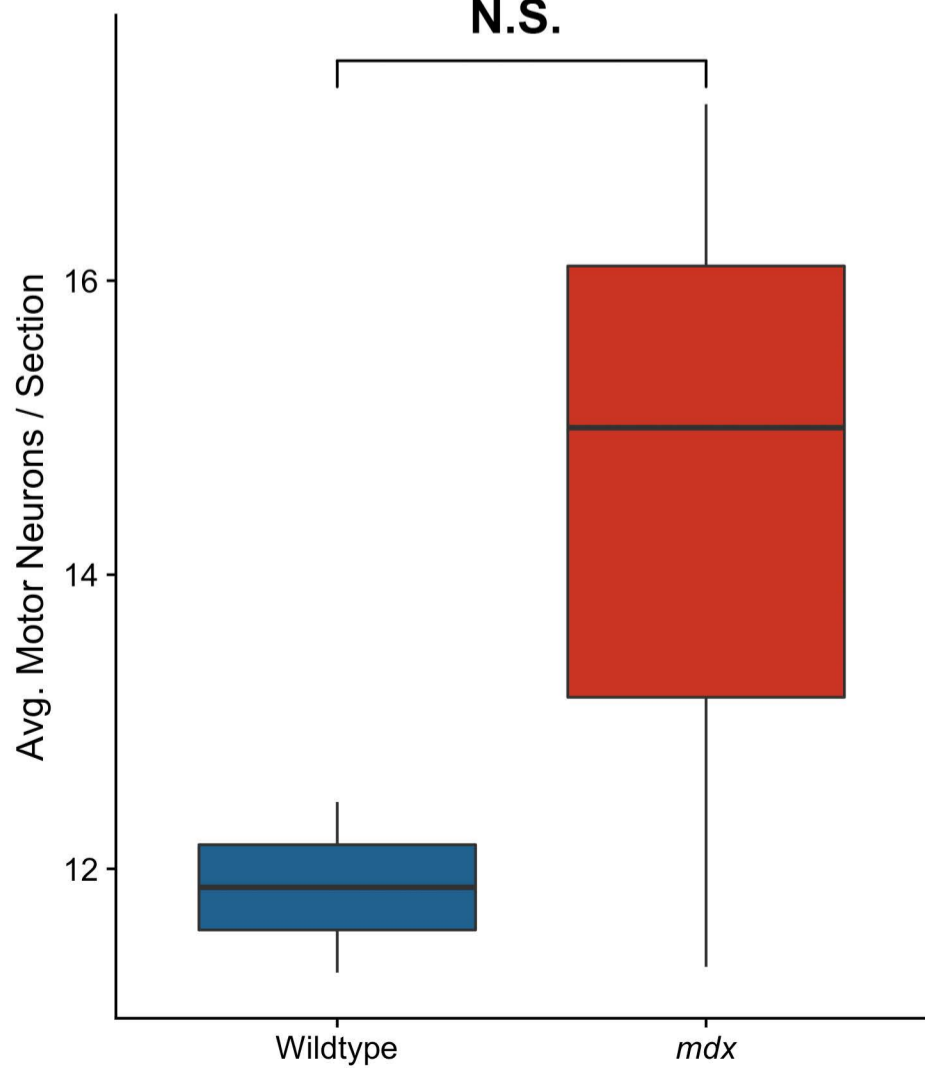
Figure S1 Small-caliber axons are not demyelinated in *mdx* mice

a, Myelin sheath thickness of small-caliber axons ($< 5 \mu\text{m}$) in wildtype mice (phrenic: $1.94 \mu\text{m} \pm 0.06$, $n = 45$ axons; XII: $1.86 \mu\text{m} \pm 0.02$, $n = 124$ axons) and *mdx* mice (phrenic: $2.00 \mu\text{m} \pm 0.02$, $n = 105$ axons; XII: $1.82 \mu\text{m} \pm 0.01$, $n = 229$ axons). Phrenic: $p = 0.234$ Two Sample *t*-test; XII: $p = 0.170$ Two Sample *t*-test.

Figure S2 Phrenic and XII motor neuron counts

a, Bright field images of C4 spinal cord sections. Dashed circle around the phrenic motor pool. **b**, Bright field images of medulla sections. Scale bars represent $100 \mu\text{m}$. **c**, Average phrenic motor neurons per cervical spinal cord section (Wildtype: 11.87 motor neurons ± 0.58 , $n = 2$ mice; *mdx*: 14.51 motor neurons ± 1.71 , $n = 3$ mice). **d**, Average XII motor neurons per medulla section (Wildtype: 136.01 motor neurons ± 11.20 , $n = 3$ mice ; *mdx*: 117.10 motor neurons ± 5.08 , $n = 3$ mice). Phrenic: $p = 0.261$ Two Sample *t*-test; XII: $p = 0.229$ Two Sample *t*-test.

a**Phrenic****XII**

a**Cervical WT****Cervical *mdx*****b****Medulla WT****Medulla *mdx*****c****Phrenic****N.S.****d****XII****N.S.**