

## Supplementary Material

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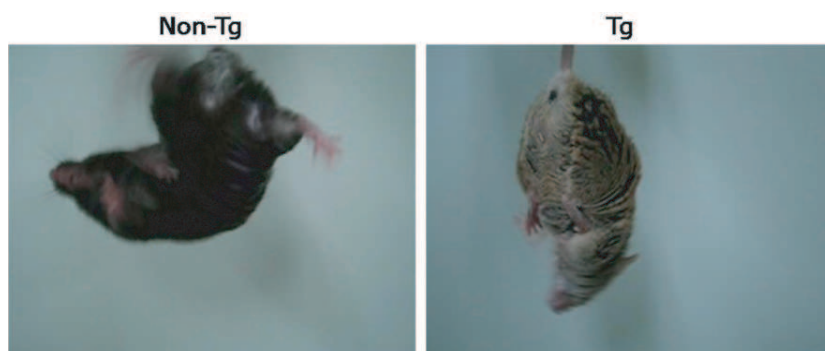
# Severe Motor Neuron Degeneration in the Spinal Cord of the Tg2576 Mouse Model of Alzheimer Disease

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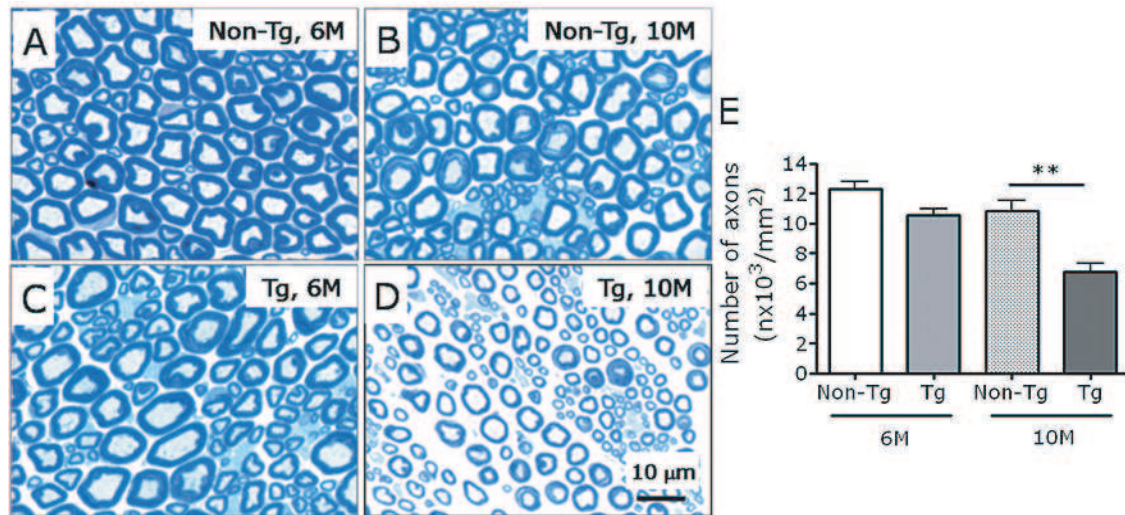
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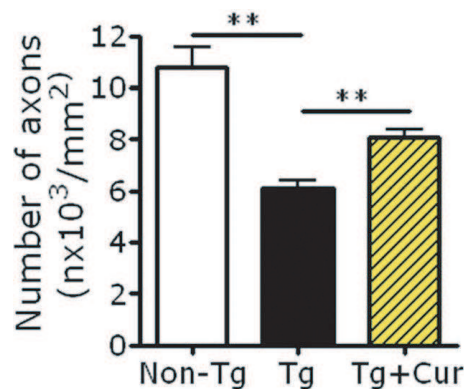
Supplemental Figure 1. Video recordings of abnormal hindlimb extension reflex and body trembling phenotypes of Tg2576 mice. Abnormal hindlimb extension reflex and body trembling phenotypes were recorded for Tg2576 mice at 14.5 months of age (Tg; [http://www.j-alz.com/issues/21/Seo\\_videoA.avi](http://www.j-alz.com/issues/21/Seo_videoA.avi)) and their non-transgenic control mice (Non-Tg; [http://www.j-alz.com/issues/21/Seo\\_videoB.avi](http://www.j-alz.com/issues/21/Seo_videoB.avi)).

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Supplemental Figure 2. Loss of neuronal fibers and demyelination in the ventral root of the spinal cord of Tg2576 mice. A-D) Transverse sections of toluidine blue-stained ventral root at the level of L5 of non-transgenic control mice (non-Tg; A and B) and Tg2576 mice (Tg; C and D) at 6 (A and C) and 10 (B and D) months of age. Neuronal fibers in Tg2576 mice had a defect in myelination and a reduction in number at 10 months of age. E) Quantification of the numbers of axon fibers in the ventral root of non-transgenic control (non-Tg) and Tg2576 mice at 6 and 10 months of age. The numbers of toluidine blue-stained axons within a circular area ( $100 \mu\text{m}^2$ ) in the center of the ventral root were counted. Data represent means  $\pm$  SEM ( $n = 5-6$ ). \*\* indicates a difference at the  $p < 0.01$  level (One-way ANOVA with Newman-Keuls multiple range test).



Supplemental Figure 3. Loss of nerve fibers in the sciatic nerve of Tg2576 mice. Quantification of the numbers of axonal fibers in the sciatic nerve of non-transgenic control (non-Tg), Tg2576 (Tg) and Tg2576 mice fed curcumin mice (Tg+Cur) at 16 months of age. The numbers of toluidine blue-stained axons within a circular area ( $100 \mu\text{m}^2$ ) in the center of the sciatic nerve were counted. Data represent means  $\pm$  SEM ( $n = 6-8$ ). \*\* indicates a difference at the  $p < 0.01$  level between each group (One-way ANOVA with Newman-Keuls multiple range test).