### Figure S1

Toluidine blue staining of semi-thin transverse sections of SOD1-G93A and littermate control mice at P30.

### Figure S2

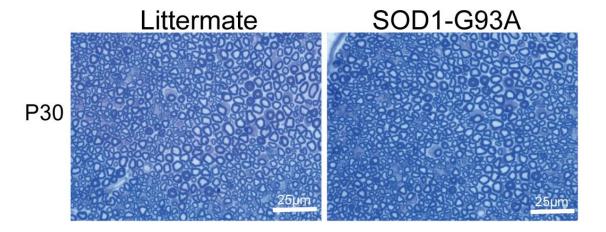
(A-B)Representative immunohistochemistry staining for CHAT in SOD1-G93A and littermate control mice at P60, P90 and P120, Quantification showed that the ChAT positive cell decreased. (n = 3 mice for each group; data are presented as means  $\pm$  SEM)

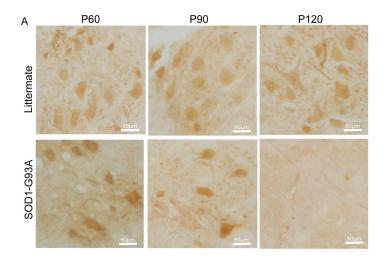
### Figure S3

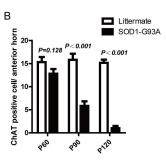
(A) P120 SOD1-G93A and littermate control mice were tested on an accelerating rotarod from 15 rpm to 40 rpm for three 600-s periods, with a 10-min break between each test (the mean  $\pm$  SEM of each group was plotted; n = 10 mice per group).(B) According to the footprint analysis, the walking patterns of P120 SOD1-G93A mice were impaired compared to those of the P120 littermate control mice.

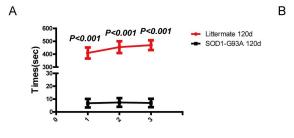
#### Figure S4

qRT-PCR analysis of Igf-1, Gdnf, brain-derived neurotrophic factor (Bdnf), Cntf and Ptn mRNA expression in SOD1-G93A and littermate control mice at P120(n = 3 mice for each group; data) are presented as means  $\pm$  SEM).











	Length	Р
Littermate	6.94±0.23cm	P<0.001
SOD1-G93A	2.45±0.30cm	

