Clinical Sign	Score
• Slightly flaccid tail • Slight tail spasticity	1
• Flaccid tail • Tail spasticity	1.5
• Slightly impaired righting reflex	2
• Impaired righting reflex	2.5
• Slight hind limb weakness • Unilateral hind limb weakness • Slight hind limb spasticity • Unilateral hind limb spasticity	3
• Bilateral hind limb weakness • Bilateral hind limb spasticity	3.5
• Weakness in one hind limb, paralysis in the other • Severe bilateral hind limb weakness • Hind limb spasticity causing immobility in same limb • Severe bilateral hind limb spasticity	4
• Hind limb paralysis • Hind limb spasticity with both limbs paralysed	4
• Slight fore limb spasticity • Unilateral fore limb weakness	4.5
• Fore limb weakness • Fore limb spasticity	5
• Weakness in one fore limb, paralysis in the other • Severe fore limb weakness • Spasticity in one fore limb, paralysis in the other • Severe fore limb spasticity	5.5
• Bilateral fore limb paralysis • Bilateral fore limb spasticity and immobility	6.5
• Moribund or dead	7

Supplementary Figure S1. Clinical scoring table for signs of neurological deficits in murine models, adapted from Miller et al. [56]. Clinical signs for neurological deficits in mice are matched with a score for the determination of severity of disease. In this study, mice were scored on experimental autoimmune encephalomyelitis (EAE) clinical symptoms. Presymptomatic mice for the 3 DPI and 10 DPI time-points were ensured free of neurological deficits. Signs of neurological deficit appeared from 12 DPI, reaching hind-limb paralysis (score 4 of the 7-point grading scale) at around day 18. Mice at 17 DPI are therefore expected to be symptomatic (score 4), but only neurologically asymptomatic mice were selected for this time-point in this study, demonstrating that although no outward symptoms present in these mice induced with EAE, metabolic functions are altered.