

The application provides for methods and compositions for inhibiting demyelination, promoting remyelination and/or treating paralysis in a subject in need thereof. Preferably, such compositions include immunoglobulins (e.g., antibodies, antibody fragments, and recombinantly produced antibodies or fragments), polypeptides (e.g., soluble forms of the ligand proteins for integrins) and small molecules, which when administered in an effective amount inhibits demyelination and/or promotes remyelination in a patient. The compositions and methods described herein can also utilize other anti-inflammatory agents used to palliate conditions and diseases associated with demyelination.