



# CHARACTERIZATION AND RESCUE OF NEURONAL DYSFUNCTION

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Session 3

Disorders and diseases of the motor system

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### **Autoantibodies against proteins of the node of Ranvier as a cause of peripheral neuropathy**

The node of Ranvier and its complex architecture of adhesion molecules and ion channels is important for saltatory nerve conduction in peripheral nerves. Autoantibodies against proteins of the node of Ranvier are associated with severe sensorimotor peripheral neuropathy. These autoantibodies mostly belong to the IgG4 subclass that does not lead to an inflammatory response but is supposed to impair nerve conduction by binding to adhesion molecules of the axoglial junction. The talk gives an overview on paranodal and nodal autoantibodies that have been detected in patients with peripheral neuropathy and discusses their pathogenic effects.

