## Progressive forms of MS respond to agents used for relapsing forms of the disease - cons

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Multiple sclerosis (MS) is a chronic inflammatory demyelinating autoimmune disease of the central nervous system. The pathogenesis of MS includes inflammatory and neurodegenerative disease processes that affect both white and gray matter. These pathogenic mechanisms underlie the relapsing and progressive course of MS. The majority of MS patients are diagnosed with relapsing MS that experience acute relapses with neuropathologic evidence of focal inflammatory demyelinating lesions within brain and spinal cord, which are usually followed by remissions along with residual and escalating disability. A subset of patients (10-15%) is diagnosed as primary-progressive MS (PPMS) and manifest gradual disability and occasional plateaus, and are considered as a distinct subgroup. The prediction of long-term individual prognosis and conversion to progressive phase is not yet possible. Because revised MS diagnostic criteria allow early diagnosis, most patients are starting disease-modifying therapy (DMT) in an early phase of the disease. Currently, there are 16 approved MS DMTs, but their long-term benefits to conversion into progressive MS course remains unclear. At this time, it is also currently unknown whether progressive forms of MS respond to agents used for relapsing forms of the disease**.** Apart from the current insight in terms of peripheral T-cell activation and T-cell driven CNS auto-immunity, other additional immune cells may have bigger role in the disease initiation and propagation. Future studies should show whether, expanding our research observations towards more encompassing approach of the innate immune system, interplay between B- and T-cells may unravel new novel and potent DMTs for treating progressive MS.