

Selective Immune Reconstitution Treatment: Mechanism of Action, Efficacy and Safety in RMS



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Multiple sclerosis (MS) is an inflammatory neurodegenerative disease of the central nervous system. The inflammation is driven significantly by autoreactive lymphocytes, which recruit cells of the innate immune system such as macrophages that contribute to subsequent tissue damage, ultimately resulting in demyelination and axonal damage that are characteristic in MS lesions. Immune-directed treatment approaches (i.e., immune reconstitution therapies [IRTs]) in MS

is emerging with novel agents that require a shift in treatment paradigm and understanding the potential role of these agents. The principle behind IRTs is that these drugs deplete the immune system and allow it to reconstitute itself. When the immune system comes back, it is normal in terms of immune function (i.e., the immune system can respond to infections and survey the periphery for tumors).

This presentation will review current and evolving immune-directed approaches in: treating MS; identifying pathophysiologic considerations surrounding IRT and selective IRT treatment strategies; summarizing current state of knowledge; analyzing patient considerations in treatment selection; and considering unanswered questions that remain to be addressed in this rapidly evolving MS treatment landscape.