

A Review of Pharmacotherapy Updated Events for Multiple Sclerosis in 2015

Dr Zahra Tolou Ghamari

Isfahan Neurosciences Research Centre, Isfahan University of Medical Sciences. Isfahan/ Iran.

According to recent publications in 2015:

1) Progressive multifocal leukoencephalopathy (PML) have been associated with natalizumab, fingolimod and dimethyl fumarate. Alemtuzumab and rituximab have been linked to cases of PML in other disease states. 2) Teriflunomide (7, 14 mg), considerably decreases the mean number of unique active lesions on MRI. 3) Pharmacotherapy with fingolimod in patients with vascular-based acropathies, due to unexpected peripheral vascular adverse needs careful screening and monitoring. 4) Oral acetazolamide might be a treatment option for fingolimod-associated macular edema, while ischemic conversion may be limiting. 5) In order to suppress inflammation and oxidative stress, combined treatment with lenalidomide and nanoceria showed a reduction in demyelination and associated neurological symptoms in experimental autoimmune encephalomyelitis mice. 6) Intensive determinations are important to significances pathogenetic mechanisms according to impact on the disease and drug ability in progressive multiple sclerosis. 7) Combination therapies will probably be needed, possibly early in the disease, along with new trial designs and treatment agendas. 8) Drug screenings are a realistic method hopefully enriched by the use of neural and oligodendrocyte progenitors 9) The arena of network biology will increase our capability to forecast therapeutic targets. 10) Genome-wide relationship investigations must try to classify alternatives related with disease progression.

Keywords: Pharmacotherapy, multiple sclerosis, fingolimod, teriflunomide