

Current Approved MS Disease-Modifying Therapies (listed alphabetically)

DRUG	FDA APPROVAL	MECHANISM OF ACTION	ADMINISTERED
Aubagio (teriflunomide) Parent company: Genzyme Corporation	Approved for relapsing forms of MS in 2012	Aubagio is an immunomodulator that affects the production of T and B cells (two types of lymphocytes that fight disease and infection). It inhibits rapidly dividing cells, including activated T cells, which are thought to drive the disease process in MS. It may also inhibit nerve degeneration.	7- or 14-milligram tablet taken orally, once per day
Avonex (interferon beta-1a) Parent company: <i>Biogen Idec</i>	Approved for relapsing forms of MS in 1996 and for individuals with clinically isolated syndrome (CIS)	Avonex is an interferon. Interferons appear to reduce inflammation by modulating a favorable balance between cells that increase inflammation and cells that decrease it.	30 micrograms taken via weekly intermuscular injections
Betaseron (interferon beta-1b) Parent company: <i>Bayer Healthcare Pharmaceuticals</i>	Approved for relapsing forms of MS in 1993 and for individuals with clinically isolated syndrome (CIS)	Betaseron is an interferon. Interferons appear to reduce inflammation by modulating a favorable balance between cells that increase inflammation and cells that decrease it.	250 micrograms taken via subcutaneous injections every other day
Copaxone (glatiramer acetate) Parent company: <i>Teva Neuroscience</i>	Approved for relapsing forms of MS in 1996 and for individuals with clinically isolated syndrome (CIS)	Copaxone is a synthetic polypeptide that mimics myelin basic protein, a key component of the myelin sheath that is damaged in MS. By a different mechanism of action than the interferons, Copaxone also appears to reduce inflammation by modulating a favorable balance between cells that increase inflammation and cells that decrease it.	20 milligrams taken via daily subcutaneous injections
Extavia (interferon beta-1b) Parent company: <i>Novartis Pharmaceuticals Corporation</i>	Approved for relapsing forms of MS in 2010 and for individuals with clinically isolated syndrome (CIS)	Extavia is an interferon beta-1b that is biologically identical to Betaseron and made in an identical process, but marketed by a different company.	250 micrograms taken via subcutaneous injections every other day
Gilenya (fingolimod, FTY720) Parent company: <i>Novartis Pharmaceuticals Corporation</i>	Approved for relapsing forms of MS in 2010	Gilenya blocks potentially damaging T cells from leaving lymph nodes, thereby lowering their number in the blood, central nervous system and tissues.	0.5-milligram capsule taken orally, once per day
Novantrone (mitoxantrone) Parent company: <i>EMD Serono, Inc.</i>	Approved for use in secondary-progressive MS (SPMS), progressive-relapsing MS (PRMS) and worsening RRMS in 2000	Novantrone is an immunosuppressant that has been used for years to treat cancer. It targets rapidly dividing cells, including those believed to be involved in MS.	IV infusion once every 3 months (for two to three years maximum). 12 mg/m ² approx. 5 to 15 minutes
Rebif (interferon beta-1a) Parent companies: <i>EMD Serono, Inc. and Pfizer Inc.</i>	Approved for relapsing forms of MS in 2002	Rebif is an interferon. Interferons appear to reduce inflammation by modulating a favorable balance between cells that increase inflammation and cells that decrease it.	44 micrograms taken via subcutaneous injections three times weekly
Tysabri (natalizumab) Parent companies: <i>Biogen Idec and Elan Pharmaceuticals</i>	Approved for relapsing forms of MS in 2006	This laboratory-produced monoclonal antibody acts against a molecule involved in the activation and function of lymphocytes and their migration into the central nervous system (CNS). It is thought to prevent damaging immune cells from crossing the blood-brain barrier.	IV infusion every four weeks 300 milligrams (mg) over 1 hour