

Enspryng® (satralizumab-mwge) Clinical Summary
Please consult complete Prescribing Information

INDICATIONS AND USAGE¹

Enspryng is an interleukin-6 (IL-6) receptor antagonist indicated for the treatment of neuromyelitis optica spectrum disorder (NMOSD) in adult patients who are anti-aquaporin-4 antibody positive (AQP4-IgG+).

DOSAGE AND ADMINISTRATION¹

- Hepatitis B virus, tuberculosis, and liver transaminase screening is required before the first dose.
- Prior to every use, determine if there is an active infection.
- The recommended loading dosage of Enspryng for the first three administrations is 120 mg by subcutaneous (SC) injection at Weeks 0, 2, and 4, followed by a maintenance dosage of 120 mg every 4 weeks.
- Enspryng is intended for patient self-administration by SC injection; a patient or patient's caregiver may administer Enspryng after proper training in injection technique and the HCP determines that it is appropriate.

NMOSD EPIDEMIOLOGY

- NMOSD prevalence is estimated at around 0.1-10 per 100,000 individuals, affecting nearly 15,000 individuals in the United States.^{2,3}
- Around 75% of NMOSD patients are AQP4-IgG+.⁴ NMOSD occurs in children and adults of all races, and occurs most commonly among women in their 30s and 40s.

NMOSD BURDEN OF ILLNESS

- Individuals with NMOSD may experience recurring relapses with accumulating disability which worsens with each relapse.⁵
- The vast majority of patients (80-90%) experience repeated relapses, the effects of which may be permanent.^{5,6} Around 60% of patients relapse within 1 year of diagnosis and 90% relapse within 3 years.⁴ More than 80% of patients may not fully recover after subsequent relapses.^{7,8}
- Historically, the loss of motor and sensory function leads to approximately 50% of patients to require a wheelchair, and 62% of patients become functionally blind, within 5 years of diagnosis.^{6,8}

PLACE OF ENSPRYNG IN THERAPY

- Enspryng is the first approved self-administered treatment for NMOSD in AQP4-IgG+ adult patients, under the guidance of a healthcare professional.¹

EFFICACY OF ENSPRYNG AS MONOTHERAPY IN NMOSD CLINICAL STUDY (SAKuraStar; PI Study 1)^{1,9}

The efficacy of Enspryng monotherapy compared with placebo was evaluated in a Phase 3, randomized (2:1), multicenter, double-blind, placebo-controlled trial in 95 patients (AQP4-IgG+, n=64) with NMOSD. Compared with patients receiving placebo, patients treated with Enspryng had:

- 74% risk reduction in time to first Clinical Endpoint Committee (CEC)-confirmed relapse among AQP4-IgG(+) patients (HR=0.26, p=0.0014)
- Greater proportion of AQP4-IgG+ patients who were relapse-free at Week 96 (76.5% with Enspryng vs 41.1% with placebo)

EFFICACY OF ENSPRYNG WITH CONCURRENT IMMUNOSUPPRESSIVE THERAPY (IST) IN NMOSD CLINICAL STUDY (SAKuraSky; PI Study 2)^{1,10}

The efficacy of Enspryng with concurrent ISTs compared with placebo+ISTs was evaluated in a Phase 3, randomized (1:1), multicenter, double-blind, placebo-controlled trial in 76 adult patients (AQP4-IgG+, n=52) with NMOSD. Compared with placebo+ISTs, patients treated with Enspryng+ISTs had:

- 78% risk reduction in time to first CEC-confirmed relapse among AQP4-IgG+ patients (HR=0.22, p=0.0143)
- Greater proportion of AQP4-IgG+ patients who were relapse-free at Week 96 (91.1% with Enspryng vs 56.8% with placebo)

SAFETY INFORMATION¹

The use of Enspryng is contraindicated in patients with a known hypersensitivity to satralizumab or any of the inactive ingredients, active Hepatitis B virus infection, or active or untreated latent tuberculosis.

WARNINGS AND PRECAUTIONS¹

- **Infections:** Delay Enspryng administration in patients with an active infection until the infection is resolved. Vaccination with live or live-attenuated vaccines is not recommended during treatment.
- **Elevated Liver Enzymes:** Monitor ALT and AST levels during treatment; interruption of Enspryng may be required.
- **Decreased Neutrophils Counts:** Monitor neutrophils during treatment.

ADVERSE REACTIONS¹

The most common adverse reactions (incidence at least 15%) are nasopharyngitis, headache, upper respiratory tract infection, gastritis, rash, arthralgia, extremity pain, fatigue, and nausea.

1. Enspryng® [package insert]. Genentech; South San Francisco, CA. 2020. 2. Flanagan EP, Cabre P, Weinschenker BG, et al. Epidemiology of aquaporin-4 autoimmunity and neuromyelitis optica spectrum. *Ann Neurol* 2016;79:775-783. <https://www.ncbi.nlm.nih.gov/pubmed/26891082>. 3. Papadopoulos MC, Bennett JL, Verkman AS. Treatment of neuromyelitis optica: state-of-the-art and emerging therapies. *Nat Rev Neurol* 2014;10:493-506. <https://www.ncbi.nlm.nih.gov/pubmed/25112508>. 4. Wingerchuk DM, Lennon VA, Lucchinetti CF, et al. The spectrum of neuromyelitis optica. *Lancet Neurol* 2007;6:805-815. <https://www.ncbi.nlm.nih.gov/pubmed/17706564>. 5. Wingerchuk DM. Diagnosis and treatment of neuromyelitis optica. *Neurologist* 2007;13:2-11. <https://www.ncbi.nlm.nih.gov/pubmed/12629245>. 6. Kessler RA, Mealy MA, Levy M. Treatment of Neuromyelitis Optica Spectrum Disorder: Acute, Preventive, and Symptomatic. *Curr Treat Options Neurol* 2016;18:2. <https://www.ncbi.nlm.nih.gov/pubmed/26705758>. 7. Jarius S, Ruprecht K, Wildemann B, et al. Contrasting disease patterns in seropositive and seronegative neuromyelitis optica: A multicentre study of 175 patients. *J Neuroinflammation* 2012;9:14. <https://www.ncbi.nlm.nih.gov/pubmed/22260418>. 8. Wingerchuk DM, Weinschenker BG. Neuromyelitis optica: clinical predictors of a relapsing course and survival. *Neurology* 2003;60:848-853. <https://www.ncbi.nlm.nih.gov/pubmed/12629245>. 9. Traboulsee A, Greenberg BM, Bennett JL, et al. Safety and efficacy of satralizumab monotherapy in neuromyelitis optica spectrum disorder: a randomised, double-blind, multicentre, placebo-controlled phase 3 trial. *Lancet Neurol* 2020;19:402-412. <https://www.ncbi.nlm.nih.gov/pubmed/32333898>. 10. Yamamura T, Kleiter I, Fujihara K, et al. Trial of Satralizumab in Neuromyelitis Optica Spectrum Disorder. *N Engl J Med* 2019;381:2114-2124. <https://www.ncbi.nlm.nih.gov/pubmed/31774956>