

Eptinezumab (Vyepti®)

Overview:

Eptinezumab is a humanized monoclonal antibody designed for the preventive treatment of migraines in adults. It targets the calcitonin gene-related peptide (CGRP), a neuropeptide implicated in migraine pathophysiology. Administered via intravenous infusion, Eptinezumab offers a quarterly dosing regimen.

Mechanism of Action:

Eptinezumab binds to the CGRP ligand, preventing its interaction with the CGRP receptor. By inhibiting this pathway, it reduces vasodilation and inflammation associated with migraine attacks.

Physiological Functions:

- Migraine Prevention: Decreases the frequency and severity of migraine episodes.
- Vascular Modulation: Prevents CGRP-induced vasodilation of intracranial blood vessels.
- Neurogenic Inflammation Reduction: Mitigates inflammatory responses linked to migraine pathogenesis.

Clinical Use:

- Indication: Preventive treatment of migraine in adults.
- Administration: Intravenous infusion every 3 months.
- Efficacy: Clinical trials have demonstrated significant reductions in monthly migraine days compared to placebo.

Dosing:

Recommended Dose: 100 mg administered intravenously over 30 minutes every 3 months.

Alternative Dose: 300 mg every 3 months for patients requiring enhanced efficacy.

Preparation: Dilute in 100 mL of 0.9% Sodium Chloride Injection, USP, and administer using an appropriate infusion set.

Conclusion:

Eptinezumab offers a targeted approach to migraine prevention by inhibiting the CGRP pathway. Its quarterly intravenous administration provides a convenient option for patients seeking long-term migraine prophylaxis.

