

# OLANZAPINE

**BRAND NAME** ZYPREXA IM, ZYPREXA RELPREVV  
**DRUG CLASS** Antipsychotic  
**AVAILABILITY** **Zyprexa IM (short-acting)** vial contains 10 mg of olanzapine. Also contains lactose, tartaric acid, hydrochloric acid and/or sodium hydroxide.<sup>1</sup>  
**Zyprexa RelPrevv (long-acting)** vial contains 210 mg, 300 mg or 405 mg of olanzapine pamoate. Diluent vial contains water for injections. Also contains carmellose sodium, mannitol, polysorbate-80, hydrochloric acid and/or sodium hydroxide.<sup>1</sup>

**WARNING** **Zyprexa RelPrevv** is a depot injection. Establish tolerability with oral or short acting IM olanzapine before giving the first injection. Monitor the patient for post-injection syndrome for at least 2 hours after every injection. Resuscitation facilities must be readily available.<sup>1</sup>

**pH** Zyprexa IM: 5.3–5.9 when reconstituted<sup>2</sup> Zyprexa RelPrevv: 5–8 when reconstituted<sup>2</sup>

**PREPARATION** **Zyprexa IM:** reconstitute the vial with 2.1 mL of water for injections to make a concentration of 5 mg/mL. The solution is clear and yellow.<sup>1</sup>  
**Zyprexa RelPrevv:** reconstitute the vial with the diluent provided. Shake vigorously to ensure an even suspension. Wear gloves to avoid skin irritation.<sup>3</sup> The suspension is opaque and yellow.<sup>3</sup>

Vial	Volume of diluent	Concentration
210 mg	1.3 mL	150 mg/mL
300 mg	1.8 mL	150 mg/mL
405 mg	2.3 mL	150 mg/mL

**STABILITY** Vial: store below 25 °C.<sup>1</sup>  
Reconstituted solution: Zyprexa IM is stable for 1 hour below 25 °C. Protect from light.<sup>1</sup> Zyprexa RelPrevv is stable for 24 hours below 25 °C.<sup>1</sup>

**ADMINISTRATION**  
**IM injection** **Zyprexa IM:** inject slowly<sup>1</sup>  
**Zyprexa RelPrevv:** inject into the gluteal muscle.<sup>1</sup> The ventrogluteal site is preferred.

**SUBCUT injection** **Zyprexa IM (short-acting) only:** suitable as an intermittent injection in palliative care patients.<sup>4</sup> Continuous subcutaneous infusion has been reported<sup>5</sup> but may not be necessary due to the long half-life of olanzapine.<sup>6</sup>

**IV injection** **Zyprexa IM (short-acting) only:** suitable for behavioural emergencies in acute medical settings. Lower doses are used than when given IM.<sup>3</sup> Reconstitute the vial with 5–10 mL of water for injections. Inject the dose over 5 to 10 seconds.<sup>7,8</sup> See SPECIAL NOTES

**IV infusion** Not recommended<sup>1</sup>

**COMPATIBILITY** No information

**INCOMPATIBILITY** Haloperidol<sup>1</sup>

**SPECIAL NOTES** Monitor for hypotension and bradycardia after the IM injection. Patients should remain lying down if drowsy or dizzy after the injection.<sup>1</sup>  
Monitor the patient every 30 minutes for at least two hours after Zyprexa Relprevv injection for post-injection syndrome. Symptoms include profound sedation, delirium, extrapyramidal symptoms, altered speech, ataxia, aggression, dizziness, weakness, hypertension and seizures.<sup>1</sup>  
Administration of IM olanzapine and parenteral benzodiazepines together is not recommended because cardiorespiratory depression, excessive sedation and deaths have occurred.<sup>1</sup>

## REFERENCES

1. Product information. Available from www.tga.gov.au. Accessed 01/08/2019.
2. Medical information. Request 0641856 Zyprexa pH [email]. West Ryde, NSW: Eli Lilly Australia; 08/08/2019.
3. Zyprexa RelPrevv user manual. West Ryde, NSW: Eli Lilly Australia; 08/08/2019.
4. Elsayem A, Bush SH, Munsell MF, Curry E, Calderon BB, Paraskevopoulos T, et al. Subcutaneous olanzapine for hyperactive or mixed delirium in patients with advanced cancer: a preliminary study. *J Pain Symptom Manag* 2010; 40: 774–82.
5. Dickman A, Schneider J. The syringe driver. Continuous subcutaneous infusions in palliative care. 3rd ed. Oxford, UK: Oxford University Press; 2011.
6. Twycross R, Wilcox A, Howard P editors. Palliative care formulary. 6th ed. London: Pharmaceutical Press; 2017.
7. Behavioural emergencies [March 2013]. In: eTG complete [internet]. Melbourne: Therapeutic Guidelines Ltd; June 2019.
8. Chan EW, Knott JC, Taylor D, Kong D. Intravenous olanzapine for acute agitation in the emergency department. *J Pharm Pract Res* 2011; 41: 135–7.