



MONOGRAPH

Olanzapine Pamoate Depot Injection

This monograph only covers long-acting olanzapine pamoate depot injection (Zyprexa Relprevv®) and must not be confused with short-acting olanzapine intramuscular injection (Zyprexa®).

Scope (Staff):	Medical, Pharmacy, Nursing, Anaesthetic Technicians
Scope (Area):	All Clinical Areas, Community Infant, Child, and Adolescent Mental Health Services (ICAMHS)

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this [DISCLAIMER](#)

! HIGH RISK MEDICINE !

QUICKLINKS

Dosage/Dosage Adjustments	Administration	Compatibility	Monitoring
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DRUG CLASS

Olanzapine is a second-generation antipsychotic.¹

Olanzapine pamoate (Zyprexa Relprevv®) is a long acting, injectable form of olanzapine.² It reduces the positive and negative symptoms of schizophrenia through modulation of central dopaminergic and serotonergic activity.^{2,3}

Olanzapine pamoate is a [High Risk Medicine](#).

INDICATIONS AND RESTRICTIONS

Olanzapine pamoate is not listed on the Paediatric State-wide Medicines Formulary. All prescribing requires prior approval from the CAHS Drug & Therapeutics Committee.

Olanzapine pamoate is indicated for the treatment of schizophrenia in patients sufficiently stabilised with oral olanzapine.²

- Prior to commencing this medication, arrangements must be made for ongoing administration.

CONTRAINDICATIONS

- Hypersensitivity to olanzapine pamoate or any component of the formulation.^{1,2}

PRECAUTIONS

- Parenteral benzodiazepine – Simultaneous administration may cause cardiorespiratory depression and excessive sedation.¹
- Tobacco smoking – increases clearance of olanzapine.¹
- Respiratory failure – may be worsened.¹
- Medications or conditions that affect temperature regulation.¹
- Gastrointestinal obstruction, bladder obstruction, urinary retention, myasthenia gravis – may be exacerbated.¹
- Low white cell counts or previous blood dyscrasia – may increase risk of clinical dyscrasia.¹
- Diabetes – can increase blood glucose levels.¹
- Prolactinoma – may increase growth.¹
- Observation Requirements – olanzapine pamoate must not be prescribed unless the patient agrees to adhere with the observation requirements post injection.^{1,4} Parent / carer must be present during injection and monitoring period.
- Community Clinics – Must be able to accommodate and perform the required monitoring after each administration and be able to transfer the patient to emergency services in the event of post injection syndrome (PIS).⁴

FORMULATIONS

Listed below are products available at PCH, other formulations may be available, check with pharmacy if required:

- Olanzapine pamoate, equivalent to olanzapine 210 mg + diluent.²
- Olanzapine pamoate, equivalent to olanzapine 300 mg + diluent.²
- Olanzapine pamoate, equivalent to olanzapine 405 mg + diluent.²

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DOSAGE & DOSAGE ADJUSTMENTS

This medication should only be considered by a Psychiatrist for the treatment of resistant schizophrenia when all other conventional options have failed and there is an accompanying approval from the CAHS Drugs and Therapeutics Committee.

Information for dosing in children and adolescents is unavailable and is based on recommended adult dosing below.

Table 1: Recommended dose scheme between oral olanzapine and olanzapine pamoate.^{1,2}

Target Oral Olanzapine Dose	Recommended Starting Dose of olanzapine pamoate	Maintenance Dose after 2 Months of olanzapine pamoate
10 mg per day	210 mg every 2 weeks OR 405 mg every 4 weeks	150 mg every 2 weeks OR 300 mg every 4 weeks
15 mg per day	300 mg every 2 weeks	210 mg every 2 weeks OR 405 mg every 4 weeks
20 mg per day	300 mg every 2 weeks	300 mg every 2 weeks

Maximum dosage: 405 mg every 4 weeks or 300 mg every 2 weeks.^{1,2}

Renal impairment:

- A lower starting dose (150 mg every 4 weeks) with conservative dose adjustments.²

Hepatic impairment:

- A lower starting dose (150 mg every 4 weeks) with conservative dose adjustments.²

RECONSTITUTION & ADMINISTRATION

Reconstitution:

- Reconstitute the vial with the diluent provided.⁵

Table 2: Olanzapine pamoate reconstitution instructions^{5,6,7}

Dose	Vial strength	Volume of diluent	Concentration	Final volume to inject
150 mg	210 mg	1.3 mL	150 mg/mL	1 mL
210 mg	210 mg	1.3 mL	150 mg/mL	1.4 mL
300 mg	300 mg	1.8 mL	150 mg/mL	2 mL
405 mg	405 mg	2.3 mL	150 mg/mL	2.7 mL

Note: there will be left over diluent and solution in the vial

- Shake vigorously to ensure an even suspension.⁵
- Wear gloves to avoid skin irritation.⁵
- The suspension is opaque and yellow.⁵

Administration:

- Inject into the gluteal muscle.⁵ The ventrogluteal site is preferred.⁵
 - See [PCH Intramuscular \(IM\) Injections Procedure](#) for further details on intramuscular administration.
- Prescribing and administration of olanzapine pamoate must be documented on the MR353.05 WA Intramuscular Long-Acting Injection Chart (Depot Antipsychotic).

COMPATIBILITY (LIST IS NOT EXHAUSTIVE)

Compatible fluids: No information.⁵

INCOMPATIBLE drugs: Haloperidol.⁵

MONITORING^{2,6,7,8}

After the administration of olanzapine pamoate long-acting injection the patient must be monitored at 5 minutes, 10 minutes, 15 minutes and 30 minutes post injection, then at least every 30 minutes for a total of 2 hours. Post injection monitoring should be conducted by the administering nurse.

Document findings on the CAHS Olanzapine Pamoate Post Injection Checklist **MR XXXXX**

- Level of alertness
- Orientation
- Any signs and symptoms of post-injection syndrome

Prior to patients leaving community ICAMHS clinics ensure that they are alert, oriented with no signs and symptoms of post-injection syndrome.

Patients who develop or show signs of post-injection syndrome:

- Increase clinical observations to 15-minute intervals and request immediate review by the Psychiatrist.
- Monitor the patient for an additional hour or until symptoms resolve.
- If vital signs become unstable:
 - Follow the [Resuscitation and Responding to Clinical Deterioration MET Review and Code Blue](#) Procedure
 - OR
 - Call 000 (ambulance) if outside PCH.

ADVERSE EFFECTS

The types of undesirable effects observed in adolescent patients (aged 13-17) are similar to those seen in adult patients but with a potentially greater impact on weight gain, blood glucose levels, blood lipid (cholesterol, LDL, and triglyceride) levels, hepatic transaminase values and elevations in prolactin levels.²

Common: hyperglycaemia (random blood glucose at upper limit of normal [ULN]), type 2 diabetes, peripheral oedema, sedation, anxiety, agitation, extrapyramidal side effects (EPSE), orthostatic hypotension, tachycardia, blurred vision, mydriasis, constipation, nausea, dry mouth, urinary retention, sexual adverse effects, weight gain, hyperprolactinaemia (may result in galactorrhoea, gynaecomastia, amenorrhoea or infertility).¹

Infrequent: EPSE, elevation of liver aminotransferases, allergic reactions, including urticaria, Stevens-Johnson syndrome; intra-operative floppy iris syndrome, Syndrome of Inappropriate Antidiuretic Hormone Secretion (SIADH), hyperthermia, hypothermia, neuroleptic malignant syndrome, anaemia, thrombocytopenia, neutropenia, agranulocytosis, venous thromboembolism (VTE), stroke, ECG changes (reversible, broadened QT interval), arrhythmias, cardiac arrest, sudden death, hepatic fibrosis, priapism, systemic lupus erythematosus, seizures, dysarthria, dysphagia, new or worsening obsessive-compulsive symptoms .¹

Rare: rhabdomyolysis, VTE, hepatic failure, multi-organ hypersensitivity syndrome.¹

Post-injection Syndrome (PIS): An unpredictable reaction resulting from the inadvertent intravascular administration of the injected olanzapine pamoate dose.⁹ Symptoms present like an olanzapine overdose and can include:

- Sedation (ranging from mild in severity to a coma-like state).^{2,9}
- Delirium (e.g. agitation disorientation, confusion, irritability).^{2,9}
- Extrapyramidal side effects (EPSE).^{2,9}
- Aggressiveness.^{2,9}
- Dizziness.^{2,9}
- Ataxia.^{2,9}
- Convulsions.^{2,9}

Table 3: Frequency and time of onset of post-injection syndrome event²

Time period post injection	Frequency of post injection syndrome event
≤1 hour	0.05% of injections
>1 hour and ≤ 2 hours	<0.01% of injections
>2 hours	< 0.01% of injections
The risk of PIS is present with each injection	

STORAGE

Vial: store below 25C.⁵

Reconstituted solution: Use product as soon as possible after reconstitution.⁵ Stable for 24 hours below 25C.^{2,5,7}

INTERACTIONS

This medication may interact with other medications; consult PCH approved references (e.g. [Clinical Pharmacology](#)), a clinical pharmacist or PCH Medicines Information Service on extension 63546 for more information.

Please note: The information contained in this guideline is to assist with the preparation and administration of **olanzapine pamoate**. Any variations to the doses recommended should be clarified with the prescriber prior to administration

Related CAHS internal policies, procedures and guidelines

[CAHS High Risk Medicine Policy](#)

[CAMHS Psychotropic Medication – Monitoring Adverse Physical Health Effects Policy](#)

[CAMHS Physical Health Assessment and Monitoring](#)

[CAHS Use of Medications for other than Manufacturer's Approved Indications Policy](#)

[Off-Label Psychotropic Prescribing Guide for CAMHS Clinicians](#)

[Resuscitation and Responding to Clinical Deterioration MET Review and Code Blue Procedure](#)

[PCH Intramuscular \(IM\) Injections Procedure](#)

Related external legislation, policies and guidelines

[WA Consent to Treatment Policy](#)

[Statewide Paediatric Medicine Formulary: Formulary ONE \(F1\)](#)

References

1. Australian Medicines Handbook (AMH) [internet]. [Australian Medicines Handbook \(health.wa.gov.au\)](#). January 2025.
2. Zyprexa Relprevv Product Information. AusDI online [Internet]. [Zyprexa Relprevv - AusDI \(health.wa.gov.au\)](#). 2025.
3. Zyprexa Relprevv Monograph. Clinical Pharmacology, Philadelphia (PA): Elsevier Inc [internet]. [Clinical Pharmacology Home \(health.wa.gov.au\)](#). 2024.
4. Western Australian WA Country Health Service (WACHS). [Olanzapine Pamoate – Zyprexa Relprevv® Guideline](#). January 2025 (Version 1.00)
5. Australian Injectable Drugs Handbook 9th Edition [internet]. Olanzapine – [Zyprexa Relprevv®](#). May 2025.
6. South Eastern Sydney Local Health District. [Olanzapine Pamoate Long-Acting Injection \(LAI\) Medication Monograph](#). June 2024. Lucenza06.

7. East Metropolitan Health Service – Royal Perth Bentley Group. [Olanzapine Long Acting Injections \(LAI\) SOP](#). Nov 2017.
8. South Metropolitan Health Service – Rockingham Peel Group. [Medication: Olanzapine pamoate \(Zyprexa Relprevv®\) – Administration Policy and Procedure](#). Aug 2023.
9. Lexicomp Editorial Advisory Panel. Olanzapine, Pediatric Drug Information [Internet]. Wolters Kluwer: UpToDate; [Search - UpToDate \(health.wa.gov.au\)](#). June 2025.

Useful resources (including related forms)

[Abnormal Involuntary Movement Scale \(AIMS\)](#)



[Clinical Algorithm for Monitoring Metabolic Syndrome in Children](#)

[Choice and Medication Information Leaflets](#)

[CAHS Consent for Medication Use Form MR505.00/MR859.01](#)

[CAMHS Antipsychotic Physical Health Monitoring Form MR505.01](#)

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