MONOGRAPH

Paliperidone

Scope (Staff):	Medical, Pharmacy, Nursing
Scope (Area):	All Clinical Areas, Community Child and Adolescent Mental Health

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

DRUG CLASS

Paliperidone is an atypical antipsychotic.[1]

Paliperidone is the major active metabolite of risperidone.[1, 2] Paliperidone blocks central dopamine (D2) and serotonin (5HT2A) receptors.[1, 2] Paliperidone also antagonises alpha-1 adrenergic, alpha-2 adrenergic and H1 histaminergic receptors. [2]

Paliperidone is a High Risk Medicine.

INDICATIONS AND RESTRICTIONS

- Treatment of schizophrenia. [1, 3-5]
- Treatment of schizoaffective disorder. [1, 6-8]
- Acute exacerbations of schizoaffective disorder as monotherapy or in combination with antidepressants and/or mood stabilisers (oral formulation only). [3, 5-7]

All formulations are restricted at PCH, see Formulary One

CONTRAINDICATIONS

- Hypersensitivity to paliperidone or risperidone or any component of the formulation. [1, 3-5, 8]

PRECAUTIONS

- CNS depression – may cause CNS depression affecting mental alertness [1, 8]
- Prolactinoma – antipsychotics have been associated with growth of prolactinomas [1, 3]
- Epilepsy and seizures risk – may alter EEG or lower seizure threshold. [1, 3-5, 8]
- Myasthenia gravis – may be exacerbated. [3]
- Renal impairment – clearance decreased in renal impairment (see dosing below). [1, 3, 5, 8]
- Hepatic impairment – has not been studied in patients with severe hepatic impairment. Use with caution. [1, 4, 5]
- Respiratory failure – may cause or worsen respiratory depression. [3]
- Temperature regulation – increased risk of hypo and hyperthermia. [1, 3-5]
- Gastrointestinal obstruction – may be exacerbated. [1, 3]
- Pre-existing GI narrowing disorders – avoid modified release tablets [1, 5]
- Bladder obstruction and urinary retention – may be exacerbated. [3]
- Patients with dysphagia or at risk for aspiration pneumonia – monitor closely. Has been associated with oesophageal dysmotility and aspiration of gastric contents. [1, 4, 5]
- Shock – drug-related hypotension may worsen symptoms. [3]
- Low white cell count or blood dyscrasia – may be exacerbated. [1, 3]
- Cardiovascular – can increase QT interval, increasing risk of arrhythmia. [1, 3-5]
- Blood pressure – can cause or worsen orthostatic hypotension. [1, 3-5, 8]
- Thromboembolism – can increase risk of venous thromboembolism (VTE). Use with caution in people with risk factors for VTE. [3-5]
- Hyperthyroidism – increased risk of acute dystonia. [3]
- Diabetes – can increase blood glucose levels. [1, 3-5]
- Paediatrics – increased risk of dystonia and metabolic effects (class effects); [3, 8] also, more at risk for weight gain, metabolic abnormalities and hyperprolactinaemia. [3]
- Surgery – Reduced doses of anaesthetics and CNS depressants might be necessary. [3]

FORMULATIONS

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

- Paliperidone 3 mg modified release tablet
- Paliperidone (as palmitate) 50 mg modified release injection (pre-filled syringe) – **once monthly** (Invega Sustenna®)*

- Paliperidone (as palmitate) 75 mg modified release injection (pre-filled syringe) – **once monthly** (Invega Sustenna®)*
- Paliperidone (as palmitate) 100 mg modified release injection (pre-filled syringe) – **once monthly** (Invega Sustenna®)*

*The above modified release injections are often referred to as long-acting injections.

Disclaimer: There are other modified release injection formulations available which are not kept at PCH or listed on the Paediatric Statewide Medicine Formulary (3 monthly and 6 monthly modified release injections). These are not covered by this monograph. Individual Patient Approvals (IPAs) are required before commencing on these formulations.

Imprest location: Formulary One

DOSAGE & DOSAGE ADJUSTMENTS

Oral:

Schizophrenia:

- **≥ 12 years:** 3 mg once daily; adjust dose based on response and tolerability in increments of 3 mg every ≥ 5 days. (1, 2, 8, 9)
- **Maximum daily dose is weight dependent:**
  - **< 51 kg:** 6 mg/day (1, 2, 8)
  - **≥ 51 kg:** 12 mg/day (1, 2, 8)

Once Monthly Intramuscular Injection (10):

Schizophrenia (treatment):

- Before initiating paliperidone palmitate long acting injection, tolerability and efficacy must be established with either test or previous doses of oral paliperidone, oral risperidone or risperidone long acting injection.(4, 11)
- Dosing regimen consists of two initiation (loading) doses on day 1 and day 8, followed by a monthly maintenance dose (see Table 1).
- **Dose ≥ 12 years:** IM 150 mg on day 1, then IM 100 mg on day 8, then IM maintenance dose 4 weeks later (i.e. 5 weeks after the 1st initiation dose). Continue to give the maintenance dose once monthly and adjust as required based on response and tolerability.(6, 7, 9, 12)
  - The first monthly maintenance dose is based on the equivalent dose of oral paliperidone, or oral/IM risperidone previously tolerated (see Table 2) (8-10)
  - If a maintenance paliperidone dose was not established or previous effective dose is unknown, give 75 mg IM as maintenance dose. (9)
  - Usual maintenance dose range: 25 to 150 mg every 4 weeks.(9)

- **Alternative dosing regimen can be used for patients ≥ 12 years with higher risk of adverse effects:** IM 100 mg on day 1, then IM 75 mg on day 8, then IM maintenance dose (see Table 1 for specific dosing) 4 weeks later (i.e. 5 weeks after 1st initiation dose). (6-7, 12)

See Appendix for IM dose titration tables and additional IM dosing guidance:

- Table 1: Paliperidone Palmitate Long Acting Injection Dosing Regimen
- Table 2: Paliperidone Palmitate Dose Equivalence
- Table 3: Managing Missed IM Paliperidone Palmitate: **Second Initiation Dose**
- Table 4: Managing Missed Monthly IM Paliperidone Palmitate: **Maintenance Dose**

If switching from oral paliperidone/risperidone

- It is not necessary to continue oral paliperidone or oral risperidone (oral overlap) following the first long-acting IM paliperidone palmitate injection. (8, 11)

If switching from another long-acting injectable antipsychotic

- If the patient has never been exposed to paliperidone (or risperidone), an oral dose should be given to test for hypersensitivity or allergy. (8, 9, 11)
- If switching from a different long acting injectable antipsychotic, give the paliperidone maintenance dose when the next dose is due (omit doses on days 1 and 8) and continue at monthly intervals. (3, 4, 8)

Hepatic impairment: Paediatric (Oral and IM)

- No dosage adjustment necessary in mild to moderate liver impairment.(1, 8)
- Use with caution in patients with severe liver impairment due to lack of studies.(1, 8)

Renal impairment (Oral):

eGFR calculator

- Clearance is decreased in renal impairment – adjust dose according to renal function.(1, 8)
- There is currently no available paediatric data for dose adjustments in patients <18 years with renal impairment.(1) The following recommendations are made using adult data(1, 3, 6-8) derived from studies using Cockcroft-Gault creatinine clearance. In children with significantly reduced kidney function, specialist advice should be sought.
    - CrCl 50 – 80 mL/minute: Start at 3 mg once daily. Max 6 mg daily.
    - CrCl 30 – 49 mL/minute: Max 3 mg once daily.
    - CrCl 10 – 29 mL/minute: Start at 3 mg on alternate days. Max 3 mg once daily.

- CrCl <10 mL/minute: use not recommended.

Renal impairment (IM – once monthly):

- Avoid long acting paliperidone preparations in patients with changing renal function
- There is currently no available paediatric data for dose adjustments in patients <18 years with renal impairment.[1] The following recommendations are made using adult data[1, 3, 6-8] derived from studies using Cockcroft-Gault creatinine clearance. In children with significantly reduced kidney function, specialist advice should be sought.
  - CrCl 50 – 80 mL/minute, IM 100 mg on day 1, then 75 mg on day 8, then 50 mg 1 month later (maintenance dose). Give maintenance dose once a month (range 25–100 mg once a month). [1, 3, 6-8]
  - Do not use long-acting injections if CrCl <50 mL/minute. [1, 3, 6-8]

ADMINISTRATION

Oral modified release tablets:

- Take consistently with or without food. Swallow whole with liquid. Tablets should not be chewed, divided or crushed. [3, 5]
- Paliperidone is contained within a nonabsorbable shell which releases the drug at a controlled rate. The tablet shell is eliminated from the body and may be visible in the patient's stools.[5]

Long-acting injection (Paliperidone Palmitate - Invega Sustenna®):

See Intramuscular (IM) Injections.

- Shake the prefilled syringe vigorously for at least 10 seconds until the suspension is mixed well (should be homogenous and milky-white in appearance). [5, 13, 14]
- Administer by slow, deep intramuscular injection only. [4]
- Use the deltoid muscle for the first two doses, and the deltoid or gluteal muscle for subsequent maintenance doses. [4] Use the needles provided in the packaging to prevent blockage. [14]
  - **Deltoid injections**:
    - In patients < 90 kg use the 1 inch, 23-gauge needle provided (blue hub) [4, 14]
    - In patients ≥ 90 kg use the 1.5 inch, 22-gauge needle provided (grey hub) [4, 14]
    - Alternate between the two deltoid muscles. [4]
  - **Gluteal injections:**
    - Use the 1.5 inch, 22-gauge needle provided (grey hub). [4, 14]
    - Alternate between the two gluteal muscles. [4]
- Prescriptions and administration of Paliperidone Palmitate Long Acting Injection must be documented on the MR353.05 WA Intramuscular Long-Acting Injection Chart (Depot Antipsychotic).

COMPATIBILITY

Do not mix IM injection with any fluids or other medications. [13]

MONITORING

- Extrapyramidal side effects – Abnormal Involuntary Movement Scale (AIMS) or Dyskinesia Identification System: Condensed User Scale (DISCUS) rating assessment can be used [1, 3-5]
- Blood glucose levels/HbA1c [1, 3, 8] – prior to treatment, at 3 months, then every 6 months [8]
- Blood pressure (including orthostatic) [1, 3, 8]
- Heart rate [1, 8]
- ECG [3]
- Full blood count [1, 4, 5]
- Liver function tests [3, 8]– especially for children who are obese or who are rapidly gaining weight while receiving therapy [8]
- Neurological function [1, 4, 5, 8]
- Renal function – serum creatinine and serum and electrolytes [1]
- Serum lipid profile – cholesterol and triglycerides [1, 3]
- Serum prolactin [1, 3-5]
- Weight, height, BMI [1, 3-5]
- Risk factors (personal, modifiable) [1]

The following documents must be completed when commencing patient(s) on any antipsychotic:

- CAMHS Antipsychotic Physical Health Monitoring Form
- CAMHS.PM.PsychotropicMedicationPhysicalHealthMonitoringHandbook.pdf

ADVERSE EFFECTS[3]

Common:

Injection site pain and reactions (for IM Injection – especially high doses), akathisia, tachycardia, sedation, anxiety, agitation, extrapyramidal side effects (EPSE) (see below), orthostatic hypotension, blurred vision, mydriasis, constipation, nausea, dry mouth, urinary retention, sexual adverse effects, weight gain, hyperprolactinaemia (may result in galactorrhoea, gynaecomastia, amenorrhoea or infertility)

Infrequent or Rare:

Sleep disturbance, increased salivation (higher dosage), allergic reactions, including urticaria, Stevens-Johnson syndrome, intra-operative floppy iris syndrome, SIADH, hyperthermia, hypothermia, neuroleptic malignant syndrome (see below), anaemia, thrombocytopenia,

neutropenia, agranulocytosis, VTE, stroke, ECG changes (reversible, broadened QT interval), arrhythmias, cardiac arrest, sudden death, hepatic fibrosis, priapism, systemic lupus erythematosus, seizures, increased blood glucose, dysarthria, dysphagia.

Neuroleptic Malignant Syndrome (NMS)

- A potentially fatal condition characterised by fever, marked muscle rigidity, altered consciousness and autonomic instability; usually progresses rapidly over 24–72 hours. Elevation of serum creatine kinase concentration (skeletal muscle origin) and leucocytosis often occur. (3)
- Not all typical signs need to be present for diagnosis. The incidence of NMS is greatest in young men. It does not always occur immediately after starting antipsychotic treatment and may be seen after many months or years.

Extrapyramidal Side effects

- Akathisia – A feeling of motor restlessness. Usually occurs 2-3 days (up to several weeks) after starting treatment. May subside spontaneously or with dose reduction.
- Parkinsonism – Includes tremor, rigidity, bradykinesia. Usually develops after weeks or months of treatment. Usually reversible, in some cases, symptomatic treatment may be necessary.
- Tardive dyskinesia – Involuntary movements of the face, mouth, tongue and sometimes head and neck, trunk or limbs. Usually occurs after medium to long-term treatment or after stopping the antipsychotic (particularly after suddenly stopping). There may be a slow improvement after the drug is withdrawn.
- Dystonia – Involuntary contraction of major muscle groups that is highly disturbing to the patient. These include torticollis, carpopedal spasm, trismus, perioral spasm, and life-threatening laryngeal spasm and opisthotonos. Often occur within 24-48 hours after commencing treatment or increasing dose.

STORAGE

- Paliperidone modified release tablets – Store below 25ºC (5)
- Paliperidone palmitate modified release injection (Invega Sustenna®) – Store below 25ºC (4)

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 **Paliperidone**. Any variations to the doses recommended should be clarified with the prescriber prior to administration

Related CAHS internal policies, procedures and guidelines
CAMHS Psychotropic Medication – Monitoring Adverse Physical Health Effects Policy
CAMHS Psychotropic Medication Physical Health Monitoring Handbook.pdf
CAMHS Physical Health Assessment and Monitoring
Consent for Medication Use
CAHS High Risk Medicines Policy
Off-Label Psychotropic Prescribing Guide for CAMHS Clinicians Guideline
Use Of Medications For Other Than Manufacturers Approved Indications

Related external legislation, policies and guidelines
WA-Intramuscular-Long-Acting-Injection-Chart-Depot-Antipsychotic-Adult-Chart.pdf
Guidelines for the use of the WA Intramuscular Long-Acting Injection Chart

References

1. Paliperidone Medication Monograph Tampa (FL): Elsevier; 2025 [updated updated 09 Apr 2025. Available from: https://www-clinicalkey-com.pklibresources.health.wa.gov.au/pharmacology/monograph/3529?sec=monpreg.
2. Micromedex: Merative; 2025. Available from: https://www-micromedexsolutions-com.pklibresources.health.wa.gov.au/micromedex2/librarian/CS/325454/ND_PR/evidencexpert/ND_P/evidencexpert/DUPLICATIONSHIELDSYNC/006F44/ND_PG/evidencexpert/ND_B/evidencexpert/ND_AppProduct/evidencexpert/ND_T/evidencexpert/PFActionId/evidencexpert.DoIntegratedSearch?SearchTerm=Paliperidone&fromInterSaltBase=true&UserMdxSearchTerm=%24userMdxSearchTerm&false=null&=null#.
3. Australian Medicines Handbook (Online). Adelaide (SA): Australian Medicines Handbook Pty Ltd; 2025. Available from: https://amhonline-amh-net-au.pklibresources.health.wa.gov.au/search?q=paliperidone.
4. AUSDI (Online). St Leonards (NSW): Health Communication Network Pty Ltd; 2023 [cited 2025. Available from: https://ausdi-hcn-com-au.pklibresources.health.wa.gov.au/productInformation.hcn?file=p02866.
5. AusDI (Online). St Leonards (NSW): Health Communication Network Pty Ltd; 2020 22 Oct 2025]. Available from: https://ausdi-hcn-com-au.pklibresources.health.wa.gov.au/productInformation.hcn?file=p00050.
6. Attygalle U (Expert Opinion). Paliperidone Indication and Dosing. 2025.
7. Hegarty A (Expert Opinion). Paliperidone Indication and Dosing in Paediatrics. 2025.
8. Paliperidone: Pediatric drug information. [cited 22 Oct 2025]. In: UpToDate (Online) [Internet]. Waltham (MA): UpToDate Inc, [cited 22 Oct 2025]. Available from: https://www-uptodate-com.pklibresources.health.wa.gov.au/contents/search.

9. eTG. Principles of treating psychoses including schizophrenia 2025 [updated 02/2025. Available from: https://app-tg-org-au.pklibresources.health.wa.gov.au/viewTopic?etgAccess=true&guidelinePage=Psychotropic&topicfile=principles-treating-psychoses.
10. Taylor M. BTRE, Young A.H. Paliperidone palmitate long-acting injection. In: Atrium T, editor. The Maudsley® Prescribing Guidelines in Psychiatry. UK: Wiley; 2021.
11. Keks N, Schwartz, D., & Hope, J. Antipsychotic switching tool. Australian Prescriber. 2019;42(4):156.
12. JJMC. Use in adolescent/paediatric populations 2025 [Available from: https://www.jnjmedicalconnect.com/products/invega-sustenna/medical-content/use-in-adolescentpediatric-populations#references-content.
13. Australian Injectable Drugs Handbook. Abbotsford (VIC): Advanced Pharmacy Australia; 2025. Available from: https://aidh.hcn.com.au/browse/p/paliperidone.
14. Paediatric Injectable Guidelines. 10th Ed [Internet]. 2025 [cited 22 Oct 2025].

Useful resources (including related forms)
Clinical Algorithm for Monitoring Metabolic Syndrome in Children
Abnormal Involuntary Movement Scale (AIMS)

This document can be made available in alternative formats on request for a person with a disability.

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Appendix:

Table 1: Paliperidone Palmitate Long Acting Injection Dosing Regimen [6-8]

Dosing Long Acting Injection	Standard IM Dosing	Alternative IM Dosing	Site of Administration
Initiation Dose			
Day 1	150 mg	100 mg	Deltoid only
Day 8 (± 4 days)	100 mg	75 mg	Deltoid only
Maintenance Dose			
Every month (± 7 days) thereafter **Adjust as needed for efficacy & tolerance.**	25 – 150 mg (usually 75 mg)	25 – 150 mg (usually 50 mg)	Deltoid or Gluteal

Table 2: Paliperidone Palmitate Dose Equivalence [8]

Risperidone oral (mg/day)	Risperidone Long Acting Injection – (mg/ fortnight)	Paliperidone oral (mg/day)	Paliperidone palmitate Long Acting Injection – (mg/month)
1	-	3	25
2	25	3	50
3	37.5	6	75
4	50	9	100
6	-	12	150

Table 3: Managing Missed IM Paliperidone Palmitate (Invega Sustenna®): **Second Initiation Dose** [8]

Time Since 1st injection	Recommendations
< 4 weeks	Administer 100 mg as soon as possible followed by 75 mg maintenance dose 5 weeks after the 1st initiation dose (regardless of when it was administered). Commence maintenance dose 4 weeks later.
4 to 7 weeks	Administer 100 mg as soon as possible, followed by another 100 mg dose 1 week later. Commence maintenance dose 4 weeks later.
> 7 weeks	Recommence entire dose titration.

Table 4: Managing Missed Monthly IM Paliperidone Palmitate (Invega Sustenna®): **Maintenance Dose** [8]

Time since last injection	Recommendations	
4 to 6 weeks	Administer the missed dose as soon as possible. Resume usual monthly maintenance dose 4 weeks later.	
> 6 weeks to 6 months	**25 to 100 mg monthly**	Administer missed dose as soon as possible followed by the same dose 1 week later. Resume usual monthly maintenance dose 4 weeks later.
	150 mg monthly	Administer 100 mg as soon as possible followed by another 100 mg dose 1 week later. Resume usual monthly maintenance dose 4 weeks later.
> 6 months	Recommence entire dose titration.	