

<b>Areas where Protocol/Guideline applicable</b>	SESLHD inpatient settings (including Calvary hospital)
<b>Authorised Prescribers:</b>	Specialist Palliative Care Service
<b>Indication for use</b>	<p>Refractory nausea and vomiting not responding to first line treatments (metoclopramide, cyclizine or haloperidol)</p> <p>Refractory agitation not responding to the following first line treatments in the terminal phase: Midazolam 60 to 200mg per 24 hours and/or Haloperidol 10mg per 24 hours</p>
<b>Proposed Place in Therapy</b>	<p>Low dose levomepromazine is considered a second line therapy for refractory nausea and vomiting.</p> <p>Levomepromazine is considered a second line drug in the management of refractory agitation in the imminently dying with the intention to reduce a patient's level of consciousness.</p>
<b>Precautions and relative Contra-indications</b>	<p>Hepatic &amp; renal Impairment</p> <p>Cardiac disease, particularly heart block &amp; known QT interval prolongation/arrhythmia</p> <p>Parkinson's disease Dementia</p> <p>Epilepsy and seizure activity – lowers seizure threshold</p> <p>Encephalopathy</p>
<b>Important Drug Interactions</b>	Caution is advised with the concurrent use of drugs metabolized by CYP2D6 e.g. tricyclic antidepressants, some beta-blockers, as theoretically levomepromazine may cause plasma concentrations to increase, or reduce conversion of pro-drugs to the active metabolite, e.g. codeine to morphine
<b>Dose conversion for oral to subcutaneous route</b>	A ratio of 1:1 between oral and subcutaneous routes should be used
<b>Preparation</b>	Levomepromazine 25mg/mL injection
<b>Dosage</b>	<p><b><u>Refractory nausea and vomiting:</u></b> <b>Low dose only</b> - 6.25 mg daily and every 2 hours PRN to a maximum of 25mg in 24hours</p> <p><b><u>Terminal agitation:</u></b> The usual starting dose is 25mg BD and 25mg every 2 hours PRN to a</p>

	<p>maximum of 200mg in 24 hours. Titrate regular dose according to need. Usual dose range: 50mg to 200mg daily (<b>maximum dose 200mg in 24 hours</b>). Total daily dose can be administered via continuous subcutaneous (CSCI) or bolus subcutaneous injections in two to four divided doses</p> <p>Consider reduced starting doses in the elderly and in hepatic and renal failure.</p>
<b>Diluents</b>	Water for Injection (WFI)
<b>Drug Compatibility</b>	Check Syringe driver drug compatibilities in <a href="#">SESLHDPR/175</a> Administration of subcutaneous medications in Palliative Care (Table 1: Subcutaneous Medication Compatibility Chart)
<b>Prescribing Instructions</b>	Levomepromazine must be prescribed on the eMR, eRIC, or in Mosaik/ARIA. In the absence of eMM systems, the appropriate paper medication chart may be used.
<b>Administration Instructions</b>	Dilute to the largest practical volume
<b>Known Adverse Effects</b>	<p>Drowsiness, sedation</p> <p>Postural hypotension</p> <p>Extrapyramidal side effects</p> <p>Dry mouth</p>
<b>Monitoring requirements</b>	<p>Monitor level of sedation and titrate dose accordingly.</p> <p>Monitor for injection site reactions. If administered via continuous infusion, perform 4 hourly infusion site checks as per Subcutaneous Syringe Driver Inpatient Management form SES130.021</p>
<b>Practice Points</b>	<p>Levomepromazine should be diluted as much as is practical to avoid site irritation.</p> <p>Protect product, syringes and lines from direct sunlight or heat. Discard if discolouration occurs.</p>
<b>Basis of Protocol/Guideline:</b> (including sources of evidence, references)	<p>Palliative Care Formulary online. In Medicines Complete. Pharmaceutical Press. Available via CIAP.</p> <p>Palliative Care (December 2024) In Therapeutic Guidelines. Melbourne. Therapeutic Guidelines Ltd. Available via CIAP.</p> <p>Dickman A, Schneider J. The syringe driver: continuous subcutaneous in palliative care. Oxford University Press; 2016</p>
<b>Groups consulted in development of this guideline</b>	St George Palliative Care Team SESLHD Palliative Care working party.

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