

Pharmacy Bulletin

Pharmacy Department, HCTM, PPUKM

Edition 17, Issue 5

Nationwide Shortage of Diazepam

There has been nationwide shortage of diazepam. Companies have stopped production of Tab Diazepam. Items affected are Tab Diazepam 2mg, Tab Diazepam 5mg, Tab Diazepam 10mg. In view of this shortage, alternatives in PPUKM are stated below.

Indication	Alternatives	Dose recommendation
Anxiety	Alprazolam	Adult: Oral 0.25-0.5mg TDS (usual range 0.5-4mg/day in divided dose) ^[1]
	Lorazepam	Adult: Oral 1-4mg/day in 2 or 3 divided doses with largest dose taken at night (max 10mg daily) ^[1]
	Clobazam	Adult: 20-30mg daily in divided doses or as single dose at bedtime, increase in severe anxiety to max 60mg daily in divided doses. Elderly (or debilitated), 10-20mg daily. ^[1]
Panic disorder	Alprazolam	Adult : Oral 0.5-1mg at bedtime or 0.5mg TDS, dose increase <1mg every 3 or 4 days (max 10mg/day) ^[1]
	Clonazepam	Adult : Oral 0.25mg OD or BD ^[2]
Pre-medication	Lorazepam (unlicensed)	Adult : Oral 0.5-1mg TDS ^[2]
	Midazolam	Adult: 0.02 to 0.03 mg/kg over 2 to 3 minutes; maximum 2.5 mg (1.5 mg maximum if elderly) ^[6]
	Lorazepam	Adult: Oral 2-4mg 1-2 hour before operation Child: 5-13 years old oral 0.5-2.5mg (50mcg/kg)> 1 hour before operation. ^[1] Child 1 mo—11 yo : 50-100 mcg/kg (max per dose 4mg) , 1 hour before procedure ⁷ Child 12-17 yo: 1-4mg , 1 hour before procedure ⁷
Alcohol Withdrawal	Midazolam	Adult: IV Midazolam 2-5mg every 5 minutes x3, then 4-10mg x 3. ^[4]
	Diazepam	Adult: IV Diazepam 10mg Initially . Can go up to 20mg. Additional dose of 5-10mg every hour. 3-4 hours interval usually enough.
	Lorazepam	Adult : Oral 0.25mg-1mg every 2-4 hours as needed. Usual maximum 3mg in 24 hours.
Hypnotic	Midazolam	Adult : Oral 7.5mg at night ^[3]
	Lorazepam	Adult: oral 1-2mg at bedtime ^[1] Child 1mo-11 yo: 100mcg/kg (max per dose 4mg) for 1 dose, then 100mcg/kg after 10 min (max per dose 4mg) if required for 1 dose Child 12-17 yo: 4mg for 1 dose, then 4mg after 10 min for 1 dose ⁷ .




Properties ^[1]	Midazolam	Alprazolam	Lorazepam	Clonazepam	Clobazam	Diazepam
Duration of action						
Onset of action						
Half-life (parent)(h)	2-5	12-15	10-20	18-50	36-42	IV 33-45 hrs Oral 44-48 hrs
Half-life (metabolite)(h)	12	Inactive	Inactive	Inactive	71-82	IV 87 hrs Oral 100 hrs
Time to peak (h)	0.4-0.7 (iv)	1-2	1-6	1-4	0.5-4	0.5-2

PHARMACOKINETICS

1. DiPiro, J., Talbert, R. and Yee, G. (2008). Handbook of Pharmacotherapy. New York, USA: McGraw-Hill Professional Publishing
2. American Society of Health-System Pharmacist. (2014). AHFS Drug Information. Bethesda, Maryland. 4. UpToDate: Management of moderate and severe alcohol withdrawal syndromes 5. Consensus Guideline on Management of Epilepsy 2010 : Emergency Treatment of Epilepsy 6. UpToDate: Procedural sedation in adults outside the operating room 7. BNF For Children 2015-2016
3. UpToDate: Management of moderate and severe alcohol withdrawal syndromes
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5. UpToDate: Procedural sedation in adults outside the operating room
6. BNF For Children 2015-2016

Worldwide Discontinued of Sofradex

Sofradex drops (**Dexamethasone Na 0.05%, Framycetin Sulfate 0.5%, Gramicidin 0.005%**) has been discontinued by Sanofi Aventis due to commercial reasons. Sofradex is commonly use as an eye drop or ear drop for infection, inflammation and otitis externa. Alternatives to Sofradex based on it's common indication for ocular use are listed as table below.

Alternatives	Approved indication(s)	Notes/Safety in pregnancy
 <p>Maxitrol Eye DROP (Recommended !!) (Dexamethasone, Neomycin & Polymycin B) Can be use as ear drop. Dose: 1-2 drops every 4-6 hour Availability : Kedai Farmasi NF Price: RM 8.33 Prescriber: All clinic</p>	i. Infection & Inflammation of ear ii. Otitis media iii. Otitis externa/swimmer's ear	<p>Not recommended. Use during pregnancy only if the potential benefits to the mother justifies the potential risk to the fetus.</p> <p>Recommendation by ENT-UK¹ when treating a patient with a discharging ear, in whom there is a perforation or patent grommet:</p> <ul style="list-style-type: none"> • If a topical aminoglycoside is used, this should only be in the presence of obvious infection. • Topical aminoglycosides should be used for no longer than 2 weeks. • The justification for using topical aminoglycosides should be explained to the patient. • Baseline audiometry should be performed, if possible or practical, before treatment with topical aminoglycosides.
 <p>Maxitrol Eye OINTMENT (Dexamethasone, Neomycin & Polymycin B) Can be used for ear. Dose: Apply small amount to affected area 3-4 times daily. Availability : Formulary item Prescriber: All clinic</p>	i. Infection & Inflammation of ear iii. Otitis externa/swimmer's ear ²	<p>Not recommended. Use during pregnancy only if the potential benefits to the mother justifies the potential risk to the fetus.</p>
 <p>Ofloxacin Otic Solution (TARIVID) Adult: 10 drops daily for 7 days Child: 6 month-13 years 5 drops daily for 7-14 days. Availability : Formulary item Prescriber: A* (ENT specialist only)</p>	i. Otitis media ii. Otitis externa/swimmer's ear	<p>Use during pregnancy only if the potential benefits to the mother justifies the potential risk to the embryo or fetus.</p>

References:

1. Evidence review and ENT-UK consensus report for the use of aminoglycoside-containing ear drops in the presence of an open middle ear Phillips, J.S.,* Yung, M.W.,* Burton, M.J.,† & Swan, I.R.C. Blackwell Publishing Limited, Clinical Otolaryngology, 32, 330–336
2. Clinical evidence in the management of swimmer's ear, Andre Marais. South African Family Practice 2015; 57(5):4-8

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