

FMOLHS Drug Shortage Memo

To: All Providers

From: Pharmacy Department

Date: 12/06/2023

Drug Affected: Lorazepam Injection

Dear Providers,

Currently, there is a shortage of **lorazepam injection** due to increased demand as a result of a supplier closure. At OLOLRMC, a limited supply is currently available and we do not have a date where supply chain and manufacturing will allow for acquisition of more product. As a result, we are attempting to restrict utilization where evidence-based medicine confirms the maximal potential benefit to the patients.

Lorazepam is an intermediate-acting benzodiazepine used for several indications. The most utilized indications at OLOLRMC are alcohol withdrawal, seizure, procedural sedation, and agitation. Benzodiazepine pharmacokinetics and conversions are provided in the below charts for further information. To conserve supply, the following recommendations during the period of shortage are:

- **Alcohol withdrawal:** utilize alternative pathway with phenobarbital +/- diazepam
- **Procedural sedation:** consider utilization of fentanyl +/- ketamine or propofol
- **Conscious sedation for imaging:** consider need for conscious sedation prior to prescribing. If still necessary, consider oral lorazepam, low-dose diazepam, or midazolam
- **Agitation:** consider a first generation or second-generation antipsychotic (haloperidol, droperidol, olanzapine)

Lorazepam injections will remain as the preferred agent for seizures while supplies are available

Benzodiazepine Properties Chart

Lorazepam IV 1mg	Diazepam IV 5mg	Midazolam IV 2mg
Intermediate-Acting (half-life ~14 hours Increased to ~ 18 hours in ESRD)	Long-Acting (parent half-life ~60-72 hours)	Short-Acting (half-life ~3 hours)
Onset of Action IV: 10-20 minutes	Onset of Action: IV: 1-3 minutes	Onset of Action: 1-5 minutes
Metabolized Hepatically Excreted in Urine	Metabolized Hepatically *Has active metabolites Excreted in Urine	Metabolized Hepatically *Has active metabolites Excreted in Urine

Benzodiazepine Conversion Chart*

Lorazepam IV	Diazepam IV	Midazolam IV
1mg	5mg	2mg
0.25mg	1.25mg	0.5mg
0.5mg	2.5mg	1mg
1mg	5mg	2mg
2mg	10mg	4mg
4mg	20mg	8mg

note: the pharmacokinetic profiles for benzodiazepines are widely variable and dosage conversions are not exact. Please use clinical judgement and patient-specific factors, including renal and hepatic function when converting between different benzodiazepines

For any questions/concerns, please contact:

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