HOUSTON Methodist LEADING MEDICINE

HOUSTON METHODIST
PHARMACY & THERAPEUTICS NEWS
February 2023

# FORMULARY UPDATES

Laura M. Blackburn, PharmD

The following medications were **ADDED** to Houston Methodist Formulary:

| Medication | Pharmacologic Class and Indication | Formulary Action and Considerations |
|---|---|---|
| Leqvio® (inclisirin) | • Antilipemic Small Interfering Ribonucleic Acid (siRNA) Agent<br>• Heterozygous familial hypercholesterolemia<br>• Secondary prevention of cardiovascular events | • Restricted to cardiology when used for FDA-labeled use - Patients must have trialed maximally tolerated statin therapy for clinical ASCVD or heterozygous familial hypercholesterolemia who require additional lowering of LDL-C<br>• Restricted to the outpatient setting with prior financial approval |
| Jevtana® (cabezitaxel) | • Antineoplastic taxane derivative, antimicrotubular treatment of patients with metastatic castration-resistant prostate cancer previously treated with a docetaxel-containing treatment regimen | • Restricted to Hematology/ oncology for FDA labeled use<br>• Restricted to outpatient setting with prior financial approval |

To request a medication for formulary review, **click here**

# CRTITICAL DRUG SHORTAGE UPDATE:

Albuterol sulfate inhalation solution products are on national shortage:

An Epic "Soft Stop" alert has been placed system-wide. A Soft-stop allows providers to continue with the order while a "Hard stop" will not allow prescribers to sign the order. Each HM entity is implementing a respective Soft or Hard Stop based on their entity's available supplies.

HM policy allows patients to utilize their own inhaled supplies when available and should be encouraged at this time.

Where metered dose inhaler formulations of albuterol and albuterol/ ipratropium can be substituted on a case-by-case basis they will be, but with the understanding that as with the nebulized solution, these products are now difficult to acquire.

The standing automatic conversion FROM levalbuterol (Xopenex) TO albuterol may be temporarily suspended during this shortage period.

Lastly, HM respiratory therapy leaders and staff are aware are actively screening patients for discontinuation of nebulization to extend supplies as well as using canister-based delivery of therapy for ventilated patients vs. the nebulization solutions.

The *Pharmacy & Therapeutics News* is dedicated to providing the most current information regarding medication-use policy and formulary issues. Each issue details recently approved actions from the system P&T committee as well as relevant patient safety, pharmacotherapy and drug distribution updates. Entity representatives to the system P&T committee structure can be found here.

# 2023 Pain Guide for Houston Methodist Updated:

The HM System Pain Guide has been updated for 2023 and is available for providers. Link here or scan the code below for access. The guide has resources for PCA dosing, opioid analgesic equivalencies, opioid reversal for discharge / outpatient prescribing and information on use of non-opioid therapies for pain management.

## Triennial Policy Review

- **System Policy on Clinical Interventions Documentation:** A triennial review was completed. The policy outlines procedures for appropriately monitoring alerts and documenting interventions in both VigiLanz and Epic. Revisions included clarifications, formatting and updated images of contemporary software.

# MEDSAFETY MATTERS!

Amaris Fuentes, PharmD

**ISMP Medication Safety Newsletter Links:** Acute Care

## ISMP Recommended Tallman (Mixed Case) Lettering Updates

Updated tallman (mixed case) lettering recommendations have been provided by ISMP based on a comprehensive evaluation using information from the FDA and a recent survey of healthcare practioners. Tallman (mixed case) lettering has been used a safety strategy to highlight medications with potential for confusion based on similar names. Research has noted reduction of errors when using the mixed case approach or other forms of text enhancements. The updated recommendations include the following medication names:

- cycloPHOSphamide (confused with cycloSPORINE and cycloSERINE,
- droPERidol and droNABinol
- dexAMETHasone and dexmedeTOMIDine
- pyRIDostigmine and PHYSostigmine
- ALfentanil (confused with SUFentanil and fentanyl)
- BUPivacaine and ROPivacaine
- oxyBUTYnin (confused with oxyCODONE, OxyCONTIN, and oxyMORphone)
- raNITIdine (not available) confused with riMANTAdine

# MEDICATION SAFETY & POLICY

Amaris Fuentes, PharmD

## Flumazenil CQI

A CQI was conducted to evaluate use of the agent for reversal of benzodiazepines along with trends with benzodiazepine prescribing. The need for reversal was most common in older patients without chronic use of benzodizapines and most common associated with lorazepam and midazolam use. The current flumazenil dose escalation panel was used in limited circumstances. The following recommendations will be implemented based on the review: updates to the dose escalation panel to include a third dose at 0.5mg, removal of the standalone flumazenil order, and application of geriatric context to temazepam orders

## Lorazepam for Procedural Sedation

Audit of lorazepam IV use for procedural sedation noted use of every 8 hour PRN orders intended for one time use. A procedural sedation/anxiety panel will be developed to support use of the agent for this indication to include orders, nursing vital sign assessments, and access to the flumazenil dose escalation panel. Additionally, dose and frequency defaults will be removed from lorazepam IV orders.

## Peripheral Norepinephrine BPA Optimization

Based on literature assessment and provider feedback on Best Practice Advisories that trigger for use of norepinephrine through peripheral lines, the following changes will be implemented: trigger alert 12 hours after ordering for standard concentrations (8mg/250mL) & maintain alerting 4 hours after ordering for high risk scenarios including use of concentrations above the standard and use of doses over 15mcg/min. System_PCPS 126 High Alert/High Risk Medications will be updated to reflect these changes.

## Sodium Bicarbonate Ordering Options

To minimize confusion and error potential at ordering and optimize safe administration, the sodium bicarbonate IV options will be updated to direct to use of IVPB or syringe adapter for short 15 minute infusion and undiluted sodium bicarbonate infusions will direct to a standard product concentration and support dosing in mEq/hr with advice for placement of central lines.

NEWSLETTER STAFF

Editor-in-Chief: Michael G. Liebl, PharmD
Managing Editor: Laura M. Blackburn, PharmD
Contributors: Zoe Tu, PharmD
System P&T Committee Roster is available to view here.

# MEDICATION SAFETY & POLICY

Amaris Fuentes, PharmD

## Alvimopan REMS

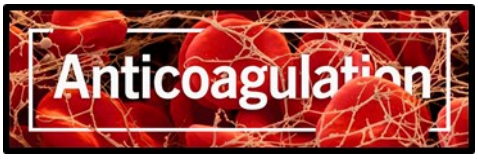
To improve compliance with REMS program and audit response, the following are recommendations for improved documentation of education:

- Include the following links on order composer to allow for just-in-time provider education
- Add attestation statement to order composer to acknowledge review of education
- Copy existing instructions on preop alvimopan orderable (below) to the postop alvimopan orderable.
- Approve BPA with link to REMS education and attestation visible to order verifying pharmacist and administering nurse to allow for just-in-time education and documentation.

## BMT Electrolyte Replacement Protocol

An electrolyte replacement protocol was approved to prevent delays in electrolyte repletion and avoid complications with electrolyte abnormalities. Patients are eligible for the protocol if located on Walter Tower 15 at HMH, same day lab values are available, creatinine clearance (CrCl) GREATER than 50 mL/minute and not requiring dialysis, serum creatinine has NOT increased by ≥0.3 mg/dL since last value reported or urine output GREATER than 500 mL during last 24 hours, and body weight GREATER than 30 kg . Oral and IV replacement will be available. Details of the replacements will be available in Epic for ordering at a later date.

# ANTICOAGULATION USE SAFETY




Patti Romeril, PharmD

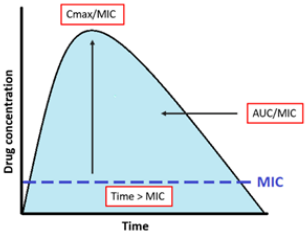
## Pharmacy-Managed LVAD Heparin Protocol

A CQI was conducted to assess safety & efficacy of two current pharmacy managed LVAD heparin protocols: Standard and High Suspicion for Thrombosis (HST). The intent was also to compare results with previous CQI data to determine if protocol changes are needed. The Standard LVAD Heparin Protocol had comparable baseline characteristics, efficacy, and safety as historical CQI data. Therefore, no protocol changes are warranted at this time. The high suspicion for thrombosis population had an older device type and history of pump thrombosis, however, no incidences of bleeding or thrombosis events related to HST protocol were found. Given that patients' PTTs were being maintained at the lower end of the goal range under the current protocol, it was approved to adjust the HST Protocol goal PTT range FROM 61–112 seconds TO 70–100 seconds to more adequately anticoagulate this high-risk population.

# ANTIMICROBIAL STEWARDSHIP

Shivani Patel, PharmD

## Updated Vancomycin Dosing Protocol Using Bayesian Dosing and AUC Monitoring




Current guidelines recommend Area Under the Curve (AUC) calculations as the primary method of monitoring vancomycin therapy. In contrast to traditional trough-based dosing, AUC-based dosing more reliably takes total drug exposure into account. This approach optimizes the efficacy of vancomycin while decreasing rates of nephrotoxicity associated with trough monitoring. The pharmacy-managed vancomycin protocol has been updated to align with current guidelines. Pharmacists will dose vancomycin to a target AUC range of 400-600 mg h/L, aiming for the lowest AUC that results in clinical improvement. Therapy is monitored with 1-2 *random* levels drawn with AM labs. Certain patient populations (e.g. ESRD on HD, acute renal failure) will continue to be monitored via trough levels. The change in practice will go into full effect in the coming months and providers will notice reference to AUC-based targets in the pharmacist progress notes.

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