HOUSTON Methodist LEADING MEDICINE

HOUSTON METHODIST
# PHARMACY & THERAPEUTICS NEWS

June 2021

## FORMULARY

*Isha Rana, PharmD*

*Formulary Actions:*

*The Second-generation tetracycline class was reviewed for possible consolidation. The following changes were approved:*

- *Eravacycline (Xerava) will remain on formulary with the following considerations:*
  - *Prescribing is restricted to attending-level infectious disease providers.*
  - *Epic will include a cascade of order questions to guide appropriate patient selection*
- *Tigecycline (Tigacil) was removed from formulary and Omadacycline (Nuzyra) remains non-formulary. Changes will be phased in as microbiology testing capability for eravacycline is implemented.*

*Have a medication needing Houston Methodist formulary review? Click here and complete a request form*

## ANTICOAGULATION QUALITY & SAFETY

*Engie Attia, PharmD*

### *COVID-19 Vaccine-Induced Thrombosis with Thrombocytopenia Recognition and Treatment Update*

*Very rarely, thrombosis with thrombocytopenia syndrome (TTS) events have been reported following administration of the J&J Covid-19 vaccine.*

*In these cases, the CDC advises against the use of heparin to treat thrombosis unless HIT testing is negative. The HM Anticoagulant Safety Task Force recommends the following:*

- *Maintain a high index of suspicion for symptoms that might represent serious thrombotic events or thrombocytopenia in patients who have recently received the J&J COVID-19 vaccine.*
- *Obtain platelet counts and* PF4 ELISA assay. ***Consultation with a hematologist is strongly recommended.***
- If PF4 Antibody is positive or unable to be performed, non-heparin (and non-low-molecular weight heparin) anticoagulants are preferred.
- High-dose intravenous immune globulin may be considered in refractory cases.
- High-dose glucocorticoids may improve platelet count.

Report adverse events to VAERS, including serious and life-threatening adverse events in patients following receipt of COVID-19 vaccines as required under the Emergency Use Authorizations for COVID-19 vaccines.

## MEDICATION ORDERING

*Amaris Fuentes, PharmD*

### *Midodrine Hold Parameters*

*Hold parameters have been added to midodrine medication orders to communicate systolic blood pressures thresholds for holding therapy.*

### *IV Diltiazem Continuous Quality Improvement*

*Based on review of medication event reports and use of IV diltiazem, IV diltiazem bolus dose orders have been updated to reflect that use is not recommended in the setting of cardiogenic shock, heart failure with preserved ejection fraction (HFrEF), or acute decompensated heart failure.*

### *Heparin Pharmacy Protocol Continuous Quality Improvement*

*A review of standard and low-dose heparin protocols was conducted demonstrating safe and effective use of heparin infusion therapy. The following changes were approved to optimize use of these protocols:*

- *The standard protocol now allows providers to determine use of titration boluses.*
- *Added a "Hold Heparin" infusion order for pharmacists allowing improved communication of heparin infusion pauses that are often encountered for procedures, supratherapeutic levels, or other appropriate hold reasons.*

*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.*

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# MEDSAFETY MATTERS!

*Amaris Fuentes, PharmD*

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

***Concentrated Potassium Chloride Safeguards***

*A recent ISMP newsletter article details an event at a hospital where concentrated potassium chloride was administered as an IV push during a cardiac arrest. After decades of safety reviews and recommendations, including addition as a National Patient Safety Goal in 2003, concentrated potassium chloride labels have been updated to prevent look-alike mix-ups and removed from patient care units to prevent potentially fatal errors. The instance outlined in this article is the first known report since 2007 and provides a reminder to ensure potassium chloride safety, even after years of no reported events.*

*Various root causes were identified in event. Safeguards recommended for concentrated potassium chloride vials include clearly describing guidance on potassium chloride outside of pharmacy areas including storage and dispensing and limiting compounding of potassium infusions not available in a premixed bag to pharmacy areas with safety checks.*

*Houston Methodist policy on concentrated potassium chloride is available in Attachment A of System PCPS 126 High Alert/High Risk Medication, which prohibits concentrated potassium chloride vials in patient care areas, restricts compounding of potassium salt solutions to pharmacy areas, and provides guidance on standard potassium chloride concentrations and rates of infusion. All Houston Methodist staff are encouraged to "Stop the Line – Speak Up for Patient Safety" if ever encountering an unsafe practice with potassium chloride or any other medication therapy.*

# ANTIMICROBIAL STEWARDSHIP

***COVID-19 Monoclonal Antibody Therapy Updates***

*Michael Liebl, PharmD*

*Houston Methodist continues to provide monoclonal antibody therapy for qualified patients. Two important updates since our last communication in our April P&T News.*

*First, the criteria for use listed in the EUA for these therapies were expanded allowing use in more patients. The BMI threshold was reduced from 35 to 25. Pregnancy was explicitly listed as a high-risk condition qualifying for treatment as was any history of cancer.*

*The 2nd change in this therapeutics area occurred on June 25th when the distribution of the combination therapy bamlanivimab/etesivimab was suspended. The action came as a result of an increasing predominance of COVID-19 variants in which bamlanivimab/etesivimab were no longer effective. The regeneron cocktail of casirivimab/imdevimab remain effective and as of June 30th, the regeneron formulation is the product utilized at Houston Methodist.*

*A third product sotrovimab was granted EUA status by the FDA and appears to be effective against these recent strains. Sotrovimab is not currently on our HM formulary and is not in our inventory at present but may be in the future as we continue to monitor our local COVID-19 variants and respond to product availability and FDA guidance.*

*Providers are encouraged to continue to refer qualified patients for treatment as our internal data from ~4,500 patients shows very strong positive results. Our operations process that guides patients to treatment post-referral continues to be highly reliable and results in patients being infused in just under 24 hrs from the time the referral order is placed.*

NEWSLETTER STAFF
*Editor-in-Chief:* *Michael G. Liebl, PharmD*
*Managing Editor:* *Isha Rana, PharmD*

*System P&T Committee Roster is available here.*

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# ANTIMICROBIAL STEWARDSHIP

## Intravenous to Oral Conversion for Antimicrobials

*Katherine Perez, PharmD*

*Timely intravenous (IV) to oral (PO) antimicrobial therapy conversion is effective for a variety of infections, especially when agents have excellent bioavailability. IV-PO antibiotic conversion in appropriate patients improves clinical outcomes by shortening hospital stay, reducing risk of line-related infections and adverse events, and improves patient satisfaction.*

*Slightly different polices, criteria and approaches for timely IV-PO conversion by pharmacists were in place across HM entities for years. The System Antimicrobial Stewardship Committee in June, approved a uniform, automatic IV-PO conversion protocol for named medications with high bioavailability including antimicrobials.*

*Patients initiated on IV antimicrobials for certain indications will be automatically converted by the pharmacist to oral therapy if the following criteria are satisfied:*

- *functioning GI tract,*
- *tolerating ≥ 1 other oral medication,*
- *afebrile for 24 hours, WBC < 15,000 and trending to normal,*
- *hemodynamic improvement.*

*Prescribers may direct the pharmacist to call them before converting by opting out of an automatic conversion via a response to an order question upon order entry. Eligible antimicrobials include azithromycin, ciprofloxacin, levofloxacin, doxycycline, minocycline, fluconazole, isavuconazole, metronidazole, moxifloxacin, posaconazole, and voriconazole.*

## Sanford Guide Available for your Mobile Device for Free!

*Judy Ikwuagwu, PharmD*

*The electronic Sanford Guide is ideal for accessing the most up to date infectious diseases recommendations and HM specific data and antibiograms! This resource has been added to assist our clinicians with antibiotic prescribing at the bedside through your mobile device!*
*Click Here for the electronic Sanford Guide with HM-Specific Guidance and Antibiograms*

## Antibiotic Stewardship Initiatives Fully Underway:

*Katherine Perez, PharmD*

*The **antibiotic duration of therapy entry requirement** for high frequency use antibiotics is now underway. The initial review of the program has been positive. Whereas in previous audits, only ~20% of antibiotic orders had a stop date, now all antibiotics with the requirement have a stop date. Information about the initial antibiotic durations of therapy selected for common indications will be available to associate with actual durations of treatment. Ultimately these efforts aim to ensure the optimal duration of antibiotic therapy is provided to patients and reduce unnecessary exposure of patients to antibiotics.*

*The **nasal MRSA PCR screening strategy** has expanded. The number of tests performed across HM has steadily increased since the 1st of the year from ~70 tests in January to over 800 in June. When interpreted in clincal context, a negative result should enable rapid discontinuation of anti-MRSA therapies helping to curb excessive antibiotic use. Vancomycin is the most comonnly used anti-MRSA agent at HM and published studies have shown a near 20% reduction in days of therapy when incorporating anti-MRSA PCR testing results into the treatment strategy. For additional details on the program, visit our May 2021 Antimicrobial Stewardship News.*

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