

## FORMULARY UPDATES

Laura M. Blackburn, PharmD

The following medications were ADDED to Formulary

### Secukinumab (Cosentyx®) IV

**Category:** Humanized immunoglobulin G1 (IgG1) monoclonal antibody

**FDA label:** Ankylosing spondylitis, Axial spondyloarthritis, Hidradenitis suppuritiva, Plaque psoriasis, Psoriatic arthritis,

**HM Formulary restrictions:** Restricted to FDA labeled indications and prescriber restrictions to Rheumatology. Restricted to the Outpatient care setting with prior financial approval

### Ciltacabtagene autoleucel/Cilta-Cel (Carvykti®)

**Category:** Chimeric Antigen Receptor (CAR) T-Cell Immunotherapy

**FDA-label:** Multiple myeloma, relapsed or refractory who have received at least 1 prior line of therapy, including a proteasome inhibitor and an immunomodulatory agent, and are refractory to lenalidomide.

**HM Formulary restrictions:** Restricted to Hematology/oncology providers who are certified through the REMS program. Patients must be enrolled in the REMS program. Restricted to the outpatient care setting with prior financial approval.

*The Epic Treatment plan is currently being built for this product*

### HIV Antiretroviral Therapy (ART) Formulary Class Review

The HIV ART class was reviewed to streamline options and avoid waste due to low use and expiration of product.

The following agents remain on formulary.

bictegrav/emtricit/tenofov ala	zidovudine
dolutegravir sodium	emtricitabine/tenofovir (TDF)
tenofovir disoproxil fumarate	dolutegravir/rilpivirine
lamivudine	darunavir
raltegravir potassium	darunavir/cobicistat
abacavir sulfate	ritonavir
abacavir/dolutegravir/lamivudine	nevirapine

HM will utilize the patients home supply when possible to meet a patient's needs if a non-formulary product is required.

To request a medication for formulary review, [click here](#)

## Epic Updates

### Pemivibart (Pemgarda)

Pemivibart, the covid-19 monoclonal antibody approved for prophylaxis of Covid-19 in high-risk patients unable to respond to vaccination approved by HM for formulary addition in May, was activated in epic and inventory obtained.

To order, enter a therapy plan and indicate the outpatient infusion location you want your patient to receive treatment.

Providers must review the [EUA Patient information fact sheet](#) with patients prior to ordering.

Patients require financial clearance prior to scheduling. Pemivibart is not on allocation as previous agents were.

### Auto Verification of Medication Orders:

Autoverifying medication orders is a powerful efficiency tool, but must be highly standardized, safe, and monitored. P&T approved System Policy PCPS 212 Auto-verification of Medication Orders that was piloted at HMH and satisfied the requirements. Implementation of these practices can be applied across HM entities uniformly.

To assure safety of our emergency department patients, all IV insulin orders and orders for opioid with frequencies greater than, "once" are not autoverified in that setting.

## MEDICATION POLICY UPDATES

Amaris Fuentes, PharmD

### Rho-Gam for Automated Dispensing Cabinet Override

Rho-Gam will be added to System\_PCPS152 Overriding Medications in Automated Dispensing Cabinet as an allowance for override in Emergency Department areas. This change facilitates timely administration for obstetric patients in our emergency care centers.

## SYSTEM CHEMOTHERAPY STEWARDSHIP COMMITTEE

Adam Smith, PharmD

### Hematology—Oncology Epic Treatment Plan Review Oversight Efficiency Update

There are approximately 1,300 hematology-oncology treatment plans in Epic used for standard of care and research-based entries. To ensure continued appropriateness and safety of hematology-oncology treatments, Epic treatment plans are regularly reviewed to ensure the content is consistent with best-practices and contains contemporary formulary product selection and dosing. Each month a number of treatment plans are reviewed for system-wide optimization to ensure dosing, and monitoring safeguards (e.g., labs/holding parameters, supportive care).

To streamline the review and approval process of proposed changes, physician members of the System Chemotherapy Stewardship Committee will provide formal review and approvals. This reporting change is expected to improve the efficiency of the approval process and provide visibility to the most affected provider group.

### Antiemetic Standardization

To decrease variability and align HM practice with NCCN guideline-directed recommendations amongst HM sites for Chemotherapy-induced nausea and vomiting (CINV) management, a standardized antiemetic protocol was approved and will be incorporated into all HM treatment plans .

Emetogenic Risk	Treatment Options
Minimal	None
Low	Ondansetron 8 mg
Moderate	Palonosetron (except for SQ or Multi-day chemotherapy regimens) Dexamethasone 12mg default (dosing buttons available for alternative dosing options)
High	Palonosetron (except for SQ or Multi-day regimens) Dexamethasone 12mg default (dosing buttons available for alternative dosing options) Fosapreitant

### Rasburicase Fixed-Dose Policy

Rasburicase is a recombinant urate-oxidase indicated for the management of hyperuricemia associated with malignancy in patients receiving anticancer therapy expected to result in tumor lysis syndrome (TLS). [Published literature](#) and HM internal studies support single, fixed-dose administration. A HM CQI review found variable dosing practices across HM and inconsistencies with a previously approved dose-capping approach. To address the variance, an existing entity-level policy was elevated to a [system policy](#) and refinements to monitoring, and dosing recommendation were updated. Rasburicase continues to be restricted to nephrology and hematology/oncology providers. Use is restricted to patients with serum uric acid levels >7.5 mg/dL and two risk factors or may be treated if the urica acid level is less than 7.5 mg/dL if the patient has 3 or more risk factors. Automatic dose capping will be applied by the pharmacists as follows: Uric acid levels <10: Single 3mg dose ; Uric acid levels ≥10: Single 6 mg dose

## ANTICOAGULATION USE SAFETY

Michael Sirimatueros, PharmD



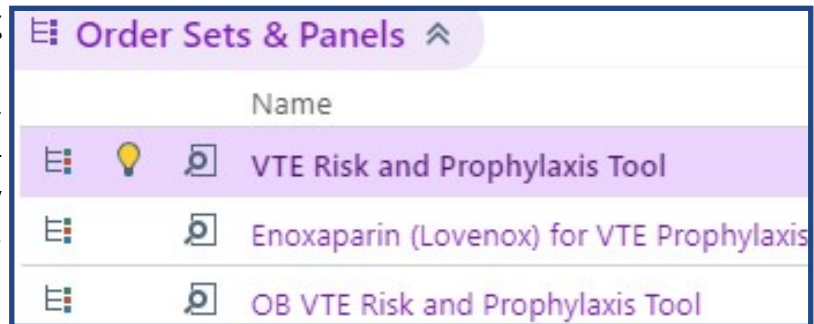
### Enoxaparin VTE Prophylaxis in Overweight and Obese Patients

Enoxaparin 40 mg once daily for venothromboembolism (VTE) prophylaxis in overweight and obese patients has not always been effective due to their high risk for VTE. A fixed-dose enoxaparin BID policy for overweight and obese patients ([System RXCLIN 159](#)) was implemented in 2019 providing recommended VTE prophylaxis dosing based on patient weight (chart below). Orders originating from the VTE prophylaxis order sets automatically select the appropriate fixed-dose regimen based on the charted weight.

Patient Weight (in kg)	Recommended Enoxaparin Dose
100 to 139 kg	30 mg subcutaneously twice a day
140 kg or greater	40 mg subcutaneously twice a day

A HM review of ~2,400 overweight/obese patients demonstrated positive outcomes including low rates of inpatient thrombosis and bleeding for patient's following policy-guided dosing. Of note, 21% of overweight/obese patients were not dosed accordingly. The majority of non-policy guided orders were either purposeful adjustments (i.e. anemia, acute blood loss) or failure to adjust when using standalone orders from the facility list (outside of the VTE ppx orders sets). The standalone orders lack the overweight/obesity dosing guidance recommendations upon ordering. As such, it is recommended that all VTE ppx orders are placed utilizing the VTE prophylaxis order sets available in Epic.

These order sets include important dosing guidance based on weight, renal function, and population-based indications (e.g., surgical, OB, etc.). The ability to order VTE prophylaxis as a standalone entry through the facility list will be phased-out to promote use of the Order Sets and take advantage of the built-in safeguards.



This change is the next in a series of previous enhancements to achieve more consistent care for our patients and improve outcomes. Our [April 2024 P&T News](#) has more about dose guidance with UFH.

### Unfractionated Heparin (UFH) Protocol Consolidation Planning Updates

As described in our [November 2023 P&T News](#), the System Anticoagulation Committee has been reviewing the Unfractionated Heparin (UFH) dosing protocols for appropriate consolidation. Pharmacists are consulted on over 11,000 patients a year for management and regularly perform quality assurance reviews. A review of the intra-aortic Balloon Pump protocol and liver transplant protocols were recently completed and were the last in a series of assessments completed and presented over the last several months. The corresponding epic build and testing are underway. Education on the changes and implementation is expected in September 2024.



# ANTIMICROBIAL STEWARDSHIP

Shivani Patel, PharmD & Wesley Hoffmann, PharmD

## Penicillin Allergy Assessment and Antibiotic Challenge Ordersets Introduced

In past P&T News issues we have detailed the [PenFAST assessment](#) and the utility of identifying improper penicillin allergy results to avoid suboptimal antibiotic selection and reduce the risk of adverse events and treatment failures. Nursing staff are now completing PenFAST assessments in Epic and the information is in the Admission Tab of the patient's chart.

Patients answer questions about when the penicillin reaction occurred, if it involved anaphylaxis/angioedema, if a life threatening reaction (SCAR, DRESS, AGEP, etc.) occurred, and if treatment was required. Based on these answers, a PenFAST score is calculated and can be found in the allergy section of the patient's chart. Using the PenFAST score alternative beta-lactams may be used. Patients with scores of  $\leq 2$ , can be safely treated with cephalosporins avoiding agents like fluoroquinolones, aztreonam, and clindamycin.

## Antibiotic Challenge Ordersets

There are cases where an antibiotic challenge is warranted to treat a patient with the most effective antimicrobial. Patients with PenFAST scores less than 3 may be considered for a challenge in certain indications. The Antibiotic Challenge orderset provides necessary guidance, rescue medications, vital sign monitoring, and dosing regimens of antimicrobials for a safe antibiotic challenge to confirm or rule-out a labeled allergy.

Search for "Antibiotic Challenge Orders" in Epic to locate order set. Oral and IV beta lactams are included as options in the challenge orderset.

Contact your local antimicrobial stewardship team for any questions.

**Penicillin Allergy Risk Assessment**

Has the Penicillin Allergy Assessment been completed?  
 Patient does NOT have a Penicillin allergy | NO - Complete the Penicillin Allergy Assessment | Unable to assess

The Penicillin allergy is being reported by:  
 Patient | Family | Other Caregiver

Was the penicillin allergy ever reported to be one of the following reactions?  
 Rash, Hives or Itching | 4=Interstitial nephritis/drug induced liver injur... | 4.0=Serum sickness/drug induced fever (+4)  
 4.00=SJS/TEN (i.e. skin sloughing/peeling) (+4) | 4.000=DRESS or AGEP (+4) | No

Unknown

**Examples:** Acute interstitial nephritis (i.e. kidney damage), drug induced liver injury (i.e. liver damage), serum sickness (i.e., fever and joint pain WITH rash), or a reaction affecting the mucosal areas (i.e., mouth)

**\* Abbreviations:** Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis (TEN), drug reaction with eosinophilia and systemic symptoms (DRESS), acute generalized exanthematous pustulosis (AGEP), and generalized bullous fixed drug eruptions (GBFDE).

**Use caution in patients with severe underlying cardiopulmonary disease.**

Did the reaction occur within the last 5 years?  
 2=Yes (+2) | No | 1=Unknown (+1)

Was the reaction characterized by anaphylaxis or angioedema (i.e. difficulty breathing or lip swelling)?  
 3=Yes (+3) | No | 1=Unknown (+1)

Did the reaction require treatment or hospitalization? (i.e. diphenhydramine (Benadryl), steroids, or intubation)  
 1=Yes (+1) | No | Unknown

**PENFAST SCORE**

Pen-Fast Score	Allergy Risk	Interpretation
0 points	Very low risk of positive penicillin allergy (<1%)	+ MD may consider oral challenge of Amoxicillin + Cephalosporins safe to use
1-2 points	Low risk of positive penicillin allergy (~5%)	+ MD may consider oral challenge of Amoxicillin + Cephalosporins safe to use
3 points	Moderate risk of penicillin allergy (20%)	+ Oral challenge NOT recommended without skin testing and allergy evaluation + Cephalosporins may be used
≥ 4 points	High risk of positive penicillin allergy (50%)	+ Oral challenge NOT recommended + Cephalosporins may be considered under close monitoring

**Allergies**

Reviewed by: [Name] RN on 6/12/2024

Allergy	Severity	Reactions	Comments
Penicillin	Low	Rash, PENFAST 0	5/2/24 - tolerates ceftriaxone with no issues PenFast Score 0: Very low risk of positive penicillin allergy (<1%) MD may consider oral challenge of Amoxicillin Cephalosporins safe to use

**Antibiotic Challenge Orders**

**Instructions:**  
 Communicate with patient's nurse that you will be performing the procedure.  
 Nursing to check/document vital signs (BP, HR, RR, O2 sat) before dose.  
 Nursing to administer dose and observe for any signs of reaction at 15-minute time mark and 1 hour time mark after administering dose.

**Definitions of Adverse Reactions:**  
**Mild reaction:** Identified as a localized reaction. Swelling (edema) of any body part that does not involve throat/laryngeal area, hives <50% body surface area, itching, flushing, eye redness/tearing, sneezing, runny nose, nasal congestion.  
**Moderate reaction:** Identified by more systemic signs or symptoms. Swelling (edema) of any body part that does not involve throat/laryngeal area, hives >50% body surface area, cough/wheezing/dyspnea that responds to albuterol, O2 sats at baseline, GI symptoms including vomiting and diarrhea.  
**Severe reaction:** Identified by life-threatening, more severe signs or symptoms. Swelling (edema) of throat/laryngeal area, hives >50% body surface area, respiratory compromise, hypotension with >20 point drop in SBP and/or MAP <65, unresponsiveness, cardiopulmonary arrest.

**Nursing**

- Vital Signs**
  - Vital signs - T/P/R/BP Per Unit Protocol  
Routine, Per unit protocol, Starting today at 1310, Until Specified  
PRE antibiotic challenge
  - Vital signs - T/P/R/BP Per Unit Protocol  
Routine, Per unit protocol, Starting today at 1323, Until Specified  
15 minutes POST antibiotic challenge
  - Vital signs - T/P/R/BP Per Unit Protocol  
Routine, Per unit protocol, Starting today at 1410, Until Specified  
1 hour POST antibiotic challenge
- Notify**
  - Notify Physician- Notify physician/APP immediately if patient experiences adverse reaction during challenge. Mild reaction: Identified as a localized reaction. Swelling (edema) of any body part that does not involve throat/laryngeal area, hives <5%.  
Routine, Until discontinued, Starting today at 1310, Until Specified, Notify physician/APP immediately if patient experiences adverse reaction during challenge. Mild reaction: Identified as a localized reaction. Swelling (edema) of any body part that does not involve throat/laryngeal area, hives <50% body surface area, itching, flushing, eye redness/tearing, sneezing, runny nose, nasal congestion. Moderate reaction: Identified by more systemic signs or symptoms. Swelling (edema) of any body part that does not involve throat/laryngeal area, hives >50% body surface area, cough/wheezing/dyspnea that responds to albuterol, O2 sats at baseline, GI symptoms including vomiting and diarrhea. Severe reaction: Identified by life-threatening, more severe signs or symptoms. Swelling (edema) of throat/laryngeal area, hives >50% body surface area, respiratory compromise, pro hypotension with >20 point drop in SBP and/or MAP <65, unresponsiveness, cardiopulmonary arrest.
- Medications**
  - Adverse Reaction Management**
    - epiNEPHrine (ADRENALIN) injection 1 mg/mL  
0.3 mg, intramuscular, once PRN, anaphylaxis, Starting today at 1309, Until Discontinued, 1 dose  
Administer for moderate and severe adverse reaction
    - albuterol (PROVENTIL) nebulizer solution 2.5 mg  
2.5 mg, inhaled, once PRN, wheezing, Starting today at 1309, Until Discontinued, 1 dose  
Administer for moderate and severe adverse reaction  
Aerosol Delivery Device: Hand-Held Nebulizer
    - diphenhydRAMINE (BENADRYL) injection 25 mg  
25 mg, intravenous, once PRN, anaphylaxis/allergic reaction, Starting today at 1309, Until Discontinued, 1 dose  
Administer for mild, moderate, and severe adverse reaction.
    - methylPREDNISolone sodium succinate (Solu-MEDROL) injection 125 mg  
125 mg, intravenous, administer over 5 minutes, once PRN, anaphylaxis/angioedema, Starting today at 1309, Until Discontinued, 1 dose  
Administer for moderate and severe adverse reaction.
  - If patient received a beta blocker in the last 24 hours, please order glucagon
- Oral or IV Test Dose Antibiotics**
  - Please document any appropriate changes in allergy status once test dose procedure is completed.  
If possible, hold the following medications the day of the Test Dose Procedure:
    - Beta blockers: inhibit the action of epinephrine
    - ACE inhibitors: increase the risk of an allergic reaction

**Oral Test Dose Medications**  
 Test dose for amoxicillin-clavulanate (AUGMENTIN) will use amoxicillin.

- amoxicillin (AMOXIL)
- cephalosixin (KEFLEX)

**IV Test Dose Medications**  
 IV Antibiotic (Test dose = 10% of the full dose)

- ampicillin IV
- ceFAZolin (ANCEF) IV
- cefepime (MAXIMED) IV
- ceFTAZidime (FORTAZ) IV
- ceftriaXone (ROCEPHIN) IV
- ceftriaXone-tazobactam (ZERBAXA) IV (RESTRICTED)
- meropenem (MERREM) IV
- netilmicin (UNIFEN) IV
- penicillin G potassium IV
- piperacillin-tazobactam (ZOSYN) IV