

MSOS Member Briefing

January 2023

MSOS Member Briefing January 2023

Moderated by: E. Robert Feroli, PharmD, FASHP



1

Baclofen Accumulation in Acute Kidney Injury

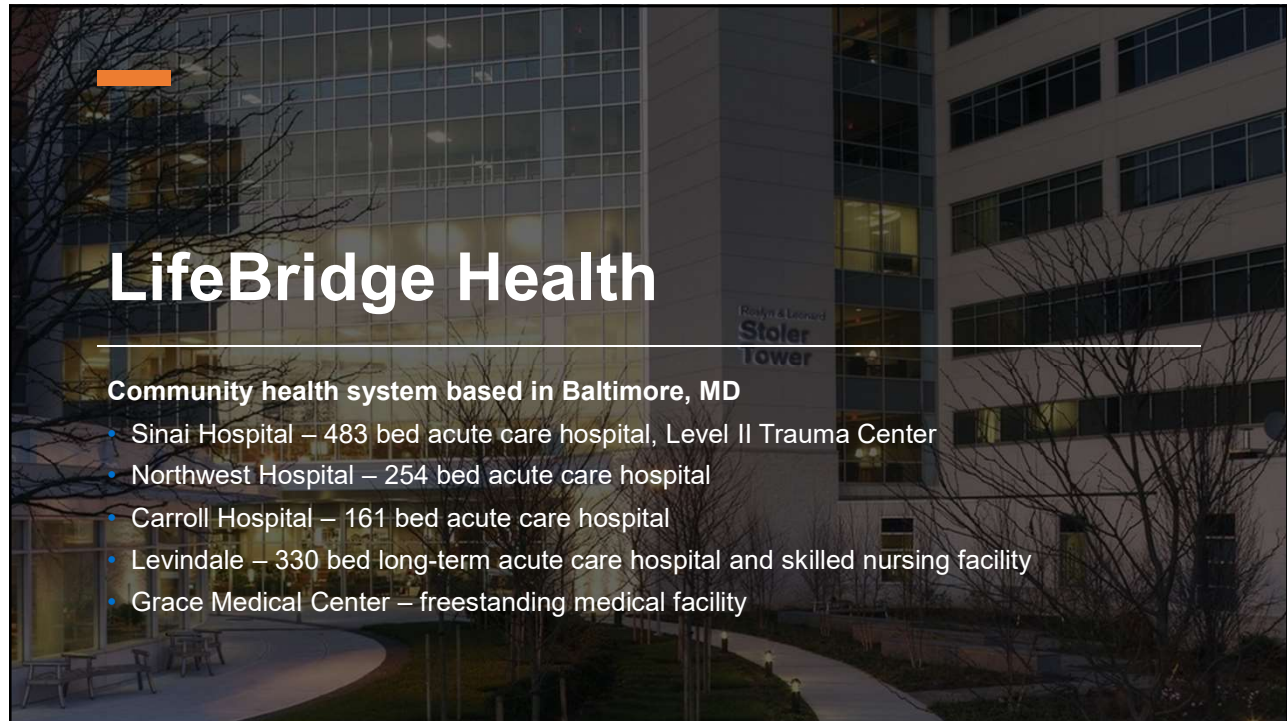
Jacqueline Hartford, PharmD, BCPS, BCCCP, CPPS
Medication Safety Officer
LifeBridge Health
Baltimore, MD



2

MSOS Member Briefing

January 2023



3

Reported Safety Event

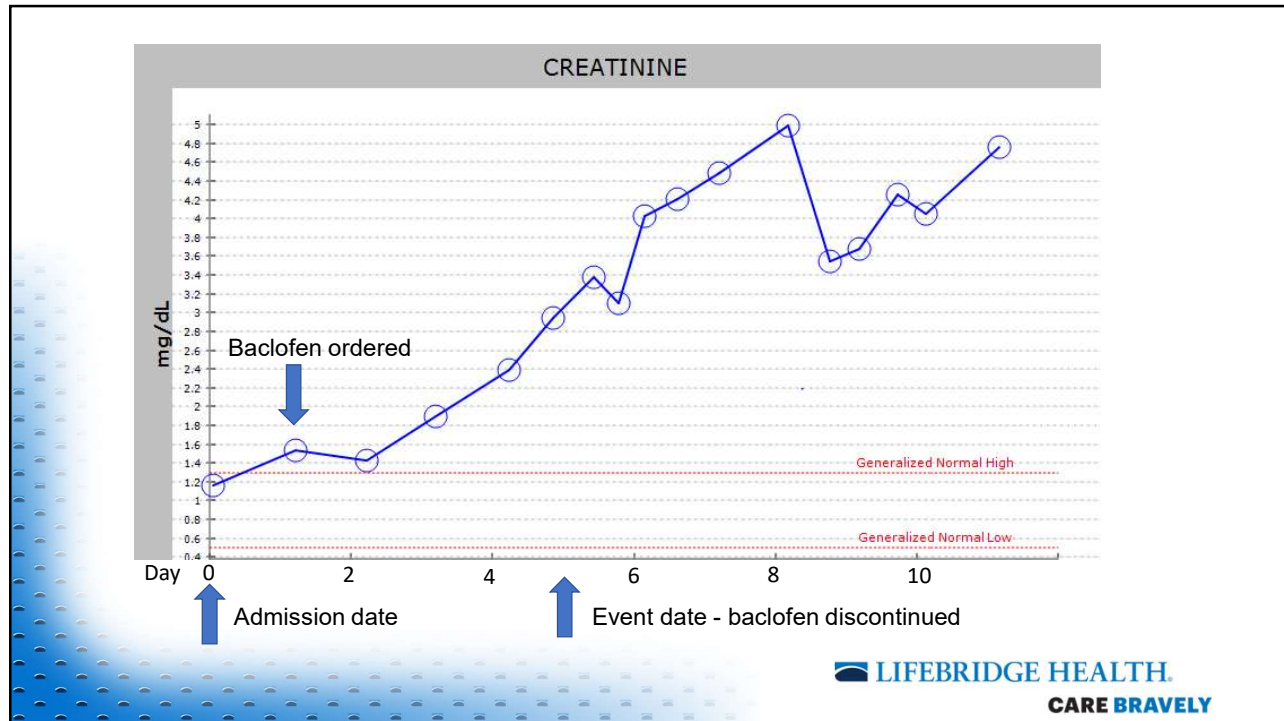
- A patient with history of quadriplegia and stage 2/3 CKD was admitted for nausea and vomiting and treated for cholecystitis
- Home medications were ordered, including baclofen 15 mg PO QID
- On day 6 of admission, a rapid response was called for a change in mental status and increasing lethargy for 36 hours
- The reporter noted that renal function was decreasing with minimal urine output and was concerned for baclofen overdose due to reduced clearance and high dose
- Nephrology was consulted, the patient was intubated, and dialysis was initiated for acidosis

 **LIFEBRIDGE HEALTH.**
CARE BRAVELY

4

MSOS Member Briefing

January 2023



5

Initial Review

The baclofen order was appropriate at the time it was ordered, so no pharmacist intervention was warranted upon verification.

The care team noted the rising serum creatinine but did not adjust the baclofen dose.

An automatic pharmacy renal dosing policy is in place for multiple medications.

LIFEBRIDGE HEALTH
CARE BRAVELY

6

MSOS Member Briefing

January 2023

RCA - Cause & Effect Analysis

- ★ Human factors
 - Equipment performance
 - Environmental factors
- ★ Policies, procedures, guidelines
- ★ Staff training, competency, credentialing, performance
 - Staffing levels
 - Availability of information
 - Communication
 - Technology
 - Leadership
 - Organizational culture

Key finding: Lack of process redundancies to identify risk of baclofen accumulation with renal impairment

7

Intervention – Assessment Trigger

Asynchronous Alert

Renal dosing protocol does not include baclofen as dose adjustments are not straightforward



Created a task to fire to pharmacist worklist if a patient is on baclofen and has a SCr ≥ 1.5 mg/dL

8

MSOS Member Briefing

January 2023

Pharmacist Multi-Patient Task List

Multi Patient Task List

Departmental View

Sunday, December 15, 2022

Clinical Pharmacy Task

NW Warfarin

AC Clinic

RSQ

Meds to Bed

Outpatient Med Ref CH

Discharges CH

Task retrieval completed

AB Patients	Name	Location/Room/Bed	Task Description	Task Status	Scheduled Date and Time	Mnemonic	Provider Name
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>							

Baclofen SCr ALERT

Completed

04/06/22 7:05:19 EDT, ONCE

This order is placed by the system as a result of the serum creatinine rising for this patient.

✖ CTUKSPU, ALDOR D	PFOUMQ, LOMQGLD Y 07/05/1946	55T1 / 5008 / A	Warfarin Dosing	Overdue	11/07/2022 06:00	Pharmacy Dosing Service - Warfarin	Oria DO, David
✖ HSPVUGL, DVSHPGZ	TBBZ, LVKGRD 06/05/1946	65T1 / 6030 / A	Warfarin Dosing	Overdue	11/07/2022 06:00	Pharmacy Dosing Service - Warfarin	Hashim MD, Rao Hamza
✖ HLTIX, ASLAGUG YTGK							

9

Impact

An audit was conducted for 3 months after implementation

The alert was triggered for 15 patients during this timeframe

Baclofen orders were discontinued in 2 cases, and dose was reduced in 1 case

Continuation of baclofen was clinically appropriate in the remaining cases

No adverse drug reactions attributed to baclofen were noted

Local incident and finding → Implementation across the health system

10

MSOS Member Briefing

January 2023

Questions?

Jacqueline Hartford, PharmD, BCPS, BCCCP, CPPS
Medication Safety Officer
LifeBridge Health
jhartfor@lifebridgehealth.org



11

Look-alike Sound-alike Drug List Update

Mona Hammam, PharmD, MS, BCPS, FISMP
Medication Safety Officer

January 2023



12

MSOS Member Briefing

January 2023



Dana-Farber Cancer Institute (DFCI)

- Dana-Farber Cancer Institute is a mostly outpatient ambulatory setting specializing in cancer care for children and adults.
- An affiliate of Harvard Medical School and a Comprehensive Cancer Center designated by the National Cancer Institute.
- Annually at Dana Farber there are 364,577 outpatient visits and 188,242 infusion treatments at our 8 locations within Massachusetts and New Hampshire.
- We use Epic as our EHR and anticancer treatment must be ordered through an approved, diagnosis linked Beacon treatment order set. If a provider wishes to order a treatment that is not linked to the patient's diagnosis, the order needs to provide a reference and is further verified and approved by a pharmacy manager before patient can receive treatment.

13




How often are others updating their LASA drug list?

- Annually
- Every 2 years
- Right before an accreditation visit
- Never, just update the date on the document

14


MSOS Member Briefing

January 2023




Where do I start to update our annual list at an ambulatory oncology center? (adding pairs)

1. Download and analyze 6 months barcode dispense, prep, and administration data
2. Check safety reports entered at my institution
3. Check ISMP newsletters within the past year
4. Get a list of new formulary added medications over the past 12 months

 Dana-Farber Cancer Institute


15

15



Start Making a List of Possible Pair Additions

1. Dispense and prep data
 - Any barcode error that appeared at least twice after an employed mitigation strategy or at 2 different locations for the same drug pair
 - Automatic add to LASA list
2. Safety reports entered at DFCI
 - Add reported drug pair to LASA worksheet
3. Check ISMP newsletters within the past year
 - Add pair if we carry both drugs mentioned in newsletter
4. New formulary additions
 - All new drugs to be vetted using LASA worksheet
 - Biosimilars are an automatic add to LASA list

 Dana-Farber Cancer Institute

16

16

LASA Worksheet

 Dana-Farber

17

Search Criteria

Proposed Drug Name *

pacritinib

Threshold *

55

1

Max 50 characters.

Range 0 - 100

<div><div></div><div></div></div> Data Source	Date Updated	Product Count
<input checked="" type="checkbox"/> Drugs At FDA	2023-01-05	7,959
<input checked="" type="checkbox"/> RxNorm	2023-01-06	31,855
<input type="checkbox"/> Suffixes In Proper Name of Biologic Products	2023-01-09	145
<input checked="" type="checkbox"/> United States Adopted Names	2022-08-08	692

Reset


Search

Dana-Farber Cancer Institute

18

MSOS Member Briefing

January 2023




POCA Results

Proposed Drug Name: **pacritinib** Threshold: **55** Show Results By: ☐ All ☒ Combined ☐ Phonetic ☐ Orthographic ☐ USAN Stem

Combined Results (374 Hits)


70% and Higher: 20 Between 55% and 69%: 354 54% and Lower: 0

Name of Concern	Combined Score (%) ↓
PACRITINIB	100
CERITINIB	80
AVAPRITINIB	79
BARICITINIB	76
FEDRATINIB	76
RIPRETINIB	76
AXITINIB	74
CAPMATINIB	74
CRIZOTINIB	74
TUCATINIB	74

 Dana-Farber Cancer Institute


19

19



Removing Pairs

- Check each drug pair on list for number of dispenses within the past 3 years.
 - If it has not been dispensed or ordered in the past 3 years, mark for deletion

 Dana-Farber Cancer Institute

20

20

MSOS Member Briefing

January 2023

List Approval

- Pharmacy policy committee approved all edits to list.

<u>Afatitinib</u>	<u>Asitinib</u>	<u>Alectinib</u>
<u>Ciltacabtagene autoleucel</u>	<u>Idecabtagene vicleucel</u>	
CISplatin	CARBOplatin	Oxaliplatin
Carmustine	Lomustine	
CloFARabine	ClaDRibine	
Cetuximab	Siltuximab	
DAPTOmycin	DACTINomycin	
DAUNOrubicin	DOXOrubicin	
DAUNOrubicin	DAUNOrubicin Liposomal	
Dacarbazine	Procarbazine	
Darzalex	Darzalex Faspro	
DOCEtaxel	PACLItaxel	Cabazitaxel
DOCEtaxel	DOXOrubicin	
DOXOrubicin	DOXOrubicin Liposomal	
DOXOrubicin	IDArubicin	
Duvelisib	Durvalumab	Daratumumab
Etoposide	Etoposide phosphate	
PACLItaxel	Albumin-bound PACLItaxel	
EriRU Bicin	EriBULin	
Elotuzumab	Ecilizumab	
Gefitinib	Gilteritinib	
Herceptin	Herceptin Hylecta	
IDArubicin	DAUNOrubicin	

Hamman, Mona October 04, 2022
Only ID= melle

Reply Resolve

Hamman, Mona
Same comment as above, retire pair

Hamman, Mona
Same as above, rec retire pair

Hamman, Mona October 04, 2022
No responses in 3 years, not in pump, retire all pair with this drug?

Reply Resolve

21

Questions?

Thank you!

Contact information:
mona_hammam@dfci.harvard.edu

22

MSOS Member Briefing

January 2023

Standardizing Communication/Feedback on Reported Medication Events

HEATHER ELLIS, PHARM.D
MEDICATION SAFETY COORDINATOR
ADVENTHEALTH ORLANDO

23

AdventHealth Orlando



- ▶ Located north of downtown Orlando
- ▶ Beds = 1,368
 - ▶ 200 ICU beds
- ▶ Non-profit, research, teaching medical center
- ▶ Pharmacy Department:
 - ▶ 115 Pharmacy Technicians
 - ▶ 118 Pharmacists
 - ▶ 6 clinical decentralized pharmacist teams

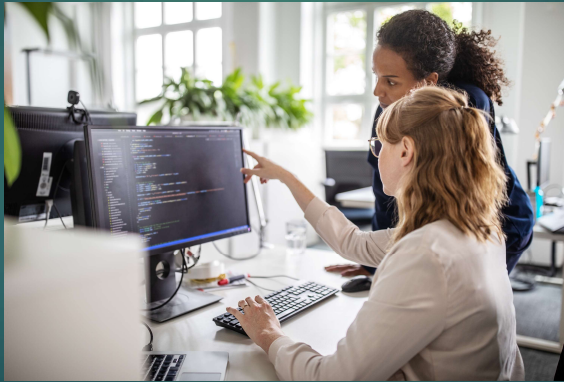
24

MSOS Member Briefing

January 2023

Background

- ▶ Does anyone have something in current state to discuss medication errors with staff?



25

Getting Started

- ▶ Continuous Quality Improvement Meeting
 - ▶ Clinical and Operations managers
- ▶ Have a set process for staff AND for management
 - ▶ Sent for "awareness and feedback"



26

MSOS Member Briefing

January 2023

Response to Medication Events

- ▶ Standardized
- ▶ Concise
- ▶ Share the “why”
- ▶ Respectful

Subject [secure] Medication Event Review Request

Good afternoon,

I wanted to ask if you may be able to forward this request to __ for feedback on the timeline of the medication event listed below. We are looking for system issues and possible fixes. The information provided is for quality improvement only.

Patient Account Number:
Medication order:
Short summary:

Many opportunities for process improvement have been identified by staff reviewing reported medication events and I value your time and input!

Thank you!

27

How to Implement

- ▶ Share your approach
 - ▶ Team energizers



28

MSOS Member Briefing

January 2023

Possible Barriers

- ▶ Current communication to staff who report medication events
 - ▶ From outside the pharmacy department



29

Status Check

- ▶ Culture of reporting
- ▶ Appropriate escalation
- ▶ Positive feedback on safety surveys



30

MSOS Member Briefing

January 2023

Questions?

HEATHER.ELLIS2@ADVENTHEALTH.COM

31



ISMP Update MSOS Briefing January 2023

Michael R. Cohen, RPh, MS, ScD (hon.), DPS (hon.), FASHP
President Emeritus
Institute for Safe Medication Practices

©2022 ISMP | www.ismp.org | 32

32

MSOS Member Briefing

January 2023

MSOS Briefing. ISMP Report for January 26, 2023

- Changes to Joint Commission Standards and National Patient Safety Goals
- ASTM Standard for color coded labels in anesthesia withdrawn
- ISMP updates its tall man letter list
- ISMP acting as co-investigator in FDA-funded study on tall man letters
- Next week, ISMP will release Targeted Medication Safety Best Practices for Community/Ambulatory Pharmacy



©2023 ISMP | www.ismp.org | 33

33

Changes to TJC MM standards and NPSGs

- The Joint Commission has withdrawn certain National Patient Safety Goals and Medication Management Standards. ISMP is concerned that some will adversely impact medication safety.




©2023 ISMP | www.ismp.org | 34

34


MSOS Member Briefing

January 2023



Issued December 20, 2022

Prepublication Requirements



Select Retired and Revised Accreditation Requirements

The Joint Commission has approved the following revisions for prepublication. While revised requirements are published in the semiannual updates to the print manuals (as well as in the online *E-dition*®), accredited organizations and paid subscribers can also view them in the monthly periodical *The Joint Commission Perspectives*®. To begin your subscription, call 800-746-6578 or visit <http://www.jointcommission.org>.

Please note: Where applicable, this report shows deleted language struckthrough and new language underlined.

APPLICABLE TO THE HOSPITAL ACCREDITATION PROGRAM
Effective February 19, 2023

RETIRED ELEMENTS OF PERFORMANCE

Environment of Care (EC) Chapter

Standard EC.02.01.03
The hospital prohibits smoking except in specific circumstances.

EC.02.01.03, EP 1
The hospital develops a written policy prohibiting smoking in all buildings. Exceptions for patients in specific circumstances are defined.
Note: The scope of this EP is concerned with all smoking types—tobacco, electronic, or other.

Human Resources (HR) Chapter

Standard HR.01.02.07
The hospital determines how staff function within the organization.


HR.01.02.07, EP 5
Staff supervise students when they provide patient care, treatment, and services as part of their training.

Standard HR.01.07.01
The hospital evaluates staff performance.

HR.01.07.01, EP 5
When a licensed independent practitioner brings a nonemployee individual into the hospital to provide care, treatment, and services, the hospital reviews the individual's competencies and performance at the same frequency as individuals employed by the hospital.

Page 1 of 10
Prepublication Standards
Effective February 19, 2023

© 2022 The Joint Commission



An ECRI Affiliate

MM.03.01.01, EP 9
The hospital keeps concentrated electrolytes present in patient care areas only when patient safety necessitates their immediate use, and precautions are used to prevent inadvertent administration.

NPSG.03.05.01, EP 8
When heparin is administered intravenously and continuously, the hospital uses programmable pumps in order to provide consistent and accurate dosing.

https://www.jointcommission.org/-/media/tjc/documents/standards/prepublications/retired-2023/hap_standards_simplification_prepub_feb2023.pdf

©2023 ISMP | www.ismp.org | 35

35

Changes to TJC MM standards and NPSGs

- American Society of Testing and Materials (ASTM) has withdrawn Standard Designation: D4774 – 11, “User-applied Drug Labels in Anesthesiology” (color-coded labels, by pharmacologic class, for drugs commonly used in anesthesia).

36

MSOS Member Briefing

January 2023

Designation: D4774 - 11 (Reapproved 2017)

Standard Specification for User Applied Drug Labels in Anesthesiology¹

This standard is based under the third designation D4774; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last revision. A superscripted letter (a) indicates an editorial change since the last revision or approval.

1. Scope

1.1 This specification covers the size, color, pattern, and type used on labels applied to unlabeled syringes filled by the users or their agents to identify the drug content. This specification is not intended to cover labels applied by the drug manufacturer.

1.2 The values stated in SI units are to be regarded as the recommended values. The use of inch-pound system values, not being exact equivalents, may result in nonconformance with the standard.

1.3 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.

1.4 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 ASTM Standards:²

¹ This specification is under the jurisdiction of ASTM Committee F02 on Primary Barrier Packaging and is the direct responsibility of Subcommittee F02.30 on Package Design and Development.

² Current edition approved Dec. 15, 2017. Published January 2018. Originally approved in 1988. Last previous edition approved in 2011 as D4774 - 11[®]. DOI: 10.1520/D4774-11(2017).

³ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For Annual Book of ASTM Standards volume information, refer to the standard's Document Summary page on the ASTM website.

⁴ Available from Pantone, Inc., 500 Commerce Boulevard, Carlstadt, NJ 07023-3006.

D4774 - 11 (2017)

DRUG CLASS ^a	EXAMPLES	PANTONE COLOR (unmixed)	LABEL EXAMPLES
1 Induction Agents	Etomidate, Ketamine, Methohexital, Propofol, Thiopental	YELLOW	DATE _____ TIME _____ mg/mL
2 Benzodiazepines	Diazepam, Midazolam	ORANGE 151	DATE _____ TIME _____ mg/mL
3 Benzodiazepine Receptor Antagonists	Flumazenil	ORANGE 151 AND WHITE DIAGONAL STRIPES	DATE _____ TIME _____ mg/mL
4a Muscle Relaxants (Depolarizers)	Succinylcholine ^b	FLUORESCENT RED 805	DATE _____ TIME _____ mg/mL
4b (Non-Depolarizers)	Atracurium, Cisatracurium, Mivacurium, Pancuronium, Rocuronium, Vecuronium	FLUORESCENT RED 805	DATE _____ TIME _____ mg/mL
5 Reversible Antagonists (Non-Depolarizers)	Endorphin, Neostigmine, Pyridostigmine	FLUORESCENT RED 805 AND WHITE DIAGONAL STRIPES	DATE _____ TIME _____ mg/mL
6 Narcotics	Alfentanil, Fentanyl, Hydromorphone, Meperidine, Morphine, Sufentanil, Remifentanyl	BLUE 297	DATE _____ TIME _____ mg/mL
7 Narcotic Antagonists	Naloxone, Nalmefene	BLUE 297 AND WHITE DIAGONAL STRIPES	DATE _____ TIME _____ mg/mL
8 Major Tranquilizers	Chlorpromazine, Droperidol	SALMON 156	DATE _____ TIME _____ mg/mL
9a Vasopressors	Epinephrine, Norepinephrine, Phenylephrine	VIOLET 255	DATE _____ TIME _____ mg/mL
9b Vasopressors	Epinephrine ^b	VIOLET 255	DATE _____ TIME _____ mg/mL
10 Hypertensive Agents	Hydralazine, Nitroglycerine, Nitroprusside, Phenolamine, Terbutaline	VIOLET 255 AND WHITE DIAGONAL STRIPES	DATE _____ TIME _____ mg/mL
11 Local Anesthetics	Bupivacaine, Chlorprocaine, Lidocaine, Mepivacaine, Procaine, Ropivacaine, Tetracaine	GRAY 401	DATE _____ TIME _____ mg/mL
12 Anticholinergic Agents	Atropine, Glycopyrrolate, Scopolamine	GREEN 367	DATE _____ TIME _____ mg/mL
13 Beta Blockers	Esmolol ^b , Labetalol ^b , Metoprolol ^b	COPPER 878U	DATE _____ TIME _____ mg/mL

^a Drugs that do not fit into the above classes should be labeled with black printing on a white background. The examples shown are representative, not restrictive.

^b All printing is to be in black boldtype, with the exception that "succinylcholine" and "epinephrine" shall be printed against the background color on reversed side letters within a black bar running from edge to edge of the label.

FIG. 1 Standard Background Colors for User Applied Syringe Drug Labels

37

Changes to TJC MM standards and NPSGs

— ISMP has updated its list of medication name pairs with recommended tall man letters. A report appears in the 01/26/2023 ISMP Medication Colors Safety Alert! (today's issue).

©2023 ISMP | www.ismp.org | 38

38

MSOS Member Briefing

January 2023

January 26, 2023 | Volume 28 • Issue 2


An ECRI Affiliate

Acute Care

ISMP Medication Safety Alert!

Educating the Healthcare Community About Safe Medication Practices

ISMP updates its list of drug names with tall man (mixed case) letters



Several design techniques have been explored for the purpose of differentiating look-alike drug names to prevent medication selection errors. Tall man (mixed case) lettering describes a method for differentiating the unique letter characters of similar drug names known to have been confused with one another. Starting with a generic drug name expressed in lowercase letters, tall man lettering highlights the differences between similar drug names by CAPITALIZING dissimilar letters. Occasionally, brand names, which always start with an UPPERCASE letter, may require the use of tall man letters to differentiate them from other brand or generic names. The use of tall man lettering to accentuate a unique portion of a drug name with UPPERCASE letters, along with other means such as color, **bolding**, or a contrasting background can draw attention to the dissimilarities between look-alike drug names as well as alert healthcare providers that the drug name can be confused with another drug name.

Since 2008, ISMP has maintained a list of drug names with recommended, UPPERCASE and **bolded** tall man letters. The list includes mostly generic-generic drug name pairs or larger groupings, although a few brand-brand or brand-generic name pairs are also included. Periodically, ISMP updates this list; it was last revised in 2016. Each time the list is updated, we analyze reported events from our error databases, survey practitioners on the topic, and conduct an internal review of drug names that would benefit from the application of UPPERCASE and **bolded** tall man lettering. The internal assessment includes an exploration of orthographic similarity, patterns of similarities in dosage, formulation, and use; and the potential for patient harm if the drugs are confused.

Standardization of Tall Man Letters

To promote standardization regarding which letters to present in **bold** UPPERCASE, ISMP follows a tested methodology whenever possible called the C03 rule.¹ The rule suggests working from the left of the drug name first by CAPITALIZING all the characters to the right once two or more dissimilar letters are encountered. Then, working from the right of the word back, returning two or more letters common to both words to lowercase letters. When the rule cannot be applied because there are no common letters on the right side of the word, the methodology suggests CAPITALIZING the central part of the word only. When this rule fails to lead to the best tall man lettering option (e.g., makes names appear too similar or hard to read based on pronunciation), an alternative option is considered. ISMP suggests that the tall man lettering scheme provided by the US Food and Drug Administration (FDA) and ISMP be followed to promote consistency.

ISMP Survey

One of the primary reasons for conducting this survey is to use the findings to update ISMP's current list of look-alike drug names with tall man (mixed case) letters. We believe healthcare practitioners should be involved in the process of identifying confusing drug names relevant to their respective practice settings and reviewing proposed tall man lettering for possible implementation. The CAPITALIZED and **bolded** letters should make the drug names distinguishable from the user's perspective.

Respondent profile

ISMP extends our sincere appreciation to the 298 respondents who

continued on page 2 — Tall man (mixed case) letters >

SAFETY briefs

Inappropriate use of ADC overrides.
One of the biggest challenges to the safe use of automated dispensing cabinets (ADCs) is the ease with which medications can be removed upon override, many times unnecessarily and with a lack of perceived risk. ISMP's affiliate, ECRI, recently released *Top 10 Health Technology Hazards for 2023* (www.ecri.org/pdf/10TH). Coming in at number three is how the inappropriate use of ADC overrides can result in medication errors. We encourage organizations to review the *ISMP Targeted Medication Safety Best Practices for Hospitals*, Best Practice #16: www.ismp.org/bestpractices, and implement the following recommendations:

continued on page 2 — SAFETY briefs >

ISMP Medication Safety Alert! Acute Care Action Agenda

One of the most important ways to prevent medication errors is to learn about problems that have occurred in other organizations and to use that information to prevent similar problems at your practice site. To promote such a process, selected items from the **October – December 2022** issues of the *ISMP Medication Safety Alert! Acute Care* newsletters have been prepared for leadership to use with an interdisciplinary committee or with frontline staff to stimulate discussion and action to reduce the risk of medication errors. Each item includes a brief description of the medication safety problem, a few recommendations to reduce the risk of errors, and the issue number to locate additional information.

The *Action Agenda* is available for download as an Excel file (www.ismp.org/node/5977). Continuing education credit is available for nurses at: www.ismp.org/tallman.


An ECRI Affiliate

©2023 ISMP | www.ismp.org | 39

Changes to TJC MM standards and NPSGs

— ISMP has developed a series of Targeted Medication Safety Best Practices for ambulatory/community pharmacies.

MSOS Member Briefing

January 2023



ISMP
Institute for Safe Medication Practices
An ECRI Affiliate

ALERTS ABOUT CONTACT NEWS
Information for consumers

Consulting & Education Tools & Resources Publications & Memberships Error Reporting LOGIN

WEBINARS

Introducing ISMP's New Targeted Medication Safety Best Practices for Community Pharmacy: 2023-2024

Tuesday, January 31, 2023 - 1:00pm to 2:00pm

f Start off your New Year with an eye on safety. Join ISMP for a complimentary webinar as we seek to inspire and mobilize practitioners from around the US in the national adoption of specific consensus-based safe practices selected to reduce or eliminate repetitive medication safety issues in community pharmacies that continue to cause harmful or fatal errors to patients.

in

t

e During this FREE webinar, learn about ISMP's new Targeted Medication Safety Best Practices for Community Pharmacy and why they were selected for national action. Don't miss this opportunity to join this important call and align your safety practices.

Tuesday, January 31, 2023 from 1:00 - 2:00 PM ET


REGISTER NOW

<https://www.ismp.org/events/introducing-ismps-new-targeted-medication-safety-best-practices-community-pharmacy-2023-2024>


©2023 ISMP | www.ismp.org | 41

41

Questions?



- A copy of today's slides will be posted on our website
- Next MSOS Briefing date – March 23, 2023.



42