



InPharmation

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Formulary Additions

Latuda (lurasidone)

- New second generation antipsychotic indicated for the treatment of acute schizophrenia
- Restricted to patients continuing home regimen. New starts require initiation by a psychiatrist.
- Available strengths: 40mg, and 80mg tablets

Viibryd (vilazodone)

- New antidepressant indicated for the treatment of major depressive disorder in adult patients
- SSRI with partial 5HT_{1a} agonism
- Available strengths: 10 mg, 20 mg, 40 mg

Prothrombin Complex Concentrate (PCC) for Oral Anticoagulant Reversal

Prothrombin Complex Concentrate (PCC) (Profilnine SD) is a plasma product containing coagulant factors II, VII, IX, and X, as well as proteins C and S. It is FDA approved for the prevention and control of bleeding in patients with Factor IX deficiency due to hemophilia B. However, it is commonly used off-label for rapid warfarin reversal in patients with life-threatening bleeding.

PCC was added to the formulary in January 2011 and it is restricted to its FDA-approved indication and to reversal of warfarin in patients with suspected or confirmed intracranial bleeding who may require surgery.

It is given as a fixed single dose of 500 IU (10mL) for INRs < 5 and 1000 IU (20mL) for INRs ≥ 5. Dosing can also be individualized at 25-50 IU/kg based on actual body weight (ABW).

PCC should be administered as a slow IV push at a rate of 5 mL/min (10mL/min max) to avoid infusion-related reactions. Serious adverse effects include thrombosis and DIC. Nausea, vomiting, chills, and fever are commonly reported.

A limited number of studies have shown

that PCC effectively decreases the INR to <1.5 in 15 minutes. Almost all of them evaluate the effect of PCC on time to achievement of a target INR. There are no randomized trials evaluating the impact of PCC use for warfarin reversal on patient outcomes.

Newer oral anticoagulants, Xarelto® (rivaroxaban) and Pradaxa® (dabigatran) have been receiving recent national attention. There is presently no commercially available agent to reverse the effects of either medication.

A randomized, placebo-controlled trial evaluating the reversal of rivaroxaban and dabigatran by PCC in healthy subjects was published in *Circulation* in October 2011. Fixed dose PCC (50IU/kg) completely reversed

the anticoagulant effects of rivaroxaban but not dabigatran.

The results of this trial sparked national conversations about the safety of newer oral anticoagulants. The Pharmacy & Therapeutics Committee will be working with medical staff to develop standard guidelines for reversal of both new and older IV and oral anticoagulants.



Drug Information Question?

Did you know you have quick access to ask a drug information question? Enter it by clicking the "Drug Information Request" link in the top left corner of the FormWeb homepage (www.formweb.com/ololrnc). The question will then be directed to a pharmacist who will address your question in a timely manner.

Drug Shortages

The following drug shortages are currently affecting OLOL's medication supply. Please visit www.formweb.com/ololrmc for a full list:

Medication	Alternatives
Etomidate inj.	Injectable benzodiazepines (e.g. midazolam)
Pancuronium inj	Vecuronium, rocuronium, atracurium, cisatracurium
Leucovorin inj.	Automatic substitution to levoleucovorin at 50% of prescribed dose
Prochlorperazine inj.	Automatic substitution to promethazine 12.5mg q6hp N/V (no change in prescribed route)
Fosphenytoin Inj (all strengths)	Automatic substitution to phenytoin inj. (no change in prescribed dose/route)
IV Immune globulin (Carimune®)	Privigen® (prescribers will be contacted for substitution)
Methocarbamol Inj.	Providers will be contacted for substitution

Patient Safety Corner

FDA recommends capping IV Zofran dosing at 16mg/dose

The FDA has informed healthcare professionals and the public of the risk of QT prolongation with the 32 mg IV dose of Zofran (ondansetron). No single IV dose should exceed 16 mg. OLOL pharmacists will automatically reduce 32mg IV doses to 16mg per approval by the P&T Committee.

Other News

FDA puts brakes on Janssen's request for added Xarelto® (rivaroxaban)

The FDA has denied Xarelto's® (rivaroxaban) application for the proposed additional indication in patients with acute coronary syndrome (ACS) stating incomplete data for valid approval. Rivaroxaban is currently FDA -approved for DVT prophylaxis following knee or hip replacement and for stroke prevention in patients with non-valvular atrial fibrillation.

FDA denies Bristol-Myers Squibb application for Eliquis® (apixaban)

Approval for apixaban (Eliquis), a new factor Xa inhibitor, has been delayed again. The FDA is requesting additional information from the manufacturer, Bristol-Myers Squibb and Pfizer. They are seeking market approval with the indication for prevention of stroke in patients with non-valvular atrial fibrillation.

Pharmacy Resident Montly Journal Club

The Pharmacy Practice Residents will be conducting a year long journal club series looking at the newer anticoagulant medications and the various trials conducted supporting their use. Discussions will be held the second Wednesday of every month beginning in August. Stay tuned for dates & times.

PGY-1 Pharmacy Practice Residency

In June 2012 the pharmacy department welcomed its first class of PGY-1 Pharmacy Practice Residents. Similar to residencies in medicine, pharmacy residencies are intense, structured, "learn-by-doing" experiences that involve close work with preceptors and mentors. (*American Society of Health-System Pharmacists 2007*)

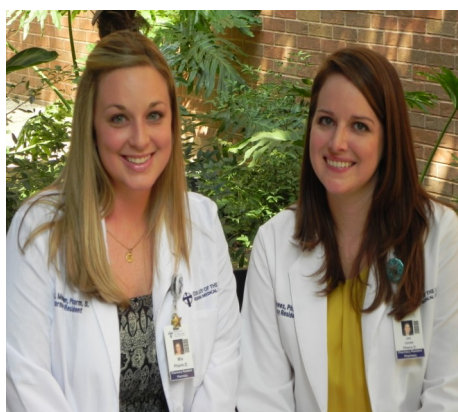
Recent graduates from doctor of pharmacy programs, Jennifer Anderson Jones, Pharm.D. and Mia Incaprera Monson, Pharm.D., have just completed their orientation month and will begin rotations throughout various services in our hospital.

Jen, a New Orleans native, received her Bachelor of Science degree in Biochemistry/Molecular Biology at Mississippi State University in May 2008, then graduated from The University of Florida College of Pharmacy in May 2012. Jen's initial practice interests include cardiology, oncology and ambulatory care.

Mia, also a New Orleans native, completed her Bachelor of Science in Biology at Xavier University in May 2008. She then graduated from Xavier College of Pharmacy in May 2012. Mia's initial practice interests include internal medicine, cardiology and intensive care.

The pharmacy residents will complete core rotations throughout the first part of the resident year, followed by elective rotations in the Spring. Monthly journal club presentations will be given on relevant articles effecting clinical practice. They will be trained in multiple services currently offered by the clinical pharmacy team, as well as establishing new programs that benefit patient care.

Welcome, Mia and Jennifer!



Pictured here: Mia (left), Jennifer (right)

Joint Commission: Are You Ready?

Simple Standards JACHO will be looking for.....

- Write legibly and print your last name
- Date and time each order
- Use approved abbreviations, for example:
 - “units” instead of “U”
 - “daily” instead of “qd”
 - “international unit” instead of “IU”
 - “every other day” instead of “qod”
 - “morphine sulfate” instead of “MS or MSO₄”
 - “magnesium sulfate” instead of “MgSO₄”
 - “morphine 3mg” instead of “morphine 3.0mg”
 - “digoxin 0.25mg” instead of “digoxin .25mg”
- List prn indications
- Qualify PRN indications when multiple PRN medications are prescribed for the same indication, for example:
 - Norco 5mg PO q4h PRN pain scale 1-3
 - Norco 7.5mg PO q4h PRN pain scale 4-6
 - Norco 10mg PO q4h PRN pain scale 7-10
 - Morphine 2mg IV q4h PRN pain (**Incorrect**)

We'll call you for this....

Morphine 2mg IV q4h PRN pain not relieved by Norco 10mg (**Correct!**)

QUESTIONS, COMMENTS OR SUGGESTIONS?

Please contact us at:

Brandi.LaFrance@ololrnc.com

765-3067

Ordering a Pharmacy Consult

Would you like pharmacy to dose vancomycin or renally adjust a medication? If so, please place a “Consult, Pharmacy” order in Powerchart or complete a written order requesting pharmacy to consult. You can select from a wide variety of pharmacy services that are available such as:

- Aminoglycoside dosing/monitoring
- Renal dosing
- Antibiotic Stewardship
- TPN management
- Warfarin dosing/monitoring
- Vancomycin dosing/monitoring

Please refrain from entering consult requests in the order comments section. Doing so prevents the consult from being added to the consult list and increases the risk of it being missed.

Drug Recalls

The following medications are manufacturer recalls. Affected lots have been removed from stock and returned to the manufacturer.

Product	Recall date	Reason
Heparin 20,000/500ml 5% Dextrose IVPB	April 2012	Potency issues
Morphine Inj. 4mg/ml 1ml Carpuject	April 2012	Overfill issues
Cyanocobalamin Inj. 1000mcg/ml, 1ml vial	April 2012	Sterility issues
Hep-lock flush syringe 2 unit/ml 3ml	May 2012	Potency issues
Epinephrine Inj. 1mg/ml, 1ml ampule	May 2012	Particle visibility
Fosphenytoin Inj. 50mg PE/ml	May 2012	Particle visibility

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