



# InPharmation

The official publication of the Pharmacy Department  
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## Staff Spotlight

### Shenetra McKnight, CPhT

#### Favorite Scripture:

There is therefore now  
no condemnation to  
them which are in  
Christ Jesus, who walk  
not after the flesh, but  
after the spirit.

Romans 8:1



Shenetra, from Baton Rouge, is the new technician supervisor. Although she is still training, she has caught on to many things very quickly. If you are lucky, you can catch Shenetra singing her heart out in the main pharmacy! In fact, if given the opportunity, Shenetra would pack up, move away, and be in a Broadway play where she could pursue her passion for singing. This summer, Shenetra will be one step closer to living out her passion. She is traveling to New York to experience The Lion King live! Hakuna Matata!

Shenetra's faith and love for people are grand. Love is the most important thing to her. She would rid the world of homelessness if she could so that everyone would be at peace. This is the true meaning of peace: To relax and allow God to handle everything.

## Zika Virus: What You Need to Know

By Stephanie Chang, PharmD

The Zika virus was first identified in Uganda in 1947. Sporadic cases occurred, mostly in Africa and Asia, until 2007 when the first epidemic was reported in Micronesia and the Western Pacific. The current outbreak, which started May 2015 in Brazil, has an estimated 440,000 to 1.3 million cases.



People can become infected with the Zika virus through a bite from *Aedes aegypti* mosquitoes. The most recent cases of Zika virus disease transmission have been reported in South America, Central America, the Caribbean, Mexico, and the Pacific Islands. The *Aedes aegypti* mosquitoes also inhabit Florida and other southeastern states. Residents who have traveled to countries with Zika virus outbreaks have tested positive for the virus after they have returned to the U.S.

Researchers suggest that the Zika virus disease can also be transmitted sexually. Based on current literature, it is known that the Zika virus disease can be spread by men through semen. In the known cases of sexual transmission, the men had symptoms, but it is likely that the virus can be spread before, during, and after men have symptoms. Many questions still remain, including the length of time the virus stays in semen.

The Zika virus can be passed from a pregnant woman to her fetus, and infection during pregnancy can cause a serious birth defect of the brain called microcephaly (small head size) as well as other severe brain defects. Other problems such as defects of the eye, hearing deficits, and impaired growth have also been reported. The greatest risk of microcephaly is during the first trimester of pregnancy.

Most people infected with the Zika virus don't know they have the disease because they will be asymptomatic. The most common symptoms are fever, rash, joint pain, or conjunctivitis. The Zika virus has also been associated with Guillain-Barré syndrome, meningoencephalitis, and acute myelitis.

Pharmacists will encounter patients who may have questions about travel to Zika-afflicted countries. When traveling to Zika affected areas, patients should stay in places with air conditioning and apply insect repellent with diethyltoluamide (DEET) or picaridin on clothing and exposed skin. Sunscreen should be applied before repellent. Repellent can be applied on children older than 2 months. Parents can also take precautions by covering strollers, carriers, and cribs with mosquito netting and dressing children in long sleeves and pants. Permethrin-treated clothing is also an option for adults and children.

Currently, no vaccine or medications are available to prevent or treat Zika virus disease infections. According to the National Institute of Allergy and Infectious Disease, the ideal vaccine development timeline for accelerated approval from FDA would be by December 2017.

For more information, visit the CDC website <http://www.cdc.gov/zika/>

## Added to formulary:

- **Bridion (sugammadex):** agent to reverse the neuromuscular blockade of rocuronium and vecuronium.
  - ◇ *Formulary, restricted* for use by Anesthesia personnel. Initial use will be restricted to Main OR/PACU and rolled out to other ORs/PACUs shortly after.

## Deleted from formulary:

- **Nexium (esomeprazole) and Prevacid (lansoprazole):** These proton pump inhibitors are currently approved for use in pediatric patients. These will be phased out and become non-formulary once our stock is depleted. Protonix (pantoprazole tablets, packets, and injection) and Prilosec (omeprazole capsules, packets, oral suspension) will now be the only formulary PPIs approved for pediatric patients.
  - ◇ As a reminder, Protonix remains the only formulary PPI for adult patients.

## Therapeutic Interchange Update:

- **Pulmicort Flexhaler (budesonide)** can be automatically interchanged to Arnuity (fluticasone furoate). Please see FormWeb for interchange directions.

## Policy Changes

- The Tikosyn (dofetilide) Risk Evaluation and Mitigation Strategies (REMS) program has been eliminated.
  - ◇ Healthcare providers who prescribe Tikosyn are no longer required to enroll in the Tikosyn REMS Program
  - ◇ Pharmacies and Healthcare facilities may dispense Tikosyn without having to enroll in the Tikosyn REMS Program
  - ◇ At OLOL, initiation of Tikosyn will remain restricted to cardiologists/ cardiology mid-level providers. However, any service line physician or midlevel can continue Tikosyn if it is a home medication. A baseline EKG at the time of admission is still required for both initiation of therapy and continuation of a home medication. For more information and to view the updated policy please refer to FormWeb.
- On May 10<sup>th</sup> the Argatroban Continuous Infusion Powerplan will go live. Pharmacy will automatically be consulted to follow along and assist with dose adjustment for argatroban infusions. Once an order for warfarin is entered by the physician, pharmacy will manage the patients' warfarin dosing and coordinate discontinuation of the argatroban drip once the patients' INR is therapeutic.

## ISMP 2016-2017 Best Practice:

The purpose of the Targeted Medication Safety Best Practices for Hospitals is to identify, inspire, and mobilize widespread, national adoption of consensus-based best practices for specific medication safety issues that continue to cause fatal and harmful errors in patients, despite repeated warnings in ISMP publications. Numbers 1-8 were detailed in prior newsletters.

### ISMP Best Practice 9:

Ensure all appropriate antidotes, reversal agents, and rescue agents are readily available. Have standardized protocols and/or coupled order sets in place that permit the emergency administration of all appropriate antidotes, reversal agents, and rescue agents used in the facility. Have directions for use/ administration readily available in all clinical areas where these agents are used.

**Rationale:** ISMP has received multiple reports of patient death and extreme harm secondary to emergency medications, antidotes, and reversal agents not being readily available in these situations, such as Epinephrine for treatment of emergent anaphylaxis. It is important for pharmacists to know where these reversal agents are located in order to allow for the timely reversal of such life-threatening situations.

### Recommend Prevention Methods:

- Identify which antidotes, reversal agents, and rescue agents should be administered immediately in emergency situations to prevent patient harm
- Use this list to develop appropriate protocols or coupled order sets to ensure the best practice is met.

## Zosyn Dosing Conversion

In an effort to improve patient care, Zosyn will now be administered as a prolonged infusion over 4 hours. May 17th marks the 'Go Live' date for the conversion to this prolonged infusion strategy and all new orders for Zosyn will be automatically converted from the intermittent infusion to the prolonged infusion. Studies have shown a decrease in hospital length of stay in addition to reduced rates of mortality with this prolonged infusion method. Additionally, prolonging the infusion time optimizes the pharmacokinetics of the antibiotic resulting in a decrease in bacterial minimum inhibitory concentrations (MIC) to the drug and improving its activity against more resistant bacteria (i.e. *Pseudomonas aeruginosa*).

Loading dose of Zosyn (4.5gm) over **30 minutes x 1**, THEN Zosyn (3.375gm) **q8h over 4 hours (0400, 1200, 2000)**  
(Historically at OLOL Zosyn has been administered **q6-8 hours** infused over **30 minutes**)

For more information pertaining to the dosing and scheduling of Zosyn utilizing this new strategy please refer to FormWeb.

# Regulatory

## Recent FDA Drug Approvals

- **Venetoclax (Venclexta)** is a BCL-2 inhibitor approved for the treatment of chronic lymphocytic leukemia with 17p deletion.
- **Emtricitabine and tenofovir alafenamide (Descovy)** is a fixed-dose combination of 200mg emtricitabine and 25 mg of tenofovir alafenamide (TAF), both HIV nucleoside analog reverse transcriptase inhibitors for the treatment of HIV. The TAF formulation is noted to be safer than previous tenofovir formulations (tenofovir disoproxil fumarate, TDF) in terms of renal toxicity.
- **Cabozantinib (Cabometyx)** is a tyrosine kinase inhibitor approved for the treatment of renal cell carcinoma in patients who have previously received anti-angiogenic therapy.
- **Pimavanserin (Nuplazid)** is a non-dopaminergic selective serotonin inverse agonist (SSIA) and is also classified as an atypical antipsychotic approved for the treatment of hallucinations and delusions associated with Parkinson's Disease.
- **Glycopyrrolate and formoterol fumarate (Bevespi Aerosphere)** is a combination long-acting muscarinic antagonist and long-acting beta 2 agonist approved for the treatment of chronic obstructive pulmonary disease (COPD).

## FDA Med Safety Alert

### Drug changes name for safety reasons: Brintellix transitions to Trintellix

- The new name for the SSRI, vortioxetine (Brintellix) will be Trintellix. The FDA approved this brand name change after receiving multiple reports of prescribing and dispensing errors because of confusion with Brillinta (ticagrelor), the anti-platelet. The new name change will appear in June.

- The FDA reminds healthcare providers to continue to be careful when checking and dispensing vortioxetine. The new brand name, Trintellix, will have a new national drug code (NDC) number, and the FDA recommends that the new Trintellix name will need to be dispensed and loaded as an available medication in the electronic medication dispensing system with Brintellix being removed as an available option.

## New FDA Medication Warning

A new warning has been added to the atypical antipsychotic, aripiprazole (Abilify) for all formulations. The FDA has added the warning of impulse control problems including gambling, eating, shopping, and sexual activity. The FDA is advising all healthcare providers, including pharmacists to make their patients aware of this new warning and ask their patients if they are experiencing any new urges while on this medication.

# WANTED

## Pharmacy Technician to participate on Newsletter Committee

Committee member responsibilities include:

- Attending monthly committee meetings (2nd Monday of the month at 2:30)
- Bring ideas for newsletter content

Any interested persons should email:

Jennifer.jones2@lolrnc.com

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## Reminders

**Wednesday May 18<sup>th</sup> (12-12:30):** Lunch N Learn → Topic: TCA overdose

**May 26-28<sup>th</sup>:** LSHP Annual Meeting

**June 21<sup>st</sup>:** LSHP CE featuring OLOL Resident, Kellee Brown

**Wednesday May 25<sup>th</sup> (12-12:30):** Lunch N Learn → Review of the 2016 Antimicrobial stewardship guidelines & Clinical Pearls