OUR LADY OF THE LAKE RMC

InPharmation

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Staff Spotlight

Britney Ross, PharmD, BCPS

Have you met our ED pharmacist Britney? Britney has been here for around 3 years now, but she's never had a staff spotlight. Not only is she one of our ED pharmacists, but she is also our Residency Program Director. She has done an incredible job handling our current residents. Also, this July began her second full year as director.

She has an adorable cat named Sammy, and this September, she will be getting married to her fiancé, Steve! In her spare time, she enjoys relaxing and having a glass of wine. She loves to travel and has been to over seven countries, including Italy, Spain, and England. If she could live anywhere in the world, it would be Paris, France.

In addition to keeping the residents in line, enjoying time with her friends and family, and working, she loves to work out and make delicious, healthy foods and meal prep for the week.

"New Medication Shows Promise as an Adjunct Treatment for Patients with Shock"

Giapreza (angiotensin II) is a new medication approved on December 21st, 2017 for the treatment of septic or other distributive shock. Septic and distributive shock are conditions resulting from inadequate blood flow to organs that can be fatal if left untreated. Angiotensin II is a naturally-occurring hormone produced in the body that is responsible for raising blood pressure, but Giapreza is the first formulation of its kind that targets patients with shock. Giapreza works to cause vasoconstriction and potentiate the release of aldosterone. Most patients requiring Giapreza will be started on an IV loading dose ranging from 20 ng/kg/min to 80 ng/kg/min, and a maintenance dose as low as 1.25 ng/kg/min (max of 40 ng/kg/min) when shock symptoms have improved.

The double blind, randomized clinical trial, "ATHOS-3" led to the approval of Giapreza. ATHOS-3 compared Giapreza to placebo in shock patients who continued to have hypotension despite receiving fluid and vasopressor therapy. Giapreza and placebo doses were titrated for the first 3 hours based on the patient's MAP response (with a goal of 75 mmHg or greater) while vasopressors were continued. Vasopressors used included: norepinephrine, vasopressin, phenylephrine, epinephrine, and dopamine in the first 3 hours.

The primary endpoints used to measure the efficacy included the achievement of a MAP of 75 mmHg or greater, or an increase in MAP of at least 10 mmHg without an increase of the patient's baseline vasopressor dose. The results showed 70% of patients treated with Giapreza achieved a primary endpoint as compared with 23% in the placebo group. The most common adverse reactions present in the trial included an increased risk of clotting events, lowered platelet levels, and an elevated heart rate.

Based on the results of the ATHOS-3 trial, it is entirely reasonable to consider Giapreza as an "add-on" medication for the first-line treatment of shock. Initially in shock, norepinephrine and vasopressin are used with norepinephrine being the drug of choice. Using a single vasopressor is ideal in patients with shock, however, sometimes these patients may not respond well, and the dose of the vasopressor may be "maxed-out" as a result. For example, the addition of Giapreza to a patient already receiving norepinephrine would reduce the need for dose increases, thus reducing the risk of adverse reactions.[2] The data provided from the ATHOS-3 trial demonstrates great promise in the use of Giapreza in shock patients. It can be concluded that Giapreza can play an important role as an adjunct vasopressor. However, because Giapreza is a new medication that has not been studied as extensive-

ly as other vasopressors, more data is warranted for its use for other indications and conditions.

References:
"Angiotensin II." *Lexicomp Online*, Wolters Kluwer Health, online.lexi.com/lco/action/doc/retrieve/docid/patch_f/6582570.

GIAPREZATM (angiotensin II) [package insert]. San Diego, CA: La Jolla Pharmaceutical Company; 2017.

"GIAPREZA (Angiotensin II) Injection for IV Infusion." *GIAPREZA™ (Angiotensin II) Injection for IV Infusion*, giapreza.com/.

Shortages

- Diltiazem injections
- Hydromorphone injections (Restricted use)
- Potassium Chloride 2meq/ml injections
- Ketamine 200mg/20ml vials
- Amiodarone 360mg/200ml bags
- Linezolid in NS (D5W product will be used as alternative, however not built in epic)
- Sincalide 5mcg

Formulary Changes

Deletions from Formulary:

- Konsyl (psyllium) packet
- Vexol (rimexolone) 1% 5 mL ophthalmic suspension
- Glyoxide (carbamide peroxide) 10% 2 oz bottle

Therapeutic Substitutions:

- Pantoprazole (Protonix) substitution changed to pantoprazole 40mg only
- Docusate sodium 50mg will now be docusate sodium 100mg
- Hydroxyzine HCl (Atarax) will now be changed to hydroxyzine pamoate (Vistaril)
    - For doses 10mg or less, the hydroxyzine pamoate will be in suspension form
- Propafenone sustained release (Rythmol SR) will now be propafenone immediate release.
    - Please be mindful of the dosing schedule change from daily to TID

ISMP Safety

Practice Guidelines

This patient safety corner is brought to you by the 2018-2019 ISMP Targeted Medication Safety Best Practices for Hospitals.

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 and administration readily available in all clinical areas where the antidotes, reversal agents, and rescue agents are used.

Rationale:

- The goal of this best practice is to ensure that all antidotes, reversal agents, and rescue agents for medications that carry high potential to cause adverse reactions or harm are available for administration without delay.
- It is important to have standardized protocols or coupled order sets so qualified staff can treat the reaction/overdose without waiting for an order from the prescriber.
- The directions for administration and manipulation should be readily available near where these agents are stored to avoid administration delays or improper use/handling of the medications.

Regulatory

Recent FDA Approvals

- **Symdeko** (tezacaftor/ivacaftor and ivacaftor) – Treatment of cystic fibrosis in patients 12 years of age or older who have two copies of the F508del mutation or who have at least mutation in the CF gene.
- **Lutathera** (lutetium Lu 177 dotatate) – Treatment of gastroenteropancreatic neuroendocrine tumors (GEP-NETs) that are positive for the hormone receptor somatostatin.
- **Trogarzo** (ibalizumab – uiyk) – In combination with other antiretrovirals for the treatment of HIV-1 infection in heavily treatment-experienced adults with multidrug resistant HIV-1 infection failing their current antiretroviral regimen.
- **Tavalisse** (fostamatinib disodium hexahydrate) – Treatment of thrombocytopenia in adult patients with chronic immune thrombocytopenia (ITP) who have had insufficient response to a previous treatment.

Reminders

- "The Lake is a great place to work. Are we ready for our guests today? Check your dress code, name badge and attitude." Please make sure you are following the dress code we have in place.
- First dose Vancomycin is LIVE!! Thank you for participating in training. The next step will be to complete the HealthStream quiz.
- The calcitonin medication page on Formweb has been updated. Please refer to it with any questions.

Process Update

- We are providing after hours coverage for Perkins Surgery Center. We should expect about 10 orders per week. LSU Recovery Room can be reached at (225)-768-5743

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Wishing our residents good luck in their future endeavors!