GULF-COAST SOCIETY OF HEALTH-SYSTEM PHARMACISTS (GCSHP)

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EDITOR-IN-CHIEF: IAN DUNNE, PHARMD, BCPS, AAHIVP

PRESIDENT'S LETTER

JOSEPH W. ROGERS, PHARMD, MS
PRESIDENT, GCSHP
DIRECTOR OF SPECIALTY PHARMACY
MEMORIAL HERMANN HEALTH SYSTEM

Greetings, members of the Gulf Coast Society of Health System Pharmacists! It is a pleasure to write to you today both to share some of the accomplishments we have achieved as an organization and to forecast what is to come.

So far this year, education has been a major focus for the organization. Outgoing Education Chair, Regan Collins, handed off the torch to Emmanuel Enwere and Chib Amuneke-Nze in the early summer and they have taken it and run with it, organizing three continuing education (CE) or sponsored education events. We collaborated with Memorial Hermann Memorial City Medical Center to host a CE on opioid management, which achieved the Texas State Board of Pharmacy requirement of at least one hour on opioid management per license period. Additionally, we collaborated with our industry partners to provide access to education on pancreatic cancer and stroke. Several additional topics are under consideration for the coming months, including Texas law CE, updates in sepsis management, and more.

Our engagement with our student chapters has been equally strong. President-Elect, Ardath Mitchell represented GCSHP at the TSU SSHP Membership Drive and CV workshop, offering her perspective on entering the profession and the benefits of joining professional organizations.

GCSHP continues to be the state's largest chapter with over 440 members. This year, TSHP has issued a challenge to increase recruitment by 10% while maintaining retention of 95%. TSHP will issue special recognition for the regional chapter with the highest percetanges in both categories. With the many benefits of GCSHP membership, both goals are well within our grasp. Be on the lookout for chances to join in this effort at upcoming GCSHP events – there will be special prizes and recognition for members who bring guests.

The annual Casino Night in July was another success, with nearly 100 attendees. All the great aspects of this event continued to be featured, including networking, casino games, and our annual award ceremony.

Additionally, this year we wished to promote and contribute to the Richard Cadle Mentoring Scholarship for Pharmacy Leadership, with what turned out to be a highly competitive wine toss!

We held this year's second chapter-wide business meeting in conjunction with a networking social at Mi Luna, in September. A number of upcoming initiatives were discussed, and new connections were made between all who attended. In an effort to increase transparency and engagement with all the chapter's members, we plan to continue the pairing of business with social and education events in the coming months.

We are continuously evaluating the offerings and impact of GCSHP because it is essential that we bring value to our members and the community. To that end, a needs assessment will be sent out in the next week to get your feedback on the education, volunteer, social, and other various events and activities of the chapter. Please take some time to consider the question "What could GCSHP do for me?" Please share your thoughts with us as we strive to be an adaptable organization that meets our members' needs.

Thanks for your participation with GCSHP and being what makes this organization so great. We look forward to seeing you at our next event!

SIXTH ANNUAL GCSHP CASINO NIGHT (2018)

Each year, the Gulf Coast Chapter hosts its annual Casino Night at Saint Arnold Brewery in Houston, Texas. Nearly 100 local pharmacists, pharmacy students, and pharmacy technicians enjoyed playing (and learning to play!) various casino games throughout the night. This year, GCSHP introduced the wine toss, which ended up being a fan favorite activity. For the past 4 years, Casino Night has served as a food drive for the Houston Food Bank. Many members brought canned food donations, which resulted in two boxes of food donations!

This year, money was raised for the Richard Cadle Mentoring Scholarship for Pharmacy Leadership. The scholarship is awarded to a pharmacy resident in Texas who demonstrates leadership qualities, compassion, and the spirit of helping others through community service. Keep and eye out for more information on the application process this Winter.

Thanks to everyone for coming out and supporting this year's event!

GCSHP ANNUAL AWARD RECIPIENTS

GCSHP seeks to recognize outstanding work in pharmacy practice and awards a special few of its members each year for these achievements. This year, four members were specifically recognized for their hard work:

Outstanding Pharmacist Award:
Laura Blackburn, PharmD, BCPS, BCCCP (top)
- Recognition of outstanding contributions as a health systems pharmacist
- Active participation in the growth of GCSHP and exemplary dedication to improving the delivery of quality health care

Outstanding Student Award: Sarah Theriault (bottom left)
- Demonstration of active participation in GCSHP and interest in health systems pharmacy practice through research and other activities

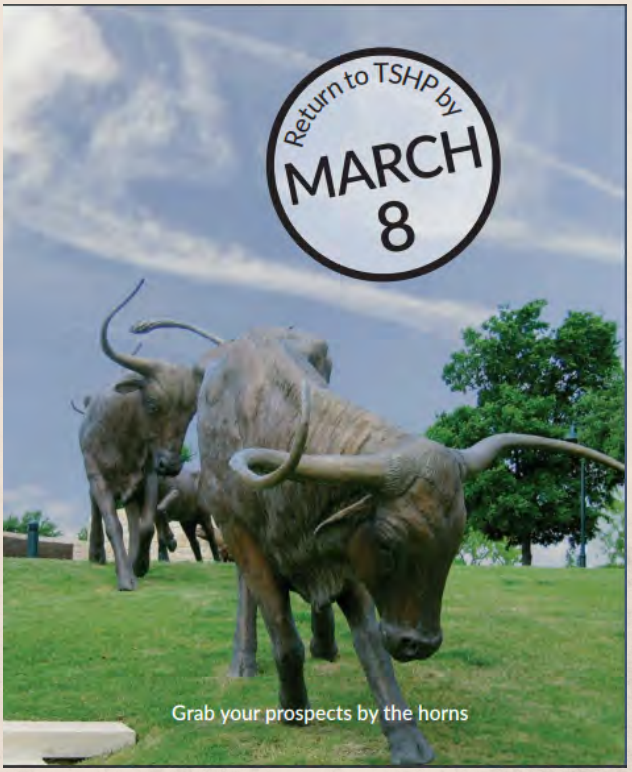
Outstanding Technician Award:
Tiffany Kofroth, CPhT (bottom right)
- Recognition of outstanding contributions to professional growth and community service

Outstanding Industry Service Award: Rick Ulasewich, BS
- Outstanding service and demonstration of the highest standard of professionalism and constructive interest in the formation, growth, and programs of GCSHP
- Advancement of improved, rational, safe, and economic drug therapy

TSHP ANNUAL SEMINAR

Exhibitor and Partnership Prospectus
April 12-14, 2019
Embassy Suites Hotel, Convention Center, & Spa
Frisco, Texas

Speaker topic deadline: October 31, 2018
Abstract deadline for poster: February 25, 2019



ACCOLADES

Congratulations to Sarah Lake Wallace, MS, PharmD on being elected the new President-Elect for TSHP!

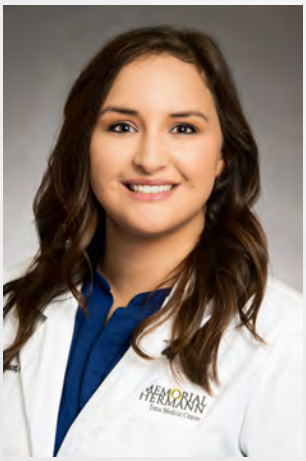
Congratulations to all our GCSHP Speakers at the TSHP Seminar 2018:

Alex C. Varkey, PharmD, MS
Alexandra Tatara, PharmD, BCPS
Ardath Mitchell, PharmD, BCPS
Devlin Smith, PharmD
Faith Rutherford, CPhT
Jordan L. Burdine, PharmD
Katie Morneau, PharmD, BCPS
Lourdes M. Cuellar, MS, RPh, FASHP
Joy P. Alonzo, M.Eng, PharmD
Reagan D Collins, PharmD, BCCCP
Tiffany Bartlett, CPhT
Matthew A Wanat, PharmD, BCPS, BCCCP, FCCM
Melanie Madorsky, PharmD, BCPS
Mohamed T. Sarg, PharmD, BCPS
Phuoc Anh (Anne) Nguyen, PharmD, MS, BCPS
Ryan K. Roux, PharmD, MS, FTSHP, FASHP
Shreya Parekh, PharmD, MS, BCPS
Stephen Davis, PharmD, MS, CPPS
Jeffrey L. Wagner, PharmD, MPH, BCPS
Todd Canada, PharmD, BCNSP, BCCCP, FASHP, FTSHP
Laura M. Blackburn, PharmD, BCPS, BCCCP
Jessica Gardea, PharmD, BCACP
Edward C. Stemley Jr, PharmD, MS

RESIDENT'S CORNER

STEROID USE IN SEPTIC SHOCK

BY: GENENE ALEXIS WILSON, PHARMD
PGY-1 PHARMACY PRACTICE RESIDENT
MEMORIAL HERMANN - TEXAS MEDICAL CENTER



Septic shock is defined as hypotension requiring vasopressors to maintain MAP > 65 mmHg and serum lactate > 2 mmol/L despite adequate fluid resuscitation. Fluids, antibiotics, and hemodynamic support are key in the treatment of septic shock, but recommendations for other treatments (e.g. steroids) have been controversial. Surviving Sepsis guidelines recommend against routine use of hydrocortisone unless the patient remains hemodynamically unstable despite adequate fluid resuscitation and vasopressors. The uncertainty of corticosteroids use may be due to the varying results and limitations of previous studies. In 2002, Annane evaluated hydrocortisone 50 mg IV bolus every 6 hours with fludrocortisone 50 mcg compared to placebo for 7 days in septic shock. Steroid therapy resulted in a significant reduction in mortality. In 2008, CORTICUS evaluated the use of IV hydrocortisone 50 mg every 6 hours versus placebo for a total of 6 days. No reduction in mortality was seen at 28 days, but there was a reduction in time to reversal of shock in the steroid group. These two studies provided conflicting evidence on the effect of steroids on morality in septic shock. Two large randomized controlled trials published this year provide greater evidence for corticosteroids in patients with septic shock.

ADRENAL was designed to evaluate 90-day mortality when comparing a seven-day hydrocortisone 200 mg continuous infusion versus placebo in septic shock. Death occurred in 27.9% versus 28.8% (0.95; 95% CI 0.76-1.03) in the treatment and placebo groups, respectively. There was a reduction in time to reversal of septic shock with 3 vs. 4 days (1.32; 95% CI 1.23-1.41) in the treatment and placebo groups, respectively. The addition of hydrocortisone reduced time in an ICU by 2 days (10 vs. 12 days; 95% CI 1.06-1.23). Finally, there was a reduction in duration of mechanical ventilation days with 6 days in the hydrocortisone group versus 7 days in the placebo group (1.13; 95% CI 1.05-1.22).

APROCCHSS was designed to evaluate hydrocortisone 50 mg IV every 6 hours plus fludrocortisone 50 mcg for 7 days versus placebo. The primary outcome, all-cause mortality at 90 days, was reduced in the steroid group compared to placebo 49% versus 43%, respectively (0.88; 95% CI 0.78-0.99). There was also a statistically significant difference in vasopressor free days (17 vs. 15; p< 0.001) and organ failure free days (14 vs. 12; p<0.003).

Although only one trial presented a mortality benefit with use of hydrocortisone, the aforementioned studies demonstrated positive outcomes in ventilator days, organ failure free days, and ICU length of stay. Adverse effects of steroid therapy must be considered. In APROCCHSS, hyperglycemia occurred in 89.1% of patients treated with steroids versus 83.1% with placebo (1.07; 95% CI 1.03-1.12). There were more superinfections seen in patients who were treated with hydrocortisone (31.1% vs. 28.4%), but it was not statistically significant (1.09; 95% CI 0.92-1.30). With the addition of these two trials, clinical practice may shift into a more liberal steroid use in septic shock since the benefits will likely outweigh the risks.

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3. Annane D, Sebille V, Charpentier C, et al. Effect of treatment with low doses of hydrocortisone and fludrocortisone on mortality in patients with septic shock. JAMA. 2002;288(7):862–871.
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STUDENT'S SECTION

COMPLETE, TWO-DRUG ANTIRETROVIRAL TABLET FOR HIV

BY: EMILY SARTAIN, PHARMD CANDIDATE 2019
UNIVERSITY OF TEXAS AT AUSTIN COLLEGE OF PHARMACY

According to the CDC, there are approximately 1.2 million people living with HIV (PLHIV) in the United States and around 40,000 newly diagnosed infections each year. Antiretroviral therapy (ART) has dramatically reduced HIV-associated morbidity and mortality and transformed the quality of life of PLHIV. In addition, ART achieves and maintains an undetectable viral load and reduces the transmission of HIV.

Despite advancements in therapy, there are significant barriers to retention of care and ART adherence. The U.S. Department of Health and Human Services recommends an initial three-drug combination regimen consisting of two nucleoside reverse transcriptase inhibitors (NRTIs) in combination with an integrase strand transfer inhibitor (INSTI). Historically, two drug regimens increased the risk of inadequate viral suppression and resistance; however, there is growing evidence that indicates two-drug regimens may sufficiently maintain viral suppression in patients who have achieved virologic suppression on stable 3-drug regimens.

In November 2017, ViiV Healthcare's Juluca (dolutegravir and rilpivirine) was FDA-approved as replacement of current ART regimen (CAR) in adults with HIV-1 infection who have been virologically suppressed (HIV-1 RNA < 50 copies/mL) on a stable regimen for at least 6 months with no history of treatment failure and no known resistance to either dolutegravir (DTG) or rilpivirine (RPV). DTG is an INSTI that inhibits HIV integrase from incorporating HIV DNA into the host CD4 cell DNA. RPV is a non-nucleoside reverse transcriptase inhibitor (NNRTI) that non-competitively binds to reverse transcriptase and blocks the conversion of viral RNA to DNA. The combination tablet contains 50 mg DTG and 25 mg RPV and is recommended to be taken as one tablet orally once daily with a high calorie meal.

Before initiation of DTG/RPV, pregnancy testing must be performed for all adolescents and adults of childbearing potential due to risk of neural tube defects, especially during the first trimester. This medication has not been studied in end-stage renal disease or severe hepatic impairment. Drug interactions limit some medication coadministration (table below).

The SWORD-1 and SWORD-2 trials were identical, Phase 3, multicenter, open-label trials that enrolled 1,024 adults with HIV-1 infection on a stable ART for at least 6 months with no history of treatment failure or known resistance to DTG or RPV. Subjects were randomized 1:1 to continue on their CAR (containing 2 NRTIs plus either an INSTI, protease inhibitor [PI], or NNRTI) or switch to DTG/RPV. The primary endpoint was proportion of patients with HIV-1 RNA < 50 copies/mL at week 48 of therapy.

Overall, the adjusted treatment difference for virologic success at week 48 was -0.2 (95% confidence interval -3.0 to 2.5) with 486/513 (94.7%) in the DTG/RPV group and 485/511 (94.9%) in the CAR group. The SWORD trials concluded that switching to DTG/RPV compared to continuing CAR was non-inferior for viral suppression. The most common adverse events experienced were diarrhea (2%) and headache (2%). The most common adverse event leading to discontinuation was psychiatric disorders (depression, suicidal ideation, anxiety, insomnia, abnormal dreams) in 2% of patients in the experimental group compared to <1% in the control group.

According to the Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents Living with HIV, the only two-drug regimens for regimen switching in the setting of virologic suppression with good supporting evidence include (1) a boosted PI-based regimen plus emtricitabine or lamivudine or (2) dolutegravir plus rilpivirine.

STUDENT'S SECTION

Dolutegravir/Rilpivirine Drug-Drug Interactions

Drug Class	Contraindicated Drug(s) in Class	Clinical Comment
Antiarrhythmic	Dofetilide	Potential for serious and/or life-threatening events due to the potential for increased dofetilide plasma concentrations.
Anticonvulsants	Carbamazepine, Oxcarbazepine, Phenobarbital, Phenytoin	Potential for significant decreases in rilpivirine plasma concentrations due to CYP3A enzyme induction, which may result in loss of virologic response.
Antimycobacterials	Rifampin, Rifapentine	
Glucocorticoid (systemic)	Dexamethasone	
Herbal products	St John's wort	
Proton Pump Inhibitors	Esomeprazole, lansoprazole, omeprazole, pantoprazole, rabeprazole	Potential for significant decreases in rilpivirine plasma concentrations due to gastric pH increase, which may result in loss of virologic response.

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6. Juluca (dolutegravir/rilpivirine) [prescribing information]. Research Triangle Park, NJ: ViiV Healthcare; September 2018.
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UPCOMING EVENTS

Regional Residency Showcase
University of Houston College of Pharmacy - November 2nd

Sponsored Education (non-CE)
Genentech Sponsored Dinner - November 7th
Topic: Stroke

GCSHP Volunteer Event
McGovern Centennial Gardens - December 1st

Continuing Education
Law Requirement - Winter 2019

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