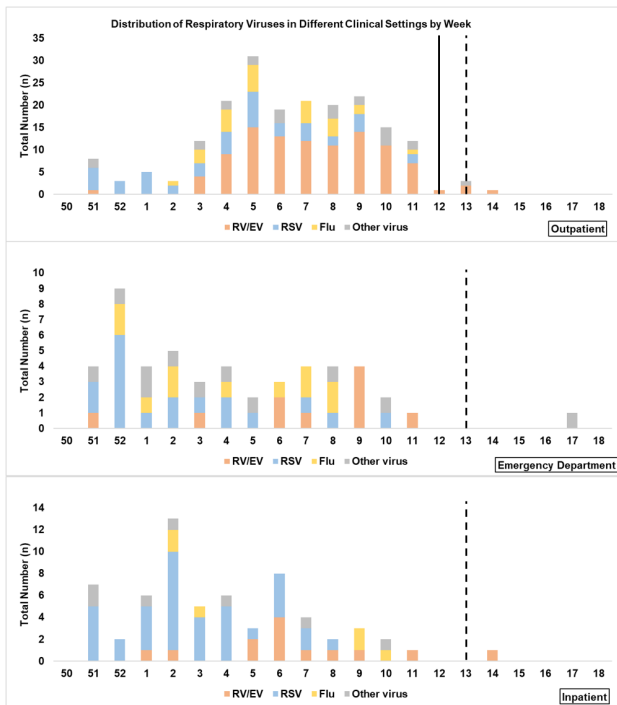


Distribution of Respiratory Viruses in Different Settings by Season



Solid line: March 16th, surveillance halted in 3 out of 4 outpatient clinics due to SARS-CoV-2 restrictions

Dashed line: March 23rd, stay-at-home implementation in Nashville, TN

Conclusion. Most medical encounters in infants are due to viral pathogens, with RSV, RV/EV, and flu being the most common. However, distributions differed by clinical setting, with RSV being the most frequently detected in the IP and ED settings, and second to RV/EV in the OP setting. Continued active viral ARI surveillance in various clinical settings is warranted. Preventative measures such as vaccines and infection control measures deserve study to reduce viral ARI burden.

Disclosures. Zaid Haddadin, MD, CDC (Grant/Research Support, Research Grant or Support) Quidel Corporation (Grant/Research Support, Research Grant or Support) sanofi pasteur (Grant/Research Support, Research Grant or Support) Danielle A. Rankin, MPH, CIC, Sanofi Pasteur (Grant/Research Support, Research Grant or Support) Jon Fryzek, PhD, MPH, EpidStrategies (Employee) Mina Suh, MPH, International Health, EpidStrategies (Employee) Donald S. Shepard, PhD, Sanofi Pasteur (Grant/Research Support) Natasha B. Halasa, MD, MPH, Genentech (Other Financial or Material Support, I receive an honorarium for lectures - it's a education grant, supported by genentech) Karius (Consultant) Moderna (Consultant) Quidel (Grant/Research Support, Research Grant or Support) Sanofi (Grant/Research Support, Research Grant or Support)

914. Epidemiology of Patients with ESKAPE Pathogen Bloodstream Infection in the US Military Health System

Alexander C. Vostal, MD¹; Melissa Grance, BSc²; Uzo Chukwuma, MPH³; Carlos Morales, MPH²; Charlotte Lanteri, PhD²; Kalyani Telu, MS⁴; Edward Parmelee, MS²; John H. Powers, III, MD⁵; Katrin Mende, PhD²; ¹University of Maryland Medical Center/NIAID, Silver spring, Maryland; ²Infectious Disease Clinical Research Program, Uniformed Services University of the Health Sciences, Rockville, Maryland; ³Navy and Marine Corps Public Health Center, Portsmouth, Virginia; ⁴Henry M. Jackson Foundation for the Advancement of Military Medicine, Bethesda, MD; ⁵Clinical Research Directorate, Frederick National Laboratory for Cancer Research, Bethesda, Maryland

Session: P-43. HAI: Surveillance

Background. Bloodstream infections (BSI) are associated with both inpatient mortality and substantial morbidity in the United States. We sought to characterize the epidemiology of BSIs with ESKAPE pathogens on patients served by the United States Military Healthcare System (MHS), which actively prospectively captures clinical and microbiological data from US service members and their beneficiaries.

Methods. We performed a retrospective analysis of MHS patients with blood cultures positive for ESKAPE pathogens (*E. faecium*, *S. aureus*, *K. pneumoniae*, *A. baumannii*, *P. aeruginosa*, and *Enterobacter* spp.), as well as *Neisseria gonorrhoeae* and *Raoultella* spp. between January 2010 and December 2015. Microbiological data from the Navy and Marine Core Public Health Center was retrospectively collated with clinical and demographic data from the MHS Data Repository.

Results. We identified 7,404 patients who experienced 8,791 episodes of ESKAPE (including *N. gonorrhoeae* and *Raoultella* spp.) BSI. The patients were predominately

active duty (N=688) or retired (N=2,517) Armed Forces service members and their dependents (N=2,361). Further, 59.4% were male and 47.5% were >65 years old. A total of 5,594 (75.5%) of BSI episodes were associated with hospital admission, with an average length of stay of 14.9 days (SD of 27.5 days) and 47.4% (N=2,650) of those admissions were associated with an ICU stay averaging 8.6 days (SD of 18.0 days). The most common pathogens detected were *E. coli* (34.6%, N= 3,042) followed by *S. aureus* (28.0%, N=2,464), with 7.6% and 40.7% of isolates resistant to ceftriaxone and methicillin, respectively. We found a larger proportion of *E. coli* BSI in females (47.4% versus 26.2%) and *S. aureus* BSI in males (32% versus 21.9%). The frequency of *A. baumannii* BSI in younger patients, ages 18-30, was an average 4.5 fold higher than in older age groups (30-50, 50-65 and >65).

Conclusion. We noted epidemiological differences in the burden of ESKAPE pathogen BSIs, in various populations including sex and age specific risk factors in a population served by the MHS. Further work is underway to evaluate risk factors for infection and outcomes with pathogens with in vitro resistance controlling for factors such as age, gender, co-morbid diseases and severity of illness.

Disclosures. All Authors: No reported disclosures

915. Global 2018 Surveillance of Eravacycline Against Gram-positive Pathogens, Including Resistant Isolates

Steven Morgan, PharmD¹; Sara Hwang, PharmD¹; Ekaterina Efimova, PharmD¹; Stephen Hawser, PhD²; Ian Morrissey²; Virgil Lijffrock, PharmD¹; ¹Tetraphase Pharmaceuticals, Villanova, Pennsylvania; ²IHMA, Monthey, Valais, Switzerland; ³IHMA Europe, Monthey, Valais, Switzerland

Sara Hwang¹, Ekaterina Efimova¹, Virgil Lijffrock¹, Steven Morgan¹, Stephen Hawser², Ian Morrissey²

Session: P-43. HAI: Surveillance

Background. Eravacycline (ERV) is a fully-synthetic, fluorocycline antibacterial approved by the FDA and EMA for the treatment of complicated intra-abdominal infections (cIAI) in patients ≥18 years of age. The purpose of this study was to further monitor the *in vitro* activity of ERV against Gram-positive pathogens, such as *Staphylococcus aureus* (including methicillin-resistant *S. aureus*, MRSA), *Enterococcus* spp. (including vancomycin-resistant *Enterococcus*, VRE) and *Streptococcus* spp.

Methods. Isolates were collected globally during 2018 from various body sites. Minimum inhibitory concentrations (MICs) were determined by CLSI broth microdilution. Antibiotic susceptibility was determined using the most recent CLSI breakpoints (30th ed CLSI M100 document), except for ERV and tigecycline (TGC) where FDA breakpoints from 2018 and 2005, respectively, were applied.

Results. Summary MIC data for ERV and select comparators are shown in the Table. ERV MIC_{50/90} for *Enterococcus* spp were 0.06/0.12 µg/mL and were not affected by the presence of vancomycin resistant mechanisms. The MIC₉₀ of ERV against VRE was 2-fold lower than TGC, at a value of 0.12 µg/mL. ERV MIC₉₀ values for methicillin-susceptible *S. aureus* (MSSA) was 0.12 µg/mL and for MRSA was 0.25 µg/mL. Generally, for all pathogens, ERV MIC₉₀ values were 2- to 4-fold lower than TGC.

Table

Organisms (N)	ERV MIC _{50/90}	TGC MIC _{50/90}	VAN MIC _{50/90}	DAP MIC _{50/90}
<i>Enterococcus</i> spp (985)	0.06/0.12	0.12/0.25	1/>16	2/2
<i>E. faecalis</i> (502)	0.06/0.12	0.12/0.25	1/2	1/2
<i>E. faecium</i> (483)	0.06/0.06	0.06/0.25	1/>16	2/4
VRE (189)	0.06/0.12	0.06/0.25	>16/>16	2/4
<i>S. aureus</i> (520)	0.06/0.12	0.25/0.25	1/1	0.25/0.5
MSSA (308)	0.06/0.12	0.25/0.25	1/1	0.25/0.5
MRSA (212)	0.06/0.25	0.25/0.5	1/1	0.5/0.5
<i>Streptococcus anginosus</i> group ^a (48)	0.015/0.03	0.03/0.06	0.5/1	0.25/0.5

Units in µg/mL; MIC_{50/90} - minimum inhibitory concentration required to inhibit growth of 50/90% of isolates; ^a*S. anginosus*, *S. constellatus*, *S. intermedius*

Conclusion. ERV *in vitro* activity was demonstrated for clinically important Gram-positive pathogens, including resistant isolates. Overall, ERV demonstrated lower MIC₉₀ values than comparators for all organisms. This 2018 global surveillance highlights ERV's utility against Gram-positive organisms and further underscores its role in cIAI, where these pathogens play a causative role.

Disclosures. Steven Morgan, PharmD, Tetraphase Pharmaceuticals (Employee) Sara Hwang, PharmD, Tetraphase Pharmaceuticals (Employee) Ekaterina Efimova, PharmD, Tetraphase Pharmaceuticals (Employee) Stephen Hawser, PhD, Tetraphase Pharmaceuticals (Scientific Research Study Investigator) Virgil Lijffrock, PharmD, Tetraphase (Employee)

916. National Estimates of the Proportion of Bacterial Pathogens Expressing Resistant Phenotypes in US Hospitals, 2012-2017

James Baggs, PhD¹; Kelly M. Hatfield, MSPH¹; Hannah Wolford, MSPH¹; Babatunde Olubajo, PhD, MPH¹; Sujan Reddy, MD, MSc²; Natalie McCarthy, MPH²; Prbasaj Paul, PhD, MPH¹; Clifford McDonald, MD¹; Alexander Kallen, MD²; Anthony Fiore, MD, MPH³; John A. Jernigan, MD, MS¹; ¹Centers for Disease Control and Prevention, Atlanta, GA; ²CDC, Atlanta, Georgia; ³Div of Healthcare Quality Promotion, Atlanta, GA

Session: P-43. HAI: Surveillance

Background. In 2019, CDC updated national estimates of antibiotic resistance. In this abstract we provide national estimates of and trends in proportion of bacterial