

# Highlights from 2018 USCAST

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Dr. Steve Yan (in place of USCAST liaison Dr. Ron Miller)  
Center for Veterinary Medicine, Rockville, MD 20855

## 1. EUCAST Update (Christian Giske, M.D.; EUCAST-SC Chairman)

- ❖ Breakpoint setting for oral aminopenicillin for *H. influenza* and *Strep. pneumouniae*
- ❖ Third consultation on definition of the "Intermediate" category
  - "Susceptible" with increased exposure to drug, high likelihood of therapeutic success
  - Different from the CLSI's definition of "Susceptible, dose-dependent" group
  - Purpose of this definition is to avoid clinicians likely refraining from use of a drug in the group or category
- ❖ EUCAST development labs function in the following areas:
  - Contribute to the data of Bpt tables
  - Method comparisons
  - Colistin testing
  - Validation trials
  - Rapid testing directly from blood
- ❖ Paper discussion: MIC is a range of concentrations, not a single value
- ❖ Carbapenem consultation against *Enterobacteriaceae*
  - $S \leq 2$ ,  $I = 4$ , and  $R \geq 8$
- ❖ Upcoming aminoglycoside consultation
  - Will base on USCAST
  - Not fully active in monotherapy for systemic infections
  - UTI only breakpoints?

## 2. USCAST Update (Ronald N. Jones, M.D., USCAST Scientific Secretary)

- ❖ 2013 – informal meeting with the idea formed to establish USCAST
- ❖ 2014 – achieved a "not-for-profit" status from state of NY (for tax exempt), securing donors, family foundation, drafted 1<sup>st</sup> "drug-class Bpts on FQ report
- ❖ 2015 – first full year in operation, passing of Bill Craig, first Website publication, initiated a new Bpt project for aminoglycosides
- ❖ 2016 – Web V2.0, and 2.1; comparison tables, FQ report, first open meeting, and 2<sup>nd</sup> round of donation
- ❖ 2017 – became "financially stable for several years to come"
- ❖ 2018 – guidance development of surrogate testing, polymixin testing, 'open meeting'
- ❖ New website may come out sometime November 2018, will include newly approved USCAST Bpts on a couple of drugs (ceftaroline, dalovancin, oritavancin); "rationale for USCAST clinical BPTs", "Guidance of surrogate agent testing"

## 3. FDA (CDER) Update (Sumathi Nambiar, M.D.)

- ❖ Focused on "21<sup>st</sup> Century Cure Act" that was passed in Congress on December 12, 2016

- ❖ Briefly described the challenges by Section 511A that updating susceptibility testing interpretive criteria (STIC) is a complicated process and dependent on each drug sponsor's update of individual drug labeling
- ❖ The Cure Act recognizes the importance of improving the process of updating STIC
- ❖ Mentioned that FDA-CDER has established a website on STIC (December 13, 2017): [www.fda.gov/STIC](http://www.fda.gov/STIC)

#### 4. Breakpoints proposed at the meeting

##### ❖ Meropenem-Vaborbactam:

|                           | MIC 9 mcg/mL |   |       | Disk Diffusion (mm) |   |     |
|---------------------------|--------------|---|-------|---------------------|---|-----|
|                           | S            | I | R     | S                   | I | R   |
| <i>Enterobacteriaceae</i> | ≤8/8         | - | ≥16/8 | ≥17                 | - | ≤16 |
| <i>P. aeruginosa</i>      | ≤8/8         | - | ≥16/8 | ≥14                 | - | ≤13 |

##### ❖ Plazomicin (a new aminoglycoside):

| MIC (mcg/mL) |       |       | Disk Diffusion (mm) |       |     |
|--------------|-------|-------|---------------------|-------|-----|
| S            | I     | R     | S                   | I     | R   |
| S ≤ 2        | I = 4 | R ≥ 8 | ≥16 mm              | 14-15 | ≤13 |

(Note: Plazomicin is indicated for UTI caused by *E. coli*, *K. pneumoniae*, and *Enterobacter cloacae* and *Proteus mirabilis*)

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