

Updated antimicrobial susceptibility panels

Effective April 30, 2018, IDEXX Reference Laboratories will introduce updated antibiotic susceptibility panels for gram-negative and gram-positive aerobic bacteria. The VITEK® 2 (bioMérieux) automated platform, used in all our microbiology labs, supports rapid and accurate antibiotic susceptibility test (AST) reporting. The system allows for easy application of standard deduction rules and has an extended minimum inhibitory concentration (MIC) range, which enables low-level resistance detection.

In the **gram-positive** antibiotic panels, doxycycline and minocycline will now be reported with MICs for *Staphylococcus sp.*, effectively replacing tetracycline, an older antimicrobial not commonly used in practice. Amikacin, florfenicol and pradofloxacin will be added to the panel, allowing for reporting of MICs. Amikacin is useful for the treatment of multi-resistant staphylococci when indicated. Florfenicol is an active antibiotic in Osurnia®, a topical treatment indicated for ear infection in dogs. Pradofloxacin is the latest fluoroquinolone indicated for the treatment of skin and soft tissues (wounds, abscesses and deep pyoderma) caused by some strains of *Staphylococcus* as well as *Pasteurella multocida* and *Streptococcus canis* in dogs and cats. These antibiotics will replace fusidic acid and mupirocin. Susceptibility to fusidic acid and mupirocin will now be performed when indicated by the disc diffusion method (Kirby-Bauer) and will be reported as sensitive, intermediate or resistant, with no MIC.

In the **gram-negative** antibiotic panels, more potent antibiotics which are important for the treatment of multi-resistant organisms will be added to the panel. Ceftazidime (a third-generation cephalosporin), ciprofloxacin and doxycycline will replace the following less commonly used antibiotics: piperacillin, rifampicin, tetracycline and tobramycin.

IDEXX Reference Laboratories strives to provide the most current and clinically relevant antibiotic susceptibility panels based on sample type/site, species and organism. Our cultures are performed and interpreted following Clinical and Laboratory Standards Institute (CLSI) standards. The quantitative MIC susceptibility results are used to guide effective therapy by selection of an appropriate antibiotic treatment and dosing range, increasing the chance of successful treatment and minimizing the risk of antibiotic resistance.

To learn more about how to use your MIC susceptibility results to select the best antibiotic for your patient, visit idexx.ca/MIC.

Customer Support Services

IDEXX supports your practice with our customer support, technical support, and medical consulting services teams, including our diagnostic support veterinarians and board-certified veterinary specialists.