METHODS

**Prompt Turbidity**

**Materials/Methods:** MSDGN panels were evaluated at three clinical sites by comparing MIC values obtained using the MSDGN panels with activity against carbapenem- and multidrug-resistant Enterobacterales and Pseudomonas aeruginosa on an investigational MicroScan Dried Gram-Negative MIC (MSDGN) panel with ceftobiprole-taniboractam. Clinical sites were tested among the three sites.

**Quality Control Expected Results**

**MicroScan Dried Gram-Negative MIC Panels:**

**Enterobacterales and Pseudomonas aeruginosa** clinical isolates were tested using the Prompt® and turbidity methods of inoculation during the combined phases of efficacy and challenge. MSDGN panels were incubated at 35 ± 1°C and read on the WalkAway System, the autoSCAN-4 instrument, and visually at 16-20 hours. Frozen reference panels were prepared according to CLSI/ISO methodology, incubated for 16-20 hours and read visually.

**Quality Control**

Quality control (QC) testing was performed daily using NCTC 13335 E. coli, ATCC 27365 P. aeruginosa, and ATCC BAA-1705 K. pneumoniae for a minimum of 20 replicates per site.

**Panel Inoculation, Incubation, and Reading**

All isolates were subcultured onto trypticase soy agar (TSA) with 5% sheep blood and incubated for 18-24 hours at 35 ± 2°C prior to testing. Isolates from frozen stocks were subcultured twice before testing.

Inoculum suspensions for each strain were prepared with the direct standardization (turbidity standard) method for MSDGN MIC and frozen reference panels. MSDGN MIC panels were also inoculated with the Prompt inoculation method.

Following inoculation, frozen reference panels were incubated at 35 ± 2°C and read visually at 16-20 hours for Enterobacterales and P. aeruginosa. MSDGN MIC panels were incubated at 35 ± 1°C in the WalkAway system for 18 hours. All MSDGN panels were read by the WalkAway, autoSCAN-4, and visually.

**Quality Control Evaluation**

Data from a multicenter study evaluated the performance of a MicroScan Dried Gram-Negative MIC Panels for Enterobacterales and Pseudomonas aeruginosa obtained with MSDGN panels correlated well with MICs obtained using frozen reference panels in this multicenter study.

**Data Analysis**

**Quality Control**

Overall quality control results were ≥95% within range for each read and inoculation method on the dried test panel for E. coli NCTC 13335, P. aeruginosa ATCC 27853, and K. pneumoniae ATCC BAA-1705. E. coli NCTC 13335 includes QC development data only for the autoSCAN-4 read method with Prompt inoculation method. Quality control results were ≥95% within range for the frozen reference panels, which were inoculated using the turbidity method and read visually. The number of replicates and percentage within range are indicated in Tables 6 and 7. Variations in total number tested for each read method are due to technical error elimination.

**Quality Control Results**

**Table 2. Enterobacterales Clinical Isolates - Prompt Inoculation Method**

**Table 3. P. aeruginosa Clinical Isolates - Prompt Inoculation Method**

**Table 4. Enterobacterales Clinical Isolates - Turbidity Inoculation Method**

**Table 5. P. aeruginosa Clinical Isolates - Turbidity Inoculation Method**

**Table 6. Quality Control - Frozen Reference Results**

**Table 7. Quality Control - Dried Test Results**

****

**Quality Control**

Quality control (QC) testing was performed daily using NCTC 13335 E. coli, ATCC 27365 P. aeruginosa, and ATCC BAA-1705 K. pneumoniae for a minimum of 20 replicates per site. The number of replicates and percentage within range are indicated in Tables 6 and 7. Variations in total number tested for each read method are due to technical error elimination.

**Quality Control Results**

**Table 2. Enterobacterales Clinical Isolates - Prompt Inoculation Method**

**Table 3. P. aeruginosa Clinical Isolates - Prompt Inoculation Method**

**Table 4. Enterobacterales Clinical Isolates - Turbidity Inoculation Method**

**Table 5. P. aeruginosa Clinical Isolates - Turbidity Inoculation Method**

**Table 6. Quality Control - Frozen Reference Results**

**Table 7. Quality Control - Dried Test Results**

****

**Quality Control**

Overall quality control results were ≥95% within range for each read and inoculation method on the dried test panel for E. coli NCTC 13335, P. aeruginosa ATCC 27853, and K. pneumoniae ATCC BAA-1705. E. coli NCTC 13335 includes QC development data only for the autoSCAN-4 read method with Prompt inoculation method. Quality control results were ≥95% within range for the frozen reference panels, which were inoculated using the turbidity method and read visually. The number of replicates and percentage within range are indicated in Tables 6 and 7. Variations in total number tested for each read method are due to technical error elimination.