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Title: *VERIGENE[®] - An Analysis of the Effects and Benefits of the Implementation of a New Technology for Rapid Positive Blood Culture Results*

For many healthcare institutions, bloodstream infection testing accounts for a vast percentage of overall laboratory testing ordered and performed. Rapid identification of positive blood cultures is crucial, not only from a cost-analysis perspective, but also for the streamlining of antibiotic therapy and ensuring each patient is treated adequately leaving no detected organism(s) uncovered. We retrospectively reviewed and analyzed inpatient positive blood culture results over a six-month period, with the intent to compare the data attained with report information from traditional culture methods, to determine the overall impact of the implementation of The VERIGENE[®] System. Time to result, number of positive blood cultures, organisms detected/not detected, resistance markers, time to definitive therapy and vancomycin use reduction among other key clinical parameters were recorded and compared. The average time from culture draw to result of the cultures identified using The VERIGENE[®] System was 38.4 hours, while time to definitive therapy was 27 hours. While the results collected are impressive, further research utilizing traditional culture methods is necessary in order to compare the two methods and determine the overall effects and benefits of implementing The VERIGENE[®] System.