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DATE: March 9, 2023

SUBJECT: Microbiology to Implement Rapid Blood Culture PCR

Effective March 13th, 2023 the VCUHS Microbiology Laboratory will implement the Biofire® Blood Culture Identification (BCID) PCR.

Going forward, when a blood culture is determined to be positive, the laboratory will perform both a BCID PCR as well as a Gram stain. PCR results will be available at the time of Gram stain reporting and these results will now be a part of the critical notification which is called by Pathology Client Services.

BCID results will be reported within the blood culture order. It can identify most Gram-positive and Gram-negative bacteria as well as most *Candida*. It also detects methicillin resistance in staphylococci, vancomycin resistance in enterococci, and some beta-lactam resistance in Gram-negative bacteria.

BCID PCR will be performed under the following conditions.

- First positive blood culture with a single Gram stain morphology.
- PCR will be repeated after 7 days for a given Gram stain morphology.

<u>NOTE</u>: If a patient develops a new episode of a bacteremia with a different Gram stain morphology, PCR will be repeated.

• PCR will NOT be performed on cultures with more than one Gram stain morphology.

For questions contact Dr. Doern and Dr. Bryson at christopher.doern@vcuhealth.org and alexandra.bryson@vcuhealth.org

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