From: C. James Sung, M.D.

Executive Chief of Pathology and Laboratory Medicine, Care New England Health System

Chief of Pathology and Laboratory Medicine, Women and Infants Hospital

Cunxian Zhang, M.D., Ph.D.

Chief and CLIA Director of Pathology and Laboratory Medicine, Kent Hospital

Katrine Hansen, M.D.

Director of Microbiology Lab, Women & Infants Hospital of Rhode Island

Amy Arruda, MT (ASCP)<sup>CM</sup>

Microbiology Laboratory Manager, Women & Infants Hospital of Rhode Island

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RE: Implementation of Substitute PCR Assay for Positive Blood Cultures

An Update On: Discontinuation of Routine Testing With GenMark ePlex Blood Culture

Identification Gram Positive Panel (BCID-GP).

Effective March 31,2023 the Cepheid Xpert MRSA/SA Blood Culture PCR Assay is performed at Kent Hospital and Women and Infants Hospital. This is a temporary, back-up assay to help mitigate the supply chain issue of the GenMark BCID-GP cartridge.

The Cepheid Xpert MRSA/SA can detect Staphylococcus aureus and mecA mediated Methicillin Resistant Staphylococcus aureus when present in a patient's blood culture. Positive aerobic blood culture bottles that display staphylococcal morphology on gram stain are subjected to this assay. Only the first positive blood culture bottle that meets this criterion will be tested unless it has been seven days since the last PCR result. The Laboratory will automatically set up the testing when appropriate, so there will be no need to order or request this PCR testing.

While the Xpert MRSA/SA Blood Culture PCR is more limited in scope than the GenMark BCID-GP, it will hopefully provide clarity on Staphylococcal bloodstream infections. Identification of Staphylococcus aureus, or lack thereof, can potentially aid in distinguishing true infection vs blood culture contaminants in these scenarios. Information provided regarding methicillin resistance will provide expedited antibiotic therapy.

Should a positive blood culture displaying gram positive morphology not qualify for this new assay, but expedited testing is needed, please call the Laboratory at either Kent Hospital or WIH to request BCID-GP testing be performed.

<u>Kent Hematology Lab:</u> X31484 WIH Microbiology Lab: X41191

There have been no definitive updates provided by Roche/GenMark as to when additional kits will be available. Therefore, we remain at critically low inventory levels of GenMark BCID-GP cartridges. We will continue to update as new information becomes available. Thank you again for your understanding and support.