



MEMORANDUM #149

TO: UNC Hospitals Attending Physicians, Housestaff, Nursing Coordinators,
Department Heads and Supervisors

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DATE: July 9, 2013

SUBJECT: Rapid Testing on Positive Blood Cultures for Streptococci/Enterococci

Effective July 15th, 2013, the Clinical Microbiology Laboratory will begin using an assay that rapidly identifies *Streptococcus* species and *Enterococcus* species from positive blood cultures, including vancomycin resistance in enterococci (Nanosphere Verigene Gram Positive Blood Culture Test, BC-GP). Details on this assay can be found online at <http://www.nanosphere.us/product/gram-positive-blood-cultures>. The BC-GP assay is FDA-cleared and will identify *Streptococcus* spp. (such as *S. pneumoniae* and viridans group *Streptococcus*), *S. pyogenes* (group A Strep), *S. agalactiae* (group B Strep), *S. anginosus* group, *Enterococcus faecalis*, and *E. faecium* and detect vancomycin resistance in *Enterococcus*.

Testing will be performed automatically on positive blood cultures with a Gram stain of Gram positive cocci in pairs and/or chains (one bottle per set). Results will be available in ~3 hours after the Gram stain result and will be phoned directly to an on-call pharmacist and reported in the electronic medical record. The original positive Gram stain result will continue to be called to the ordering physician. Implementation of this test will allow for targeted use of antibacterial agents based on a treatment algorithm developed by the Anti-infectives Subcommittee of the UNC Pharmacy and Therapeutics Committee. See the recommended treatment algorithm here: <http://pharmacy.intranet.unchealthcare.org/clinresources/clinguidelines/Ecoc-Strep%20Pharm%20Procedure%205-17-13.pdf>. The on-call pharmacist will be responsible for communicating the recommended treatment with the primary medical team.

Culture confirmation and susceptibility testing will still be performed per routine laboratory protocol. In general, this testing requires an additional 2-3 days. Using the reporting algorithm described above, our in-house data demonstrate >99% agreement of the BC-GP test with culture for all targets.

Additional information can be found on the McLendon Clinical Laboratories website (<http://labs.unchealthcare.org/>). Questions not answered by the website can be directed Dr. Melissa Miller at 966-3723.