

TO: Clients of URMCLabs

FROM: Marilyn A. Menegus, PhD
Associate Director, URMCL Clinical Microbiology Laboratories & Professor of
Microbiology and Immunology, Department of Pathology and Laboratory Medicine
Phone: 585-275-7735
e-mail: Marilyn_Menegus@urmc.rochester.edu

RE: Updates on Syphilis Testing

DATE: March 1, 2012

As part of a continuing effort to improve our laboratory services, we are introducing a new Syphilis testing algorithm. Unless otherwise notified, these changes will take effect on 3/8/12.

Laboratory testing will begin with the syphilis screen (Bioplex Syphilis IgG) as our initial screen test, in place of the Rapid Plasma Reagin assay (RPR). The Bioplex Syphilis IgG test detects specific antibodies to *T. pallidum*, the spirochete that causes Syphilis. This test has both greater sensitivity and specificity for *T. pallidum* infection than does the RPR test, which only detects host anti-cardiolipin antibodies and is known to have a high false positive rate.

As part of the Syphilis testing algorithm, specimens that are syphilis screen (Bioplex IgG) positive will also be reflexed to the *Treponema pallidum* particle agglutination (TPPA) assay for confirmation. At the CDC's urging we have already replaced the FTA (Fluorescent Treponemal Antibody) with the TP-PA confirmation test for all screen positive patients. The RPR test will still be offered as a measure of disease status for all screen positive patients.

Our test report will include a final interpretation of the patient's sero-status along with corresponding clinical interpretation, followed by results of individual component tests listed.

If you have any questions regarding this change in Syphilis testing, please do not hesitate to contact me or Michael Nasello, the lab supervisor, at (585) 275-8728. For all other inquiries, please contact the Serology Laboratory at (585) 275-7801.

Reference:

1. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6005a1.htm> CDC: *Discordant Results from Reverse Sequence Syphilis Screening – Five Laboratories, United States, 2006-2010*. MMWR 2011; 60:133-137
2. <http://cid.oxfordjournals.org/content/51/6/700.full> *Novel Treponema pallidum Serologic Tests: A Paradigm Shift in Syphilis Screening for the 21st Century*. CID 51: 700-708, 2010