



MEMORANDUM

DATE: April 14, 2015

TO: All Physicians, Clinical Managers and Educators, and Residents at Hamilton Health Sciences, St. Joseph's Healthcare, Joseph Brant Hospital and the Niagara Health System

CC: Dr. D. Yamamura, Dr. V. Alexopoulou, J. Korver, D. Boychuk, T. Dorland, P. McGillis, P. Guy, L. Tweedle, J. Ellis, D. Legeard

FROM: Dr. M. Smieja, Dr. C. Main and C. Rutherford

RE: **LAMP Detection of *Streptococcus pyogenes* (Group A *Streptococcus*) From Throat Swabs**

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Effective Monday, May 4, 2015, the Microbiology Laboratory will be changing our test method for detecting *Streptococcus pyogenes* (Group A *Streptococcus*) from throat swabs, from bacterial culture to Loop-mediated isothermal Amplification (LAMP) detection. This new molecular method has a sensitivity of 98% and specificity 99% compared to repeated culture, and provides results in less than one hour, versus 16-24 hours for culture.

The order codes (CTHR or HBO Code 25040) for this test have NOT changed, however there are several changes that you should be aware of:

- 1) Positive LAMP results will be reported as: "*Streptococcus pyogenes* (Group A) detected. This isolate is predictably susceptible to penicillin and ampicillin."
- 2) Culture and susceptibility testing will not be performed routinely on LAMP positive specimens as *S. pyogenes* (group A) is predictably susceptible to penicillin. If susceptibility testing is required (e.g. penicillin allergy) please call the Virology Molecular Microbiology lab at 905-522-1155 ext 33708.
- 3) Occasionally, *S. pyogenes* detected by LAMP testing will not grow in culture, and in these cases susceptibility testing will not be possible.

This change will result in shorter turn around times and allow for the initiation of earlier treatment. Please do not hesitate to contact Dr. Marek Smieja (36021) or the microbiology laboratory (46148) if you have any questions about this exciting change.

Thank-you for the privilege of serving you and our patients,

Marek Smieja, MD
Microbiologist

Cheryl Main, MD
Microbiologist

Candy Rutherford, ART
Technical Specialist, Molecular