

DATE:	2022 April 4
TO:	Calgary Zone Physicians, Nursing Staff, and other Health Care Providers
FROM:	APL Calgary Microbiology
RE:	Change of Testing Methodology for Detection of <i>Streptococcus pyogenes</i> (Group A <i>Streptococcus</i>) from Throat Swabs

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Key Message

- Effective **April 12, 2022** Alberta Precision Laboratories in Calgary will be changing the methodology used for the detection of *Streptococcus pyogenes* (Group A *Streptococcus*) in throat swabs from patients with suspected bacterial pharyngitis to a laboratory-developed nucleic acid amplification test.

Background

- The currently used test, Hologic's Group A *Streptococcus* direct DNA probe assay, has been discontinued by the manufacturer, necessitating a change in testing platform.
- The newly developed assay (GAS LAMP) is based on loop-mediated amplification targeting the *spy* gene of *S. pyogenes*.

How this will impact you

- GAS LAMP has improved performance characteristics over the current method, with a sensitivity of 95% and a specificity of 100% compared to standard culture-based detection of *S. pyogenes*.
- Turnaround time for results will remain unchanged (1 day).
- Culture and sensitivity testing will still be performed for:
 - GAS LAMP-positive samples where a history of penicillin allergy is indicated
 - patients younger than 3 months old
 - when recurrence or treatment failure is indicated
 - when suspicion of infection with *Arcanobacterium haemolyticum*, *Neisseria gonorrhoeae*, *Corynebacterium diphtheriae*, Group C/G *Streptococcus*, or yeast is indicated

Action Required

- No changes to ordering on APL requisitions, specimen collection or handling are required.**
- In **Sunrise Clinical Manager (SCM)** throat swabs for *S. pyogenes* (Group A *Streptococcus*) testing should be ordered as '**Streptococcal Pharyngitis Screen**' starting April 12.
 - The 'Throat Group A Beta Strep' order will no longer be available after this date.
- GAS LAMP results will appear under the test name '**Streptococcal Pharyngitis Screen**' in both Netcare and SCM.
 - Culture and sensitivity results, when required, will continue to appear separately under the test name 'Throat Culture'.
- See the [APL Test Directory](#) for further information on ordering, collection, and transport requirements.

Inquiries and feedback may be directed to

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This bulletin has been reviewed and approved by

- Dr. Paul Klonowski, MD, Associate Medical Director, South Sector, Alberta Precision Laboratories