



# Technical Alert

## Liat Rapid Strep A Testing

**TO:** Physicians, Clinical Staff and Clients

**FROM:** Dr. Matthew J. Bankowski, PhD, D(ABMM), HCLD/CC(ABB)  
V.P. – Technical Director, Clinical and Molecular Microbiology and Infectious Disease

Terrie Koyamatsu, B.S., MT(ASCP) - Manager, Clinical and Molecular Microbiology

Dr. Wesley Kim, M.D.  
DLS Laboratory Director, Central Lab  
and QMC West Laboratory

Dr. Ana Ortega-Lopez, M.D.  
Laboratory Director, QMC Punchbowl,  
North Hawaii and Molokai

**DATE:** December 13, 2016

**SUBJECT:** The current “Group A Streptococcus DNA Probe” (Unit Code: 5671) will be discontinued December 18, 2016, and will be replaced with real-time PCR detection (available since August 10, 2016).

Effective as of December 19, 2016, the “Strep A by nucleic acid test”(Unit code: 5824) using real-time PCR (“Cobas<sup>®</sup> Strep A” nucleic acid test for use on the Cobas<sup>®</sup> Liat System) will be available for ordering. The reason for this change in methodology is to offer both improved test performance and turn-around-time for optimization of patient healthcare. Some noteworthy test performance specifications and requirements for the newly introduced real-time PCR Cobas<sup>®</sup> Liat test are as follows:

### Test Performance Characteristics

**Clinical Sensitivity:** 98.3% (95% CI: 95.0% - 99.4%)

**Clinical Specificity:** 94.2% (95% CI: 91.5% - 96.1%)

**Test Accuracy:** 95.4% (95% CI: 93.4% - 96.9%)

**Positive Predictive Value (PPV):** 88.1% (95% CI: 82.8% - 91.9%)

**Negative Predictive Value (NPV):** 99.2% (95% CI: 97.7% - 99.7%)

**Analytical Sensitivity (Limit of Detection):** 20 CFU/mL (The current nucleic acid probe test is approximately 24,000 CFU/mL)

**PCR time to detection:** 15-20 minutes/test (Test batching during high test volume will result in extended reporting times.)

**Test Limitations:** A negative test with persisting symptoms may indicate other pathogens are present (e.g. beta Strep group C/G or Arcanobacterium hemolyticum). In such cases and if clinically indicated, followup testing by culture is suggested.

### Specimen Collection and Transport

**Specimen Type:** Throat swab in liquid Amies Collection and Transport System (**Eswab**)

**Optimum Specimen:** Optimum volume is 1.0 mL with 500 µL minimum volume required

**Other Specimen Types:** None

### Specimen Stability

**Ambient Stability:** Room (Approximately 25°C) temperature for up to 48 hours.

**Refrigerated (2-8°C):** Refrigeration (Approximately 4°C) for up to 48 hours.

**Frozen Stability (-20°C or lower):** Unknown

**Local Transport:** Room temperature (Approximately 25°C)

**Long Distance:** Room temperature (Approximately 25°C) or under refrigeration (Approximately 4°C) for up to 48 hours.

### CPT and Unit Codes

**Unit Code:** 5824

**CPT Code:** 87651

**Diagnostic Laboratory Services Inc.**

99-859 Iwaiwa Street – Aiea, HI 96701

(808) 589-5100 – www.dlslab.com