

# 10X Essentials: Infectious Disease Diagnostics in the Geisinger Health System

## Group B *Streptococcus* (GBS) Testing Guide

### Clinical and Diagnostic Utility

[http://www.geisingermedicallabs.com/10xEssentials/testing\\_guides.shtml](http://www.geisingermedicallabs.com/10xEssentials/testing_guides.shtml)

- The standard for **prevention of neonatal GBS** disease is **screening pregnant women** with a **molecular test method at 35–37 weeks of gestation** to determine their colonization status, which can be transient, chronic, or intermittent. Guidelines recommend intrapartum antibiotic prophylaxis (IAP) for parturient women who have a screen positive for group B *Streptococcus* (GBS).
- The **Xpert GBS LB Assay (test code GRBS)** is one of the methods indicated for assessment of GBS colonization status in antepartum women.
- GRBS is designed to detect GBS DNA from **Lim broth-enriched vaginal/rectal swab specimens**, **GRBS results are obtained in approximately one day** after collection, with susceptibility results 1d later.

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GBS

### Testing Criteria

**Specimen: swab specimen(s); vaginal/rectal combination** (swabbing both the lower vagina and rectum (past the anal sphincter) is recommended by the Centers for Disease Control and may increase yield compared with sampling the one site alone).

**Approved devices: Molecular Testing swab (white cap), ESswabs™ (white cap).**

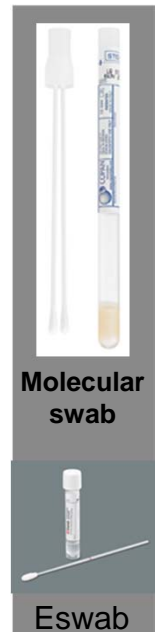
**Transport Temperature:** Preferred transport temperature to laboratory at **2-8 degrees C** (stability = 6 days).

**Antibiotic Susceptibility Testing:** Susceptibility testing is automatically performed for positive patients who are allergic to penicillin. A susceptibility battery (GRBSS-OBL, Group B Susceptibility) will be automatically ordered in the Laboratory Information System (LIS) and performed by Microbiology.

**The susceptibility battery includes:** penicillin, clindamycin, tetracycline, vancomycin, erythromycin and inducible clindamycin resistance (D-zone test). Although erythromycin susceptibility is tested, it is **not** reported due to increasing rates of resistance and poor placental penetration. Erythromycin is not recommended as intrapartum antibiotic prophylaxis and therefore susceptibility is not reported.

**Contraindications:** 1) Patients who have used systemic or topical (vaginal) antibiotic treatment in the week prior  
2) patients diagnosed with placenta previa 3) males.

**Performance:** Demonstrated sensitivity/specificity for detection of GBS is 99.0% and 92.4%, respectively, relative to culture.



Molecular  
swab

Eswab

dmw/rmm/lis: gbs , ver. 1, 3/21/2013 ,revised 2/6/2014

Questions? Call Microbiology: 570-271-6504

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