

Immediate GBS results you can trust, at the right time — as early as 30 minutes<sup>\*</sup>

Xpert<sup>®</sup> Xpress GBS



# ↓ The Need

Group B *Streptococcus* (GBS) remains a leading cause of early onset neonatal sepsis. Rates of maternal colonisation have not changed, but universal antenatal screening at 35–37 weeks along with the use of intrapartum antibiotic prophylaxis (IAP) has resulted in a decrease of early onset disease.<sup>1</sup>

### Challenges remain, including:

- Risk of change of GBS colonisation status following screening at 35–37 weeks of gestation<sup>2,3</sup>
- Some women with unknown GBS status presenting at Labor & Delivery unit<sup>4,5</sup>
- Risk-based IAP exposes 65–85% of GBS-negative women to antibiotics<sup>6</sup>
- 69% sensitivity of antenatal culture for GBS detection when compared to intrapartum culture<sup>7</sup>

# 66

The benefits of this solution are extreme. Everything becomes easier for everyone. It is a team effort based on trust between laboratories, midwives, and gynecologists, all of whom must be convinced that this POC solution is useful and provides an effective response to their organisation."

### Prof. Luton,

Head of the Obstetrician Gynecologist Department Bichat- Claude Bernard Hospital (APHP)

# ↓ The Solution

Cepheid's Xpert<sup>®</sup> **Xpress** GBS test is the only *in vitro* diagnostic test to fully meet the GBS European consensus criteria for rapid intrapartum GBS testing.<sup>4</sup> The Xpert **Xpress** GBS test delivers rapid results with 93.5% sensitivity\* and 95.5% specificity.\*

## On-demand molecular testing — an ideal solution:

- Dual targets in highly conserved regions for an extended GBS strain coverage
- Test designed with Early Assay Termination (EAT) to provide positive results in approximately 30 mins
- Easy-to-use testing with 1 min hands on time
- Intrapartum rectal/vaginal swabs can be tested by trained lab, or labor and delivery staff
- Sample Adequacy Control integration to ensure correct sample incorporation into the cartridge
- Random access, enables any test in the menu to be run at anytime, without the need to batch

# ↓ The Impact

The Xpert **Xpress** GBS test can easily be run in near-patient settings by trained non-laboratory personnel. Now clinicians are able to identify GBS colonisation status when it matters most.

- Identify GBS colonisation status at the time of labor
- Fast and easy to interpret results, enables timely appropriate treatment preventing early onset of GBS disease in newborns
- Reduce unnecessary use of intrapartum antibiotic prophylaxis (IAP)
  - Reduce overall hospital cost<sup>8</sup>
  - Reduce length of stay<sup>9</sup>
  - Streamline patient management
  - Less impact on newborn intestinal flora<sup>10</sup>

\* Sensitivity and specificity results for intrapartum vaginal/rectal.

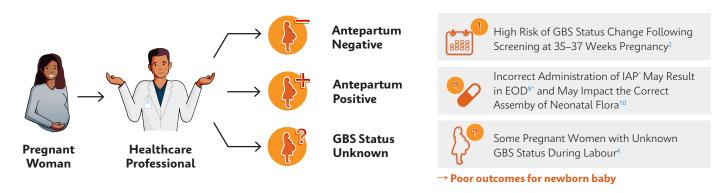
## **Coverage**, plus **Accuracy**, plus **Peace of mind**

That's the **PCR***plus* advantage. From Cepheid.

# Impact on Patient Pathway

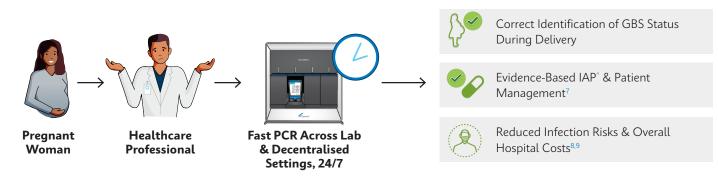
## Challenge

Increased Threat to Newborns Due to Inaccurate Antepartum or Risk-Based GBS Screening



## Solution

Fast & Accurate Intrapartum PCR Testing for GBS as early as 30 minutes\*



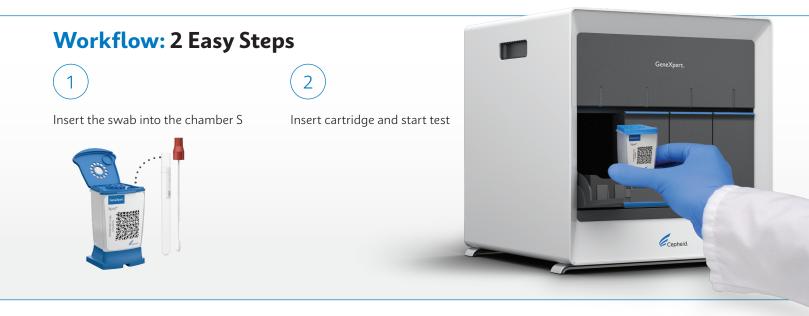
# Clinical Performance

Xpert **Xpress** GBS test results and estimated performance by specimen collection type.

Specimen Collection Type	Sensitivity (95% CI)	Specificity (95% Cl)
Intrapartum vaginal/rectal	93.5% (85.7– 97.2)	95.5% (93.9–96.7)
Antepartum vaginal/rectal	88.1% (81.1–92.8)	95.6% (93.5– 97.0)

\* For positive GBS results with Early Assay Termination (EAT). 42 minutes for negative GBS results.

^ IAP: Intrapartum Antibiotic Prophylaxis, EOD: Early Onset Disease, AMR: Antimicrobial Resistance.



# **Catalog Information**

Xpert<sup>®</sup> Xpress GBS 10 tests 

XPRSGBS-CE-10

#### References:

- Wicker E, et al. Group B streptococci: declining incidence in infants in Germany. Pediatr Infect Dis J. 2019 May;38(5):516-9.
- Helmig R, et al. Diagnostic accuracy of polymerase chain reaction for intrapartum detection of Group B Streptococcus colonization. Acta Obstet Gynecol Scand. 2017 2 Sep;96(9):1070-1074.
- 3 Melin P. Neonatal group B streptococcal disease: from pathogenesis to preventive strategies. Clin Microbiol Infect. 2011 Sep;17(9):1294-303.
- Di Renzo et al. Intrapartum GBS screening and antibiotic prophylaxis: a European consensus conference. J Maternal Fetal Neonatal Med. 2014:1-17. Available at: https://pubmed. 4 ncbi.nlm.nih.gov/25162923
- 5 ASM, March 2020, Guidelines for the Detection and Identification of Group B Streptococcus Revised Guidelines from CDC, 2020
- 6 Saari A, et al. Antibiotic exposure in infancy and risk of being overweight in the first 24 months of life. Pediatrics. 2015 Apr;135(4):617-626.
- 7 Young BC, et al. Evaluation of a rapid, real-time intrapartum group B streptococcus assay. Am J Obstet Gynecol. 2011 Oct;205(4):372.e1-6.
- 8 Picchiassi E, et al. Intrapartum test for detection of Group B Streptococcus colonization during labor. J Matern Fetal Neonatal Med. 2018 Dec;31(24):3293-330.
- Björklund V, et al. Replacing risk-based early-onset-disease prevention with intrapartum group B streptococcus PCR testing. J Matern Fetal Neonatal Med. 2017 Feb;30(3):368-373 9
- 10 Zimmermann P, et al. Effect of intrapartum antibiotics on the intestinal microbiota of infants: a systematic review. Arch Dis Child Fetal Neonatal Ed. 2020 Mar;105(2):201–8

#### CORPORATE HEADQUARTERS

+1.408.541.4192

Sunnyvale, CA 94089 USA

TOLL FREE +1.888.336.2743

PHONE +1.408.541.4191

904 Caribbean Drive

FAX

#### **EUROPEAN HEADQUARTERS** Vira Solelh 81470 Maurens-Scopont France +33.563.82.53.00 PHONE +33.563.82.53.01 EMAII

www.Cepheidinternational.com

© 2022 Cepheid 3284-01 cepheid @cepheideurope.fr