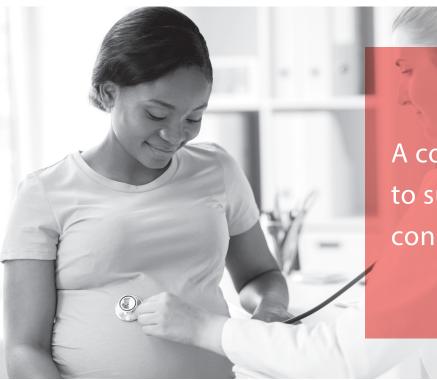
# **WOMEN'S HEALTH**



A comprehensive offer to support women from conception to childbirth

- BIOSYNEX® hCG 10 BSS, BIOSYNEX® hCG 20 BSS
  - Detection of  $\beta$  -hCG hormone in urine in 3 to 5 minutes
- Amnioquick<sup>®</sup> range
  - Detection of a premature rupture of the fetal membranes
- Premaquick®
  - Prediction of threatened pre-term delivery
- BIOSYNEX Ampliflash® GBS (Group B Streptococcus)
  - Intrapartum screening by isothermal Molecular Biology



## CONCEPTION

BIOSYNEX offers a wide range of qualitative tests for the detection of human chorionic gonadotropic hormone (hCG) in urine, serum or plasma.

These in vitro diagnostic medical devices make it possible to identify a pregnancy from its early stages, for use in the laboratory or in Point of Care (POC).

- Sensitivity >99.9 %
- Two hCG thresholds: 10 or 20 mIU/mL









### BIOSYNEX hCG 10 BSS



Cassette format

• hCG detection threshold: 10 mlU / mL

• Ref: SW10003







Manufacturer: BIOSYNEX SWISS S.A. (Switzerland)

### **O BIOSYNEX hCG 20 BSS**



- Cassette format
- hCG detection threshold: 20 mIU / mL
- Ref: SW10002







Manufacturer: BIOSYNEX SWISS S.A. (Switzerland)



### RUPTURE OF MEMBRANES

Almost 10% of full term pregnancies are affected by a Premature Rupture of the Membranes (PROM) while PROM occurs in 2-3% of pregnancies before 37 weeks of amenorrhea. These PROMs are responsible for a third of prematurity and almost 20% of perinatal mortality.



### AMNIOQUICK® range

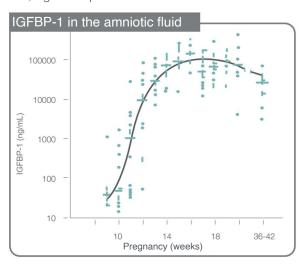
Qualitative rapid tests for the detection of IGFBP-1 +/- AFP parameters, signs of rupture of fetal membranes.

#### **IGFBP-1**

Insulin like growth factor binding protein 1.

L'IGFBP-1 is produced by the decidua.

IGFBP-1 accumulates very early in the amniotic fluid. This high level, which persists until childbirth, makes it a useful marker for detecting rupture of membranes in the early stages of pregnancy.





#### **AFP**

Alpha-fetoprotein

AFP is a protein synthetized by the fetal liver and is then found in the amniotic fluid during the pregnancy.

The peak concentration of AFP in the amniotic fluid is reached at the end of the second trimester while IGFBP-1 slowly decreases. Coupled with IGFBP-1, AFP increases the sensitivity of the PROM test and thus the reliability of the diagnosis.

### 

- · Designed, developed and patented by BIOSYNEX
- Unique combination of two biomarkers (IGFBP-1 & AFP) in a single assay
- · Adjusted IGFBP-1 threshold for best combined performance
- Evaluated in 7 independent studies
- Individually wrapped for room use: swab, test, diluent, patient card (procedure + result)



### RUPTURE OF MEMBRANES

### FEATURES OF AMNIOQUICK® RANGE

A complete range of PROM tests available in differents formats to adapt to your pratice







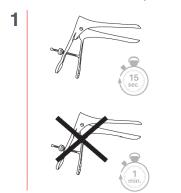


	Amnoquick®	Amioquick® card	Amioquick® duo+
Reference	1090003	1090005	1090004
Format	strip	cassette	cassette
IGFBP-1	5 ng/mL	5 ng/mL	10 ng/mL
AFP	-	-	5 ng/mL
Sensitivity / Specificity	98.5% / 100%	98.5% / 100%	97.9% / 97.6%



#### **PROCEDURE**

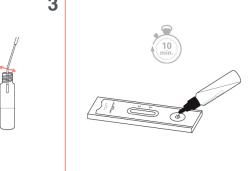
Study shows that a weak positive sample usually appears within 3 to 4 minutes<sup>3</sup>.



Easy collection: With or without speculum.

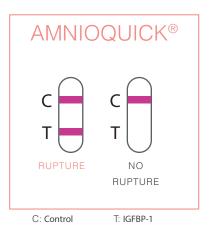


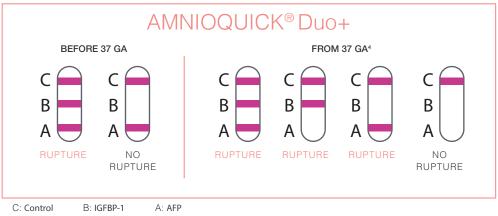
Quick sample preparation: unload and break swab 1.



Simple performance of the test: 3 drops in the well 2. Read the result at 10 minutes.

### **RESULTS**





Manufacturer: BIOSYNEX S.A. (France)

<sup>2</sup> Strip format: immerse the strip, arrows down, in the tube

<sup>3</sup> J. Guibourdenche et al. Diagnosis of premature rupture of membranes: comparative study of the analytical performances of biological diagnostic tests. Ann Biol Clin, vol. 76, n ° 3, May-June 2018

### THREAT OF PREMATURE DELIVERY

In 50% of cases, preterm deliveries are preceded by a threat of preterm delivery, but only 20% of these patients give birth prematurely. It is therefore essential to reliably predict imminent delivery when there is a risk of prefrem delivery.

Fetal fibronectin, the most documented biomarker of imminent delivery, shows a good negative predictive value but its positive predictivity remains modest (around 15 to 48% in the prediction of delivery at 7-10 days).

### PREMAQUICK®

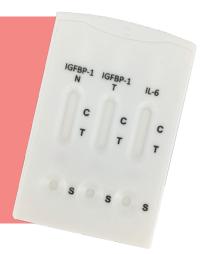
By combining 3 biomarkers, the PREMAQUICK® test integrates the main pathogenic mechanisms responsible for preterm delivery and provides high positive and negative predictivity of delivery within 7 and 14 days in women between 22 and 37 weeks af amenorhea.

#### **IGFBP-1 Native**

of amniotic fluid during contractions.

#### **IGFBP-1 Total**

#### **INTERLEUKIN-6**





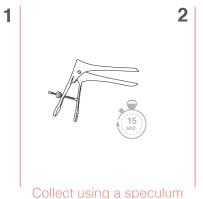


15 months



Ref: 1090009 Manufacturer: BIOSYNEX S.A. (France)

### **PROCEDURE**







Prepare the sample



Transfer 3 drops in each well. Read the result at 10 minutes.

### Reading algorithm:

✓ IGFBP-1 NATIVE: 3 points ✓ IGFBP-1 TOTAL : 2 points **√**i IL-6 : 1 point

Sum > 2**POSITIVE** Result

 $Sum \leq 1$ **NEGATIVE** Result



3

HIGH probability of delivery

LOW probability of delivery

### THREAT OF PREMATURE DELIVERY

#### **PERFORMANCES**

Evaluation in 97 women with threat of prefrem delivery at less than 35 WA.

The sample was taken during the speculum examination, before vaginal examination. The women were then followed for 14 days after admission.

	Probability of delivery ≤ 7 days	Probability of delivery ≤ 14 days
Sensitivity	93.5%	94.3%
Specificity	90.9%	96.8%
PPV	82.9%	94.3%
NPV	96.8%	96.8%

Triple NEGATIVE (score = 0)

VPN 98%

Triple POSITIVE (score = 6)VPP 96%



## BSX READER®

The BSX READER® is a very sensitive and robust measurement system for rapid diagnostic tests (RDTs) provided by BIOSYNEX. This flexible and reliable system allows users to easily perform BSX Series RDTs. The instrument will guide you through the analysis procedure with a series of messages and animations displayed on the touch screen.

#### **Automated calibration**

Wilde range of tests available

Several compatible cassette formats



#### Easy to use and intuitive

**Technician time** optimization

**Automatic or manual** incubation

**Eraonomic design** 

Manufacturer: BIOSYNEX S.A. (France)

# RDTs BSX Range

#### Women's health:

AMNIOQUICK® Card BSX REF:1090005\_BSX

AMNIOQUICK® DUO+ BSX REF:1090004\_BSX

PREMAQUICK® BSX

### Virology:

BIOSYNEX® COVID-19Ag BSX REF:SW40006\_BSX

**RSVTOPBSX** 

### **Bacteriology:**

TETANOTOP® BSX REF:1030016\_BSX

EasyTETANOTOP® BSX REF:502880\_BSX

REF:1030002 BSX

BIOSYNEX® STREP A BSX REF:1030005\_BSX

### **Toxicology:**

DRUGCHECK®+ THC BSX REF:1140013\_BSX

DRUGCHECK®+ 10 BSX

## BSX READER®

#### REF. 5060029

- Reader BSX READER®
- Power cable
- · Barcode reader
- User manual

#### **ACCESSORIES**

• Dymo printer LabelWriter 450 (ref. 502250) or Dymo printer LabelWriter 550 (ref. 502252)

the TDRs of the BSX range and BIOSYNEX. For more information, contact the BIOSYNEX sales representative in

# INTRAPARTUM SCREENING BY ISOTHERMAL MOLECULAR BIOLOGY

### **BIOSYNEX AMPLIFLASH® GBS**

Intrapartum screening for vaginal or rectal GBS with BIOSYNEX AMPLIFLASH® GBS allows the appropriate administration of antibiotic prophylaxis to positive parturients.



10 to 30% of pregnant women are healthy carriers1

sepsis

neonatal meningitis<sup>3</sup>

4 to 6 %

**Change of carrying** during pregnancy<sup>2</sup>

**61%** of infected infants were born to culture-negative mothers at 8 months<sup>5</sup>

#### **PROCEDURE**

Vaginal +/- rectal swab sampling at the patient's admission

Thermal lysis in an empty (5 minutes at 98°C)



Mix preparation Transfer the lysate sample in the Rehydratation tube



Amplification 25 minutes (+ early call if POSITIVE)

		Sensibility	Specificity	Precision
	Vaginal swabs	99%	100%	99.6%
	Vaginorectal swab	97.8%	100%	99.2%

2

DISCOVER OUR NEW

AMPLIFLASH® GBS VIDEO



<sup>1.</sup>Edward MS, Nizet V. Group B streptococcal infections. In: Jack S, Remington JS, Klein JO, Wilson CB, Nizet V, Maldonado YA, editors. Infectious diseases of the fetus and newborn infant. 7th ed. Philadelphia: WB Saunders. 2011;pp.417–467.

2.Yow MD, et al. The natural history of group B streptococcal colonization in the pregnant woman and her offspring. I. Colonization studies. AmJ Obstet

Gynecol 1980;137:34-8.

3. Melin P, Efstratiou A. Group B streptococcal epidemiology and vaccine needs in developed countries. *Vaccine*. 2013;31S:D31–D42

<sup>4.</sup> Schrag SJ, Zell ER, Lynsfield R, et al. A population-based comparison of strategies to prevent early-onset group B streptococcal disease in neonates. The new england journal of medicine. 2002;347:233-9.

<sup>5.</sup> Van Dyke et al. Evaluation of universal antenatal screening for group B Streptococcus. The new england journal of medicine, 2009;360:25:2626-36

### AMPLIFLASH READER®

Nucleic Acid Amplification Tests (NAATS) are diagnostic tests based on molecular biology. NAATS can use many different methods to amplify and detect a pathogen's nucleic acids including Real time PCR or isothermal amplification such as LAMP (Loop-mediated isothermal amplification). Our AMPLIFLASH® range based on isothermal amplification technology, provided fast results obtained in less than 30 minutes in order to manage emergencies.

#### From sample to result in 30 minutes

**QR** codes that guarantee traceability and implement protocols



Complete kit for 25 tests.

Intuitive all-in-one system

Manufacturer: Allsheng (China)

# AMPLIFLASH® range

SARS-COV-2: Ref. 3150069

- 25 PCR tube strips prefilled with lyophilised master mix
  Transparent caps for sealing
  25 tubes of Lysis buffer
  25 tubes of rehydratation buffer
  1 Method Card with QR Code

GBS: Ref. .3150072

- 25 PCR tube strips prefilled with lyophilised master mix
  25 empty tubes for the thermal lysis
  25 tubes of rehydratation buffer
  Transparent caps for microplate sealing
  1 Method Card with QR Code

# AMPLIFLASH® READER

#### REF. 5150001

- AMPLIFLASH READER® Instrument
- Throughput: 1 patient per run up
- Userfriendly software to control up to 5 devices at once



In vitro diagnostic medical devices. Read the instructions for use carefully.

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