

Diagnosis by clinical syndrome

The pathology-oriented PCR panels



Diagnosis by clinical syndrome based on symptomatology allows simultaneous testing for the microbial agents most frequently responsible in the clinical picture.



Objectives

- To avoid having to conduct a series of serological tests, bacterial and/or viral cultures, antigen tests and multi-target PCRs that, when performed in a sequence, can sometimes span over several weeks.

The technology used

- Eurofins Biomnis uses PCR panels targeting the main pathogens.

The benefits

- Time saved as the diagnosis is conducted in one go.
- Allows de-escalation of treatment.
- Potentially allows use of antibiotics to be discontinued.
- The appropriate treatment can be identified.
- The bacteria can be detected in the presence of antibiotics.
- Fastidious or non-cultivable micro-organisms can be identified.
- Allows screening of viruses.

And all of this using a single sample.

Characteristics of infectiology diagnostic methods

	Unit PCR	Culture	Panel
High specificity	YES	NO	YES
High sensitivity	YES	NO	YES
Time needed	1 day	Several days	1–2 days
Detection of multiple pathogens	NO 1 per test	YES	YES
While undergoing antibiotic treatment	YES	NO	YES
Detection of viruses	YES	NO	YES
Detection of fastidious bacteria	YES	+/-	YES
Simultaneous detection of bacteria, viruses, yeasts, parasites, etc.	NO	NO	YES*

**depending on the type of panel*

Respiratory panel

Indications for the panel

This panel is intended for respiratory infections, including paediatric and atypical cases.

More specifically, the use of this panel is indicated for the following clinical syndromes:

- Epiglottitis
- Pharyngitis
- Sinusitis
- Pneumopathies
- Bronchitis
- Otitis
- Flu-like symptoms

Microorganisms screened by the panel

Virus

- *Adenovirus* types 3, 4, 7, 21
- Human *Coronavirus* (4 types)
- *Enterovirus / Rhinovirus*
- *Influenza A* – Human flu
- *Influenza A* – H1N1-09
- *Influenza A / H1-2009*
- *Influenza A* – H3
- *Influenza B*
- *Enterovirus* group
- Human *metapneumovirus*
- *Parainfluenza* virus types 1, 2, 3, 4
- Respiratory syncytial virus (A and B)



Bacteria

- *Bordetella pertussis*
- *Chlamydomphila pneumoniae*
- *Mycoplasma pneumoniae*

Performance of the test

The respiratory panel uses a nasopharyngeal swab. The different types of samples possible are as follows:

- Nasopharyngeal aspirate / lavage
- Bronchial aspirate
- Nasopharyngeal sample
- Throat sample
- Sputum

The sample must be transported in a refrigerated environment.

Test results

They will be sent to you within 2 days.

Gastrointestinal panel

Indications for the panel

The use of this panel is indicated for the following clinical syndromes:

- Gastroenteritis
- Food-borne diseases
- Traveller's diarrhoea
- Acute diarrhoea

Microorganisms screened by the panel

Bacteria

- *Campylobacter jejuni*
- *Campylobacter coli*, *upsaliensis*
- *Clostridium difficile* (A/B toxin)
- *Plesiomonas shigelloides*
- *Salmonella*
- *Yersinia enterocolitica*
- *Vibrio* (*parahaemolyticus*, *vulnificus*, *cholerae*)
- *Vibrio cholerae*
- Enteropathogenic *E. coli*
- Enteroaggregative *E. coli*
- Shigella/enteroinvasive *E. coli*
- Enterotoxinogenic stx1 stx2 *E. coli*
- *E. coli* O157

Parasites

- *Cryptosporidium*
- *Cyclospora cayetanensis*
- *Entamoeba histolytica*
- *Giardia lamblia*

Virus

- *Adenovirus* 40/41
- *Astrovirus*
- *Norovirus* GI/GII
- *Rotavirus* A
- *Sapovirus* I, II, IV, V

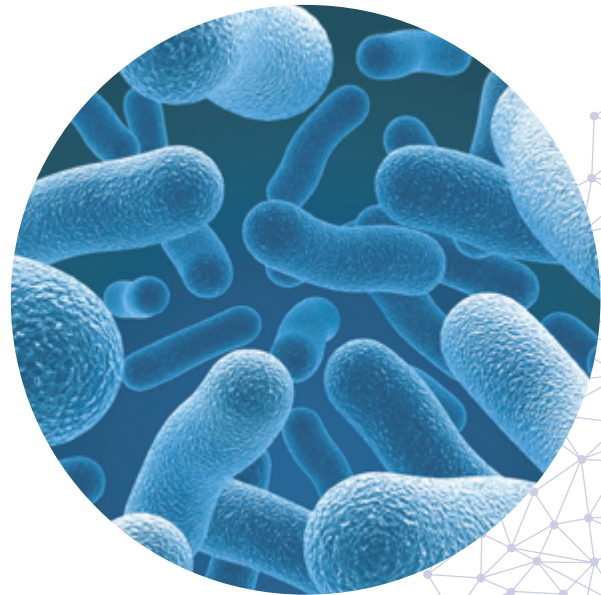
Performance of the test

The gastrointestinal panel uses stool samples.

The sample must be transported in a refrigerated environment.

Test results

They will be sent to you within 2 days.





Practical details

- ▶ Test carried out by Eurofins Biomnis laboratory **in France.**
- ▶ **Dedicated contacts** to assist you and inform you:

Eurofins Biomnis International Division

17/19 avenue Tony Garnier
BP 7322 - 69357 Lyon cedex 07
FRANCE

Tel.: +33(0)4 72 80 23 85

Email: international@biomnis.com

- ▶ **Biomnis analysis code**
 - Respiratory panel: **PIR**
 - Gastrointestinal panel: **GIP**



About Eurofins Biomnis

European leader in the sector of specialised medical pathology, Eurofins Biomnis carries out over 40,000 analyses per day from a range of over 3,000 tests available, including specialised tests for which the company has the appropriate permits and authorisations.

Founded in 1897 by Marcel Mérieux, Eurofins Biomnis remains the leader in the field of specialist biology in France, thanks to its constant innovation and investment in technology.

The Department of Infectious Diseases is one of the laboratory's areas of excellence.

The expertise of the biologists, their experience and the number of complex cases they examine each day allows them to give a detailed interpretation specific to the different clinical cases.

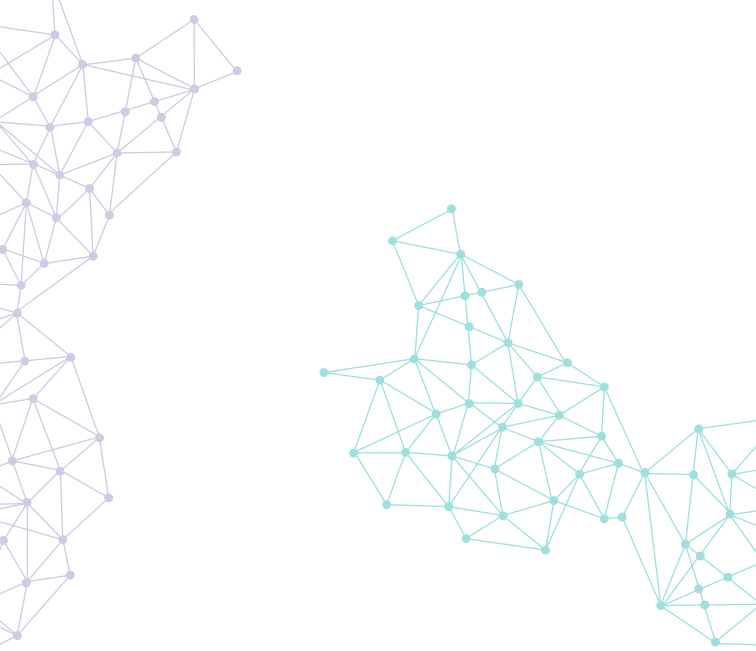


Notes

A series of horizontal dotted lines for writing notes, spanning the width of the page.

Notes

A series of horizontal dotted lines for writing notes, spanning the width of the page.



eurofins

Biomnis

Eurofins Biomnis

17/19 avenue Tony Garnier

BP 7322 – 69357 LYON Cedex 07 – FRANCE

Email: international@biomnis.com

www.biomnis.com