

10
PARTNERS



4 years
DURATION



5,6 M€
FUNDING



8
COUNTRIES



DIAGORAS OBJECTIVES

The DIAGORAS project aims to develop a **device** that will **speed up** the diagnostic workflow of respiratory tract infections (RTIs) and **reduce the costs** of the current diagnostic procedures. This rapid, highly sensitive and **specific microbiological diagnostic system** will allow general practitioners (GPs) to make more informed and targeted decisions for the correct treatment of patients.

DIAGORAS acts as a **pathogen identification and diagnostic tool**, helping to reduce the risk of healthcare complications and unnecessary, costly treatment. The project will improve the social and economic aspects of community-based RTIs.

MILESTONES

EARLY 2017

Biological assays and discs ready as components

MID 2018

Analytical validation in laboratory conditions completed

END 2017

System integration of components completed into first prototype

JUNE 2019

End of the project with clinical testing of the platform



PARTNERS

- | | |
|------------------------|-------------------------|
| ① Hahn Schickard | ⑥ MagnaMedics |
| ② AIT | ⑦ ClinicaGeno |
| ③ University of Zurich | ⑧ BioVendor |
| ④ Erasmus MC | ⑨ SPARKS & CO |
| ⑤ ASKION | ⑩ Karolinska Institutet |

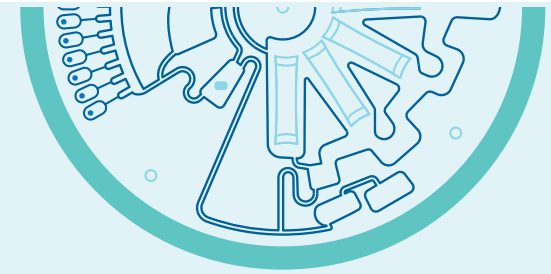
WANT TO KNOW MORE ?

www.diagoras.eu

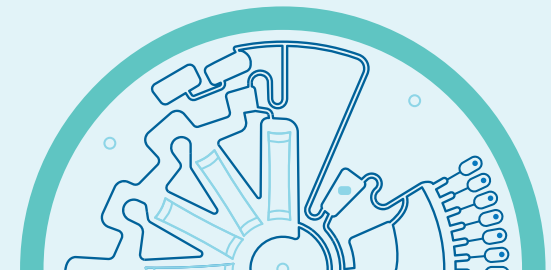
@DiagorasEU



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Chairside Diagnosis of
RESPIRATORY
TRACT INFECTIONS
for Personalised Treatment



CONTEXT

According to the WHO, antibiotic resistance already causes an estimated 700,000 deaths annually and, without effective action, is predicted to **cause 10 million deaths annually by 2050**.

Additionally, respiratory tract infections (RTIs) are among the top reasons for visiting a general practitioner, and one of the **major causes associated with the unnecessary prescription of antibiotics**.

Most antibiotics are **prescribed in primary care**, where the antibiotic prescription rate can approach 76%. Two factors are responsible of this **growing threat to humanity**:

- ▷ In febrile patients, many antibiotic prescriptions are **based on patient signs and symptoms**, and not on accurate clinical evidence-based diagnostics.
- ▷ **Diagnostic uncertainty** is an important factor when prescribing antibiotics to patients.

Antimicrobial resistance is a global problem that affects all individuals.

HIGH SOCIETAL IMPACT

DETECT RESPIRATORY TRACT INFECTIONS AT THE POINT OF CARE

REDUCING

OVERALL BURDEN TO HEALTHCARE SYSTEMS

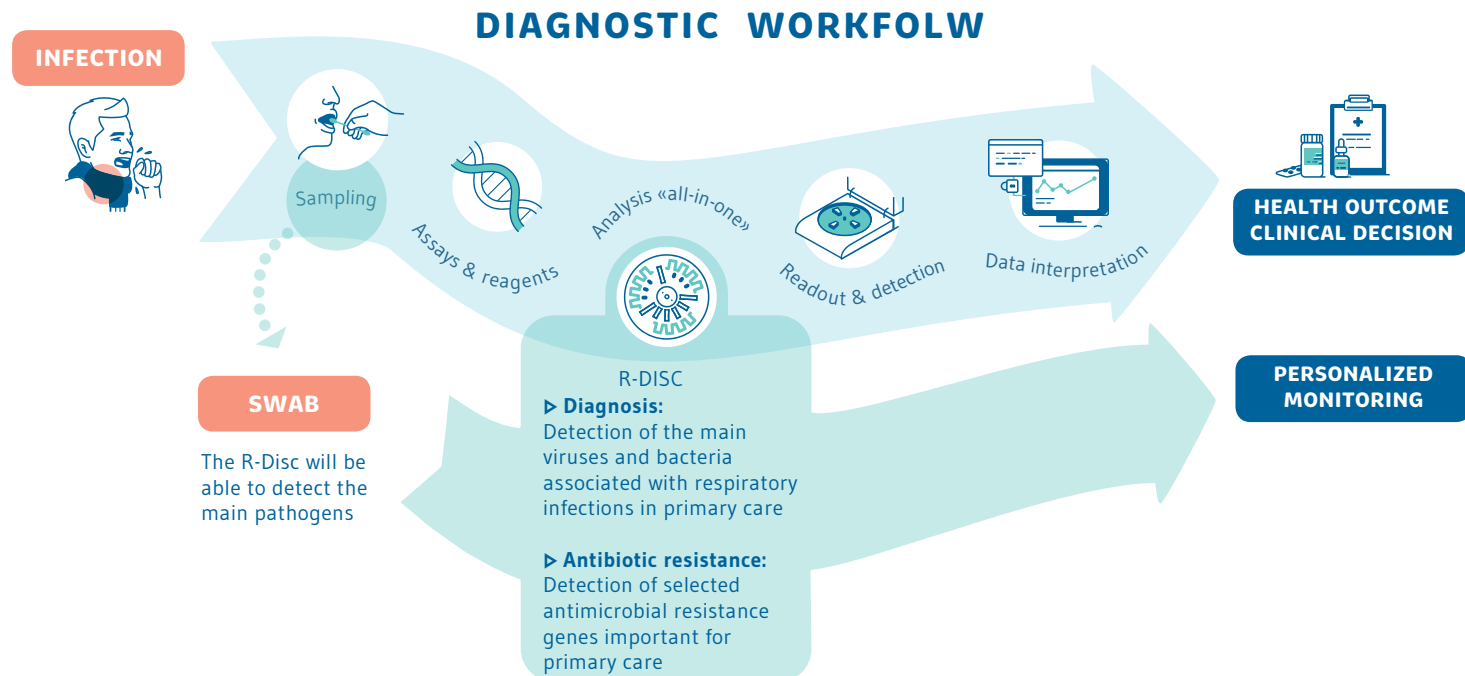
TIME TO DIAGNOSIS

DIAGNOSIS OF RESPIRATORY TRACT INFECTIONS AT CURRENT

- ▷ Antibiotic prescribing is based on symptomatic, rather than evidence-based diagnosis
- ▷ General practitioners (GPs) obtain pathogen and antibiotic resistance results in ~3 days
- ▷ A CRP test, even at the GP, is not sufficient to differentiate bacterial vs. viral infections

INNOVATIONS ASSOCIATED WITH DIAGORAS

- ▷ Differentiation of viral vs. bacterial infections by combining molecular biology and CRP tests
- ▷ Samples are tested on a compact platform which integrates a microbiology lab into a disc
- ▷ GPs obtain the results rapidly, on site, and with minimum manual effort



DIAGNOSTIC PANEL

Bacteria

B. pertussis
C. pneumoniae
M. pneumoniae
S. aureus
L. pneumophila

M. catarrhalis
H. influenzae
S. pneumoniae
S. pyogenes

Indicative relevant antibiotic resistances
 TEM-1, ROB-1, ermB

Viruses incl. (sub)types, serotypes, lineages

Influenza A
 Influenza B
 Respiratory Syncytial Virus
 Human Metapneumovirus
 Human Parainfluenza Virus

Human Adenovirus
 Human Coronavirus
 Human Rhinovirus
 Human Enterovirus
 Human Bocavirus