

Exploiting Host Response for the Early Diagnosis of Infection and Sepsis



Presymptom Health has been selected to participate in the UK's pioneering **Innovative Devices Access Pathway (IDAP) pilot** – a new pathway designed to ensure that technology is helping UK patients as quickly as possible.

Founded in 2019, **Presymptom Health** is developing a diagnostic portfolio based on the results from a major £16M, 8-hospital study.

Presymptom Health technology is being developed to address significant Antimicrobial Stewardship & Sepsis diagnostic opportunities, leveraging datasets from 7 ongoing or completed clinical discovery and validation trials encompassing nearly 5,500 patients.

Our first antibiotic stewardship product will launch in the UK in 2025. This product (InfectiClear) will offer 95% accuracy up to 3 days before current clinical diagnosis.

Highly Differentiated Host Response Technology

Presymptom Health's technology platform focuses on RNA-based host response analytics. Providing a highly sensitive pathogen-agnostic early signal of active infection and severity/sepsis.

This overcomes the significant limitations associated with traditional pathogen-centric approaches:

- Long time-to-result of microbiological culture exceeds acute care window and low accuracy;
- Molecular panels yield uncertain diagnostic etiology in majority of patients (75% of patients uncertain in recent 4,600 patient PERFORM cohort; 2023);
- Clinicians don't know whether to treat and what to treat.

“Ruling out the presence of infection (Presymptom Health's initial product) is as important as antibiotic development to address the Antimicrobial Resistance crisis”

Chris Witty, Chief Medical Officer, England, October 2023

Clinical Focus Areas (Antimicrobial Resistance & Sepsis):

11m infection-related deaths per annum. Standard of diagnostic care is slow (1-3 days) and lacks accuracy; (50-80%)

Late and imprecise diagnosis leads to:

Inappropriate care pathway and inefficient resource allocation.

Antimicrobial Misuse & Resistance (AMR) associated with 1-5M deaths; \$20B cost in US alone.

Poor outcomes.

7.6% mortality per hour from delayed sepsis diagnosis.

Presymptom USPs:

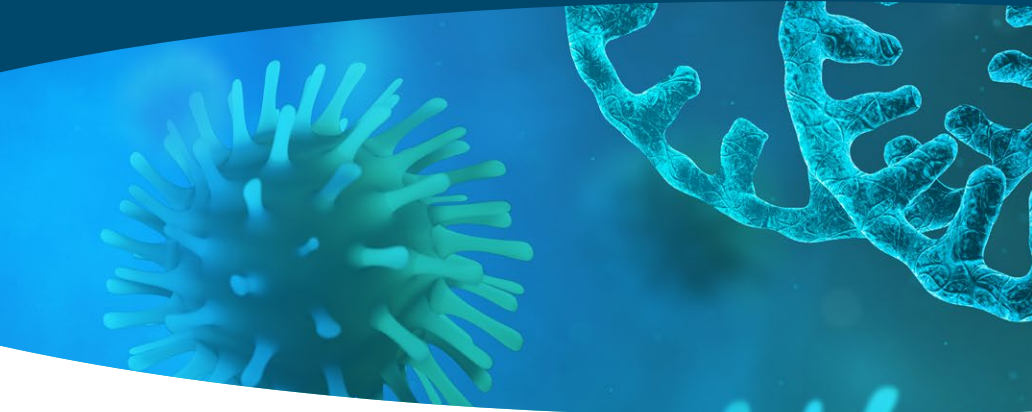
Early diagnosis of:

- Infection
- Sepsis



“The work of Presymptom Health has potential for high impact to patients and high return to the UK economy”

Ron Daniels, CEO, the Sepsis Trust



Foundational Discovery Study:

10-year presymptomatic clinical study.



4,385 elective surgery patients.

Daily blood samples (PAX, serum, plasma).

c100,000 sample/aliquot proprietary biobank, full clinical annotation.

100 collaborating clinicians/researchers.

Results published 2022.

Our Technology & Clinical Studies:

Over 5,500 Patients

7 Clinical Studies: PRECISION

SEPTIMET  National Institutes of Health
Turning Discovery Into Health



12 UK/EU Hospitals

mRNA-based infection & sepsis blood tests

Deployment on diverse lab & near-patient cartridge-based systems

For further information contact:

Iain D. Miller, Ph.D.

CEO, Presymptom Health Ltd

iain.miller@presymptom.com

Core Strategy

Leverage host response genomics to transform early diagnosis of illness (infection) and severity (sepsis) by:

- Generating and exploiting unique clinical cohorts & evidence base
- Applying machine learning pipeline to develop actionable insights
- Deploying lean core team overseeing outsourced providers to develop portfolio of novel tests under ISO13485 framework to 1st regulatory milestones
- Partnering for commercial distribution & exploitation

Product Development: UKCA mark by mid-2025

Our first antibiotic stewardship product will launch in the UK in 2025.

- Host response PCR test for Antibiotic Stewardship.
- Will be run on existing 3rd party PCR systems.
- Target time to result: 1-6 hours (platform dependent).
- Result will be delivered as infection risk score; can be used to either rule out or rule in infection.

infectiClear



R U L I N G O U T I N F E C T I O N

