

TECHNOLOGY UPDATE 3, CIRRUS® D20

Emerging Antimicrobials and Diagnostics in AMR 2019, G.C de Valk, 2019

BiosparQ drivers

What motivates us

Health care professionals (e.g. GPs) are still required to prescribe antibiotics without proper diagnosis first. As a result, people are unnecessarily suffering and Antimicrobial Resistance (AMR) rapidly spreads with all known negative consequences.

What do we stand for

Reducing the time to effective antibiotic treatment for patients suffering from infectious diseases, and to secure current antibiotics for future generations, by enabling access to affordable and rapid diagnostics for health care professionals (e.g. GPs).

BiosparQ is a high-tech company focused on rapid identification of micro organisms

An overview of BiosparQ

- Founded 2009
- Leiden Bioscience Park
- World's first Single-cell MALDI TOF Mass Spectrometer Cirrus® D20 for rapid microbial identification
- Extensive IP portfolio
- Collaboration with KOL's

Finalisten Nationale Iconen | Biosparq

Door Ministerie van Economische Zaken - 12/07/2019

Vind ik leuk 3



Tackling AMR requires Rapid diagnostics



Public awareness



Sanitation and hygiene



Surveillance



Rapid diagnostics



Antibiotics in agriculture and the environment



Vaccines and alternatives



Human capital



Drugs



Every year 150 million people get diagnosed with urinary tract infection ...

How about the GP?

“Please help us to improve UTI diagnostics. It is not acceptable that we still prescribe AB blindly at the primary care setting, while we have the ambition to fight AMR”



GP

“Please help me accurately diagnose UTI patients and accurately prescribe and effective AB course for them. Your solution should:

- Perform better than current standards, target is > 90% accurately diagnosed and effective AB course predicted
- Perform faster than current standards, target is < 30 minutes
- While being cost effective
- While being applicable at a near patient testing site”



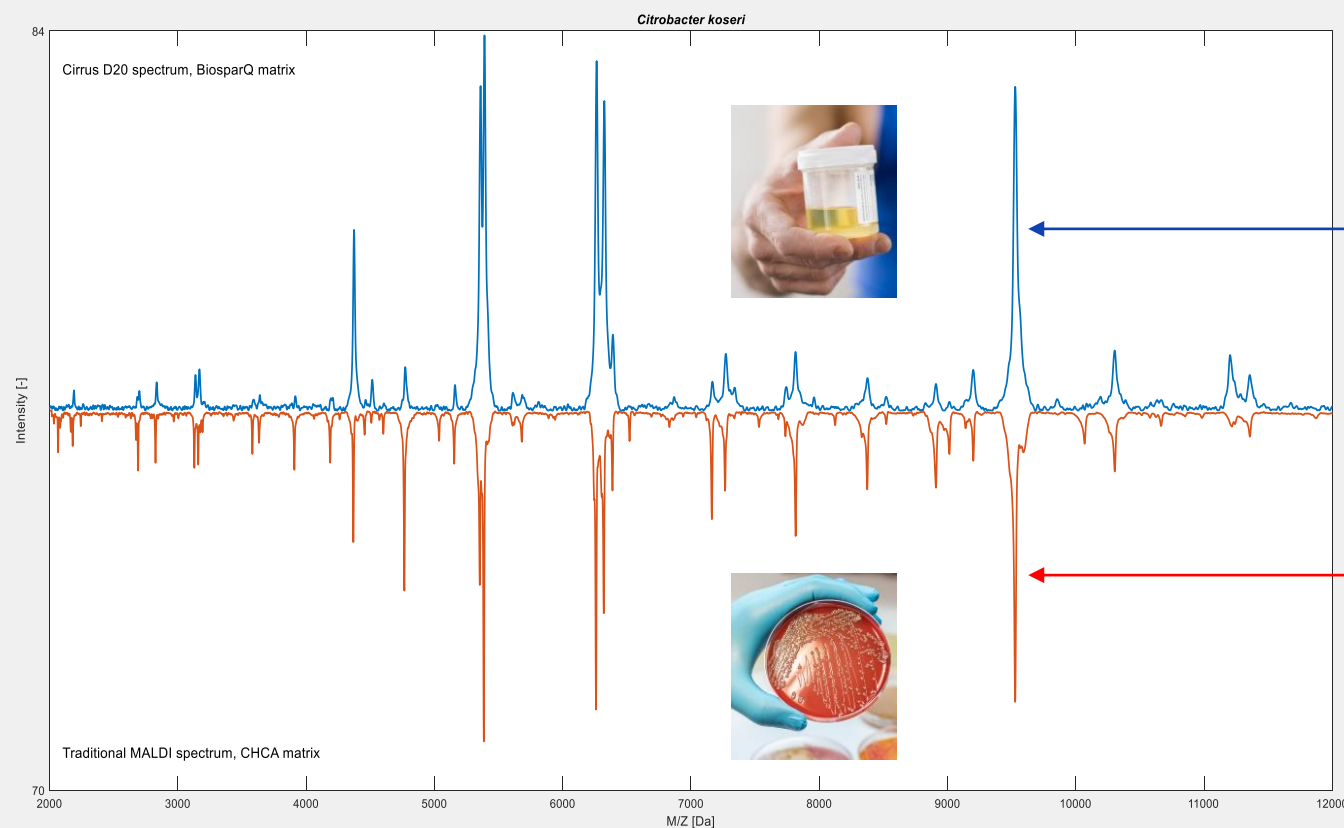
GP

Cirrus® D20

- Highly intuitive
- Primary care setting
- 15 minutes turnaround time
- Cost effective



Spectra Data (example)



BiosparQ
SYSTEMS

10 – 100 cells



100.000 – 1.000.000 cells



Next steps

- Collaboration Saltro and BiosparQ
 - UTI Analytical validation
 - CE IVDR certification
 - Pilot primary care setting
- Discussions with stakeholders
 - Reimbursement
 - Standards
- NL roll-out
- EU / US roll-out
- RTI, ST, BSI, & other medical applications development
- Environmental, food safety and other testing applications development



Take home message

Cirrus® D20 will enable health care professionals (e.g. GPs) to rapidly diagnose and effectively treat patients suffering from infectious diseases, and thereby providing a significant contribution to push back AMR.

