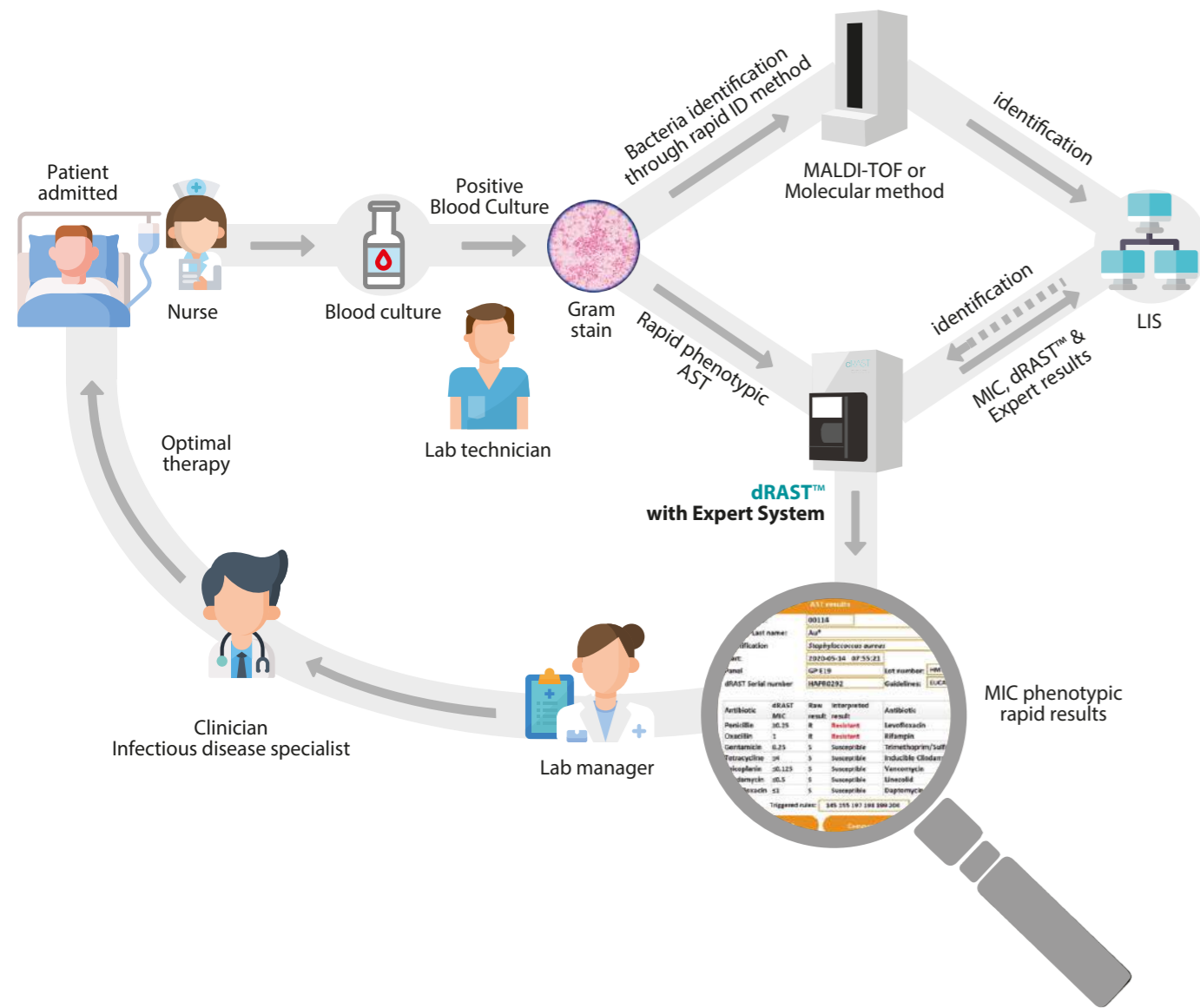
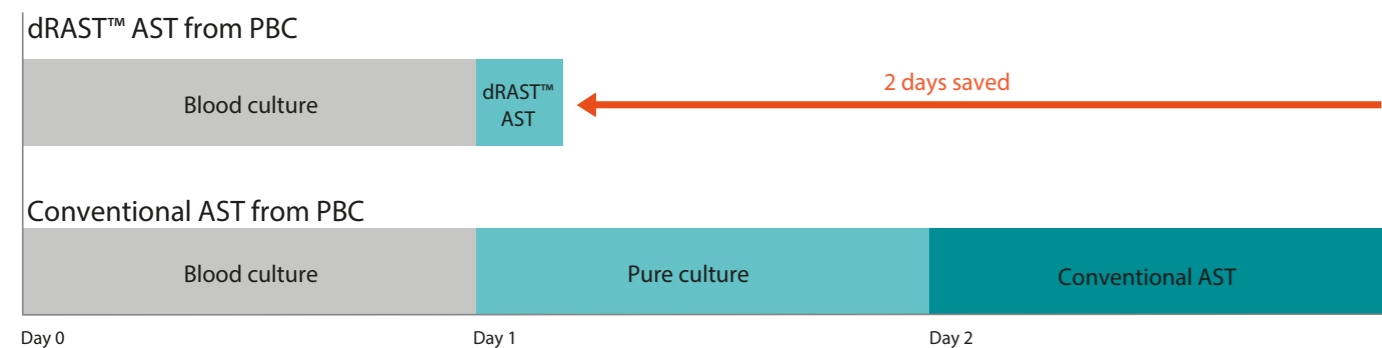


## Workflow & Added value

dRAST™ brings Rapid Phenotypic MIC results interpreted with dRAST™ Expert System in as low as 4 hours enabling antibiotic therapy to be adapted for optimal Patient & Stewardship use.

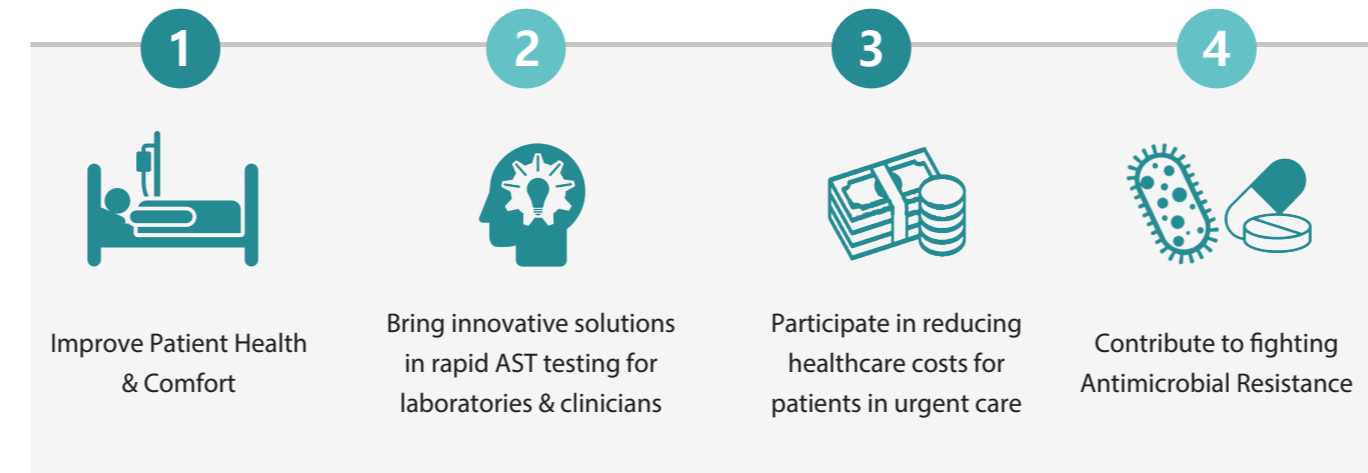


Up to 48 hours saved compared to conventional Antimicrobial Susceptibility Testing methods for the utmost patient & healthcare system benefits.



## Our mission

### Helping you care for Sepsis patients



**FAST**  
Rapid AST with MIC & SIR direct from PBC

**COMPREHENSIVE**  
Full Expert System on board with dynamic algorithm

**SIMPLE**  
Easy to use interface with low hands-on time

**RANDOM ACCESS**  
Continuous loading for optimal handling of urgent care patients

**FLEXIBLE**  
Incorporating international guidelines & recommendations: EUCAST, CLSI & CA-SFM

**CONNECTED**  
LIS Bi-directional with easy Bacteria Identification integration

**QUANTAMATRIX**  
www.quantamatrix.com



**QuantaMatrix® Korea**  
F16, 17, Bld. B, BYC highcity, 131, Gasan distal 1-ro, Geumcheon-gu, Seoul, Republic of Korea  
contact@quantamatrix.com

**QuantaMatrix® Europe**  
Villejuif Bio Park - 1 Mail du Pr Georges Mathé, 94800 Villejuif - France  
contact-europe@quantamatrix.com

**QUANTAMATRIX**



Ref: MKT-BDR002EN C





dRAST™ provides phenotypic MIC results in as low as 4 hours upon Positive Blood Culture samples (PBC). After a simple gram stain, PBCs are directly run on dRAST™ without any additional prep time.

dRAST™ uniquely combines 2 re-invented reference methods & 21<sup>st</sup> century technology: broth micro-dilution & drug diffusion in addition to proprietary time-lapse imaging.

PBC is mixed with liquified agar ultimately forming a solid phase with fixed bacteria. Mueller-Hinton media then rehydrates dried antibiotics to form a liquid phase that interacts in diffusion with fixed bacteria.

No need for extra chemical or dye, the bacteria integrity is preserved. The algorithm dynamically analyses the interaction between bacteria and drugs for optimal MIC determination. The built-in dRAST™ Expert System then interprets the results allowing the Microbiology lab to get results within same shift of PBC.

## dRAST™ Key Features

- Dedicated to Positive Blood Culture samples
- Provides phenotypic MIC in as low as 4 hours
- Random access with up to 12 samples simultaneously
- Expert system on board with choice of international guidelines
- Easy start with no Mc Farland required, no sample prep
- 2 panels: 1 Gram Neg. + 1 Gram Pos.
- Easy to use, fast to operate
- No daily maintenance

## Hands on time less than 1 min

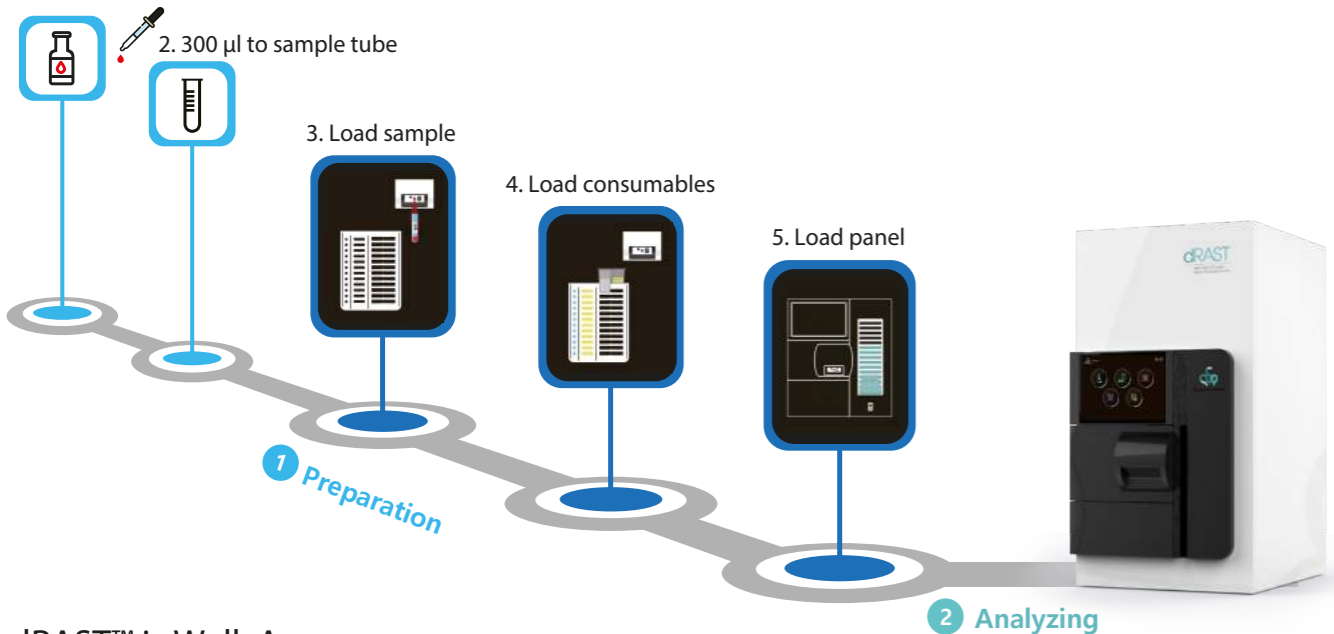
1. Positive blood culture sample

2. 300 µl to sample tube

3. Load sample

4. Load consumables

5. Load panel



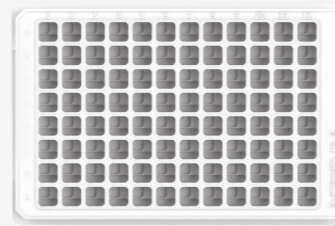
dRAST™ is Walk Away.

- Simply take aliquot from PBC sample, load it on dRAST™ with consumables, panels and walk away
- Let dRAST™ handles everything else – preparation, incubation & analysis

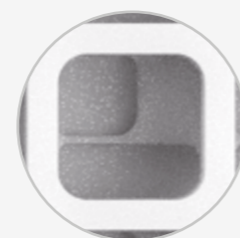
## Technology

### The best of both worlds

#### Broth microdilution re-invented for optimal phenotypic MIC

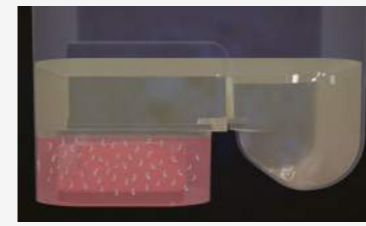


96 well plate with unique 2 compartments in each well allowing interaction of fixed bacteria and rehydrated antibiotic



Variation of drugs and concentrations in wells provide optimal phenotypic MIC

#### Diffusion in liquid-solid media



Heterogeneous phase brings fixed bacteria in solid media to interact with various concentrations of multi-drug panel

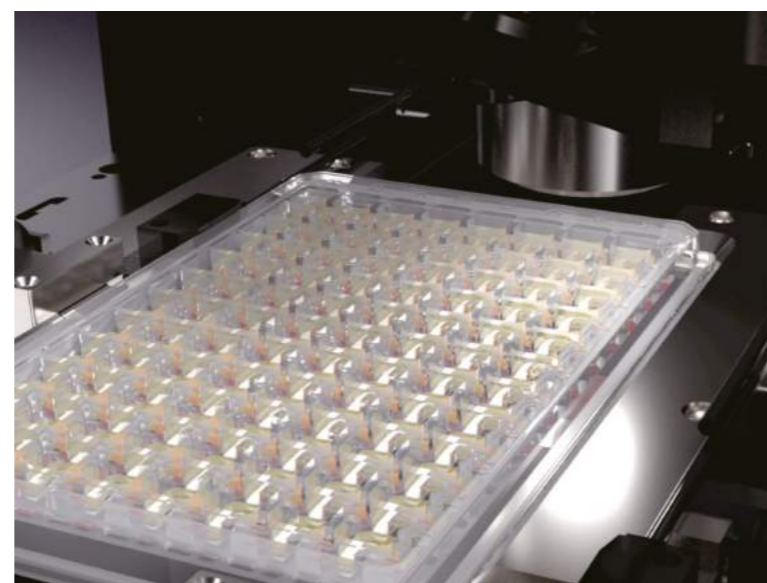


Agar to be mixed with positive blood culture



Mueller-Hinton media to rehydrate drugs and constitute liquid phase

## Time-lapse imaging featuring proprietary QuantaMatrix® algorithm



Example of resistant bacteria

Example of susceptible bacteria

Time

Dynamic reading optimizes interpretation to shorten time to results with bug-drug combinations in as low as 4 hours.

dRAST™ prompts the User whenever a result is ready to be reviewed providing unmatched added-value into the demanding microbiology lab.

## Intuitive User interface

- Intuitive interface with minimal training
- Easy navigation & operation
- dRAST™ prompts for results to be validated



Position	Sample ID	Gram type	TOC	Bacteria ID	Status
1	123455	negative		E. coli	complete
2	45678	positive		S. aureus	complete
3	3421	positive		S. aureus	reading
4	6584	positive		S. aureus	incubating
5	9876	negative		K. pneumoniae	incubating

Sample ID	Gram type	TOC	Bacteria ID	Status
1	GP		K. pneumoniae	
2	SA		S. aureus	
3	7654321		S. aureus	
4	9876543		E. coli	
5	3210987		K. pneumoniae	
6	5678901		A. baumannii	
7	4321098		E. coli	
8	6543210		S. aureus	

## dRAST™ Expert System with international & local guidelines

Maintained by QuantaMatrix, dRAST™ Expert System. Integrates the latest recommendations by EUCAST, CLSI & CA-SFM. Raw data and interpreted results available and displayed at all times.

Results are displayed in a single screen with MICs and SIR determination. All information is gathered for optimal decision making.

Specimen ID	00213	Sample ID	00213202003271646
Bacteria ID	<i>Staphylococcus aureus</i>	Isolate number	1
Start	2020-03-27 11:16:37	End	2020-03-27 16:46:49
Panel	GP E19	Lot Number	UA20200116
dRAST Serial Number	MDC1912005	Guidelines	EUCAST 2020
Software Version	1.4.1 (B.S.B.2)		

Activated comments and rules are listed for each sample allowing the User to get all relevant information to be provided to Clinicians and Infectious Disease Specialists.

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Bacteria ID	<i>Staphylococcus aureus</i>	Isolate number	1
Start	2020-03-27 11:16:37	End	2020-03-27 16:46:49
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