Now
One Fits All

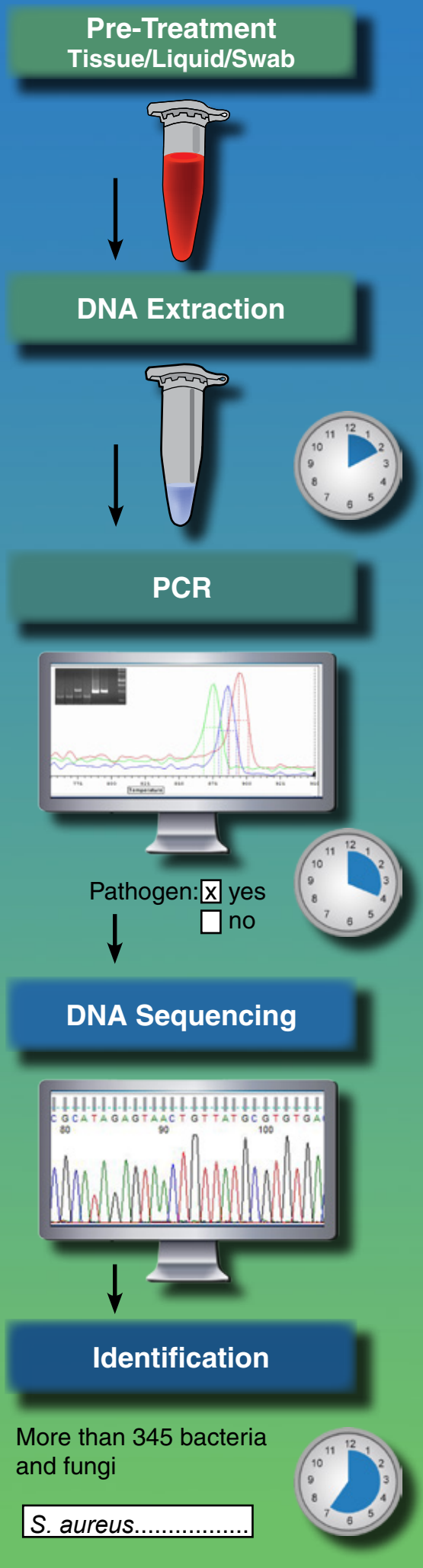
Broad-Range MDx

CE IVD

SepsiTest™-UMD

Identify >345 Bacteria and Fungi in Tissues, Body Fluids, Swabs

Molzym



Universal Pathogen Identification

SepsiTest™-UMD is a precise culture-independent routine diagnosis to address:

- Non-growing pathogens under antibiotic treatment
- Rare pathogens, including anaerobic and fastidious organisms.

SepsiTest™-UMD allows the identification of more than 345 bacteria and fungi in relation to:

- Endocarditis
- Orthopedic infections
- Tuberculosis
- Wound infections
- Sepsis
- Meningitis
- Pneumonia and more...

Clinical Benefit

SepsiTest™-UMD increases the rate of diagnosis of true infections (40% to 67%, Fig. 1) by the identification of pathogens in culture-negative patients.

SepsiTest™-UMD identifies pathogens in 35% [2] to 45% [5] of patients 12 h to 3 days earlier than blood culture. In infective endocarditis, **SepsiTest™-UMD** provides pathogen identity even up to 8 days earlier [6].

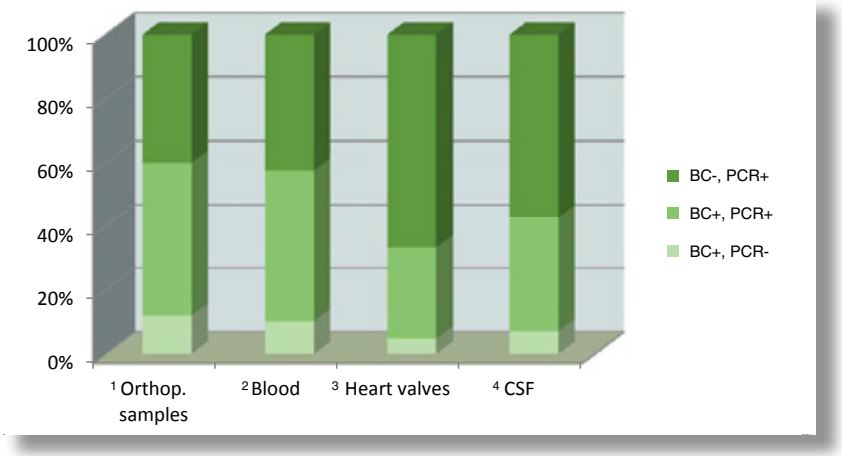


Fig. 1: Ratio of positive results by culture (BC), SepsiTest™-UMD (PCR) or both methods obtains with orthopaedic (combined BC and PCR positivity: 25/84 patients [30%; [1]]), blood (59/187 [32%; [2]]), heart valves (21/30 [70%; [3]]) and CSF (14/20 [70%; [4]]). Note the considerable ratio of culture-negative patients with clinically relevant PCR positive results (BC-/PCR+).

References:

[1] Grif et al., J. Clin. Microbiol. 2012, 50: 2250
[2] Wellinghausen et al. 2009, J. Clin. Microbiol 47: 2759
[3] Kühn et al., J. Clin. Microbiol. 2011, 49: 2919
[4] Meyer et al., J. Clin. Microbiol. 2014, 52: 1751
[5] Orszag et al., J. Clin. Microbiol. 2013, 52: 307
[6] Marsch et al., Interact. Cardia Vas. Thorac Surg. 2015, doi: 10.1093/icvts/ivv006

Unique DNA Extraction

High sensitivity and specificity gained by the DNA extraction protocol of **SepsiTest™-UMD**:

- > 99% removal of human and free floating microbial DNA
- Broad-range lysis of bacteria and fungi
- DNA enrichment and isolation of live bacteria and fungi.

Highly Sensitive PCR Performance

SepsiTest™-UMD includes DNA-free PCR reagents for the detection of bacterial and fungal DNA:

- Assays: 16S / 18S rRNA gene PCR
- Amplification: 40 cycles routinely
- Controls: PCR-positive & negative, extraction control
- Identification: Sanger sequencing analysis.

Microbe Differentiation

SepsiTest™-BLAST is a free online BLAST tool for sequence analysis that relies on edited sequences from more than 7,000 cultivated reference strains of bacteria, yeasts and *Aspergillus* spp.

Analytical Sensitivity

Best performance with **SepsiTest™-UMD** for highly sensitive pathogen diagnostics:

Strain	cfu/ml blood
Escherichia coli	40
Klebsiella pneumoniae	50
Staphylococcus aureus	20
Streptococcus pneumoniae	50
Enterococcus faecalis	20
Candida albicans	10
Candida glabrata	10

Automation

SelectNA™*plus:* Fully-Automated DNA Extraction:

- Hands on time: 10min*
- Total process time: 90min*
- 1 - 12 samples in parallel
- Various specimens: body fluids, swabs and tissue

*Depending on specimens and number of samples

Specimens


Heart Valve


Ascites Fluid


BAL Fluid


Synovial Fluid


CSF


Swab

Selection of Identified Pathogens:

Gram-negative bacteria	*Edwardsiella tarda*	*Providencia stuartii*	*Dolosigranulum pigrum*	*Propionibacterium* spp.
Achromobacter xylosoxidans	*Elizabethkingia meningoseptica*	*Pseudomonas* spp.	*Eggerthella lenta*	Rhodococcus spp.
Acidovorax spp.	*Enhydrobacter aerosaccus*	*Ralstonia* spp.	*Enterococcus* spp.	*Rothia* spp.
Acinetobacter spp.	*Enterobacter* spp.	*Raoultella planticola*	*Eremococcus coleocola*	*Staphylococcus* spp.
Aeromonas veronii	*Escherichia* spp.	*Rickettsia typhi*	*Eubacterium* spp.	*Streptococcus* spp.
Afipia broomeae	*Fusobacterium* spp.	*Serratia marcescens*	*Facklamia* spp.	*Tropheryma whippleii*
Aggregatibacter aphrophilus	*Haemophilus* spp.	*Shigella* spp.	*Finegoldia magna*	*Tsukamurella* spp.
Anaerotruncus colihominis	*Hafnia alvei*	*Stenotrophomonas maltophilia*	*Gardnerella vaginalis*	Ureaplasma urealyticum
Bacteroides spp.	*Helicobacter pylori*	*Veillonella* spp.	*Gemella* spp.	*Vagococcus* spp.
Bartonella quintana	*Kingella* spp.	*Weeksella* spp.	*Gordonia* spp.	*Wolbachia* sp.
Bordetella spp.	*Klebsiella* spp.	*Yersinia* spp.	*Granulicatella adiacens*	**Fungi**
Borrelia garinii	*Kerstersia* spp.	**Gram-positive bacteria**	*Janibacter* spp.	*Aspergillus* spp.
Bosea spp.	*Kluyvera cryocrescens*	*Abiotrophia* spp.	*Kocuria* spp.	*Candida* spp.
Brucella spp.	*Lautropia mirabilis*	*Actinomyces* spp.	*Lactobacillus* spp.	*Cladosporium cladosporioides*
Burkholderia spp.	*Legionella pneumophila*	*Aerococcus* spp.	*Lactococcus* spp.	*Cryptococcus* spp.
Campylobacter spp.	*Leptotrichia* spp.	Alloiococcus otitis	*Leifsonia* spp.	*Didymella exitialis*
Cand. Neoehrlichia mikurensis	*Massilia* spp.	*Anaerococcus* spp.	*Listeria monocytogenes*	*Davidiella tassiana*
Capnocytophaga spp.	*Methylobacterium* spp.	*Atopobium* spp.	*Microbacterium* spp.	*Fusarium* spp.
Chryseobacterium indologenes	*Moraxella* spp.	*Bacillus* spp.	*Micrococcus* spp.	*Malassezia* spp.
Citrobacter freundii	*Morganella morganii*	*Bifidobacterium* spp.	Mogibacterium timidum	*Pseudallescheria boydii*
Cloacibacterium normanense	*Neisseria* spp.	*Brevibacterium* spp.	*Mycobacterium* spp.	*Saccharomyces cerevisiae*
Comamonas testosteroni	*Pantoea agglomerans*	*Carnobacterium* spp.	*Mycoplasma* spp.	*Schizophyllum radiatum*
Coxiella burnetii	*Paracoccus spp.*	*Clostridium* spp.	*Nocardi*a spp.	*Sporobolomyces* spp.
Cronobacter sakazakii	*Pasteurella* spp.	*Coprococcus catus*	*Paenibacillus* spp.	*Issatchenkia orientalis*
Curvibacter spp.	*Porphyromonas* spp.	*Corynebacterium* spp.	*Parvimonas micra*	
Delftia spp.	*Prevotella* spp.	*Dermabacter hominis*	*Peptoniphilus* spp.	**Protist**
Dialister spp.	*Proteus* spp.	*Dietzia* spp.	*Peptostreptococcus* spp.	*Plasmodium* spp.

Order Information:

Product*	Application	Content	Order No.
SepsiTest™-UMD	Broad-range applications (fluids, tissues, swabs), manual DNA extraction protocol	24 reactions	U-010-024
		48 reactions	U-010-048
UMD-SelectNA™	Broad-range applications (fluids, tissues, swabs), semi-automated DNA extraction protocol	24 reactions	U-050-024
		48 reactions	U-050-048
Add-On 10	Add on kit for the extraction of pathogen DNA for volumes up to 10ml	24 reactions	U-120-024
		48 reactions	U-120-048
Micro-Dx™	Broad-range applications (fluids, tissues, swabs), fully-automated DNA extraction protocol	24 reactions	U-200-024
		48 reactions	U-200-048

* Not available in the U.S.

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