

A Global Challenge

As the gap widens between the rising number of MDRO infections and the development of new antibiotics to treat them, “**Superbugs**” have become one of healthcare’s biggest threats.

Rapid diagnostic methods and surveillance are some of the most valuable tools in preventing the spread of resistance.⁽¹⁾

Screening at-risk patients**, as part of an Infection Control program is an effective measure to contain the spread of MDROs.⁽²⁾

Reducing the emergence and spread of antimicrobial resistance is a global challenge – requiring strong and smart actions.

** Intensive Care Units, clean surgery, transplantation units, cardio-vascular surgery, orthopedic surgery, geriatrics, long-term care facilities. Previous carriage or infection with MRDO, hospital stay and/or antibiotic exposure within the last year, coming from endemic zones...

bioMérieux’s portfolio of S.M.A.R.T solutions contributes to the management of antimicrobial resistance by providing timely actionable results for informed clinical decisions.

BE S.M.A.R.T. WITH RESISTANCE™
Solutions to Manage the Antimicrobial Resistance Threat
www.biomerieux.com/besmart



**Over 45 years
experience
in the fight against
Infectious Diseases**

BE S.M.A.R.T. WITH RESISTANCE™



Targeted Solutions

FOR SCREENING & ACTIVE SURVEILLANCE

new

chromID® plates and LyfoCults® Plus Microorganisms		
chromID CARBA agar	ref 43861	20 plates
chromID CARBA/chromID OXA-48 agars*	ref 414011	20 bi-plates
LyfoCults® Plus K. pneumoniae BAA 1705 (KPC)	ref 303479	1 x 2 strains
chromID ESBL agar	ref 43481	20 plates
new Biplate BLSE agar	ref AEB525770	20 bi-plates
LyfoCults® Plus K. pneumonia ATCC® 700603™ (ESBL)	ref 301247	1 x 2 strains
chromID VRE agar	ref. 43004/43851**	20 plates
new chromID ESBL/chromID VRE agars*	ref 43470	20 bi-plates
LyfoCults® Plus E. faecalis ATCC® 51299™ (VanB)	ref 301107	1 x 2 strains
chromID MRSA agar	ref 43451/43841**	20 plates
chromID MRSA agar	ref 43459	100 plates
new chromID MRSA/chromID S aureus agars	ref 43466	20 bi-plates
LyfoCults® Plus S. aureus ATCC® 43300™ (MRSA)	ref 301621	1 x 2 strains

Additional ranges

new

Brain-heart infusion broth	ref 42081	20 tubes
Todd Hewitt broth	ref 42116	20 tubes
new Mueller Hinton hyper salted agar*	ref AEB521800E	20 plates
CLOXA Mueller Hinton agar*	ref AEB120291	10 plates 120 x120 mm

new

Molecular biology		
NucliSENS EasyQ® MRSA	ref. 280115	48 tests
NucliSENS EasyQ KPC (RUO)	ref 410341	48 tests
Research use only		

Etest® strips

ESBL PM/PML	ref 534700	30 strips
ESBL CT/CTL	ref 532200	30 strips
ESBL TZ/TZL	ref 532500	30 strips
MBL MP/MPI	ref 411361	30 strips

VITEK® 2 - VITEK 2 COMPACT – VITEK MS

Contact your local bioMérieux representative for availability

DiversiLab®

Contact your local bioMérieux representative for availability

SLIDEX®

SLIDEX MRSA Detection	ref 73117	50 tests
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* For more information consult the instructions for use. Contact your local bioMérieux representative for availability.

** USA only FDA cleared

CE marked products



With chromID bioMérieux offers you an extensive range of chromogenic media for the simultaneous culture and identification of micro-organisms⁽²⁰⁾

Bibliography

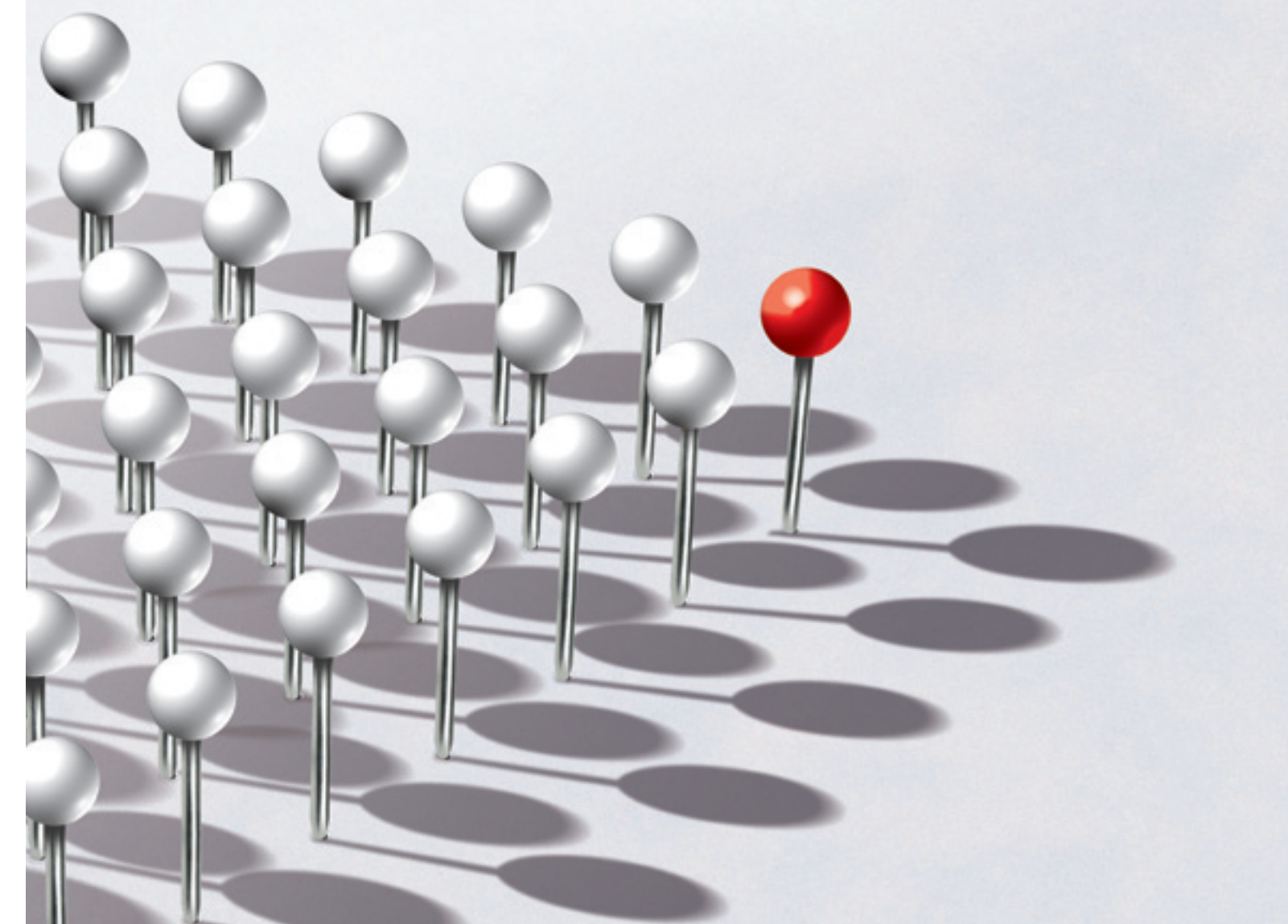
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BE S.M.A.R.T. WITH RESISTANCE™



Leading the charge on MDROs
Multi-Drug Resistant Organisms



CARBAPENEMASES

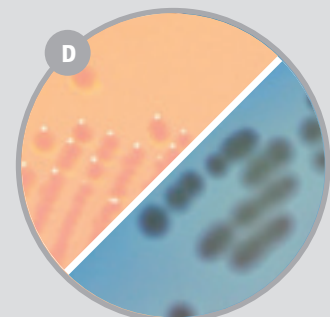
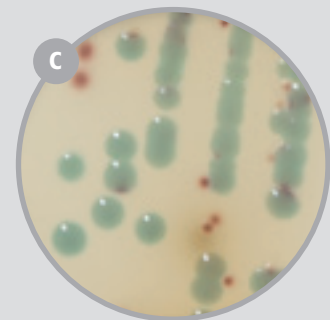
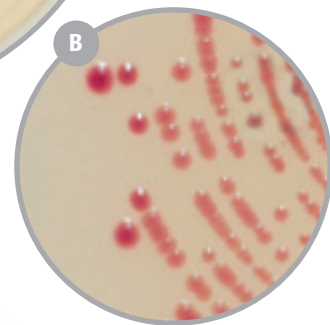
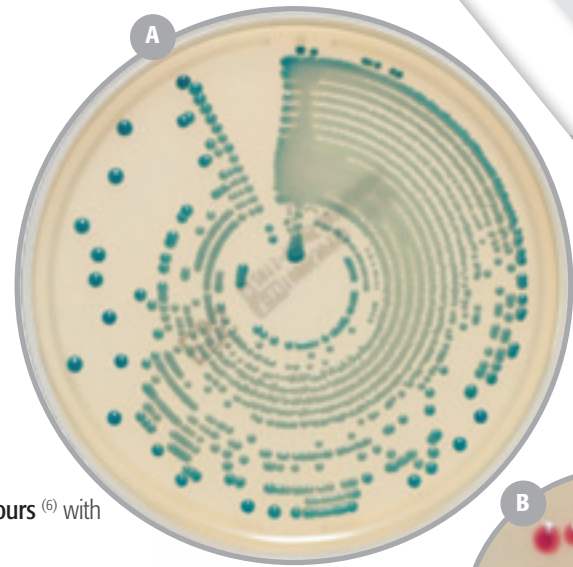
are the most powerful beta-lactamases, being able to hydrolyze almost all β -lactams. They are mostly of the KPC, VIM, IMP, NDM and OXA-48 types. ^{(3) (4) (5)}

SPECIFICITY – SENSITIVITY – RAPIDITY

> chromID® CARBA agar

Chromogenic medium for the screening of carbapenemase producing *Enterobacteriaceae*

Very rapid screening of carbapenemase producing *Enterobacteriaceae* in 18-24 hours ⁽⁶⁾ with
→ high sensitivity 97.4% [93.4-99.3]
→ high specificity 99.7% [98.9-100.0]
defined on clinical specimens (stools or rectal swabs) compared to conventional method ^{(7) (8) (9)}



ESBL*

among the gram-negative bacilli has been a major concern in hospitals in recent years. ⁽¹⁰⁾

SPECIFICITY – SENSITIVITY – RAPIDITY

> chromID® ESBL agar

Chromogenic medium for the screening of ESBL-producing *Enterobacteriaceae*

Very rapid screening of ESBL in 18-24 hours with
→ high sensitivity 97.7% ⁽¹¹⁾
→ high specificity 98% ⁽¹¹⁾
defined on clinical specimens (rectal swabs, urines, respiratory specimens)

> biplate BLSE agar

Selective medium for the screening of presumptive ESBL *Enterobacteriaceae* and Multi-Resistant Gram-negative bacilli ⁽¹²⁾

defined on stools, rectal swabs, urine and respiratory specimens

* Extended-spectrum beta-lactamase-producing *Enterobacteriaceae*.

MRSA

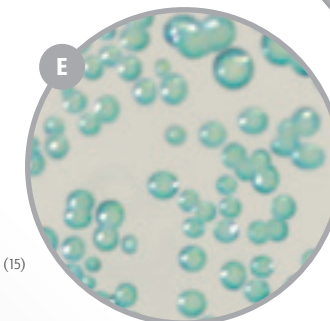
(Methicillin-resistant *Staphylococcus aureus*) has become a major public health concern. Screening of MRSA carriage is recommended by official organisations. ⁽¹⁴⁾

SPECIFICITY – SENSITIVITY – RELIABILITY

> chromID® MRSA agar

Chromogenic medium for the screening of Methicillin-resistant *Staphylococcus aureus*

Provides colony isolation and identification of MRSA in 18-24 hours
Validated for use with nose, throat, perineum, wound, groin specimens ⁽¹⁵⁾



VRE

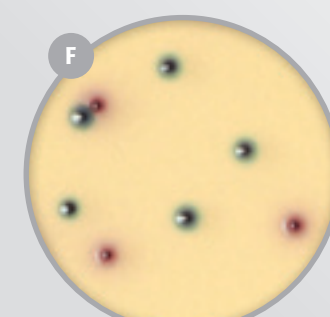
- Carrier screening is the most efficient method of controlling VRE. *Enterococcus faecium* and *Enterococcus faecalis* with acquired vancomycin resistance (phenotypes VanA and VanB) are increasingly responsible for healthcare-associated infections. ⁽¹⁶⁾

RAPIDITY – SIMPLICITY – RELIABILITY

> chromID® VRE agar

Chromogenic medium for the screening of Vancomycin-resistant *Enterococci*

Direct identification of *Enterococcus faecalis* (bluish-green) and *E. faecium* (violet) and identification of Vancomycin-resistant *Enterococci* in 24 hours ⁽¹⁷⁾, defined on stools and rectal swab specimens



For more information consult the instructions for use. Contact your local bioMérieux representative for availability.



MDRO complete offer



NucliSENS EasyQ®
Amplification and qualitative detection of genes from bacterial nucleic acid extracts ⁽¹⁹⁾



Etest®
Quantitative technique for phenotypically determining the antimicrobial susceptibility



DiversiLab®
Characterization to strain level for rapid implementation of infection control measures



LyfoCults® Plus
Microorganisms for quality control procedures



VITEK® 2 Technology
VITEK® MS
Identification and antimicrobial susceptibility testing



SLIDEX®
Identification of MRSA by detecting PBP2' (penicillin-binding protein 2')



“ Rapid diagnostic methods and surveillance are some of the most valuable tools in preventing the spread of resistance ⁽¹³⁾ ”

“ In some countries, over 60% of *Staphylococcus aureus* cases in hospital ICUs are now resistant to first-line antibiotics ⁽¹⁸⁾ ”

“ The validated Certificate of Compatibility, document shows the compatibility with complementary bioMérieux tests. www.biomerieux.com/techlib ”