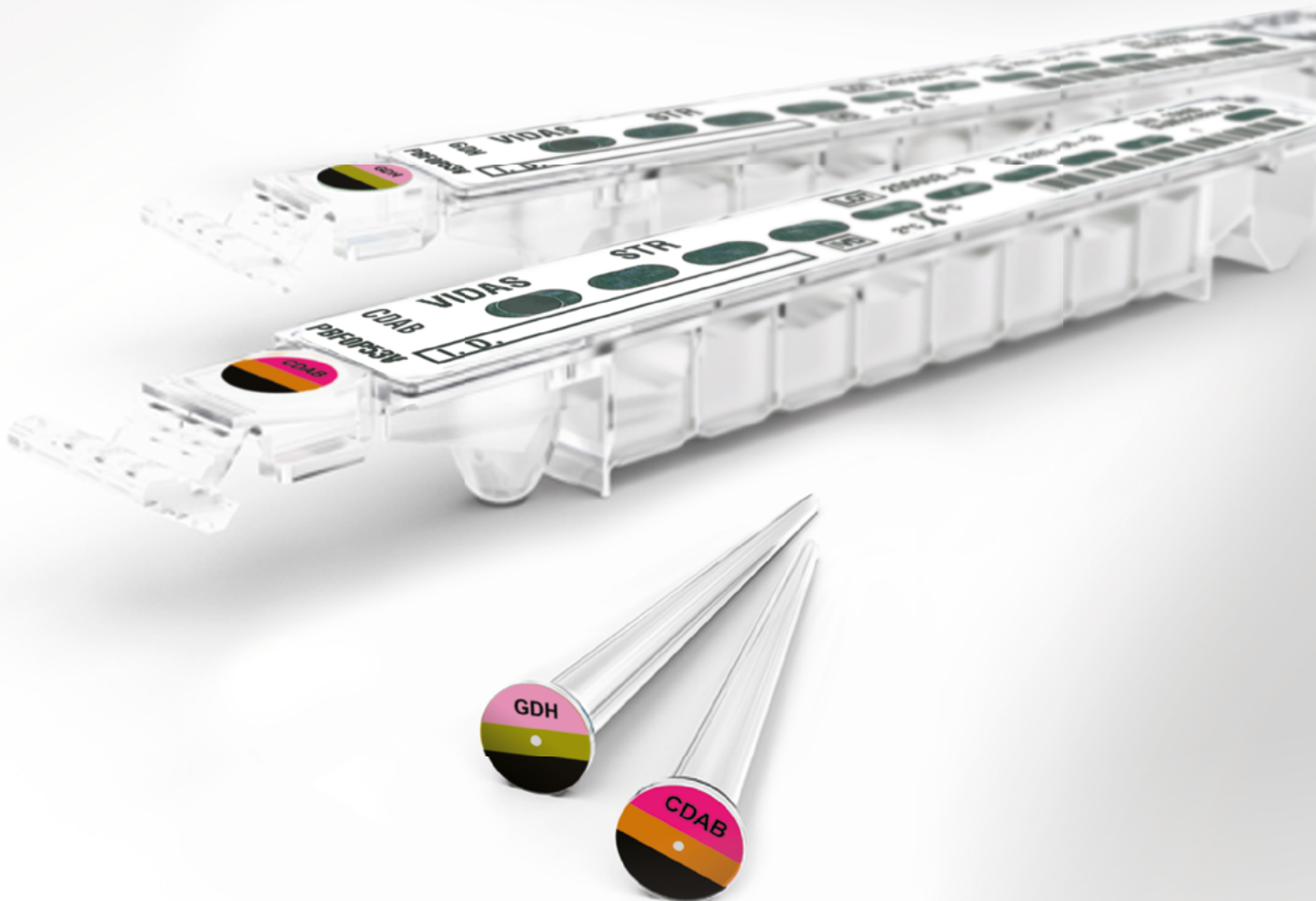




# VIDAS<sup>®</sup> *C. difficile* GDH VIDAS<sup>®</sup> *C. difficile* TOXIN A & B

Optimize your antibiotic stewardship approach  
to *Clostridioides difficile* infection testing



PIONEERING DIAGNOSTICS

# Did you know ?



Classed as worldwide threat – between **1/6** and **1/16** patients die by Day 30 after diagnosis of *Clostridioides difficile* infection (CDI)<sup>1,2</sup>



Typical cost per primary CDI episode - **\$10,000**/case<sup>3</sup>



**46%** reduction in CDI cases through an Antimicrobial Stewardship Program<sup>4</sup>

## Fighting Antibiotic Resistance: CDI Diagnosis is Key

### ***C. difficile* causes diarrheal infections and is highly transmissible.**

Preventing transmission and controlling outbreaks as well as giving the appropriate antimicrobial treatment to the patient requires.

**Relying on clinical diagnosis alone to make a diagnosis of CDI is not sufficient<sup>5</sup>.**



*“Absence of clinical suspicion and use of sub-optimal laboratory diagnostic methods mean that an estimated 40 000 inpatients with CDI are potentially undiagnosed each year in 482 European hospitals.”*

Davies et al, 2014

### **Antimicrobial Stewardship Programs can reduce the risk of CDI<sup>6</sup> by implementing:**

- **Early, cost-efficient testing that helps avoid over-diagnosis:** 2- or 3-step diagnostic algorithm that includes a fecal toxin text method<sup>7</sup>
- **Optimized antibiotic use:** reduce frequency & duration of infection, limit use of treatments with higher CDI risk, treat according to local epidemiology & strain types<sup>8</sup>
- **Prompt patient isolation & infection control measures**



*“Less than 50% of 500 European hospitals were using optimum testing methods for CDI as defined by European guidelines.”*

Crobach et al, 2016

## VIDAS<sup>®</sup> *C. difficile* GDH and VIDAS<sup>®</sup> *C. difficile* TOXIN A & B

### Optimize your Antibiotic Stewardship approach to *Clostridioides difficile* infection testing

#### **VIDAS<sup>®</sup> *C. difficile* GDH assay:**

a qualitative test for the detection of *C. difficile* antigen in stool specimens from patients suspected of having CDI.

#### **VIDAS<sup>®</sup> *C. difficile* TOXIN A & B assay:**

a qualitative test for the detection of *C. difficile* toxin A and toxin B in stool specimens from patients suspected of having CDI.

Both tests can be used on-demand on the VIDAS<sup>®</sup> family of instruments.



### **Cost-efficient<sup>10,11</sup>**

**Potential annual test cost savings by using the two-step process with VIDAS<sup>®</sup> *C. difficile*:**

- Based on theoretical data/5 patients a day
- Assumes 80% rule-out with GDH
- Average price molecular assay \$35/test

\$63,000

Reduced Costs

\$17,280

Molecular stand-alone testing on all samples

VIDAS<sup>®</sup> *C. difficile* GDH screening followed by VIDAS<sup>®</sup> *C. difficile* TOXIN A & B on positive samples



# VIDAS® *C. difficile* GDH and VIDAS® *C. difficile* TOXIN A & B



→ **Greater clinical value for clinicians:** actionable results due to excellent clinical performance

<b>VIDAS <i>C. difficile</i> GDH<sup>a</sup></b> Rapid, accurate screening of <i>Clostridioides</i>	<b>VIDAS <i>C. difficile</i> TOXIN A &amp; B<sup>b</sup></b> Provides high PPV of toxin presence for definitive CDI diagnosis
<b>95.8%</b> Sensitivity	<b>88.3%</b> Sensitivity
<b>90.0%</b> Specificity	<b>99.8%</b> Specificity

<sup>a</sup> Compared to Bacterial Culture CCFA. <sup>b</sup> Compared to Cellular Cytotoxicity Assay. Source: VIDAS® *C. difficile* GDH and VIDAS® *C. difficile* TOXIN A & B package inserts.

## Sample Preparation Quick Guide

Refer to the appropriate VIDAS package insert for the full sample preparation instructions

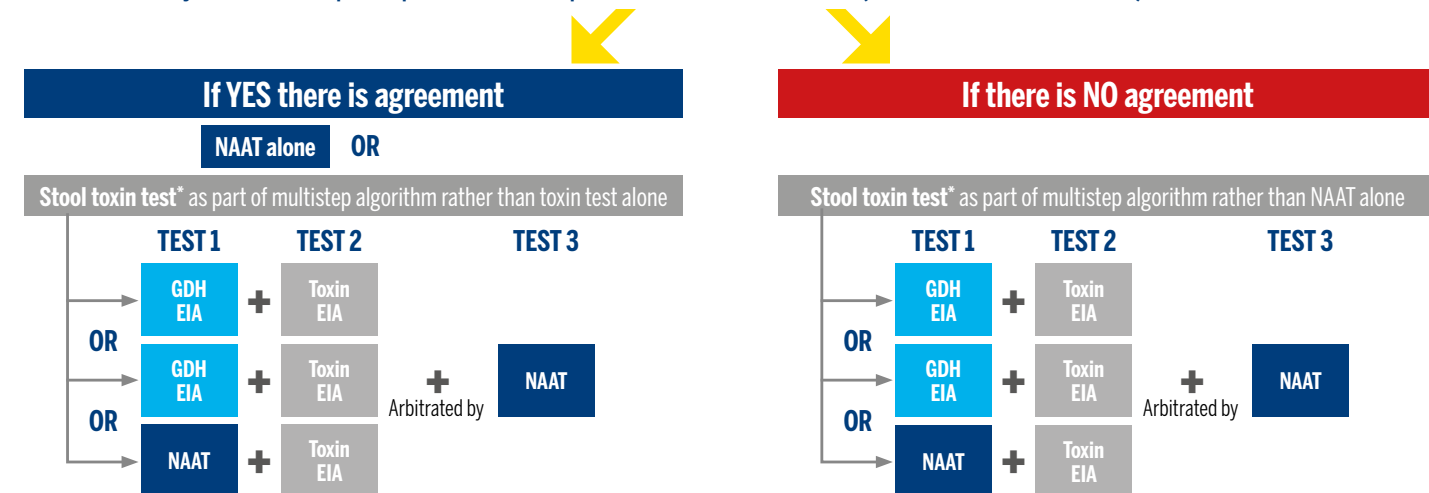


### IDSA/SHEA Update for Clinical Practice Guidelines for CDI

Adapted from McDonald et al. *Clin Infect Dis.* 2018;66:987-994

Laboratory testing algorithm chosen based on agreement between the clinician and laboratory to:

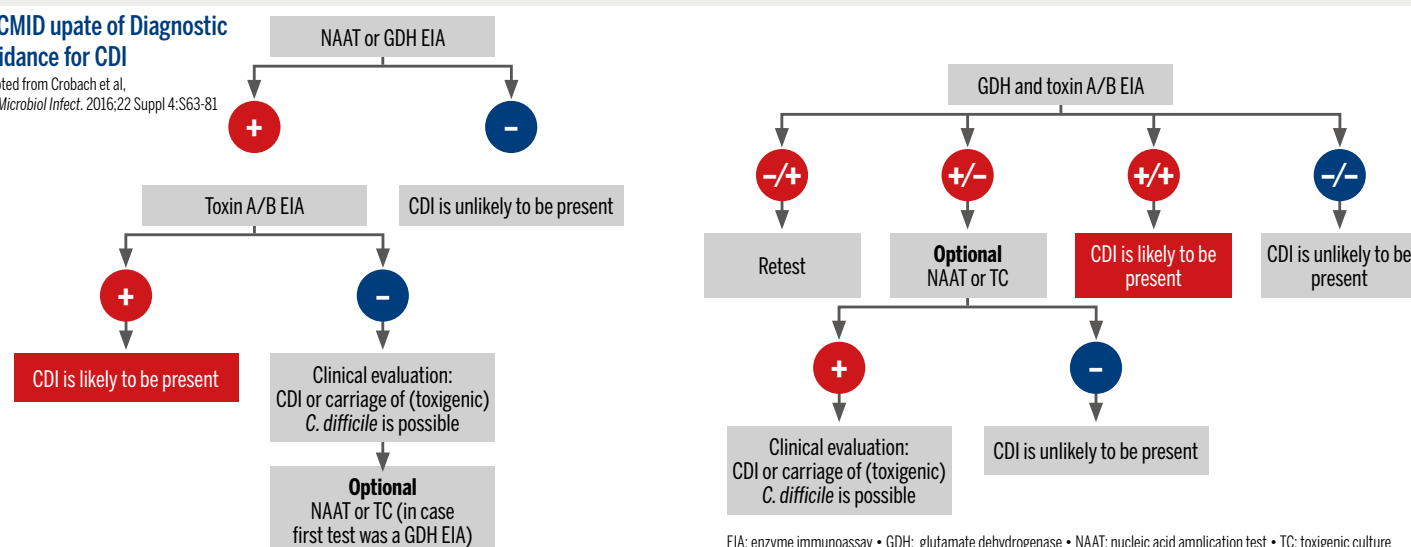
1. Not send stool samples on patients receiving laxatives &
2. Only send stool samples of patients with unexplained and new onset diarrhea (≥ 3 unformed stools in 24 hrs)



\* Approved stool EIA toxin tests vary widely in sensitivity. Laboratories should choose a toxin test with sensitivity in the upper range of sensitivity as reported in the literature [146-149, 156].

### ESCMID update of Diagnostic Guidance for CDI

Adapted from Crobach et al. *Clin Microbiol Infect.* 2016;22 Suppl 4:S63-81



EIA: enzyme immunoassay • GDH: glutamate dehydrogenase • NAAT: nucleic acid amplification test • TC: toxigenic culture

## bioMérieux's complete *C. difficile* solution:



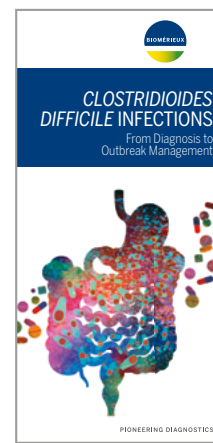
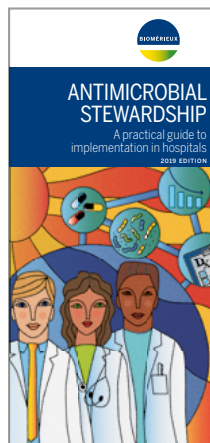
# AVAILABLE ON INSTRUMENTS OF THE VIDAS® FAMILY: VIDAS®, MINI VIDAS® AND VIDAS® 3



## TECHNICAL SPECIFICATIONS

	VIDAS® <i>C. difficile</i> GDH	VIDAS® <i>C. difficile</i> TOXIN A & B
Reference	30125	30118
Tests/kit	60	60
Sample type	Fecal specimen	Fecal specimen
Sample volume	200 µL	200 µL
Sample volume after pre-treatment	300 µL	300 µL
Calibration frequency	28 days	14 days

## TWO EDUCATIONAL BOOKLETS are available for more information on *Clostridioides difficile* infection and Antimicrobial Stewardship



See package insert for more details

## REFERENCES

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