

#### 24 May 2017

To the Laboratory Manager Cc: Chairman Medical Board and Relevant Head of Departments

### **Urgent Product Correction Notice**

Dear Valued bioMérieux Customer,

Our records indicate that your laboratory performs VITEK® 2 Antimicrobial Susceptibility Testing (AST) using one or more of the VITEK® 2 Gram-Negative AST cards types listed in Appendix A. A performance issue has been identified with colistin (cs01n).

#### **Description of Issue:**

EUCAST and CLSI recently issued a joint recommendation that broth-microdilution (BMD) is the only reference method validated for antimicrobial susceptibility testing (AST) of colistin. As the VITEK® 2 AST-GN colistin (cs01n) was developed to agar dilution (AD), an internal bioMérieux investigation was conducted to identify any shift in performance for colistin (cs01n) since the VITEK® 2 colistin (cs01n) test was developed.

Investigational testing included VITEK® 2, broth-microdilution and agar dilution using 290 isolates with varying degrees of susceptibility and resistance to colistin. Two QC organisms (E.coli ATCC® 25922 $^{\text{TM}}$  and P. aeruginosa ATCC® 27853 $^{\text{TM}}$ ) were also included in the testing. MIC results from the three methods were compared and evaluated.

The investigation demonstrated a high rate of very major errors (resistant isolates calling susceptible) with the VITEK® 2 AST-GN colistin (cs01n) compared to agar dilution (the reference method used for cs01n development) and compared to broth-microdilution (recommended method by EUCAST/CLSI).

Since the development of VITEK® 2 AST-GN colistin (cs01n), higher resistance rates have been reported. In November 2015 plasmid mediated transferable colistin resistance (mcr-1 gene) was reported and resistance due to other mechanisms is reported more frequently.

#### Impact to patient/customer:

Evaluation of the identified issue indicates the potential for false susceptible colistin results. A false susceptible result could have a negative influence on the treatment decision as the drug may be chosen for therapy. Inappropriate treatment could be prescribed resulting in treatment failure.

<sup>&</sup>lt;sup>1</sup> "Emergence of plasmid-mediated colistin resistance mechanism MCR-1 in animals and human beings in China: a microbiological and molecular biological study.". The Lancet. Infectious diseases. (Liu YY et al., Lancet Infect Dis, 2015).



#### **Actions:**

We request you take the following action at this time:

- Please confirm this letter has been distributed to and reviewed by all appropriate personnel within your organization.
- For the referenced test kits (see Appendix A), please perform an alternate method of testing prior to reporting susceptible colistin (cs01n) results.
  - Please note that a VITEK® 2 bioART rule can be created to suppress reporting of colistin (cs01n) susceptible results (reference VITEK® 2 Online Software User Manual) if required by your facility's procedures.
- Please store this letter with your bioMérieux instrument documentation.
- Complete the Acknowledgement Form and return it to your local bioMérieux representative.

bioMérieux, Inc. is committed to providing our customers with the highest quality products, and we apologize for any inconvenience this has caused your business. If you have any questions or concerns, please contact your local bioMérieux representative.

Thank you for your continued use of bioMérieux products,

bioMérieux, Inc.

Sincerely, Cradius Tan Applications Specialist - Clinical



# Attachment A: Acknowledgement Form.

Customer Account Number: \_\_\_\_\_ Organization Name: \_\_\_\_\_

**Customer Information:** 

## **URGENT PRODUCT CORRECTION NOTICE**

FSCA - 3490 (Addendum) – VITEK® 2 - Colistin (cs01n) Performance

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tion:			
Catalog Number	Description  See Appendix A		
Multiple	See Appendix A		
:		Yes	No
Did you read the enclosed Urgent Product Correction Notice regarding VITEK® 2 colistin performance?			
	ions and implemented the actions as indicated in this cice? If no, please indicate the reason in the Comments		
	llness or injury related to the VITEK® 2 colistin issue?		

It is important that you complete this Acknowledgement Form and return it to bioMérieux.

# APPENDIX A

REF#	Description	REF#	Description
418114	AST-GN94	416914	AST-N309
22258	AST-N102	417426	AST-N315
412605	AST-N194	417952	AST-N318
412921	AST-N199	418204	AST-N320
412862	AST-N201	418489	AST-N322
412863	AST-N202	418513	AST-N325
412924	AST-N205	418514	AST-N326
412918	AST-N210	418630	AST-N328
413061	AST-N212	418631	AST-N329
413083	AST-N222	418675	AST-N331
413112	AST-N225	418676	AST-N332
413171	AST-N236	418985	AST-N335
413172	AST-N237	419077	AST-N338
413204	AST-N239	419341	AST-N339
413205	AST-N240	420063	AST-N343
413391	AST-N242	420440	AST-N344
413394	AST-N245	420867	AST-N347
413397	AST-N248	420856	AST-N348
413572	AST-N249	421258	AST-N352
413722	AST-N253	421297	AST-N353
413724	AST-N255	421350	AST-N354
413725	AST-N256	421351	AST-N355
413753	AST-N261	421451	AST-N357
414164	AST-N272	421441	AST-N358
414286	AST-N276	421583	AST-N360
414492	AST-N279	421584	AST-N361
414531	AST-N280	421585	AST-N362
414532	AST-N281	421692	AST-N363
414972	AST-N288	421693	AST-N364
415063	AST-N292	421830	AST-N365
415369	AST-N293	421853	AST-N366
415433	AST-N295	421854	AST-N367
416005	AST-N299	421855	AST-N368
416241	AST-N300	410025	AST-XN01
416590	AST-N303	413230	AST-XN05
416913	AST-N308		