K040845

JUN - 8 2004



## 510(k) SUMMARY

## VITEK<sup>®</sup> 2 ESBL Test

### 510(k) Submission Information:

Submitter's Name:	bioMérieux, Inc.
Address:	595 Anglum Road Hazelwood, MO 63042
Contact Person:	Nancy Weaver Staff Regulatory Affairs Specialist
Phone Number:	314 -731-8695
Fax Number:	314-731-8689
Date of Preparation:	March 31, 2004
B. Device Name:	
Formal/Trade Name:	VITEK <sup>®</sup> 2 ESBL Test
Classification Name:	Fully Automated Short-Term Incubation Cycle Antimicrobial Susceptibility Device, 21 CFR 866.1645
Common Name:	VITEK 2 ESBL Test
C. Predicate Device:	VITEK ESBL Test (N50510/S081)

#### D. 510(k) Summary:

The VITEK® 2 ESBL Test is a confirmatory test for the presence of extended-spectrum beta-lactamases (ESBLs) in *Escherichia coli*, *Klebsiella pneumoniae*, and *K. oxytoca*. It is intended for use with the VITEK 2 System as a laboratory aid in the determination of in vitro susceptibility to antimicrobial agents. The antimicrobials presented in VITEK 2 ESBL Test are in concentrations equivalent by efficacy to standard method concentrations in µg/ml. The VITEK 2 AST Cards are essentially miniaturized versions of the doubling dilution technique for determining the minimum inhibitory concentration (MIC) microdilution methodology.

The bacterial isolate to be tested is diluted to a standardized concentration in 0.45% saline before being used to rehydrate the antimicrobial medium within the card. The VITEK 2 automatically fills, seals and places the card into the incubator/reader. The VITEK 2 monitors the growth of each well in the card over a defined period of time (up to 18 hours). At the completion of the incubation cycle, a report is generated that contains VITEK 2 ESBL Test result.

VITEK 2 ESBL Test demonstrated substantially equivalent performance when compared with the NCCLS ESBL Disk Diffusion Confirmatory Test method.

The Premarket Notification (510[k]) presents data in support of VITEK 2 ESBL Test. An external evaluation was conducted with fresh and stock clinical isolates and stock challenge strains. The external evaluations were designed to confirm the acceptability of VITEK 2 ESBL Test by comparing its performance with the NCCLS ESBL Disk Diffusion Confirmatory Test. The VITEK 2 ESBL Test demonstrated acceptable performance of 97.7% overall Category Agreement when compared to the NCCLS reference method. Reproducibility and Quality Control demonstrated acceptable results.



Food and Drug Administration 2098 Gaither Road Rockville MD 20850

JUN - 8 2004

Ms. Nancy Weaver Staff Regulatory Affairs Specialist BioMérieux, Inc. 595 Anglum Road Hazelwood, MO 63042-2320

k040845 Re:

Trade/Device Name: VITEK<sup>®</sup> 2 ESBL Test Regulation Number: 21 CFR 866.1645 Regulation Name: Fully Automated Short-Term Incubation Cycle Antimicrobial Susceptibility Devices Regulatory Class: Class II Product Code: LON Dated: March 31, 2004 Received: April 1, 2004

Dear Ms. Weaver:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific information about the application of labeling requirements to your device, or questions on the promotion and advertising of your device, please contact the Office of *In Vitro* Diagnostic Device Evaluation and Safety at (301) 594-3084. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html.

Sincerely yours,

Jagarty S

Sally A. Hojvat, M.Sc., Ph.D. Director Division of Microbiology Devices Office of In Vitro Diagnostic Device Evaluation and Safety Center for Devices and Radiological Health

Enclosure

# Indications for Use

510(k) Number (if known): K040845

Device Name:

VITEK <sup>®</sup> 2 FSBL Test

Indications For Use:

The VITEK® 2 Antimicrobial Susceptibility Test (AST) is intended to be used with the VITEK<sup>®</sup> 2 System for the automated quantitative or qualitative susceptibility testing of isolated colonies for most clinically significant aerobic gram-negative bacilli. Staphylococcus spp., Enterococcus spp., Streptococcus agalactiae, and S. pneumoniae. The VITEK<sup>®</sup> 2 ESBL Test is a confirmatory test used to detect the presence of extended-spectrum beta-lactamases (ESBLs) in Escherichia coli, Klebsiella pneumoniae, and K. oxytoca. It is intended for use with the VITEK® 2 System as a laboratory aid in the determination of in vitro susceptibility to antimicrobial agents.

The VITEK 2 ESBL test contains the following antimicrobial concentrations:

Cefepime 1.0 µg/ml Cefotaxime 0.5 µg/ml Ceftazidime 0.5 µg/ml

Cefepime/Clavulanic Acid 1.0 / 10 µg/ml Cefotaxime/Clavulanic Acid 0.5 / 4.0 µg/ml Ceftazidime/Clavulanic Acid 0.5 / 4.0 µg/ml

Prescription Use (Part 21 CFR 801 Subpart D)

AND/OR Over-The-Counter Use \_\_\_\_ (21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

Office of In Vitro Diagnostic Device Evaluation and Safety

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