



February 22, 2017

LIOFILCHEM S. R. L.  
LAURA KOETH  
PRESIDENT, LABORATORY SPECIALISTS, INC  
1651-A CROSSINGS PARKWAY  
WESTLAKE OH 44145

Re: K163298

Trade/Device Name: Liofilchem MIC Test Strip (MTS) Ceftazidime 0.016 - 256.0µg/mL  
Regulation Number: 21 CFR 866.1640  
Regulation Name: Antimicrobial susceptibility test powder  
Regulatory Class: II  
Product Code: JWY  
Dated: November 21, 2016  
Received: December 6, 2016

Dear Ms. Koeth:

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. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. 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); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulations (21 CFR Parts 801 and 809), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638 2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, “Misbranding by reference to premarket notification” (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH’s Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

**Ribhi Shawar -A**

For Uwe Scherf, M.Sc., Ph.D.  
Director  
Division of Microbiology Devices  
Office of In Vitro Diagnostics  
and Radiological Health  
Center for Devices and Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)

K163298

Device Name

Liofilchem MIC Test Strip (MTS) Ceftazidime (CAZ) 0.016-256.0 µg/mL

Indications for Use (Describe)

The Liofilchem® MIC Test Strip (MTS) is a quantitative method intended for the in vitro determination of antimicrobial susceptibility of non-fastidious Gram negative and Gram positive aerobic bacteria (for example, Enterobacteriaceae, Pseudomonas, Enterococcus and Staphylococcus species) and fastidious bacteria (for example, anaerobes, Haemophilus and Streptococcus species and *N. gonorrhoeae*). MTS consists of specialized paper impregnated with a pre-defined concentration gradient of an antimicrobial agent, which is used to determine the minimum inhibitory concentration (MIC) in µg/mL of antimicrobial agents against bacteria as tested on agar media using overnight incubation and manual reading procedures.

The indications for use of this 510(k) is specifically for the Ceftazidime MTS at concentrations of 0.016 – 256.0 µg/mL interpreted after 16-20 hours of incubation.

The non-fastidious bacteria that have been shown to be active both clinically and in vitro against Ceftazidime according to the FDA label are:

*Citrobacter* species  
*Enterobacter* species  
*Escherichia coli*  
*Klebsiella* species  
*Proteus mirabilis*  
*Proteus vulgaris*  
*Pseudomonas aeruginosa*

Type of Use (Select one or both, as applicable)

Prescription Use (Part 21 CFR 801 Subpart D)

Over-The-Counter Use (21 CFR 801 Subpart C)

### CONTINUE ON A SEPARATE PAGE IF NEEDED.

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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