## 510(k) Summary

# K (03222 FEB 2 5 2011

#### Applicant's Name, Address, Telephone, FAX, Contact Person

Advanced Sterilization Products, Division of Ethicon, Inc. 33 Technology Drive Irvine, CA 92618

#### **Contact Person**

Ms. Yogi Shah Project Manager, Regulatory Affairs Tel: (949) 453-6435 Fax: (949) 789-3900

Summary Date: October 28, 2010

#### 1. CLASSIFICATION, COMMON OR USUAL NAME, DEVICE NAME

Classification Name:Biological Sterilization Process IndicatorCommon/Usual Name:Biological IndicatorProduct Classification:IIClassification Regulation:21CFR880.2200Proprietary Name:STERRAD<sup>®</sup> CYCLESURE<sup>®</sup> 24 Biological indicator

## 2. PREDICATE DEVICES

STERRAD<sup>®</sup> CycleSure<sup>®</sup> Biological indicator, K071014, May 24, 2007

## 3. INDICATIONS FOR USE

The STERRAD<sup>®</sup> CYCLESURE<sup>®</sup> Biological Indicator is intended to be used as a standard method for frequent monitoring of the following STERRAD<sup>®</sup> Sterilization Systems and Cycles:

MODEL	CYCLE
STERRAD <sup>®</sup> 100S	Standard
STERRAD <sup>®</sup> 50	Standard
STERRAD <sup>®</sup> 200	Standard
STERRAD <sup>®</sup> NX <sup>™</sup>	Standard
	Advanced
STERRAD <sup>®</sup> 100NX <sup>™</sup>	Standard
	Flex
	EXPRESS

## 4. DESCRIPTION OF DEVICE

The STERRAD<sup>®</sup> CYCLESURE<sup>®</sup> 24 Biological Indicator is a self-contained standalone biological monitor intended for the routine monitoring of the STERRAD<sup>®</sup> Sterilization Process. It consists of a glass fiber disc containing a minimum of  $1 \times 10^6$  Geobacillus stearothermophilus spores, a glass ampoule containing nutrient growth medium, a cap and liner closing the vial and a chemical indicator on top of the cap. The cap contains two small circular openings that allow for diffusion of hydrogen peroxide vapor into the vial. The relatively small size of the circular openings serves as a restriction to this diffusion.

## 5. SUMMARY OF NONCLINICAL TESTS

Testing was previously submitted in support of the substantial equivalence of the modified STERRAD<sup>®</sup> CYCLESURE<sup>®</sup> 24 Biological Indicator to the predicate STERRAD<sup>®</sup> CycleSure<sup>®</sup> Biological Indicator device. Both devices have same intended use, same technological characteristics, same operating principles, and utilize the same sterilant (hydrogen peroxide).

Additional testing was conducted to confirm that the STERRAD<sup>®</sup> CYCLESURE<sup>®</sup> 24 Biological Indicator performs as intended when used with the STERRRAD<sup>®</sup> 100NX<sup>™</sup> Express Cycle.

Study Performed	Results
Evaporation	Passed
Verification of positive BI color	Passed
Bacteriostasis	Passed
BI validation in STERRAD <sup>®</sup> 100NX <sup>™</sup> Express Cycle (Dose Response)	Passed

## 6. DESCRIPTION OF CHANGE:

The following changes (relative to the predicate device, K071014) were reported in K102884 and incorporated into the STERRAD<sup>®</sup> CycleSure<sup>®</sup> 24 Biological Indicator that is shown in this submission to work as intended with the STERRRAD<sup>®</sup> 100NX<sup>™</sup> Express Cycle:

- a. Outer vial resin material changed (remains molded polypropylene from the same vendor)
- b. New supplier (and new process) for the silicon coating process for the Tyvek<sup>®</sup> cap liner
- c. Maximum readout time reduced from 7 days to 3 days
- d. Name changed from STERRAD<sup>®</sup> CycleSure<sup>®</sup> Biological Indicator to STERRAD<sup>®</sup> CYCLESURE<sup>®</sup> 24 Biological Indicator
- e. Additional changes to the Instructions for Use for clarity

In addition, Intended Use statement revised adding sterilizer models and their related cycles for clarity for this submission.

# 7. OVERALL PERFORMANCE CONCLUSIONS

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Performance testing demonstrated that the STERRAD<sup>®</sup> CYCLESURE<sup>®</sup> 24 Biological Indicator performs as intended in a newly developed STERRAD<sup>®</sup>  $100NX^{TM}$  Express Cycle.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room --WO66-G609 Silver Spring, MD 20993-0002

Ms. Yogi Shah Project Manager, Regulatory Affairs Advanced Sterilization Products 33 Technology Drive Irvine, California 92618

FEB 2 5 201

Re: K103222

Trade/Device Name: STERRAD<sup>®</sup> CYCLESURE<sup>®</sup> 24 Biological Indicator Regulation Number: 21 CFR 880.2800 Regulation Name: Sterilization Process Indicator Regulatory Class: II Product Code: FRC Dated: February 10, 2011 Received: February 14, 2011

Dear Ms. Shah:

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.

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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 Part 801); 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 regulation (21 CFR Part 801), please go to

http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 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 Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <u>http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</u>.

Sincerely yours

Anthony D. Watson, B.S., M.S., M.B.A. Director Division of Anesthesiology, General Hospital, Infection Control and Dental Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

#### **Indications for Use**

510(k) Number (if known): K103222

**Device Name:** STERRAD<sup>®</sup> CYCLESURE<sup>®</sup> 24 Biological Indicator

**Indication for Use:** 

The STERRAD<sup>®</sup> CYCLESURE<sup>®</sup> Biological Indicator is intended to be used as a standard method for frequent monitoring of the following STERRAD<sup>®</sup> Sterilization Systems and Cycles:

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STERRAD <sup>®</sup> NX <sup>™</sup>	Standard
	Advanced
STERRAD <sup>®</sup> 100NX <sup>™</sup>	Standard
	Flex
	EXPRESS

Prescription Use \_\_\_\_\_\_ (Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use  $\_\sqrt{}$ (21 CFR 801 Subpart C)

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

Concurrence of CDRH, Office of Device Evaluation (ODE) Elisheth to (V - Willia

(Division Sign-Off) Division of Anesthesplogy, General Hospital Infection Control, Dental Devices

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K103222 510(k) Number: