

Ethicon Endo-Surgery, LLC, 510(k) Premarket Notification (Traditional) for ENDOPATH® XCEL® Trocars with OPTIVIEW™ Technology

**510(k) Summary**

OCT 1 2012

**Company**

Ethicon Endo-Surgery, LLC  
475 Calle C  
Guaynabo, PR 00969

**Contact**

Emily Kruetzkamp, Regulatory Affairs Associate  
Ethicon Endo-Surgery, Inc  
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**Date Prepared:** August 15, 2012

**Device Name**

Trade Name: ENDOPATH® XCEL® Trocar with OPTIVIEW™ Technology  
Common Name: Trocar

**Classification Names** Laparoscope, General & Plastic Surgery  
**Regulation Number** 876.1500

**Predicate Device**

ENDOPATH® XCEL® 12mm Trocars, submitted as ENDOPATH® III Trocar System, K032676

**Device Description:**

The ENDOPATH® XCEL® Trocars with OPTIVIEW™ Technology are sterile, single-patient use endoscopic devices used to create an access port to the inside of the body cavity to perform endoscopic surgery. The trocars accommodate instruments ranging from 5 to 12 mm diameter. The trocars contain two seals, an outer integrated removable self-adjusting seal and an internal seal. Together, these two seals minimize gas leakage when instruments are inserted or withdrawn through the trocar. A stopcock valve is compatible with standard luer lock fittings and provides attachment for gas insufflation. The trocars contain OPTIVIEW™ Technology, a design enhancement that reduces the incidence of trocar-induced endoscope lens smudging during endoscope insertion. Endoscope smudging occurs when bodily fluids and debris smear across the endoscope lens during a laparoscopic procedure. Trocar-induced smudging occurs when these bodily fluids and debris are deposited within the trocar's seal system when an endoscope or instrument has been exchanged through the trocar.

**Indication for Use:**

The ENDOPATH® XCEL® Bladeless Trocar with OPTIVIEW™ Technology has applications in abdominal, thoracic, and gynecologic minimally invasive surgical

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procedures to establish a path of entry for endoscopic instruments. The trocar may be used with or without visualization for primary and secondary insertions.

The ENDOPATH® XCEL® Blunt Tip Trocar with OPTIVIEW™ Technology has application in thoracic, gynecologic, laparoscopic and other abdominal procedures to establish a path of entry for minimally invasive instruments.

The ENDOPATH® XCEL® Dilating Tip Trocar with OPTIVIEW™ Technology has applications in thoracic, gynecologic laparoscopy and other abdominal procedures to establish a path of entry for endoscopic instruments.

The ENDOPATH® XCEL® Universal Trocar Stability Sleeve with OPTIVIEW™ Technology has applications in thoracic, gynecologic laparoscopy and other abdominal procedures to establish a path of entry for endoscopic instruments.

**Technological Characteristics:**

ENDOPATH® XCEL® Trocars with OPTIVIEW™ Technology have similar design, dimensions, and features as the predicate devices. The devices consist of two components: a sleeve and an obturator. The sleeve and obturator are used to create the access port. The obturator is a subsystem used to assist in the process of installing the sleeve port through the body tissue. After installation, the obturator is not required for trocar performance. The Bladeless Trocar obturators accommodate an appropriately sized 0° endoscope and provide visibility of individual tissue layers during insertion.

The sleeve has an integrated two-seal system for maintaining pneumoperitoneum. The trocar sleeves contain two seals, an outer integrated removable self-adjusting seal that accommodates instruments ranging from 5 to 12 mm in diameter and an internal seal. Together, these two seals minimize gas leakage when instruments are inserted through or completely withdrawn from the trocar. The sleeve has a welded stopcock assembly, which is compatible with standard luer lock fittings, and provides attachment for gas insufflation and desufflation of the pneumoperitoneum. The sleeve cannula contains integrated stability threads for abdominal wall retention. The ENDOPATH® XCEL® Trocars with OPTIVIEW™ Technology are equivalent to the predicate devices' indications and performance.

**Performance Data:** Bench testing was performed to demonstrate that the device performs as intended and is substantially equivalent to the predicate device, ENDOPATH® XCEL® Trocars. To validate that the subject device performs as intended, the following bench testing was performed:

- Drag Force of an Instrument within the Trocar, Peak Force
- Drag Force of an Instrument within the Trocar, Average Force
- Trocar Seal System Durability, demonstrated by Air Leak Performance
- Air Leak Performance While Trocar is Under Torque
- Endoscope Visualization Image Quality
- Ergonomic Force to Attach and Detach Universal Seal Cap

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Trocars with OPTIVIEW™ Technology

Please note that animal testing was not used to verify substantial equivalence of the ENDOPATH® XCEL® Trocars with OPTIVIEW™ Technology to the predicate device ENDOPATH® XCEL® Trocars.



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

Enthicon End-Surgery, LLC  
% Enthicon End-Surgery, Incorporated  
Ms. Emily Kruetzkamp  
Regulatory Affairs Associate  
4545 Creek Road  
Cincinnati, Ohio 45242

OCT 1 2012

Re: K122511

Trade/Device Name: ENDOPATH® XCEL® Bladeless Trocar  
with OPTIVIEW™ Technology

Regulation Number: 21 CFR 876.1500

Regulation Name: Endoscope and accessories

Regulatory Class: Class II

Product Code: GCJ

Dated: August 15, 2012

Received: August 17, 2012

Dear Ms. Kruetzkamp:

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.

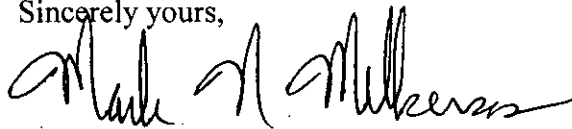
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21

CFR Part 807); labeling (21 CFR 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" (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 Small Manufacturers, International and Consumer Assistance 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,



Mark N. Melkerson  
Director  
Division of Surgical, Orthopedic  
and Restorative Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

K122511

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(1)

### Indications for Use Form

#### Indications for Use

510(k) Number (if known): K122511

Device Name: ENDOPATH® XCEL® Bladeless Trocar with OPTIVIEW™ Technology

#### Indications for Use:

The ENDOPATH® XCEL® Bladeless Trocar has applications in abdominal, thoracic, and gynecologic minimally invasive surgical procedures to establish a path of entry for endoscopic instruments. The trocar may be used with or without visualization for primary and secondary insertions.

Prescription Use X  
(Part 21 CFR 801 Subpart D)

AND/OR

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

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

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Neil R. Ogden for rxm  
(Division Sign-Off)  
Division of Surgical, Orthopedic,  
and Restorative Devices

510(k) Number K122511

K 122511

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### Indications for Use Form

#### Indications for Use

510(k) Number (if known): K 122511

Device Name ENDOPATH® XCEL® Blunt Tip Trocar with OPTIVIEW™ Technology

#### Indications for Use:

The ENDOPATH® XCEL® Blunt Tip Trocar has application in thoracic, gynecologic, laparoscopic and other abdominal procedures to establish a path of entry for minimally invasive instruments.

Prescription Use X  
(Part 21 CFR 801 Subpart D)

AND/OR

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

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

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Neil R. Degen for MKM  
(Division Sign-Off)  
Division of Surgical, Orthopedic,  
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510(k) Number K122511

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**Indications for Use Form**

**Indications for Use**

510(k) Number (if known): K 122511

Device Name: ENDOPATH® XCEL® Dilating Tip Trocar with OPTIVIEW™ Technology

**Indications for Use:**

The ENDOPATH® XCEL® Dilating Tip Trocar has applications in thoracic, gynecologic laparoscopy and other abdominal procedures to establish a path of entry for endoscopic instruments.

Prescription Use  X  AND/OR Over-The-Counter Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

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Neil B. Pugh, MD, FRCR  
(Division Sign-Off)  
Division of Surgical, Orthopedic,  
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**Indications for Use Form**

**Indications for Use**

510(k) Number (if known): K122511

Device Name: ENDOPATH® XCEL® Universal Trocar Stability Sleeve with OPTIVIEW™ Technology

Indications for Use:

The ENDOPATH® XCEL® Universal Trocar Stability Sleeve has applications in thoracic, gynecologic laparoscopy and other abdominal procedures to establish a path of entry for endoscopic instruments.

Prescription Use   X   AND/OR Over-The-Counter Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

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Neil R. P. [Signature] for [Signature]  
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Division of Surgical, Orthopedic,  
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510(k) Number K122511