

510(k) Summary

**JUN 20 2014**

Thermedx Fluid Management System  
Thermedx, LLC

510(k) Submitter Thermedx, LLC  
31200 Solon Road, Unit #1  
Solon, Ohio 44139

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Date Prepared 30 April 2014

Device Name Proprietary Name: Thermedx Fluid Management System  
Common Name: Hysteroscopic Insufflator  
Regulation Number: 21 CFR § 884.1700  
Regulatory Class: II  
Classification Name: HIG, LGZ, HRX

Intended Use The Thermedx Fluid Management System is intended for irrigation and fluid warming in laparoscopic procedures, and distention, fluid warming, and volume/deficit measurements in endoscopic procedures within gynecology, urology, and orthopedic disciplines.

Device Description The Thermedx device is a fluid management system intended for surgical applications. The device consists of a main unit and disposable tubing sets. A rolling stand-mounted device houses infrared fluid heating technology and a peristaltic fluid pump with closed-loop controls. The Thermedx monopolar electrocautery probes are an optional accessory for electrosurgical cutting and coagulation.

Technological Comparison Thermedx Fluid Management System is identical to the previous version, with no technological differences. Packaging and sterilization means remain unchanged as well. Changes relate solely to the individual procedure settings and the addition of a high pressure disposable tubing set HLL003

Non Clinical Tests Non clinical testing performed including the following:  
1. Biological testing of tube-sets based on 10993-1:2009 including:  
a. Cytotoxicity using the MEM Elution Assay method (10993-5:2009)  
b. Sensitization using the Kligman or Buehler methods (10993-10:2010)  
c. Irritation using the Intracutaneous Reactivity/Irritation Test (10993-10:2010)  
2. Software verification testing: Verify individual setting limits within table and regression testing via running range of simulated use cases.  
3. Verify crack pressures of valve for HLL003 is within 240-360mmHg range.

Clinical Information In support to the changes to the procedures and settings please refer to the numerous journal articles, practical guidelines, hospital guidelines.

Substantial Equivalence The Thermedx Fluid Management System is substantially equivalent in terms of safety and effectiveness to the device as originally cleared, Thermedx 37-5 (K091939).



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

June 20, 2014

Thermedx LLC  
Jeff B. Williams  
Engineering Manager  
31200 Solon Rd., Unit 1  
Solon, OH 44139

Re: K133799  
Trade/Device Name: Thermedx Fluid Management System  
Regulation Number: 21 CFR 884.1700  
Regulation Name: Hysteroscopic Insufflator  
Regulatory Class: Class II  
Product Code: HIG, LGZ, HRX  
Dated: May 23, 2014  
Received: May 27, 2014

Dear Jeff B. Williams,

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 (21CFR 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 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" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21CFR 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,

  
Herbert P. Lerner -S

for

Benjamin R. Fisher, Ph.D.

Director

Division of Reproductive, Gastro-Renal,  
and Urological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

**Indications for Use**

510(k) Number  
K133799

Device Name  
Thermedx Fluid Management System

Indications for Use

The Thermedx Fluid Management System is intended for irrigation and fluid warming in laparoscopic procedures, and distention, fluid warming, and volume/deficit measurements in endoscopic procedures within gynecology, urology, and orthopedic disciplines.

Type of Use

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

**PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.**

**FOR FDA USE ONLY**

Concurrence of Center for Devices and Radiological Health (CDRH)

**Herbert P. Lerner -S**  
**2014.06.20 12:40:56 -04'00'**

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