

Cook Incorporated  
Traditional 510(k) Premarket Notification  
Cook® Cervical Ripening Balloon

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**Cook Incorporated**  
**Cook® Cervical Ripening Balloon**  
**510(k) Summary**  
**21 CFR 807.92**  
**Date Prepared: September 24, 2013**

**1. Submitter Information**

Applicant: Cook Incorporated

Address: 750 Daniels Way  
P.O. Box 489  
Bloomington, IN 47402

Phone Number: (800) 468-1379  
Fax Number: (812) 332-0281

Contact: Chris Kilander  
Contact Address: Cook Incorporated  
750 Daniels Way  
Bloomington, IN 47404

Contact Phone Number: (812) 339-2235 x2564  
Contact Fax Number: (812) 332-0281

SEP 27 2013

**2. Device Information**

Trade Name: Cook® Cervical Ripening Balloon  
Common Name: Catheter, Balloon, Dilation of the Cervical Canal  
Classification: Class II

Regulation: 21 CFR § 884.4260  
Regulation Description: Hygroscopic Laminaria cervical dilator

Product Code: PFJ

**3. Predicate Devices**

The Cook® Cervical Ripening Balloon is substantially equivalent to the Atad Pre-Induction Cervical Dilator (Atad Developments and Medical Services Ltd.) cleared January 18, 2005 under 510(k) number K040625.

#### **4. Comparison to Predicates:**

The intended use and technological characteristics of the Cook® Cervical Ripening Balloon are substantially equivalent to the intended use and technological characteristics of the Atad Pre-Induction Cervical Dilator.

#### **5. Device Description**

The Cook® Cervical Ripening Balloon is a double-balloon catheter designed to mechanically ripen the cervix prior to labor induction at term when the cervix is unfavorable for induction. The tip of the Cook® Cervical Ripening Balloon is placed through the vagina and the cervical canal into the uterus. The distal balloon is positioned against the internal cervical os and inflated with up to 80 mL of saline; the proximal balloon is positioned against the external cervical os and also inflated with up to 80 mL of saline. The Cook® Cervical Ripening Balloon provides gradual mechanical cervical dilation by simultaneously providing pressure on the internal and external cervical os.

In addition to the standard version, the Cook® Cervical Ripening Balloon is also available with a removable stylet to add rigidity to the catheter and aid in placement of the balloon through the cervix. The stylet runs the length of the catheter shaft of the Cook® Cervical Ripening Balloon in a separate lumen that is closed at the distal tip. The user removes the stylet from the device once the distal uterine balloon is above the level of the internal cervical os.

#### **6. Intended Use**

The Cook® Cervical Ripening Balloon is indicated for mechanical dilation of the cervical canal prior to labor induction at term when the cervix is unfavorable for induction.

#### **7. Technological Characteristics**

The Cook® Cervical Ripening Balloon consists of an 18 Fr., 40 cm silicone catheter with a silicone tip and two silicone balloons, each inflatable up to 80 mL. Each balloon is inflated via a separate inflation lumen through a check valve at the proximal end of the

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device. The check valves are marked with a “U” for the distal, uterine balloon and a “V” for the proximal, vaginal balloon.

For the Cook® Cervical Ripening Balloon with Stylet, a 46 cm malleable stainless steel stylet with an adjustable handle is included. The stylet is placed through a separate third lumen that is closed at the distal tip and marked at the proximal end with an “S.” The stylet handle allows the user to adjust the stylet so that the distal tip is advanced to the distal (closed) end of the lumen.

The Cook® Cervical Ripening Balloon may be left indwelling for up to 12 hours. The Cook® Cervical Ripening Balloon is supplied sterile and is intended for one-time use.

To demonstrate reliable design and performance of the Cook® Cervical Ripening Balloon the following verification testing and information is presented:

- Balloon Deflation Reliability – Testing to demonstrate that the balloons deflate properly after use.
- Balloon Burst – Testing to demonstrate that the balloons do not burst at the maximum recommended inflation volume under simulated use conditions.
- Balloon Volume Maintenance – Testing to demonstrate that the balloons do not leak.
- Balloon Integrity – Testing to demonstrate that the balloons do not rupture under simulated use conditions.
- Balloon Response to Pullout – Testing to demonstrate that the distal balloon does not pull out from the patient under simulated use conditions.
- Catheter Tensile – Testing to demonstrate that the catheter shaft can sustain the maximum tensile forces anticipated in use.
- Biocompatibility – Testing to demonstrate that the device is biocompatible. The testing shows that the acceptance criteria from ISO 10993-1 were met.
- Simulated Use – Testing to demonstrate that the non-clinical users can properly follow the use instructions in a simulated environment.

In conclusion, the results of these tests provide reasonable assurance that the device is as safe and effective as the predicate and support a determination of substantial equivalence.



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

September 27, 2013

Cook, Inc.  
% Chris Kilander, MS, RAC, CQE  
Regulatory Affairs Manager  
750 Daniels Way  
Bloomington, IN 47404

Re: K131206  
Trade/Device Name: Cook<sup>®</sup> Cervical Ripening Balloon  
Regulation Number: 21 CFR § 884.4260  
Regulation Name: Hygroscopic Laminaria cervical dilator  
Regulatory Class: II  
Product Code: PFJ  
Dated: August 29, 2013  
Received: August 30, 2013

Dear Chris Kilander,

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/ucml15809.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,

**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

**4. Indications for Use Statement**510(k) Number (if known): K131206

Device Name: Cook® Cervical Ripening Balloon

**Indications for Use:**

The Cook® Cervical Ripening Balloon is indicated for mechanical dilation of the cervical canal prior to labor induction at term when the cervix is unfavorable for induction.

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)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Herbert P. Lerner -S  
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