

AUG 23 2002

K022350

**510(K) SUMMARY OF SAFETY AND EFFECTIVENESS FOR THE BARD CRURASOFT PATCH**

**A. Submitter Information**

Submitter's Name: Davol, Inc.  
Address: Subsidiary of C. R. Bard, Inc.  
100 Sockanossett Crossroad  
Cranston, RI 02920  
Telephone: 401-463-7000 ext. 2642  
Fax: 401-463-3845  
Contact Person: Brian A. Kanerviko  
Date of Preparation: July 18, 2002

**B. Device Name**

Bard CruraSoft Patch

**C. Predicate Device Name**

Trade name: Bard Composix E/X mesh, PTFE mesh, Gore  
SEAMGUARD Staple Line Reinforcement Material

**D. Device Description**

The proposed device is heart shaped and has a porous polytetrafluoroethylene (PTFE) side and an expanded polytetrafluoroethylene (ePTFE) side that are connected to each other on the edge with an interlocking monofilament PTFE stitch. There is also a row of stitching that is in a "V" shape which allows the device to be tailored. The prosthesis may be trimmed to the outside of the "V" stitching. The "V" stitching will continue to keep the two layers of the device together if it is tailored. An ePTFE flap is sewn to the superior edge of the patch to minimize the possibility of the device adhering to undesired structures, such as the esophagus. The proposed device is preshaped and presized to offer maximum ready-to-use benefits.

**E. Intended Use**

The Bard CruraSoft Patch is indicated for use in the reconstruction of soft tissue deficiencies, such as for the repair of chest wall defects and hernias, including diaphragmatic/hiatal hernias.

## **F. Summary of Similarities and Differences in Technological Characteristics, Performance and Intended Use**

The proposed and predicate devices are similar in that all three devices are surgical implants. One of the predicates is comprised entirely of PTFE, while the other is a combination of polypropylene and ePTFE. The proposed product is taking the existing PTFE from the predicate pre-amendment device and attaching it to the same ePTFE as used in predicate Composix E/X. The PTFE monofilament thread used to attach the ePTFE to PTFE is the same as the thread used in predicate Composix E/X.

The difference between the proposed and predicate devices includes the shape and the attachment of PTFE to ePTFE. The proposed device is heart shaped with ePTFE on one side and PTFE on the other. An ePTFE flap is sewn to the superior edge of the PTFE side of the device with an interlocking monofilament PTFE stitch. The ePTFE runs slightly over the top corners of the PTFE side of the device. The device is sewn together using an interlocking monofilament PTFE stitch.

The Gore SEAMGUARD Staple Line Reinforcement Material (K001789) indication includes the repair of hernias, including diaphragmatic hernias. This indication is the same as the proposed device indication statement.

The proposed device is indicated for use in the reconstruction of soft tissue deficiencies, such as for the repair of chest wall defects and hernias, including diaphragmatic/hiatal hernias. The predicate Composix E/X and the proposed device are both intended for use to reinforce soft tissues where weakness exists. Both devices give examples of chest wall defects and hernias.

The predicate PTFE mesh is indicated for use primarily in the repair of hernias and defects resulting from the surgical wounds of extensive cancer resections. The proposed device indication for use does not include the repair of defects strictly caused from surgical wounds of extensive cancer resections. Instead, it focuses on the repair of hernias and defects. The proposed device and predicate PTFE mesh share this in their indication for use.

## **G. Performance Data**

Bench testing has been completed and supports the safety and effectiveness of the Bard CruraSoft Patch for its intended use.

Laboratory test results demonstrate that the materials chosen and the design utilized in manufacturing the Bard CruraSoft Patch will meet the established specifications necessary for consistent performance during their intended use and support substantial equivalence to the predicate devices.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

**AUG 23 2002**

Brian A. Kanerviko  
Regulatory and Clinical Affairs Associate  
Daval, Inc.  
100 Sockanossett Crossroad  
P. O. Box 8500  
Cranston, Rhode Island 02920

Re: K022350

Trade/Device Name: Bard Crurasoft Patch  
Regulation Number: 878.3300  
Regulation Name: Surgical Mesh  
Regulatory Class: Class II  
Product Code: FTL  
Dated: July 11, 2002  
Received: July 19, 2002

Dear Mr. Kanerviko:

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.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such 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.

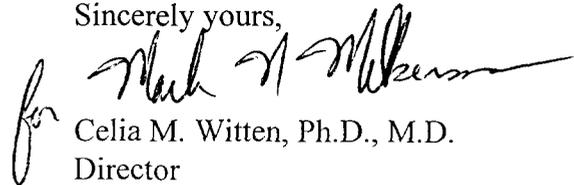
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); 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.

Page 2 – Mr. Brian A. Kanerviko

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

for

Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

510(k) Number (if known): K022350

Device Name: Bard CruraSoft Patch

Indications for Use: The Bard CruraSoft Patch is indicated for use in the reconstruction of soft tissue deficiencies, such as for the repair of chest wall defects and hernias, including diaphragmatic/hiatal hernias.

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use X OR Over-the Counter Use \_\_\_\_\_  
(Per 21 CFR 801.109)

*for* Mark N. Milberger (Optional Format 1-2-96)  
(Division Sign-Off)  
Division of General, Restorative  
and Neurological Devices

510(k) Number K022350