

4/19/99

Summary of Safety and Effectiveness

K 980903

General Information

Classification: Class II
Common Name: Central nervous system fluid shunt component
Device Trade Name: Radionics Equi-Flow™ Valve with EZ-Coat™
Radionics EZ-Coat™ Ventricular Catheter
Radionics EZ-Coat™ Peritoneal Catheter
Intended Uses: The Equi-Flow™ Valve, Ventricular Catheter, and Peritoneal Catheter with EZ-Coat™ are designed to shunt cerebrospinal fluid from the ventricles of the brain to an appropriate drainage site, such as the peritoneal cavity.
Predicate Device: Radionics Contour Flex Plus Valve and the Radionics Mini and Standard Shunt Valve Systems
Establishment Name and Address: Radionics, Inc.
22 Terry Avenue
Burlington, MA 01803
Contact Name and Phone: Michael Arnold (781) 272-1233
Establishment registration number: 1219140
Performance Standard: None established under Section 514

Substantial Equivalence Determination

A summary of the information contained in this premarket notification that addresses safety and effectiveness follows.

Safety Summary

The labeling for the Radionics Equi-Flow Valve™ with EZ-Coat, the EZ-Coat™ Ventricular Catheter, and the EZ-Coat™ Peritoneal Catheter contains instructions for the proper use of the device. The labeling includes a description of the product, directions for use, and applicable safety information including contraindications, precautions, and warnings. These instructions ensure safe and effective use of the device when followed by the physician.

Description of the Device and Basis for Substantial Equivalence

The Equi-Flow Valve™ with EZ-Coat, the EZ-Coat™ Ventricular Catheter, and the EZ-Coat™ Peritoneal Catheter are designed for use as a cerebrospinal fluid shunts. The Equi-Flow Valve with EZ-Coat is a membrane valve with an integral Siphon Limiting Device. The Siphon Limiting Device limits the reduction of the intraventricular pressure and volume caused by the siphoning effect caused by elevation of the ventricular catheter in relation to the distal catheter (often caused by the patient sitting or standing). This 510(k) covers the use of a hydrophilic surface modification that has been incorporated into the commercially available Equi-Flow Valve and Catheters. This material was subjected to and passes biocompatibility testing like the unmodified commercially available valves and catheters designed to meet the requirements of the ISO Standard 10993. In addition, performance testing was performed on the valves with the EZ-Coat modification to confirm valve performance. There is no change to the designs, dimensions, or specifications of the valves with the use of the EZ-Coat surface modification.



Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

APR 19 1999

Michael A. Arnold, Ph.D.
Vice President
Radionics, Inc.
22 Terry Avenue
Burlington, Massachusetts 01803

Re: K980903
Trade Name: Equi-Flow™ Valve, Ventricular Catheter,
and Peritoneal Catheter with EZ-Coat™
Regulatory Class: II
Product Code: JXG
Dated: January 13, 1999
Received: January 19, 1999

Dear Dr. Arnold:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to 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). 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.

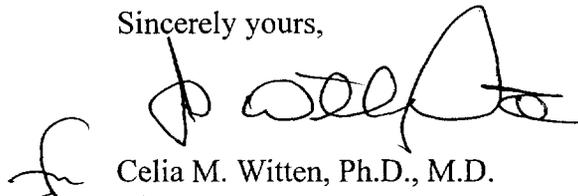
If your device is classified (see above) into either class II (Special Controls) or class III (Pre-market Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirement, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

Page 2 – Michael A. Arnold, Ph.D.

This letter will allow you to begin marketing your device as described in your 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 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4595. 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 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "<http://www.fda.gov/cdrh/dsmamain.html>".

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Celia M. Witten', is written over a horizontal line. The signature is fluid and cursive, with a large initial 'C' and 'W'.

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

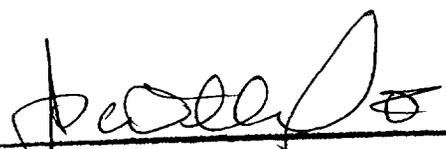
Enclosure

K980903

Indications for Use

The Radionics Equi-Flow™ Valve, Ventricular Catheter, and Peritoneal Catheter with EZ-Coat™ are indicated for the treatment of hydrocephalus. They are devices designed to shunt cerebrospinal fluid from the ventricles of the brain to an appropriate drainage site, such as the peritoneal cavity. The Equi-Flow™ Valve with EZ-Coat™ is indicated for patients where excessive reduction of intraventricular pressure or volume may be caused by the siphoning effect of hydrostatic pressure in the distal catheter of the shunt system.

Prescription Use X
(Per 21 CFR 801.109)



(Division Sign-Off)
Division of General Restorative Devices
510(k) Number K980903