

K023381

Summary

MAR 31 2003

This summary of 510(k)-safety and effectiveness information is being submitted in accordance with the requirements of 21 CFR part 807.92.

1. Company making the submission:

	Company	or	Correspondent (contract):
Name:	Gish BioMedical,		Delphi Consulting Group
Address:	Inc. 22942 Arroyo Vista Rancho Santa		11874 South Evelyn Circle Houston, TX 77071-3404
Telephone:	Margarita CA 92688-2600		713-723-4080 voice 775-429-9524 fax
Contact:	949-635-6200 voice 949-635-6299 fax Edward F. Waddell Director RA/QA		harvey@delphiconsulting.com J. Harvey Knauss Consultant

2. Device:

Proprietary Name:	Vision Hollow Fiber Oxygenator with Guardian™ Coating
Common Name:	Blood Oxygenator
Classification Name:	Oxygenator, Cardiopulmonary Bypass

3. Predicate Devices:

Vision Hollow Fiber Oxygenator, Gish Biomedical, Inc., K961530.

4. Classifications Names & Citations:

21 CFR 870.4350, Oxygenator, Cardiopulmonary Bypass, Class II, DTZ, Cardiovascular.

5. Description:

The Gish Vision Hollow Fiber Oxygenator with Guardian™ Coating consists of a hollow fiber membrane oxygenator and extracorporeal heat exchanger. The hollow fiber membrane consists of a polypropylene gas permeable mat. The unique mat design increases the interaction between blood and gas, creating a highly efficient blood oxygenator. The heat exchanger consists of a one piece, stainless steel bellows configured heat exchanger as the primary element to effect heat exchange. This element is encased by a polycarbonate housing, which directs the blood through the outside convolutions of the stainless steel bellows, and therefore effects heat

exchange while minimizing priming volume. All materials of the heat exchanger are biocompatible and coated with a proprietary coating.

The device allows for trapping and removal of air. Oxygenated blood is delivered to the patient through the tubing and appropriate cannula. Blood flow is driven by a roller pump or centrifugal pump connected through the tubing. The Gish Vision Hollow Fiber Oxygenator with Guardian™ Coating may be purchased separately or pre-connected with tubing and other components of an extracorporeal circuit.

6. Indications for use:

The Vision Hollow Fiber Oxygenator is indicated for use in procedures requiring the extracorporeal oxygenation of and carbon dioxide removal from human blood. It is designed to operate at a blood flow rate of one (1.0) to eight (8.0) liters per minute for periods of up to six (6.0) hours.

7. Contra-indications:

For heparin coated oxygenators (HFOE), heparin has been reported, on rare occasions, to induce thrombocytopenia. Since patients undergoing cardiopulmonary bypass are routinely systemically heparinized, and although the amount of heparin contributed by this device is very small in comparison to the typical dose given, caution should be exercised when using this device in patients with known or suspected heparin sensitivity.

8. Comparison:

The Vision Hollow Fiber Oxygenator with Guardian™ Coating has the same device characteristics as the Predicate devices.

9. Test Data:

The Vision Hollow Fiber Oxygenator with Guardian™ Coating has been subjected to extensive safety, performance, and validations prior to release. Final testing for the systems includes various performance tests designed to ensure that the device meets all of its functional requirements and performance specifications. Safety tests have further been performed to ensure the device complies with applicable industry and safety standards.

10. Literature Review:

A review of literature pertaining to the safety and effectiveness has been conducted. Appropriate safeguards have been incorporated in the design of the Vision Hollow Fiber Oxygenator with Guardian™ Coating.

11. Conclusions:

The conclusion drawn from these tests is that the Vision Hollow Fiber Oxygenator with Guardian™ Coating is equivalent in safety and efficacy to its predicated devices.



Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

MAR 31 2003

Gish Biomedical, Inc.
c/o Mr. J. Harvey Knauss
Delphi Consulting Group
11874 South Evelyn Circle
Houston, TX 77071-3404

Re: K023381
Vision Hollow Fiber Oxygenator with Coating
Regulation Number: 21 CFR 870.4350
Regulation Name: CPB Oxygenator
Regulatory Class: Class II (two)
Product Code: DTZ
Dated: January 21, 2003
Received: January 23, 2003

Dear Mr. Knauss:

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.

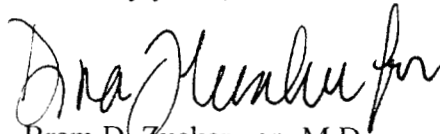
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Page 2 – Mr. J. Harvey Knauss

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. 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), please contact the Office of Compliance at (301) 594-4646. 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" (21CFR Part 807.97) you may obtain. 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,



Bram D. Zuckerman, M.D.

Director

Division of Cardiovascular Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

510(k) Number K _____

Device Name: Vision Hollow Fiber Oxygenator with Guardian™ Coating

Indications for use:

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Prescription Device:

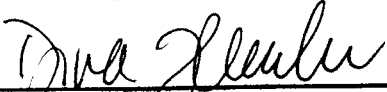
Federal Law (US) restricts this device to sale by or on the order of a physician.

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use OR

Over-The-Counter Use



(Division Sign-Off)
Division of Cardiovascular Devices

510(k) Number K023381

(Per 21 CFR 801.109)