



SEP - 7 2007

**510(k) Summary**

Submitter: Gambro Renal Products, Inc.  
14143 Denver West Parkway  
Lakewood, Colorado 80401

Contact: Kae Miller, Manager, Regulatory Affairs

Phone: 303-542-5045  
Fax: 303-876-9264

Date prepared: August 8, 2007

Device name: Gambro Polyflux HD-C4 SMALL Dialyzer for Single Use

Common name: Hemodialyzer

Classification name: High Permeability Hemodialysis System Accessory (876.5860)

**Predicate Devices:**

|                             |              |         |
|-----------------------------|--------------|---------|
| <b>Polyflux HD-C4 (BIG)</b> | Hemodialyzer | K060195 |
|-----------------------------|--------------|---------|

**Device Description:**

This device is intended for use in hemodialysis for the treatment of acute and chronic renal failure.

The intended population of this device is identical to those of the Polyflux HD-C4 (BIG), cleared for marketing in the United States under 510K notification K060195.

The membrane used in this device is a blend of polyarylethersulfone (PAES) and polyvinylpyrrolidone (PVP), which is equivalent to the membrane utilized in the Gambro Polyflux HD-C4 (BIG) single use hemodialyzers cleared for marketing in the United States under 510K Notification (K060195).

Blood enters a blood inlet port where it is distributed to the hollow fibers. The patient's blood traverses the inside of the hollow fibers and exits the device via a blood exit port. By means of a hydrostatic pressure or transmembrane pressure which is created by a combination of positive and negative pressures across the membrane, plasma water along with certain lower and middle molecular weight solutes pass through the membrane and into the dialysate or filtrate compartment of the device. Uremic toxins and waste products are removed from the patient's blood in this device by means of both diffusion and convection through the membrane and into the countercurrent flowing dialysis solution during hemodialysis. The dialysate exits the devices via a dialysate outlet port.

**Indications For Use:**

The dialyzer is intended for use in Hemodialysis for the treatments of chronic or acute renal failure.



**Technological Characteristics:**

The proposed device configurations have the same technological characteristics and are similar in design, function, composition, and operation, to the currently marketed configurations.

**Summary of Non-Clinical Tests:**

In vitro testing was conducted to compare the performance of the proposed device configurations to the predicate configurations.

**Summary of Clinical Tests:**

N/A

**Conclusion:**

Testing performed on the Gambro Polyflux Dialyzers indicates that they are safe, effective and perform as well as the predicate devices, when used in accordance with the instructions for use.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration  
9200 Corporate Blvd.  
Rockville MD 20850

SEP -7 2007

Ms. Kae Miller  
Manager, Regulatory Affairs  
Gambro® Renal Products, Inc.  
14143 Denver West Parkway  
LAKEWOOD CO 80401

Re: K072232  
Trade/Device Name: Gambro Polyflux HD-C4 SMALL Dialyzer for Single Use  
Regulation Number: 21 CFR §876.5860  
Regulation Name: High permeability hemodialysis system  
Regulatory Class: II  
Product Code: KDI  
Dated: August 8 2007  
Received: August 10, 2007

Dear Ms. Miller:

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 (Premarket 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 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.



*Protecting and Promoting Public Health*

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 one of the following numbers, based on the regulation number at the top of this letter:

|                |                                  |              |
|----------------|----------------------------------|--------------|
| 21 CFR 876.xxx | (Gastroenterology/Renal/Urology) | 240-276-0115 |
| 21 CFR 884.xxx | (Obstetrics/Gynecology)          | 240-276-0115 |
| 21 CFR 894.xxx | (Radiology)                      | 240-276-0120 |
| Other          |                                  | 240-276-0100 |

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 from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal, and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

K072232



Indications for Use Statement

510(k) number: (if known) K072232

Device Name: Gambro Polyflux HD-C4 SMALL Dialyzer for Single Use

Indications for Use: The dialyzer is intended for use in hemodialysis for the treatment of chronic and acute renal failure.

Prescription Use X AND / OR Over-The-Counter Use \_\_\_\_\_  
(Per 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

[Signature]  
(Division Sign-Off)  
Division of Reproductive, Abdominal,  
and Radiological Devices  
510(k) Number K072232