



APR 4 2000

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Mr. Richard M. Ormsbee Regulatory Affairs Associate MINNTECH® Corporation 14605 28<sup>th</sup> Avenue North Minneapolis, MN 55447 Re: K000028

Renaflo II HF 2000 Hemofilter Dated: January 4, 2000 Received: January 5, 2000 Regulatory Class: III

21 CFR §876.5860/Procode: 78 KDI

#### Dear Mr. Ormsbee:

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 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). 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 <u>Code of Federal Regulations</u>, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, 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 <u>Federal Register</u>. 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.

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) 594-4591. 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/dsma/dsmamain.html".

مراسا الماسان

Daniel G. Schultz, M.D. Captain, USPHS

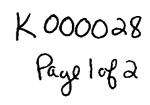
Director, Division of Reproductive,
Abdominal, and Radiological Devices

Office of Device Evaluation Center for Devices and Radiological Health

Enclosure(s)

## Indications for Use

510(k) Number (if known):	1000028
Device Name:	Renaflo® II HF 2000 Hemofilter
Indications for Use:	
fluid overload. uremia and/or e oligoanuria acute renal failure.	ofilter is intended for use in patients with electrolyte disturbances associated with It may also be used when removal of excess ents in pulmonary edema or congestive heart nerapy.
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Prescription Use V	OR Over-the -counter-use
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### 510(k) SUMMARY

#### 1. Submitter Information:

Name:

Minntech Corporation

Address:

14605 28th Avenue North, Minneapolis, Minnesota 55447

Contact Person:

Richard M. Ormsbee

Date Prepared:

December 20, 1999

#### 2. Device Name:

Proprietary name:

Minntech Renaflo® II HF 2000 Hemofilter

Common name:

Hemofilter

Classification name:

Dialyzer, High Permeability per 21 CFR 876.5860

#### 3. Predicate Device:

Renaflo<sup>®</sup> II HF 1200 Hemofilter

### 4. Device Description:

The Minntech Renaflo<sup>®</sup> II HF 2000 Hemofilter is made of glycerin-free, microporous, hollow fiber, polysulfone membrane encased in a polycarbonate housing having molded ultrafiltration ports and polycarbonate blood port header caps.

### 5. Indications for Use:

Device	Indications
Minntech Renaflo II HF 2000 Hemofilter	The Renaflo II HF 2000 Hemofilter is intended for use in-patients with fluid overload, uremia and/or electrolyte disturbances associated with oligoanuria acute renal failure. It may also be use when removal of excess fluid is indicated, such as patients in pulmonary edema or congestive heart failure refractory to diuretic therapy.

K000028 Page 2 of 2

# 6. Technological Characteristics:

A comparative summary of the Renaflo ® II HF 2000 and predicate device is as follows:

Characteristic	Renaflo II HF 2000 Renaflo II HF 1200		
	Hemofilter	Hemofilter	
Housing	Polycarbonate	Polycarbonate	
Potting Material	Polyurethane	Polyurethane	
Membrane	Polysulfone	Polysulfone	
Membrane Surface Area	1.98 m <sup>2</sup>	1.25 m <sup>2</sup>	
Maximum Transmembrane Pressure (mmHg)	500	500	
Blood port connectors	ISO	ISO	
Ultrafiltration ports	Luer	Luer	
Priming volume (ml)	132	83	

## 7. Performance Testing:

The following performance testing was conducted to determine device effectiveness as a hemofilter: Ultrafiltration Rate vs. Transmembrane Pressure, Pressure Drop vs. Blood Flow Rate, Protein Rejection, Minimum Blood Flow Rate & Blood Path Integrity.