

**Fadasis  
Medical,  
Inc.**

JUL 20 2001

K011874

7601-B Murphy Drive, Middleton, WI 53562  
Phone (608) 831-0025, ext. 276, FAX (608) 831-2202

Subject: 510(k) Summary of Safety and Effectiveness Information for the  
Fadasis Medical FM-1 NO Blender  
Proprietary Name: Fadasis Medical FM-1 NO Blender  
Common Name: Nitric Oxide Administration Apparatus - Back-up System  
Classification: Class II, 21CFR868.5165, MRO  
Panel: Anesthesiology  
Contact Person: Raymond Riddle, Vice President, Regulatory Affairs

*R. Riddle 6/12/01*

The 510(k) summary of safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 1992.

The Fadasis Medical FM-1 NO Blender is substantially equivalent to the Fadasis FM-1 NO Blender, which was cleared by FDA with 510(k) premarket notification number K003665. The purpose of this Special 510(k) was to allow the use of PEEK, rather than stainless steel, in the capillary tubes.

Indications for use: The FM-1 NO Blender provides user set concentrations of inhaled Nitric Oxide (NO), in a balance of nitrogen, mixed into a user settable constant flow of oxygen gas that is being delivered to a patient. The intended use for the FM-1 NO Blender is as a back up to a primary nitric oxide delivery system or for short term attended use when a primary delivery device cannot be used. In this capacity, it can be used with a self-inflating manual resuscitator bag. This intended use includes applications within a medical facility and transport outside of a medical facility. The FM-1 NO blender is not intended for use as a primary NO delivery system for long term use. (Note: These indications for use are unchanged from K003665.

The Fadasis Medical FM-1 NO Blender was designed to comply with the limited applicable portions of the following:

1. CGA 626: Medical NO Gas Connections.
2. IEC 601-1: Medical Electrical Equipment (for general requirements).
3. FDA Guidance Document for Premarket Notification Submissions for Nitric Oxide Delivery Apparatus, Nitric Oxide Analyzer and Nitrogen Dioxide Analyzer.

The materials selected were primarily based upon the Datex-Ohmeda INOvent Delivery System. New validation and verification completed included the FTIR Testing of PEEK. Validation and verification for 510(k) K003665 included FM-1 NO Blender 5-15 lpm Performance Characteristics Testing, FM-1 NO Blender Validation with Self Inflating Manual Resuscitator Bags, FM-1 NO Blender Validation of the Concentration Profile When Used with Self Inflating Manual, Resuscitator Bags, FM-1 NO Blender Regulator Check Function, FM-1 NO Blender 5-15 lpm Failure Testing, FM-1 NO Blender Material Compatibility Information, FM-1 NO Blender Drop Test and FM-1 NO Blender Packaging and Shipping Validation. All testing indicated the FM-1 NO Blender met its design input specifications, design output specifications, hazard analysis and risk control requirements.

Device Name – Proprietary: Fadasis Medical FM-1 NO Blender

Device Name – Common: Nitric Oxide Mixer

Device Name – Classification: Nitric Oxide Administration Apparatus  
Back-up System

Device Panel: Anesthesiology

Device Classification: Class II  
21CFR868.5165  
Product Code: MRO

Predicate Devices: Fadasis Medical FM-1 NO Blender  
FDA 510(k) log number K003665

Performance Standards: To the best of Fadasis Medical's knowledge,  
performance standards have not been promulgated  
by FDA for this device.

Owner/Operator Number: 9042308

Establishment Registration Number: 2135137

Facility Information: Fadasis Medical, Inc.  
7601-B Murphy Drive  
Middleton, WI 53562  
Telephone: (608) 831-0025  
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Device Background: The new FM-1 NO blender is identical to the predicate FM-1 NO blender with the exception of the capillary tube material, which has been changed to PEEK from stainless steel. The use of this material has been validated via FTIR testing, as required by FDA Guidance Document for Premarket Notification Submissions for Nitric Oxide Delivery Apparatus, Nitric Oxide Analyzer and Nitrogen Dioxide Analyzer. The original device performance validation data was obtained using both stainless steel and PEEK capillary tubes. Because of inadequate testing of PEEK, the use of this material was removed from the original 510(k) until further testing was completed, thus prompting this Special 510(k).



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Mr. Raymond T. Riddle  
Fadasis Medical, Inc.  
7601-B Murphy Drive  
Middleton, WI 53562

Re: K011874  
FM-1 NO Blender  
Regulation Number: 868.5165  
Regulatory Class: II (two)  
Product Code: 73 MRO  
Dated: July 3, 2001  
Received: July 9, 2001

Dear Mr. Riddle:

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 Code of Federal Regulations, 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 Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might

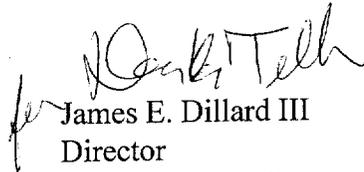
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have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

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) 594-4646. 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 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>".

Sincerely yours,



James E. Dillard III

Director

Division of Cardiovascular  
and Respiratory Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

