

K061712



DEC - 1 2006

Summary of Safety and Effectiveness

1. Applicant Information

Date Prepared: November 30, 2006
Submitter: MIR Medical International Research
Address: Via del Maggiolino, 125
00155 Roma – Italy
Contact Person: Simon Fowler
Phone Number: +39 06.22.754.777

2. Device Information

Trade Name: Spirobank II
Classification Name: spirometer and oximeter

3. Identification of legally marketed device to which the submitter claims equivalence:

Company Name: MIR.
Device Name: Spirobank
510(k) number: K983909

Company Name: MIR.
Device Name: Spirotel
510(k) number: K043528

4. Description of the device:

MIR Spirobank II is a spirometer and pulse oximeter, designed to facilitate the total valuation of lung function. It is designed for use by specialist who require a simple, portable and compact device, yet at the same time being capable of calculating more than 30 spirometric parameters, and monitors the oxygen saturation and pulse rate. It also calculates several additional statistical parameters derived from the SpO2 and the pulse rate.

Its connectivity capability (USB, Bluetooth, internal modem for acoustic coupling to telephone, RS232) makes it suitable also for telemedicine applications.

5. Statement of Intended Use:

The Spirobank II spirometer and pulse oximeter is intended to be used by a physician or by a patient under the instruction of a physician or paramedic. The device is intended to test lung function and can make:

spirometry testing in people of all ages, excluding infants and neonates

oximetry testing in people of all ages.

It can be used in any setting

6. Summary of the technological characteristics of the new device in comparison to those of the predicate device:

The MIR Spirobank II combines in a single device the functions both of a spirometer and of a pulse oximeter.

It uses the same spirometry sensor and algorithm and calculates the same parameters as Spirobank, but uses a completely new spirometry PCB.

For oximetry it uses the same oximetry PCB as the Spirotel. But in addition to the spot SpO₂ and the pulse rate, it also calculates several additional statistical parameters derived from the SpO₂ and the pulse rate.

7. Brief discussion of the clinical and nonclinical tests relied on for a determination of SE.

Testing was done to ensure that the MIR Spirotel would perform safely and accurately within the environments for which it is to be marketed.

Safety and environmental testing was conducted in accordance with EN 60601-1:1990 and EN 60601-1-2:1993. Electromagnetic compatibility (EMC), electrical, mechanical durability, safety (operator and patient), and temperature/humidity testing have been completed. The results demonstrates that the MIR Spirotel is in compliance with the guideline and standards referenced and that it performs within its specifications.

Testing of device performance included clinical testing of both spirometry and pulse oximetry functions.

Spirometry testing was performed according with American Thoracic Society (ATS) Standards. The results obtained were within the range of accuracy required by ATS.

For oximetry testing a desaturation trial was conducted. The results obtained were within specification.

The accuracy of SpO₂ and pulse rate and the statistical parameters which the device calculates, have been verified in-house.

8. Conclusions

Based on these results, it is our determination that the device is safe, effective, and performs as well as the legally marketed devices.

This summary on 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.



Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

DEC - 1 2006

Mr. Simon Fowler
M.I.R Medical International Research SRL
Via del Maggiolino, 125
00155 Roma,
ITALY

Re: K061712
Trade/Device Name: Spirobank II
Regulation Number: 21 CFR 868.1840
Regulation Name: Diagnostic Spirometer
Regulatory Class: II
Product Code: BZG, DQA
Dated: November 21, 2006
Received: November 27, 2006

Dear Mr. Fowler:

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.

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 (240) 276-0120. 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,



Chiu Lin, Ph.D.

Director

Division of Anesthesiology, General Hospital,

Infection Control and Dental Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

Indications for Use

510(k) Number (K061712):

Device Name: Spirobank II

Indications for Use: The Spirobank II spirometer and pulse oximeter is intended to be used by a physician or by a patient under the instruction of a physician or paramedic. The device is intended to test lung function and can make:

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- oximetry testing in people of all ages.

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Prescription Use X
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use _____
(21 CFR 801 Subpart C)

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

Concurrence of CDRH, Office of Device Evaluation (ODE)


Aree Nelson
Department of Anesthesiology, General Hospital,
Device Control, Dental Devices
K061712