510(k) SUMMARY

1) Submitter Information

Name: MEDA. Co., Ltd.
Address: Room D, F3, Building C2, Xinmao Science Skill Park,
Huayuan Industry Development Area, Tianjin, China

Phone: 86-22-83713808
Fax: 86-22-83713880

Contact person: Edward A. Kroll
Spectre Solutions, Inc.
5905 Fawn Lane
Cleveland, Ohio 44141
Phone: (440) 546-9810
Fax: (440) 546-9124

Data Prepared: September 16, 2006

2) Name of Device

Trade Name:
- ODM-1000A/P Biometer
- ODM-1000A Ultrasonic A-Biometer
- ODM-1000P Ultrasonic Pachymeter

Common Name:
- Ultrasound A/P Scan System for Ophthalmology
- Ultrasound A Scan for Ophthalmology
- Ultrasound Pachymeter

Classification Name: Ultrasonic Pulsed Echo Imaging System
Regulation Number: 892.1560
Product Code: 90-IYO
3) Predicate Devices

Micro Medical Devices' PalmScan AP2000/A2000/P2000 Devices, K043287

4) Intended Use

The ODM-1000A/P intended used for ophthalmology to accurately measure the axial length (AL), anterior chamber depth (ACD), lens thickness (LT), and corneal thickness (CT).

The ODM-1000A intended used for ophthalmology to accurately measure the axial length (AL), anterior chamber depth (ACD), lens thickness (LT).

The ODM-1000P intended used for ophthalmology to accurately measure the corneal thickness (CT).

5) Device Description

ODM-1000 A/P Biometer is an ultrasonic measuring instrument of pulse reflection. It contains two independent units: A-Mode Axis Biometric Parameter Measuring Unit and P-Mode Corneal Thickness Measuring Unit. It can be selected by user to configure:

ODM-1000A Ultrasonic A-Biometer (only for axial A biometry)

ODM-1000P Pachymeter (only for corneal thickness measurement)

The A-Biometer consists of a 10MHz A-probe and biometric unit. The axial biometry is the measurement for anterior chamber depth (ACD), lens thickness (LENS), vitreous length (VITR) and axial length (AL).

Corneal thickness Pachymeter consists of a 20MHz-pachymetric probe and the measuring unit. It is on the basis of the measurement of time interval between the anterior and post interface reflection wave to get the thickness of the cornea.

6) Technological characteristics

a) Devices Description

The ODM-1000A/P includes A-mode axial biometric parameter measurement and P-mode Corneal thickness measurement. Users can switch between these two modes through keyboard.
In A-mode, the 10MHz transducer transmits ultrasound into eye tissue and receives its echo reflected back by anterior chamber, lens and vitreum. Each length and their sum (AL) are calculated by measuring the time spent in different parts.

In P-mode, the 20MHz transducer transmits ultrasound into eye tissue and receives its echo reflected back by the anterior and post interface reflection pulse of the cornea, and then measure the time interval between two reflection pulse to get the thickness of the cornea.

b) Performance Data

1) Non-clinical test
Compliance Tests for ODM-1000A/P are as follows:
Safety Test (IEC 60601-1, Tested by TÜV)
EMC Test Report (IEC 60601-1-2, Tested by TÜV)
Acoustic output Test (FDA Guidance Document "Information for Manufacture Seeking Marketing Clearance of Diagnostic Ultrasound System and Transducers")
Biological Safety Test (ISO 10993, Tested by TÜV)

2) Clinical test
Not required

3) Conclusions

The ODM-1000A/P Ultrasonic Biometer/Pachymeter for Ophthalmology and The ODM-1000A Ultrasonic Biometer for Ophthalmology, The ODM-1000P Ultrasonic Pachymeter Are equivalent in safety and efficacy to the legally marketed predicate device.
Mr. Edward A. Kroll  
President  
Meda, Ltd.  
5905 Fawn Lane  
CLEVELAND OH 44141

Re: K063472  
Trade Name: Meda Model ODM 1000 A/P Ultrasonic Biometer for Ophthalmology  
Regulation Number: 21 CFR 892.1560  
Regulation Name: Ultrasonic pulsed echo imaging system  
Regulation Number: 21 CFR 892.1570  
Regulation Name: Diagnostic ultrasonic transducer  
Regulatory Class: II  
Product Code: IYO and ITN  
Dated: November 11, 2006  
Received: December 5, 2006

Dear Mr. Kroll:

We have reviewed your Section 510(k) premarket 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.

This determination of substantial equivalence applies to the following transducers intended for use with the Meda Model ODM 1000 A/P Ultrasonic Biometer for Ophthalmology, as described in your premarket notification:

<table>
<thead>
<tr>
<th>Transducer Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Scan (10MHz)</td>
</tr>
<tr>
<td>A-Scan (20MHz)</td>
</tr>
</tbody>
</table>
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 determination of substantial equivalence is granted on the condition that prior to shipping the first device, you submit a postclearance special report. This report should contain complete information, including acoustic output measurements based on production line devices, requested in Appendix G, (enclosed) of the Center's September 30, 1997 "Information for Manufacturers Seeking Marketing Clearance of Diagnostic Ultrasound Systems and Transducers." If the special report is incomplete or contains unacceptable values (e.g., acoustic output greater than approved levels), then the 510(k) clearance may not apply to the production units which as a result may be considered adulterated or misbranded.

The special report should reference the manufacturer's 510(k) number. It should be clearly and prominently marked "ADD-TO-FILE" and should be submitted in duplicate to:

Food and Drug Administration
Center for Devices and Radiological Health
Document Mail Center (HFZ-401)
9200 Corporate Boulevard
Rockville, Maryland 20850

This letter will allow you to begin marketing your device as described in your 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 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" (21 CFR 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
If you have any questions regarding the content of this letter, please contact Andrew Kang, M.D. at (240) 276-3666.

Sincerely yours,

Nancy Brogdon
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): K063472

Device Name: Meda Model ODM 1000 A/P Ultrasonic Biometer for Ophthalmology

Indications for Use:

Ultrasound Imaging of the Eye
Axial biometric parameter measurement of the Eye

Prescription Use X
(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)

(Posted November 13, 2003)

Page _ of _

(Nancy C. Bregdon)
(Division Sign-Off)
Division of Reproductive, Abdominal, and Radiological Devices
510(k) Number K063472
### DIAGNOSTIC ULTRASOUND INDICATIONS FOR USE FORM

**System:** ODM-1000A/P & ODM-1000A

**Transducer:** A-Scan (10MHz)

**Intended Use:** Diagnostic ultrasound imaging

<table>
<thead>
<tr>
<th>Clinical Application</th>
<th>Mode Of Operation</th>
<th>A</th>
<th>B</th>
<th>M</th>
<th>PWD</th>
<th>CWD</th>
<th>Color Doppler</th>
<th>Amplitude Doppler</th>
<th>Color Velocity Imaging</th>
<th>Combined (specify)</th>
<th>Other* (Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ophthalmic</td>
<td></td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fetal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdominal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intraoperative (Specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intraoperative Neurological</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatric</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Organ (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neonatal Cephalic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Cephalic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transesophageal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transrectal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transvaginal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transurethral</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intravascular</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peripheral Vascular</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laparoscopic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musculo-skeletal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musculo-skeletal Superficial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = new indication; P = previously cleared by FDA; E = added under Appendix E

**Additional Contents:**

A-Mode Biometric Probe

(Please do not write below this line - continue on another page if needed)

Concurrence of Center for Devices and Radiological Health, Office of Device Evaluation

Prescription Use (Per 21 CFR 801.109)

[Signature]

(Division Sign-Off)

Division of Reproductive, Abdominal,

Page Ag Radiological Devices

510(k) Number K063472
## DIAGNOSTIC ULTRASOUND INDICATIONS FOR USE FORM

**System:** ODM-1000A/V & ODM-1000P  
**Transducer:** A-Scan (20MHz)  

### Intended Use: Diagnostic ultrasound imaging

<table>
<thead>
<tr>
<th>Clinical Application</th>
<th>Mode Of Operation</th>
<th>A</th>
<th>B</th>
<th>M</th>
<th>PWD</th>
<th>CWD</th>
<th>Color Doppler</th>
<th>Amplitude Doppler</th>
<th>Color Velocity Imaging</th>
<th>Combined (specify)</th>
<th>Other* (Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ophthalmic</td>
<td></td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fetal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdominal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intraoperative (Specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intraoperative Neurological</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatric</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Organ (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neonatal Cephalic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Cephalic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transesophageal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transrectal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transvaginal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transurethral</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intravascular</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peripheral Vascular</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laparoscopic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musculo-skeletal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musculo-skeletal Superficial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N= new indication; P= previously cleared by FDA; E= added under Appendix E

### Additional Contents

- Pachymetric probe

---

(Please do not write below this line – continue on another page if needed)

Concurrence of Center for Devices and Radiological Health, Office of Device Evaluation

Prescription Use (Per 21 CFR 801.109)

---

unsigned