

JUN - 4 2009

## 510(k) Summary

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

### 1.0 submitter's information

Name: Andon Health Co., Ltd.  
Address: No 31, Changjiang Road, Nankai District, Tianjin,  
P.R. China  
Phone number: 86-22-6052 6161  
Fax number: 86-22-6052 6162  
Contact: Liu Yi  
Date of Application: 03/16/2009

### 2.0 Device information

Trade name: Fully Automatic Electronic Blood Pressure Monitor  
Common name: Noninvasive blood pressure measurement system  
Classification name: Noninvasive blood pressure measurement system

### 3.0 Classification

Production code: DXN- Noninvasive blood pressure measurement system.  
Regulation number: 870.1130  
Classification: II  
Panel: Cardiovascular

### 4.0 Predict device information

Manufacturer: Andon Health Co., Ltd.  
Device: KD-5902 Fully Automatic Electronic Blood Pressure Monitor  
KD-791 Fully Automatic Electronic Blood Pressure Monitor  
510(k) number: K083317  
K070826

### 5.0 Device description

KD-5901 Fully Automatic Electronic Blood Pressure Monitor is for use by medical professionals or at home and is a non-invasive blood pressure measurement system intended to measure the diastolic and systolic blood pressures and pulse rate of an adult individual by using a non-invasive technique in which an inflatable cuff is wrapped around the upper arm. The

cuff circumference is limited to 22cm-48cm.

KD-7909 Fully Automatic Electronic Blood Pressure Monitor is for use by medical professionals or at home and is a non-invasive blood pressure measurement system intended to measure the diastolic and systolic blood pressures and pulse rate of an adult individual by using a non-invasive technique in which an inflatable cuff is wrapped around the wrist. The cuff circumference is limited to 6.1023 inches to 9.8425 inches.

KD-5901 and KD-7909 are all designed and manufactured according to ANSI/AAMI SP10--manual, electronic or automated sphygmometers.

The operational principle of KD-5901 and KD-7909 are based on oscillometric and silicon integrate pressure sensor technology, the result will be shown on a LCD with an electronic interface module, the result can also be classified and displayed by the function of blood pressure classification indicator, the memory capability is 60 times. If any irregular heartbeat is detected, it can be shown on the LCD. KD-5901 also has a voice function.

#### **6.0 Intended use**

KD-5901 Fully Automatic Electronic Blood Pressure Monitor is for use by medical professionals or at home and is a non-invasive blood pressure measurement system intended to measure the diastolic and systolic blood pressures and pulse rate of an adult individual by using a non-invasive technique in which an inflatable cuff is wrapped around the upper arm. The cuff circumference is limited to 22cm-48cm.

KD-7909 Fully Automatic Electronic Blood Pressure Monitor is for use by medical professionals or at home and is a non-invasive blood pressure measurement system intended to measure the diastolic and systolic blood pressures and pulse rate of an adult individual by using a non-invasive technique in which an inflatable cuff is wrapped around the wrist. The cuff circumference is limited to 6.1023 inches to 9.8425 inches.

The intended use and the indication for use of KD-5901, as described in its labeling are the same as the predict device KD-5902; the intended use and the indication for use of KD-7909, as described in its labeling are the same as the predict device KD-791.

**7.0 Summary comparing technological characteristics with predicate device**

<b>Technological Characteristics</b>	<b>Comparison result</b>
Design principle	Identical
Appearance	Similar
Patients contact Materials	Identical
Performance	Similar
Biocompatibility	Identical
Mechanical safety	Identical
Energy source	Identical
Standards met	Identical
Electrical safety	Identical
EMC	Identical
Function	Identical

The difference of technological characteristic between KD-5901 and its predicted device KD-5902 is the appearance and the performance, the difference of technological characteristic between KD-7909 and its predicted device KD-791 is the appearance and the performance.

## **8.0 Performance summary**

KD-5901, KD-7909 Fully Automatic Electronic Blood Pressure Monitor conforms to the following standards:

- IEC 60601-1, Medical Electrical Equipment - Part 1: General Requirements for Safety, 1988; Amendment 1, 1991-11, Amendment 2, 1995.
- IEC 60601-1-2, Medical Electrical Equipment - Part 1-2: General Requirements for Safety - Collateral standard: Electromagnetic Compatibility - Requirements and Tests (Edition 2:2001 with Amendment 1:2004; Edition 2.1 (Edition 2:2001 consolidated with Amendment 1:2004)).
- AAMI SP10:2002, Manual, electronic or automated sphygmomanometers.
- AAMI / ANSI SP10:2002/A1:2003 --, Amendment 1 to ANSI/AAMI SP10:2002 Manual, electronic, or automated sphygmomanometers.
- AAMI / ANSI SP10:2002/A2:2006 --, Amendment 2 to ANSI/AAMI SP10:2002 Manual, electronic, or automated sphygmomanometers.

## **9.0 Comparison to the predict device and the conclusion**

Our device KD-5901 Fully Automatic Electronic Blood Pressure Monitor is substantially equivalent to the Fully Automatic Electronic Blood Pressure Monitor KD-5902 whose 510(k) number is K083317, KD-7909 Fully Automatic Electronic Blood Pressure Monitor is substantially equivalent to the Fully Automatic Electronic Blood Pressure Monitor KD-791 whose 510(k) number is K070826.

KD-5901 and KD-5902 are very similar in the intended use, the design principle, the material, the energy source, the applicable standards and the functions. Their appearances are different. The operational range for humidity (<90%) are changed from the predict device whose operational range for humidity is <80%. The pulse rate range is changed from 30-180 times/min to 40-180 times/min.

However, the test in this submission provides demonstration that these small differences do not raise any new questions of safety and effectiveness.

KD-7909 and KD-791 are very similar in the intended use, the design principle, the material, the energy source, the applicable standards and the functions. Their appearances are different. The operational range for humidity (<90%) are changed from the predict device whose operational range for humidity is <80%. The pulse rate range is changed from 30-180 times/min to 40-180

times/min.

However, the test in this submission provides demonstration that these small differences do not raise any new questions of safety and effectiveness.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

JUN - 4 2009

Andon Health Co., Ltd.  
c/o Mr. Liu Yi  
No 31 Changjiang Road  
Nankai District, Tianjin  
China 300193

Re: K090768  
Trade/Device Name: KD-5901, KD-7909 Fully Automatic Electronic Blood Pressure Monitor  
Regulation Number: 21 CFR 870.1130  
Regulation Name: Noninvasive Blood Pressure Measurement System  
Regulatory Class: Class II (two)  
Product Code: DXN  
Dated: undated  
Received: May 7, 2009

Dear Mr. Yi:

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 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.

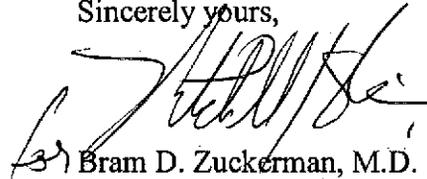
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Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other 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); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); 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.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Center for Devices and Radiological Health's (CDRH's) Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please contact the CDRH/Office of Surveillance and Biometrics/Division of Postmarket Surveillance at 240-276-3464. For more information regarding the reporting of adverse events, please go to <http://www.fda.gov/cdrh/mdr/>.

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,



Bram D. Zuckerman, M.D.  
Director  
Division of Cardiovascular Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

### Statement of Indications for Use

**510(k) Number:** K090768

**Device name:** KD-5901, KD-7909 Fully Automatic Electronic Blood Pressure Monitor

**Indications for use:**

KD-5901 Fully Automatic Electronic Blood Pressure Monitor is for use by medical professionals or at home and is a non-invasive blood pressure measurement system intended to measure the diastolic and systolic blood pressures and pulse rate of an adult individual by using a non-invasive technique in which an inflatable cuff is wrapped around the upper arm. The cuff circumference is limited to 22cm-48cm.

KD-7909 Fully Automatic Electronic Blood Pressure Monitor is for use by medical professionals or at home and is a non-invasive blood pressure measurement system intended to measure the diastolic and systolic blood pressures and pulse rate of an adult individual by using a non-invasive technique in which an inflatable cuff is wrapped around the wrist. The cuff circumference is limited to 6.1023 inches to 9.8425 inches.

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

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

*[Handwritten Signature]*

(Division Sign-Off) 6/4/09  
Division of Cardiovascular Devices

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