

April 10, 2023

Famidoc Technology Company Limited Amos Zou Management Representative No. 212 Yilong Road, Hexi Industrial Zone Jinxia, Changan Town Dongguan, Guangdong 523853 China

Re: K222887

Trade/Device Name: Arm Blood Pressure Monitor/Automatic Wireless Smart Blood Pressure Monitor Regulation Number: 21 CFR 870.1130 Regulation Name: Noninvasive Blood Pressure Measurement System Regulatory Class: Class II Product Code: DXN Dated: April 6, 2023 Received: April 7, 2023

Dear Amos Zou:

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. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at <a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm</a> identifies combination product submissions. 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. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

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.

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) for devices or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see <a href="https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products">https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products</a>); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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 go to <u>https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems</u>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<u>https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance</u>) and CDRH Learn (<u>https://www.fda.gov/training-and-continuing-education/cdrh-learn</u>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<u>https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice</u>) for more information or contact DICE by email (<u>DICE@fda.hhs.gov</u>) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Aneesh S. Deoras -S

for

Stephen Browning Assistant Director Division of Cardiac Electrophysiology, Diagnostics and Monitoring Devices Office of Cardiovascular Devices Office of Product Evaluation and Quality Center for Devices and Radiological Health

Enclosure

# Indications for Use

510(k) Number *(if known)* K222887

#### **Device Name**

Arm Blood Pressure Monitor/Automatic Wireless Smart Blood Pressure Monitor

Indications for Use (Describe)

Arm Blood Pressure Monitor/Automatic Wireless Smart Blood Pressure is intended to measure the blood pressure and pulse rate of adults and children at least 12 years of age, at household or medical center. with the cuff around the left upper arm according to the instruction in the user's guide manual(Cuff size  $220 \sim 420$  mm).

Type of Llee	(Select one or both, as applicable)
I VDE OF USE	(Select one of doint, as addiicadle)

Prescription Use (Part 21 CFR 801 Subpart D)

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

#### CONTINUE ON A SEPARATE PAGE IF NEEDED.

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# 510(K) SUMMARY

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

# 1. Submitter of 510(K):

Date of Prepared:	17/1/2023			
Submitter's Name:	Famidoc Technology Company Limited			
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## **2.Proposed Device and code:**

Device Trade Name:	Arm Blood Pressure Monitor/Automatic Wireless Smart Blood		
	Pressure monitor		
	(Model:FDBP-A7B,FDBP-A7BL,FDBP-A7BT,FDBP-A7BLT,		
	FDBP-A8B、FDBP-A8BL、FDBP-A8BT、FDBP-A8BLT、		
	FDBP-A9B、FDBP-A9BL、FDBP-A9BT、FDBP-A9BLT、		
	FDBP-A10B、FDBP-A10BL、FDBP-A10BT、FDBP-A10BLT)		
Regulation Medical	Noninvasive blood pressure measurement system.		
Specialty			
Product Code:	DXN		
Regulation number	21 CRF 870.1130		
Device Class	2		

#### 3. Predicate Device:

510(K)	Trade or Proprietary or Model	Manufacturer
	Name	
K210770	Fully Automatic Electronic	Andon Health Co,.Ltd.
	Blood Pressure Monitor	

### 4. Description of Proposed Device:

Arm Blood Pressure Monitor/Automatic Wireless Smart Blood Pressure Monitor(Model:FDBP-A7B、FDBP-A7BL、FDBP-A7BT、FDBP-A7BLT、FDBP-A8BS、 FDBP-A8BL、FDBP-A8BT、FDBP-A8BLT、FDBP-A9BL、FDBP-A9BT、 FDBP-A9BLT, FDBP-A10B, FDBP-A10BL, FDBP-A10BT, FDBP-A10BLT) includes utilize modular design method, It consists of nine main modules:

□ power-on self-test module, system initialization module, sampling data processing and pressure, pulse rate calculation module, display processing module, power detection processing module, data storage module, key scanning processing module, sampling processing module, ,wireless function module, and each module communicates through a message queue.

□ The blood pressure monitor controls the pneumatic flow control module through singlechipped microcomputer to pressurize the cuff module in order to exceed the lower pressure of patients, the blood being pushed against the artery walls;

□ Pneumatic Flow Control Module being directed to release the pressure, while the pressure detection module collect pulse pressure signal and amplify filter;

 $\Box$  amplified filtersignal being read by single-chipped microcomputer for pressure and pulse signal, through unique algorithm to obtain the systolic and diastolic pressure with pulse;

□ Single-chipped microcomputer will control the inflation/deflation module to release the pressure after receive measurements;

 $\hfill\square$  in the meanwhile, display the measurements results then stored the values with memory module.

# 5. Intended for Use

Arm Blood Pressure Monitor/Automatic Wireless Smart Blood Pressure is intended to measure the blood pressure and pulse rate of adults and children at least 12 years of age, at household or medical center. with the cuff around the left upper arm according to the instruction in the user's guide manual (Cuff size  $220 \sim 420$  mm).

# 6. Technical and Performance

The following table compares the device to the predicate device with basic technological characteristics.

7. Comparison of Technological Characteristics with Predicate Device

Elements of	Subject Devices				Predicate Device	Comparison
Comparison						Result
Device Name	Arm Blood Pressure Monitor/Automatic Wireless Smart Blood Pressure Monitor				Fully Automatic Electronic Blood Pressure Monitor	/
Device Model	FDBP-A7BL	FDBP-A7BT	FDBP-A10BL	FDBP-A10BT	KD-5810, KD5810B, KD-5811, KD-5920TL, KD-552	/
510 (k) Number	K222887	K222887	K222887	K222887	K210770	/
Product Code	DXN	DXN	DXN	DXN	DXN	SE
<b>Regulation No.</b>	870.1130	870.1130	870.1130	870.1130	870.1130	SE
Classification	II	II	II	II	II	SE
Intended Use and i	indications for Use					
Intended Use	Arm Blood Pressure Monitor/Automatic Wireless Smart Blood Pressure is intended to measure the blood pressure and pulse rate of adults and children at least 12 years of age, at household or medical center. with the cuff around the left upper arm according to the instruction in the user's guide manual(Cuff size 220 ~ 420 mm).	Arm Blood Pressure Monitor/Automatic Wireless Smart Blood Pressure is intended to measure the blood pressure and pulse rate of adults and children at least 12 years of age, at household or medical center. with the cuff around the left upper arm according to the instruction in the user's guide manual(Cuff size 220 ~ 420 mm).	Arm Blood Pressure Monitor/Automatic Wireless Smart Blood Pressure is intended to measure the blood pressure and pulse rate of adults and children at least 12 years of age, at household or medical center. with the cuff around the left upper arm according to the instruction in the user's guide manual(Cuff size 220 ~ 420 mm).	Arm Blood Pressure Monitor/Automatic Wireless Smart Blood Pressure is intended to measure the blood pressure and pulse rate of adults and children at least 12 years of age, at household or medical center. with the cuff around the left upper arm according to the instruction in the user's guide manual(Cuff size 220 ~ 420 mm).	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	SE

					<u>K222007_510(</u>	n journin
					upper arm. The cuff	
					circumference is limited to	
					22cm-48cm.	
Performance Spe	cification	L				
Measuring	Oscillometric Method	SE				
Method						
Measuring	Systolic: 60-250mmHg	Systolic: 60-250mmHg	Systolic: 60-250mmHg	Systolic: 60-250mmHg	Systolic: 60-260mmHg	Similar
Range	Diastolic: 30-195mmHg	Diastolic: 30-195mmHg	Diastolic: 30-195mmHg	Diastolic: 30-195mmHg	Diastolic: 40-199mmHg	Note 1
	Pulse: 40-199beats/min	Pulse: 40-199beats/min	Pulse: 40-199beats/min	Pulse: 40-199beats/min	Pulse rate: 40-180	
					beats/min	
Pressure	1 mmHg or 0.1 kPa	SE				
resolution						
Accuracy	Pressure:	Pressure:	Pressure:	Pressure:	Pressure: ±3mmHg	Similar
	±3 mmHg (±0.4kPa)	±3 mmHg (±0.4kPa)	±3 mmHg (±0.4kPa)	±3 mmHg (±0.4kPa)	Pulse rate:	Note 2
	Pulse:±5%	Pulse:±5%	Pulse:±5%	Pulse:±5%	Less than 60: ±3bpm	
					More than 60 (incl.) : $\pm 5\%$	
Patient	Adult	Adult	Adult	Adult	Adult	SE
Population						
Measurement	Upper Arm	SE				
Site of Body						
Inflation and	Automatic	Automatic	Automatic	Automatic	Automatic	SE
Deflation						
Memory Size	2x60 sets record	2x60 sets record	2x60 sets record	2x60 sets record	4×60 times with time and	Similar
					date stamp	Note 3
Indicators	Blood Pressure (Systolic	SE				
	and Diastolic), Pulse,					
	Date, Time, WHO BP					
	Classification Indicating					
	Bar, Low Battery Icon,					
	Heart Icon, Memory					

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	Record	Record	Record	Record Number, Bluetooth	Record Number, Bluetooth	
	Number,Bluetooth	Number,Bluetooth	Number,Bluetooth	symbol	symbol	
	symbol	symbol	symbol			
Cuff	220mm ~420mm	220mm ~420mm	220mm ~420mm	220mm ~420mm	22cm-30cm,	Similar
Circumference					30cm-42cm(Optional),	Note 4
					42cm-48cm(Optional),	
					22cm-42cm (Optional)	
Power Battery	3.7V lithium battery or	4xAAA 1.5V alkaline	3.7V lithium battery or	4xAAA 1.5V alkaline	4xAA 1.5V alkaline	Similar
	USB 5V adapter	batteries or USB 5V	USB 5V adapter	batteries or USB 5V	batteries or DC 6V	Note 5
		adapter		adapter	adapter	
Display	LED Digital Display	LED Digital Display	LCD Digital Display	LCD Digital Display	LCD Digital Display	Similar
						Note 6
OPERATING&ST	FORANE CONDITIONS					1
Operating	Temperature: 5°C~40°C	Temperature: 5°C~40°C	Temperature: 5°C~40°C	Temperature: 5°C~40°C	Temperature: 10°C~40°C	Similar
Environment	Humidity: 15% RH~90%	Humidity: 15% RH~90%	Humidity: 15% RH~90%	Humidity: 15% RH~90%	Humidity: ≤85%RH	Note 7
	RH, No condensation	RH, No condensation	RH, No condensation	RH, No condensation	Atmospheric pressure:	
	Atmospheric pressure:	Atmospheric pressure:	Atmospheric pressure:	Atmospheric pressure:	80kPa~105kPa	
	70kPa~106kPa	70kPa~106kPa	70kPa~106kPa	70kPa~106kPa		
Storage	Temperature: -25°C~55°C	Temperature: -25°C~55°C	Temperature: -25°C~55°C	Temperature: -25°C~55°C	Temperature: -20°C~50°C	Similar
Environment	Humidity: 15% RH~95%	Humidity: 15% RH~95%	Humidity: 15% RH~95%	Humidity: 15% RH~95%	Humidity: ≤85%RH	Note 8
	RH, No condensation	RH, No condensation	RH, No condensation	RH, No condensation	Atmospheric pressure:	
	Atmospheric pressure:	Atmospheric pressure:	Atmospheric pressure:	Atmospheric pressure:	80kPa~105kPa	
	70kPa~106kPa	70kPa~106kPa	70kPa~106kPa	70kPa~106kPa		
COMPLIANCE S	TANDARDS	·				
Electrical Safety	IEC 60601-1	IEC 60601-1	IEC 60601-1	IEC 60601-1	IEC 60601-1	SE
EMC	IEC 60601-1-2	IEC 60601-1-2	IEC 60601-1-2	IEC 60601-1-2	IEC 60601-1-2	SE
Home Use	IEC 60601-1-11	IEC 60601-1-11	IEC 60601-1-11	IEC 60601-1-11	IEC 60601-1-11	SE
Performance	IEC 80601-2-30	IEC 80601-2-30	IEC 80601-2-30	IEC 80601-2-30	IEC 80601-2-30	SE
Biocompatibility	All the patient	All the patient	All the patient	All the patient	All the patient	SE

	contracting materials					
	are evaluated by the					
	biocompatibility	biocompatibility	biocompatibility	biocompatibility	biocompatibility	
	standard ISO					
	10993 -5, -10.	10993 -5, -10.	10993 -5, -10.	10993 -5, -10.	10993 -5, -10.	
Performance	ANSI/AAMI/ISO	ANSI/AAMI/ISO	ANSI/AAMI/ISO	ANSI/AAMI/ISO	ANSI/AAMI/ISO	SE
	81060-2	81060-2	81060-2	81060-2	81060-2	

#### Note 1 and 2

The Measuring Range and Accuracy of proposed device and predicate device are different. But the difference is very slight, it will not affect the main function and the intended use of the device. and Measuring Range and Accuracy of proposed device they are both compliance with IEC 60601-1 and IEC 80601-2-30 Standard Therefore, this difference will not result in any safety and effectiveness issue of the proposed device.

#### Note 3

The Memory Size of proposed device and predicate device are different, is clearly indicated in user manual and outer carton. Therefore, this difference will not result in any safety and effectiveness issue of the proposed device.

#### Note 4

The Cuff Circumference of proposed device and predicate device is compliance with IEC 80601-2-30 Standard, this difference will not result in any safety and effectiveness issue of the proposed device.

#### Note 5 and Note 6

The Power Battery and Display of proposed device and predicate device are compliance with IEC 60601-1 and IEC 80601-2-30 Standard, these difference will not result in any safety and effectiveness issue of the proposed device.

#### Note 7 and Note 8

The Temperature, Relative Humidity and Atmospheric pressure of Operation and storage environment of subject devices is difference with predicate

device, and they are both compliance with IEC 60601-1-11 standard, it will not raise any safety or effectiveness issue.

### **8.Subject Devices Different Table**

model	FDBP-A7BL	FDBP-A8BL	FDBP-A7B	FDBP-A8B
Power	Rechargeable 3.7V lithium	Rechargeable 3.7V lithium	4*AAA battery	4*AAA battery
source	battery/USB 5V	battery/USB 5V	/USB 5V	/USB 5V
Number of keys	Three	Three	Three	Three
Display module	LED (No backlight)	LED (No backlight)	LED (No backlight)	LED (No backlight)
Intended Use and	See chapter 7	Same	Same	Same
indications for Use				
Performance Specification	See chapter 7	Same	Same	Same
OPERATING&STORANE	See chapter 7	Same	Same	Same
CONDITIONS				
Measuring	See chapter 7	Same	Same	Same
Method				
COMPLIANCE	See chapter 7	Same	Same	Same
STANDARDS				

FDBP-Axyy

"x"= 7, 8, 9, 10"yy"=L, B, BL, T, LT, BT, BLT or blank.

"x" 7, 9 are identical except the display, "x" 8, 10 are identical except the display.

"x" 7, 8 use the LED display, "x" 9, 10 use the LCD display.

"yy" had "L" mean the device use the lithium battery to offer the power. If not, mean use the 4\*AAA batteries and the internal circuit no charging circuit.

"yy" had "B" mean the device had Bluetooth and Wifi function. If not, mean no this function.

"yy" had "T" mean no setting button, only memory and start/stop button. If not, mean had an extra settingsbutton.

Model	FDBP-A7BT	FDBP-A8BT	FDBP-A8BLT	FDBP-A7BLT
Power	4*AAA battery	4*AAA battery	Rechargeable 3.7V lithium	Rechargeable 3.7V lithium
source	/USB 5V	/USB 5V	battery/USB 5V	battery/USB 5V
Number of keys	Two	Two	Two	Two

Display module	LED (No backlight)	LED (No backlight)	LED (No backlight)	LED (No backlight)
Intended Use and	See chapter 7	Same	Same	Same
indications for Use				
Performance Specification	See chapter 7	Same	Same	Same
OPERATING&STORANE	See chapter 7	Same	Same	Same
CONDITIONS				
Measuring	See chapter 7	Same	Same	Same
Method				
COMPLIANCE	See chapter 7	Same	Same	Same
STANDARDS				

FDBP-Axyy

"x"= 7, 8, 9, 10"yy"=L, B, BL, T, LT, BT, BLT or blank.

"x" 7, 9 are identical except the display, "x" 8, 10 are identical except the display.

"x" 7, 8 use the LED display, "x" 9, 10 use the LCD display.

"yy" had "L" mean the device use the lithium battery to offer the power. If not, mean use the 4\*AAA batteries and the internal circuit no charging circuit.

"yy" had "B" mean the device had Bluetooth and Wifi function. If not, mean no this function.

"yy" had "T" mean no setting button, only memory and start/stop button. If not, mean had an extra settingsbutton.

Model	FDBP-A10BL	FDBP-A9BL	FDBP-A9B	FDBP-A10B
Power	Rechargeable 3.7V lithium	Rechargeable 3.7V lithium	4*AAA battery	4*AAA battery
source	battery/USB 5V	battery/USB 5V	/USB 5V	/USB 5V
Number of keys	Three	Three	Three	Three
Display module	LCD (backlight)	LCD (backlight)	LCD (backlight)	LCD (backlight)
Intended Use and	See chapter 7	Same	Same	Same
indications for Use				

Performance Specification	See chapter 7	Same	Same	Same
OPERATING&STORANE	See chapter 7	Same	Same	Same
CONDITIONS				
Measuring	See chapter 7	Same	Same	Same
Method				
COMPLIANCE	See chapter 7	Same	Same	Same
STANDARDS				

FDBP-Axyy

"x"= 7, 8, 9, 10"yy"=L, B, BL, T, LT, BT, BLT or blank.

"x" 7, 9 are identical except the display, "x" 8, 10 are identical except the display.

"x" 7, 8 use the LED display, "x" 9, 10 use the LCD display.

"yy" had "L" mean the device use the lithium battery to offer the power. If not, mean use the 4\*AAA batteries and the internal circuit no charging circuit.

"yy" had "B" mean the device had Bluetooth and Wifi function. If not, mean no this function.

"yy" had "T" mean no setting button, only memory and start/stop button. If not, mean had an extra settingsbutton.

Model	FDBP-A10BT	FDBP-A98T	FDBP-A9BLT	FDBP-A10BLT
Power	4*AAA battery	4*AAA battery	Rechargeable 3.7V lithium	Rechargeable 3.7V lithium
source	/USB 5V	/USB 5V	battery/USB 5V	battery/USB 5V
Number of keys	Two	Two	Two	Two
Display module	LCD (backlight)	LCD (backlight)	LCD (backlight)	LCD (backlight)
Intended Use and	See chapter 7	Same	Same	Same
indications for Use				
Performance Specification	See chapter 7	Same	Same	Same
OPERATING&STORANE	See chapter 7	Same	Same	Same
CONDITIONS				

Measuring	See chapter 7	Same	Same	Same
Method				
COMPLIANCE	See chapter 7	Same	Same	Same
STANDARDS				

FDBP-Axyy

"x"= 7, 8, 9, 10"yy"=L, B, BL, T, LT, BT, BLT or blank.

"x" 7, 9 are identical except the display, "x" 8, 10 are identical except the display.

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"yy" had "B" mean the device had Bluetooth and Wifi function. If not, mean no this function.

"yy" had "T" mean no setting button, only memory and start/stop button. If not, mean had an extra settingsbutton.

# 9. Performance

# Testing:

Performance data includes "Non-Clinical Data" and "Clinical Data", brief description of which are shown as below.

# 9.1 Non-Clinical Data:

The following performance data were provided in support of the substantial equivalence determination.

# 9.2 Biocompatibility testing

The biocompatibility evaluation for the FDBP A series Upper arm Blood Pressure Monitor and the NIBP CUFF were conducted in accordance with the International Standard ISO 10993-1 "Biological Evaluation of Medical Devices – Part 1: Evaluation and Testing Within a Risk Management Process," as recognized by FDA. The worst case of the whole system is considered tissue contacting for duration of less than 24 hours. And the testing included the following tests:

- $\Box$  Skin Sensitization
- $\hfill\square$  Skin Irritation

# 9.3 Electrical safety and electromagnetic compatibility (EMC)

Electrical safety and EMC testing were conducted on the FDBP A series Upper arm Blood Pressure Monitor, consisting of all the modules and accessories in the system. The system complies with the IEC 60601-1: 2012 Medical electrical equipment Part 1: General requirements for basic safety and essential performance for safety and the IEC 60601-1-2: 2014 Medical electrical equipment –Part 1-2: General requirements for basic safety and essential performance – Collateral Standard:Electromagnetic disturbances – Requirements and tests standard for EMC.

#### 9.4 Bench Testing

Bench testing was conducted on the FDBP A series Upper arm Blood Pressure Monitor, consisting of all the accessories in the system. The system complies with the IEC 60601-1-11: 2015 MEDICAL ELECTRICAL EQUIPMENT –Part 1-11: General requirements for basic safety and essential performance –Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment, IEC 80601-2-30: 2018 Medical electrical equipment — Part 2-30: Particular requirements for basic safety and essential performance of automated non-invasive sphygmomanometers standards for performance effectiveness.

# 9.5 Software Verification and Validation Testing

Software verification and validation testing were conducted and documentation was provided as recommended by FDA's Guidance for Industry and FDA Staff, "Guidance for the Content of Premarket Submissions for Software Contained in Medical Devices." The software for this device was considered as a "Moderate" level of concern.

#### 9.6 Usability Testing

Usability testing according to following FDA Guidance 1757, Applying Human Factors and Usability Engineering to Optimize Medical Device Design, was conducted.

# 9.7 Clinical data:

Clinical testing is conducted per ISO 81060-2: 2018 Non-invasive sphygmomanometers - Part 2: Clinical investigation of intermittent automated measurement type.

Based on the same product principle, and the clinical validation data on the FDBP-A7BL can cover all the models included in this submission.

In this clinical study, 85 patients(43 males and 42 females) participated in the clinical study. Same arm sequentialmethod was adopted during the clinical study. The manual MercurySphygmomanometer was used as a reference sphygmomanometer. All the subjectswere volunteer to take part in the clinical study, all the subjects completed theclinical study without any AE or side-effect. The results showed the accuracy of the subject device is within acceptable scope specified in ISO 81060-2.

## 9.8 Summary

Based on the non-clinical and clinical performance as documented in the device development, the subject devices were found to have a safety and effectiveness profile that is similar to the predicate device.

# 10. Conclusions:

The proposed device has the same intended use and similar characteristics as the predicate device, AGE Automatic Upper Arm Blood Pressure Monitor with Models KD-5810, KD5810B, KD-5811, KD-5920TL and KD-552(K210770) Meanwhile, performance testing, bench testing, and safety report documentation supplied in this submission demonstrates that any differences in their technological characteristics do not raise any new questions of safety or effectiveness. Based on performance testing, the proposed device is Substantially Equivalent (SE) to the predicate device