

DECLARATION OF BLOOD PRESSURE MEASURING DEVICE EQUIVALENCE 2013

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SECTION A - Please complete all items.

I **Kevin Tan,** a Director of **Guangdong Transtek Medical Electronics Co.,Ltd** ,
Name of a Company Director Company name

hereby state that there are no differences that will affect blood pressure measuring accuracy between the

Maker^a **Kaz Europe Sàrl** Address **Place Chauderon 18, 1003 Lausanne, Switzerland**
 Manufacturer^b **Transtek** Address
 Brand^c **Braun** Model^d **BUA6350**

Blood pressure measuring device for which validation is claimed. If alternative model names are used, include all.

blood pressure measuring device and the validated blood pressure measuring device

Maker^a **Guangdong Transtek Medical Electronics Co.,Ltd** Address **Zone A, No.105 ,Dongli Road, Torch Development District, Zhongshan,528437,Guangdong,China**
 Manufacturer^b **Guangdong Transtek Medical Electronics Co.,Ltd** Address **Zone A, No.105 ,Dongli Road, Torch Development District, Zhongshan,528437,Guangdong,China**
 Brand^c **TRANSTEK** Model^d **TMB-986**

Existing validated blood pressure measuring device.

which has previously passed the **2002** protocol, the results of which were published as follows:

Title: **Validation of the TRANSTEK blood pressure monitor TMB-986 for home blood pressure monitoring according to the International Protocol**

Authors: **Wen Jun Liu; Su Gang Li; Zhe Song; Wei Gong**

Publication: **Blood Pressure Monitoring. 15(5):278-280, OCT 2010**

Full reference

The only differences between the devices involve the following components:

Tick one box for each item 1–18.

Part I	1	Algorithm for Oscillometric Measurements	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A ^e <input type="checkbox"/>
	2	Algorithm for Auscultatory Measurements	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A ^f <input checked="" type="checkbox"/>
	3	Artefact/Error Detection	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	4	Microphone(s)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A ^f <input checked="" type="checkbox"/>
	5	Pressure Transducer	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	6	Cuffs or Bladders	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	7	Inflation Mechanism	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	8	Deflation Mechanism	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Part II	9	Model Name or Number	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	10	Casing	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	11	Display	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	12	Carrying/Mounting Facilities	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	13	Software other than Algorithm	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	14	Memory Capacity/Number of stored measurements	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	15	Printing Facilities	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A ^g <input checked="" type="checkbox"/>
	16	Communication Facilities	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A ^g <input type="checkbox"/>
	17	Power Supply	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	18	Other Facilities	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A ^g <input checked="" type="checkbox"/>

An explanation of each item ticked "Yes" must be included in Section B or on a separate sheet.

- Notes: a Provide the name and address of the actual maker of the device.
 b Provide the name and address of the legal manufacturer of the device, even if it is the same as that of the maker.
 c Provide the name of the brand under which it is sold, even if it is the same as that of the manufacturer or maker.
 d Provide the model name. If alternative or internal model names are used, include all. Each device must be uniquely identifiable.

- e Only tick N/A (Not Applicable) if neither device measures blood pressure using the oscillometric method.
- f Only tick N/A (Not Applicable) if neither device measures blood pressure using the auscultatory method.
- g Only tick N/A (Not Applicable) if neither device provides printing, communication or other facilities, as appropriate.

SECTION B An explanation for each item, 1 to 18, ticked "Yes" in Section A must be provided here or in an attached document. All differences between the devices must be described.

[See attached document](#)

SECTION C Please check that the following are included with the application

- A manual for the validated device
- A manual for the device for which equivalence is being sought
- An image of the validated device
- An image of the device for which equivalence is being sought
- An image of the screen layout of validated device*
- An image of the screen layout of the device for which equivalence is being sought*

* Screen layouts shown complete, and without obscuring labels or lines, in manuals need not be included separately.

SECTION D Complete all items, bar signatures and seal, online and print. Sign and seal it then send the original to our address below. Please email a signed copy of this form, together with the manuals and images for both devices, to info@dableducational.org.

Signature of Director Ken Zhai

Company Stamp/Seal

Name **Ken Zhai**

Date **February 13, 2020**

Signature of Witness Endless Chan

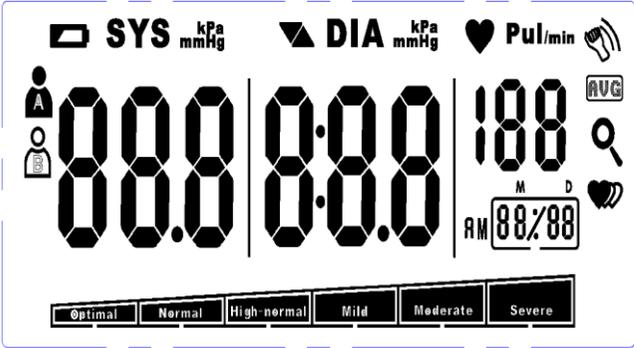
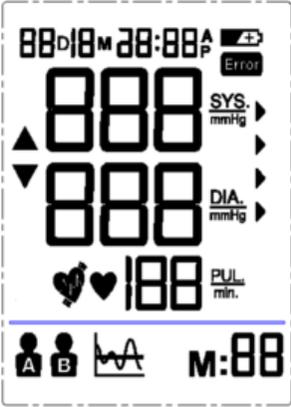
Name **Endless Chan**

Address **Zone A, No.105, Dongli Road, Torch Development District, Zhongshan, 528437, Guangdong, China**



Comparison of the Braun BUA6350 with the TRANSTEK TMB-986

Model Name or number– Item 9	TRANSTEK TMB-986	Braun BUA6350
Pictures	 <p>The image shows the TRANSTEK TMB-986 blood pressure monitor, which is white with a blue display. The display shows a systolic pressure of 138 mmHg, a diastolic pressure of 83 mmHg, and a pulse rate of 68 bpm. The date and time are also displayed as 'Thu 08:28'. The device has buttons for 'START/STOP' and 'MEM'. Next to it is a black cuff with white text and diagrams, including 'LAST MMHg 223/133', '2-26cm (9.8"-10.2")', and 'High Accuracy'.</p>	 <p>The image shows the Braun BUA6350 blood pressure monitor, which is black with a large color display. The display shows a systolic pressure of 138 mmHg, a diastolic pressure of 83 mmHg, and a pulse rate of 68 bpm. The date and time are also displayed as 'M: 10'. The device has a 'START/STOP' button. Next to it is a black cuff with white text and diagrams, including 'LAST MMHg 223/133' and 'High Accuracy'.</p>

<p>Display Image</p>		
<p>Validation</p>	<p>ESH 2002</p>	
<p>Category</p>	<p>Upper arm device for self-measurement of blood pressure</p>	<p>Upper arm device for self-measurement of blood pressure</p>
<p>Casing – Item 10</p>	<p><i>Dimensions</i></p> <p>182mm*100mm*39mm</p> <p><i>Ports</i></p> <p><i>Cuff port</i></p> <p>22–42 cm (standard: 22–32 cm; large: 32–42 cm)</p> <p><i>Features</i></p> <p><i>User buttons: Start/stop, SET & MEM, User Select</i></p> <p><i>Cuff and DC adaptor connectors</i></p> <p><i>Model name printing & brand logo</i></p> <p><i>Display</i></p> <p><i>Battery compartment</i></p>	<p><i>Dimensions</i></p> <p>110mm*124mm*113mm</p> <p><i>Ports</i></p> <p><i>Cuff port</i></p> <p>22–42 cm (standard: 22–32 cm; large: 32–42 cm)</p> <p><i>Features</i></p> <p><i>User buttons: start/stop, user selection (slide switch), average button, date & time setting buttons</i></p> <p><i>Cuff port</i></p> <p><i>Display with WHO colour indicator</i></p> <p><i>Branding logo and function printing on buttons</i></p> <p><i>Battery compartment</i></p>

Display – Item 11	<i>Type</i> <i>LCD (black on white background)</i>	<i>Type</i> <i>LCD (negative type – white on black background)</i>
Carrying/Mounting Facilities – Item 12	<i>N/A</i>	<i>N/A</i>
Software other than Algorithm – Item 13	<i>60 sets memories/per user (2*60)</i> <i>4 grade indicator</i> <i>mmHg unit</i>	<i>60 sets memories/per user (2*60)</i> <i>4 grade indicator</i> <i>mmHg unit</i>
Memory Capacity Item 14	<i>2*60</i>	<i>2*60</i>
Printing Facilities Item 15	<i>NA</i>	<i>NA</i>
Communication Facilities – Item 16	<i>None</i>	<i>None</i>
Power Supply Item 17	<i>4*AAA</i> <i>DC power socket (6V)</i>	<i>4*AA</i>
Other differences	<i>Other Details on Equivalent device that are different to Validated device</i>	<i>Other Details on Validated device that are different to Equivalent device</i>

<p>Same Criteria</p>	<p>Measurement</p> <p><i>Accuracy</i></p> <p><i>Pulse accuracy ± 5%</i></p> <p><i>Method</i></p> <p><i>Oscillometric measurement method</i> <i>Manually initiated measurement</i> <i>Measurements are from single inflations</i></p> <p><i>Ranges</i></p> <p><i>Rated cuff pressure: 0 mmHg – 300 mmHg</i></p> <p><i>Pulse 40 bpm – 199 bpm</i></p> <p><i>Inflation</i></p> <p><i>Automatic inflation by internal pump</i> <i>Zero pressure check before inflation</i></p> <p><i>Deflation</i></p> <p><i>Automatic Deflation</i> <i>Automatic safety release</i></p> <p><i>Cuffs (Please state sizes and materials used)</i></p> <p>Nylon</p> <p><i>Small/Medium (Arm circ. 22 cm to 32 cm) # AC2232-01</i> <i>Large/XLarge (Arm circ. 32-42 cm) # TMB-986-AC-05</i></p> <p><i>Sensors</i></p> <p><i>Piezo-resistive (semiconductor) pressure sensor</i></p>	<p>Measurement</p> <p><i>Accuracy</i></p> <p><i>Pulse accuracy ± 5%</i></p> <p><i>Method</i></p> <p><i>Oscillometric measurement method</i> <i>Manually initiated measurement</i> <i>Measurements are from single inflations</i></p> <p><i>Ranges</i></p> <p><i>Rated cuff pressure: 0 mmHg – 300 mmHg</i></p> <p><i>Pulse 40 bpm – 199 bpm</i></p> <p><i>Inflation</i></p> <p><i>Automatic inflation by internal pump</i> <i>Zero pressure check before inflation</i></p> <p><i>Deflation</i></p> <p><i>Automatic Deflation</i> <i>Automatic safety release</i></p> <p><i>Cuffs (Please state sizes and materials used)</i></p> <p>Nylon</p> <p><i>Small/Medium (Arm circ. 22 cm to 32 cm) # TMB-1250-02</i> <i>Large/XLarge (Arm circ. 32-42 cm) # TMB-1250-03</i></p> <p><i>Sensors</i></p> <p><i>Piezo-resistive (semiconductor) pressure sensor</i></p>
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	<p><i>Measurement Records</i></p> <p><i>YES: SYS, DIA, Pulse, IHB, Date & time</i></p> <p><i>Measurements other than Blood Pressure</i></p> <p><i>Pulse (heart rate)</i> <i>Irregular heartbeat</i> <i>Date & time</i></p> <p>Buttons/Switches</p> <p><i>Power</i></p> <p><i>On/Off with Start/Stop (Start/Stop Label)</i></p> <p><i>Measurement Records</i></p> <p><i>Memory</i> <i>User ID (A or B)</i></p> <p>Display/Symbols/Indicators</p> <p><i>Preparation</i></p> <p><i>Zero pressure adjust - arrow down symbol</i></p> <p><i>Measurement Procedure</i></p> <p><i>During Measurement: cuff pressure level & heartbeat symbol</i></p> <p><i>Post Measurement</i></p> <p><i>SBP, DBP and Pulse</i> <i>BP classification (WHO)</i></p>	<p><i>Measurement Records</i></p> <p><i>YES: SYS, DIA, Pulse, IHB, Date & time</i></p> <p><i>Measurements other than Blood Pressure</i></p> <p><i>Pulse (heart rate)</i> <i>Irregular heartbeat</i> <i>Date & time</i></p> <p>Buttons/Switches</p> <p><i>Power</i></p> <p><i>On/Off with Start/Stop (Start Label)</i></p> <p><i>Measurement Records</i></p> <p><i>Memory</i> <i>User ID (A or B)</i></p> <p>Display/Symbols/Indicators</p> <p><i>Preparation</i></p> <p><i>Zero pressure adjust - arrow down symbol</i></p> <p><i>Measurement Procedure</i></p> <p><i>During Measurement: cuff pressure level & heartbeat symbol</i></p> <p><i>Post Measurement</i></p> <p><i>SBP, DBP and Pulse</i> <i>BP classification (WHO)</i></p>
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	<p><i>Measurement Records</i></p> <p><i>Memory recall number</i> <i>User (A or B)</i></p> <p><i>Date and Time</i></p> <p><i>Date and Time (During memory recall)</i></p> <p><i>Power</i></p> <p><i>Low battery indicator</i></p> <p><i>Function</i></p> <p><i>N/A</i></p> <p><i>Communication</i></p> <p><i>N/A</i></p>	<p><i>Measurement Records</i></p> <p><i>Memory recall number</i> <i>User (A or B)</i></p> <p><i>Date and Time</i></p> <p><i>Date and Time (During memory recall)</i></p> <p><i>Power</i></p> <p><i>Low battery indicator</i></p> <p><i>Function</i></p> <p><i>N/A</i></p> <p><i>Communication</i></p> <p><i>Bluetooth module BT 4.2</i> <i>pairing to iOS and Android Braun Healthy Heart App (Smartphone)</i></p>
<p>Comparable Criteria</p>	<p>Measurement</p> <p><i>Accuracy</i></p> <p><i>BP accuracy ± 3 mmHg (15 °C-25 °C) ± 6 mmHg otherwise</i></p> <p><i>Measurement Records</i></p> <p><i>Memory: 60 measurements × 2 users</i></p> <p>Buttons/Switches</p> <p><i>Settings</i></p> <p><i>Set</i></p>	<p>Measurement</p> <p><i>Accuracy</i></p> <p><i>BP accuracy ± 3 mmHg (10 °C-40 °C)</i></p> <p><i>Measurement Records</i></p> <p><i>Memory: 60 measurements × 2 users</i></p> <p>Buttons/Switches</p> <p><i>Settings</i></p> <p><i>Date/Time set</i></p>

	<p>Display/Symbols/Indicators</p> <p><i>Post Measurement</i></p> <p><i>Measurement error E1, E2, E3, (E10, E11) → E4, E20, E21, Eexx</i></p> <p><i>Hypertension (Grading strip)</i> <i>Average (AVG)</i></p> <p><i>Measurement Records</i></p> <p><i>Memory icon (Magnifying glass)</i></p> <p><i>Date and Time</i></p> <p><i>Setting of Date and Time set but only display of Time</i></p> <p>Casing</p> <p><i>Power</i></p> <p><i>4 “AAA”batteries</i></p>	<p>Display/Symbols/Indicators</p> <p><i>Post Measurement</i></p> <p><i>Measurement error E1, E2, E3, E4, Eexx</i> <i>Hypertension (Indicator strip)</i> <i>Average (Icon)</i></p> <p><i>Measurement Records</i></p> <p><i>Memory “M”symbol</i></p> <p><i>Date and Time</i></p> <p><i>Date and Time</i></p> <p>Casing</p> <p><i>Power</i></p> <p><i>4 “AA”batteries ~ 300 measurements</i></p>
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Comments	<p>BUA6350 is equivalent to BUA6150</p> <p>BP6150 is already ESH approved by equivalence to Transtek TMB-986</p> <p>BUA6350 is a BUA6150 with additional Bluetooth connectivity</p>

Recommendation	Recommended	
Date	March 2020	