TensioMed ArteriographTM

Complete solution for measuring vascular age





The complex arterial function (stiffness) measurement with ArteriographTM is as simple as an upper arm blood pressure measurement.

This innovative device measures all the relevant arterial function parameters such as aortic pulse wave velocity (**PWVao**), augmentation index (**Aix**) and central blood pressure (**SBPao**) values **simultaneously** with the peripheral blood pressure. ArteriographTM provides an easy, fast, accurate and user-independent method for assessing vascular age.



Measured parameters:

- Peripheral (brachial) blood pressure (SBP, DBP, MAP, PP, HR)
- Central blood pressure (SBPao, PPao)
- Augmentation index (Aix aortic, Aix brachial)
- Aortic Pulse Wave Velocity (PWVao)
- Return time of aortic pulse wave (RTao)
- Left ventricle ejection duration (ED)
- Systolic area index (SAI)
- Diastolic area index (DAI)
- Diastolic reflection area (DRA)
- Ankle Brachial index (ABI)

With use of a simple, upper-arm cuff, the device is capable of recording central hemodynamic changes. By inflating the cuff to suprasystolic pressure the brachial artery becomes occluded. This leads to the major advantage of the system: the brachial flow is stopped, therefore the brachial wall characteristics are excluded (no significant wall movement), consequently the gained information relate to the systematic circulation. For calculating arterial function parameters the recorded pulse waveform is analyzed and the characteristic points of the first and reflected waves are determined. The true aortic length is



(Jug-Sy), by which the calculation of PWVao

- EASY, as an oscillometric blood pressure measurement.
- FAST, as it takes only 3 minutes (including patient data input).
- USER INDEPENDENT, as it is fully automatic; the user only has to start the measurement.
- EXCELLENT REPRODUCIBILITY, as it proved to be superior to the reproducibility of other available methods.
- LOW VARIANCE, as it proved to be the lowest among non-invasive arterial function assessing methods.
- OUTSTANDING COST-BENEFIT RATIO among clinically accepted devices.
- VALIDATED to invasive and non-invasive measurements.

Specifications

Power supply Protection against electric shock Grade of protection against electric shock Display Data storage Data transmission Ambient temperature Dimensions

Four AA long-life alkaline batteries Internal supply by batteries BF type on patient's side Liquid Crystal Display (LCD) **EEPROM** Bluetooth v2.0s 10-40°C 116.0 x94.0 x 47.0mm 250g (including batteries)

Blood pressure measuring method Sampling frequency Blood pressure measuring limits Static accuracy Pressure sensor Inflation Safety Deflation

Oscillometric 200Hz 30-280mmHg $\pm\,3\text{mmHg}$ or $\pm2\%$ of the measured value (Stability: 2 years) Piezo-resistive Automatic motor-driven pump Maximum cuff pressure: 280mmHg Stepwise

Specifications subject to change without prior notice. Refer to the TensioMed Arteriograph™ user's manual for complete description, instructions, warnings cautions and specifications



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