

BPlab®



- 24-hour ABPM
- Holter ECG
- ABI-system



OOO «Petr Telegin» - 37D, Gagarin Avenue, build. P1,
603009 Nizhny Novgorod, Russia.

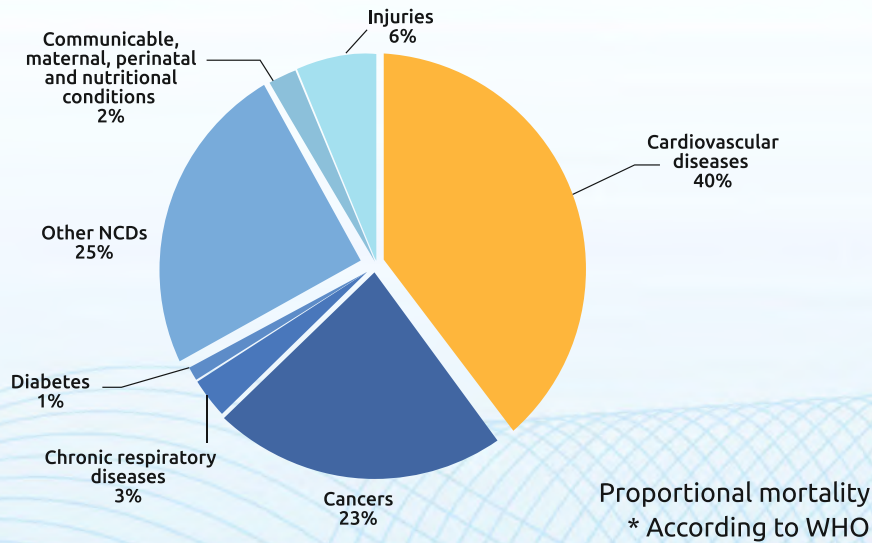
Tel.: +7(831) 212-41-41

☎ +7(987) 110-84-81

Email: impex@bplab.com

www.bplab.com

Hypertension is the silent killer №1



Cardiovascular disease (CVD) is the dominant public health issue worldwide. And hypertension is known as the most common preventable risk factor for CVD. Early detection and treatment of hypertension are the major approaches to reducing global burden of CVD and boosting longevity.

Why ABPM is a solution?

24-hour ABPM test is the most accurate method for hypertension detection and drug therapy control.

- ▶ Recognized as a compulsory method in the current guidelines of international cardiology scientific societies: ESH, ESC, BIHS, NICE, ISC, AHA;
- ▶ Reimbursed by insurance companies as a compulsory diagnostic method;
- ▶ Supported by state policies as prevention of cardio-vascular risks is more manageable and cost-effective than treatment and recovery after CV-events.

Why choose BPlab®?

- ▶ The leading Russian 24-hour ABPM manufacturer since 1994
- ▶ Full production cycle
- ▶ Clinically validated (BHS-93, ESH, ISO 81060-2)
- ▶ Certified for international markets (ISO13485, TGA, ANVISA*, registration certificates for Serbia, Kazakhstan, Uzbekistan)
- ▶ Export to more than 50 countries
- ▶ Products always available in stock
- ▶ High quality for competitive price
- ▶ Expanded software (BPLabWin, BPStat, BPCompare, Vasotens Technology)
- ▶ Well-tuned customer support
- ▶ Extended service life
- ▶ Member area for distributors



BHS in general population	A/A grade
BHS in pregnant women	A/A grade
BHS in pediatric population	A/A grade
ESH in general population	Pass
ESH in pregnant women	Pass

Enlisted in BIHS, STRIDE BP and Medaval websites as recommended.



BPlab advanced features

- ▶ Measurement quality control - storage of oscillograms (quick artefact detection)
- ▶ 24-hour arterial stiffness and central aortic pressure analysis
- ▶ Implementable into Hospital Information Systems (HL7, DICOM, GDT/BDT)
- ▶ Patient's activity and body position sensors

We care about patient's comfort



Minimum measurement time



Adaptive inflation



Pulse wave analysis (PWA) with no additional inflation step



Quiet operation



Washable latex free cuffs (no allergy, no toxicity), removable bladder

- 100% cotton cuff covers
- 6 sizes of cuffs available: 12-16 cm, 16-24 cm, 24-32 cm; 28-40 cm; 32-42 cm; 38-50 cm (radial cuff).



BPlab Standard



Bestseller since 2007

Features:

- ▶ **Powerful compressor** (fast inflation of big-size cuffs);
- ▶ Driverless cable (plug-in and go);
- ▶ Patient-friendly BP measurement algorithm;
- ▶ Power supply: 2 AA rechargeable or alkaline batteries;
- ▶ High-capacity storage: up to 999 BP measurements;
- ▶ Monitoring duration: up to 10 days.



BPlab Compact 2

Features:

- ▶ **Small size and light weight;**
- ▶ **Manual programming, 4 pre-installed measurement plans;**
- ▶ Driverless cable (plug-in and go);
- ▶ 3 connection protocols: USB, SD-card, Bluetooth;
- ▶ Colour display;
- ▶ Power supply: 2 AA rechargeable or alkaline batteries;
- ▶ High-capacity storage: up to 999 BP measurements;
- ▶ Easy implementation into a 24-hour Holter ECG software;
- ▶ OEM solution for 24-hour Holter ECG manufacturers.



VASOTENS® TECHNOLOGY

Vasotens® Technology is a modern technology of pulse wave assessment by oscillometry. It is presented in the form of PC-based software, and as a cloud-based service online.

Vasotens® Technology is an open platform that can be applicable with third BP measuring devices and software. We are remaining open for cooperation.

BPLab Vasotens® system is a unique diagnostic system which combines assessment of central aortic pressure, arterial stiffness and cardiac function parameters with traditional blood pressure monitoring.

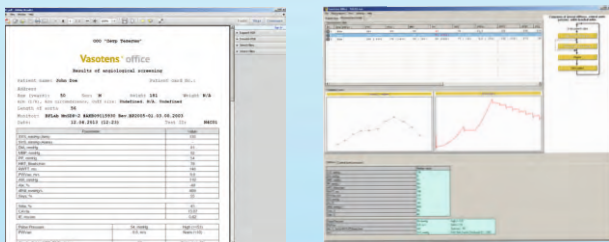
Central systolic arterial pressure and pulse wave velocity are enlisted in 2018 ESC/ESH Clinical Practice Guidelines for the Management of Arterial Hypertension as increased CV risk factors.

Fields of application:

- ▶ Hypertension mediated organ damage
- ▶ Isolated systolic hypertension in youth
- ▶ Spurious hypertension
- ▶ Drug therapy control

Vasotens Office

In-office measurements with the use of Vasotens Office® software are performed for preliminary stratification of cardiovascular risks in hypertension patients, and also to confirm masked hypertension in youth and to perform a therapy control of the drugs that primarily have an impact on central blood pressure. While measuring, a 24-hour ABPM device operates as an in-office device, it is permanently connected to the PC which performs a measurement control.

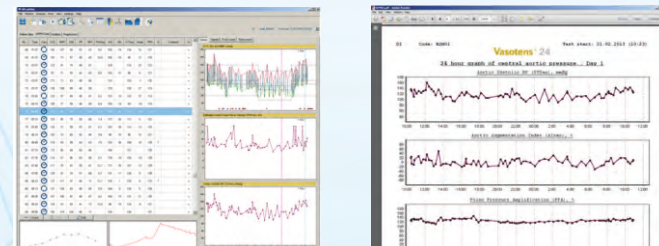


Vasotens 24

Technically, 24-hour pulse wave analysis is performed in the same way as oscillometric 24-hour blood pressure test with no additional inflation step.

The device can be programmed for 24-48 hours or more. BPLabWin® software is used for a standard interpretation of 24-hour ABPM test results, and Vasotens24® activated by the dongle key and the registration data is applied for a 24-hour pulse wave analysis.

It is also possible to use the telemedicine platform: www.tholomeus.net and / or the cloud-based service SaaS "Vasotens®".



Parameters obtained with the use of Vasotens 24 / Vasotens® Office:

Arterial stiffness:

- ▶ Reflected Wave Transit Time
- ▶ Estimated Pulse Wave Velocity
- ▶ Peripheral Augmentation Index
- ▶ Aortic Augmentation Index

Cardiac Function:

- ▶ Stroke Volume*
- ▶ Ejection Duration
- ▶ Aortic (dP/dt) max
- ▶ Central Systolic Area
- ▶ Central Diastolic Area
- ▶ SEVR

Central Aortic Pressure:

- ▶ Aortic Systolic BP
- ▶ Aortic Diastolic BP
- ▶ Aortic Mean BP
- ▶ Pulse Pressure Amplification

Your **AB**ility to take PAD under control



The new **multi-cuff BPlab Angio system** enables a simultaneous measurement of arterial blood pressure both in the upper and lower limbs with the registration of pulse waves. The recorded sphygmograms are processed and analyzed by Vasotens Office+ software.

Ankle Brachial Index is a pivotal measurement for diagnosing Peripheral Artery Disease, coronary artery disease, lower limb wound aetiology. Undertaking ABI measurement is the first step to identify if a patient needs vascular investigation and treatment. Multi-cuff BPlab Angio system provides fast and accurate ABI measurements.

BPlab Angio measurement requires minimal training and can be performed by nurses and operators.

BPlab Angio system is intended for:

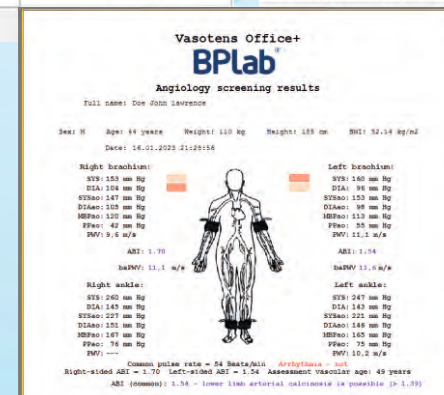
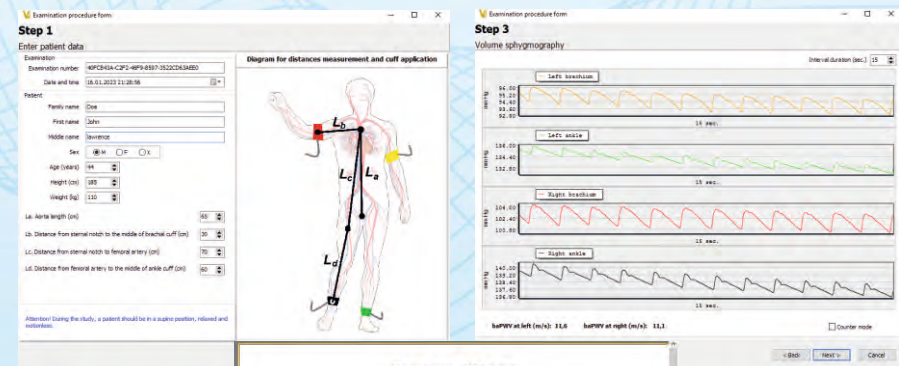
- ▶ Early and periodic screening
- ▶ Preventive medical examination
- ▶ Employees' medical checkup
- ▶ Before-doctor examination
- ▶ Drug therapy control

Measurement and assessment of:

- + Ankle-brachial index (ABI);
- + Arterial blood pressure both in arms and legs;
- + Central blood pressure (SYSao, DIAao, MBPao);
- + Ejection duration;
- + Blood pressure asymmetry;
- + Pulse pressure amplification (PPA);
- + Directly measured pulse wave velocity (PWV brachial-femoral / aortic / carotid-femoral);
- + Augmentation index (AIx peripheral / AIx aortic).



Vasotens Office+ (PC and mobile software are available)



BPLab in multi-center clinical studies and IIS

AAA Study — Advanced Approach to Arterial Stiffness. International Society for Vascular Health, Paris.

The EuRhythDia study — Impact of light therapy on rotating night shift workers. University Medical Center Hambur-Eppendorf, Hamburg.

HOMAGE — Bioprofiling Response to Mineralocorticoid Receptor Antagonists for the Prevention of Heart Failure. Inserm, Paris; London School of Hygiene and Tropical Medicine.

 **VASOTENS Registry** — International Registry for Ambulatory Blood Pressure and Arterial Stiffness Telemonitoring. Italian Institute of Telemedicine, Varese.

BPStat – Perfect solution for bulk data tabulation

Experience the method, the possibilities of which are so promising, that every researcher could only dream about!

While working with big data sets, you can easily forget about fraud and human factor!

BPStat® software enables the tabulation and the data preparation for thousands of blood pressure measurement records. The program allows to select a wide range of 24-hour ABPM tests performed by BPLab® device and choose the parameters to be assessed in the summary table.

As a result, a user receives a report, which can be easily exported into the required software (e.g. MS Excel). Mean values, variability and other parameters of central and peripheral pressure, and arterial stiffness can be represented both as a single line for each patient, and in the form of multiline arrays.

This software will be duly appreciated by statisticians who are engaged in 24-hour analysis of blood pressure and pulse wave parameters: anyone from PhD-student in a small clinic to SAS-developers in big CROs.

Main office:
OOO Petr Telegin (TM BPLab)

📍 37D, Gagarin Avenue, GSP 1081
Nizhny Novgorod, Russia, 603950
☎ tel.: +7 (831) 212 41 41
🌐 www.bplab.com
✉ impex@bplab.com, export@bplab.com

BPLab Distributors

Australia
Pacific Medical
Email: info@pacificmedical.com.au
www.pacificmedical.com.au

Austria
SOT Medical Systems
Email: office@sot-medical.com
www.sot-medical.com

Brazil
Teb Tecnologia Eletrônica
Brasileira Ltda
www.teb.com.br

Czech Republic
ZMF Medical, s.r.o.
Email: info@zmfmedical.cz
www.zmfmedical.cz

Egypt
MTS (Misr for Trade and Supplies Co.)
Email: info@misrfortrade.com
www.misrfortrade.com

France
Alam Medical
Email: info@complior.com
www.complior.com

India
Kaushal Medicare Systems
Email: sanjay.tripathi@biomedicalwala.com

Italy
Tecnoel S.r.l.
Email: tecnoel@tecnoelsrl.com
www.tecnoelsrl.com

EU representative:
BPLab Gmb

📍 Berliner Str. 95, 65824 Schwalbach
am Taunus Germany
✉ office@bplab.de

Lithuania, Latvia and Estonia
Graina LTD
Email: info@graina.lt
www.graina.lt

Portugal
InfortUCANO SI
Email: mail@infortucano.pt
www.infortucano.pt

Serbia
Medical Shop
Email: info@medicalshop.co.rs
www.medicalshop.co.rs

Slovakia
Adamed, s.r.o.
Email: adamed@adamed.sk
www.adamed.sk
NEURIS, s.r.o.
Email: neuris@neuris.cz

Spain
Quermed S.A.
Email: quermed@quermed.com
www.quermed.com
SYSTEMETICS Spain S.L.
Email: systemetics@systemetics.CAT

Turkey
ZEmed Tibbi Sistem ve Cihazlar Limited Sirketi
Email: info@zemed.com.tr
www.zemed.com.tr