

Peer-  
Review  
Studies  
on  
ABPM  
with  
**BPro**<sup>®</sup>



## Implementing Ambulatory Blood Pressure Monitoring in Primary Care Practice

Ian M. Kronish, MD, MPH, Cindy Hughes, CPC, CFPC, Kristal Quispe, BA and Anthony J. Viera, MD, MPH — May/June 2020

ABPM also allows for the evolution of patients' blood pressure while awake versus asleep, which can be valuable for risk assessment.

## 24-Hour Central Blood Pressure and Intermediate Cardiovascular Phenotypes in Unrelated Subjects

Agnieszka Bednarek, Piotr Jankowski, Agnieszka Olszanecka, Adam Windak, Kalina Kawecka-Jaszcz and Daunta Czamecka — December 31, 2014

When used for 24-hour central SBP, the BPro device (calibrated once at the beginning) captures BP waveforms every 15 minutes (for 8-10 seconds for each measurement) over 24 hours, allowing for peripheral BP monitoring. This method was validated against invasive measurements as well as against validated noninvasive methods of central pressure determination.

## A Cohort Evaluation on Arterial Stiffness and Hypertensive Disorders in Pregnancy

Wai Yee Lim, Seang Mei Saw, Kok Hian Tan, George SH Yeo and Kenneth YC Kwek — 2012

Raised arterial pressure is a manifestation of endothelial dysfunction, targeted measurement of central aortic pressures may yield important information on how these aberrant responses occur and its role in early detection and prediction of HTN disorders in pregnancy.

## Ambulatory Tonometric Blood Pressure Measurements in Patients with Diabetes

Simone Theilade, MD, Christel Jorgensen, MD, Fredrick Persson, MD, Maria Lajer, PhD and Peter Rossing, DmSc — 2012

- Aside from brachial arterial BP, the BPro device measures various arterial stiffness indices, including augmentation index, central BP, and MAP. Brachial arterial BP is an inferior risk marker of cardiovascular outcome compared with markers of arterial stiffness.
- The absence of an inflatable cuff and the inaudibility of the device prevent anticipation rise of BP and nighttime awakening in connection with measurements.

# Peer-Review Studies on ABPM with BPro

## Validation of the BPro Radial Pulse Waveform Acquisition Device in Pregnancy and Gestational Hypertensive Disorders

Adam Jakes, Julie Wade, Zoe Vowles, Paul T. Seed, Andrew H. Shennan, Lucy C. Chappel and Diane Nzelu — May 1, 2021

Our study has confirmed that BPro is accurate for use in pregnancy and may have an important role to play in HBPM in this population, particularly in women with chronic and gestational hypertension.

## Discrepancy between Tonometric Ambulatory and Cuff-Based Office Blood Pressure Measurements in Patients with Type 1 Diabetes

Simone Theilade, MD, Maria Lajer, PhD, Christel Joergensen, MD, Frederik Persson, MD and Peter Rossing, MD, DMSc — June 2011

ABP with BPro provides information on circadian BP, including nocturnal BP, which has been shown to predict the development of microalbuminuria in patients with type 1 diabetes and mortality in type 2 diabetes. Treatment of nocturnal hypertension may be important and has been shown to reduce CVD mortality and morbidity in patients with type 2 diabetes.

## Physical Exercise, Fitness and Dietary Pattern and Their Relationship with Circadian Blood Pressure Pattern, Augmentation Index and Endothelial Dysfunction Biological Markers: EVIDENT Study Protocol

Luis García-Ortiz, José I Recio-Rodríguez, Anna Puig-Ribera, Jorge Lema-Bartolomé, Elisa Ibáñez-Jalón, Natividad González-Viejo, Nahia Guenaga-Saenz, Cristina Agudo-Conde, María C. Patino-Alonso and Manuel A. Gomez-Marcos for the EVIDENT Group — 2010

The use of a new tool such as the Radial Pulse Wave Acquisition Device (BPro) and Pulse Wave Application Software (A-Pulse), and verification of their feasibility and convenience of use will help to generalize the evaluation of certain cardiovascular parameters that increase vascular risk and are not routinely assessed.



## Preventric Integrating American Heart Association Science-based Health Content

"The Center for Health Technology and Innovation aims to expand usage of the Association's science-based Care Plans, so it's incredibly encouraging to see Preventric leveraging best-in-class science from the American Heart Association and pairing it with patient-specific data with the goal of improving health outcomes,"

*Patrick Wayte, Senior Vice President of the American Heart Association Center for Health Technology & Innovation (the Center).*

"Membership in the Innovators' Network is an important step in developing a best-in-class digital hypertension management system,"

*said Philip White, Preventric Founder and Chairman.*

"Our goal is to provide digital solutions that combine ease-of-use for patients with reliable science-based insights for clinicians."