




# Bluetooth Sternal Patch **DIASYS 3** *Plus*

## for the Ultimate ABPM

Small, lightweight and wireless , the optional Patch is placed on the sternum and contains a QRS sensor  an additional Accelerometer.

Used in partnership with a  it enables Systolic Correlation (QRS Gating), reducing the duration and improving the reliability of the blood pressure measurement.

In addition, the Bluetooth Sternal Patch provides  clinically relevant parameters and enhances the evaluation of Patient Activity.



### QKD\*

Clinically validated ambulatory measurement of Arterial Stiffness; assessing Cardiac Risk.


### CENTRAL BP\*\*

Clinically validated measurement of Central Blood Pressure; shown to be more closely correlated to organ damage than brachial BP.

### HEART RATE

Based in the R-R interval with simultaneous strip recording during BP measurement.

### ACTIVITY

 Corroborate and enhanced the embedded Accelerometer and Barometer assessment of patient positional changes and activity.

\* Ambulatory measurement of the QKD interval normalized to heart rate and systolic blood pressure to assess arterial distensibility value of QKD100/60

Philippe Gosse, Laurent Bemurat, Denis Mas, Philippe Lemetayer and Jacques Clementy  
Blood Pressure Monitoring 2001

Arterial compliance may be reduced by ingestion of red wine

Fantin, Bulpitt, Zamboni, Cheek, Rajkumar.  
Journal of Human Hypertension 2016

\*\* Determination of central blood pressure by a noninvasive method (brachial blood pressure and QKD interval): a noninvasive validation

Antoine Cremera, Leopold Codjo, Mark Butlin, Georgios Papaioannou, Sunthareth Yeim, Emilie Jan, Hosen Kiat, Alberto Avolio, and Philippe Gosse  
Journal of Hypertension 2013

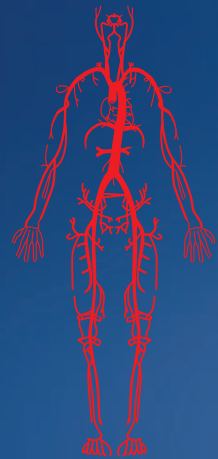
# 3 Unique Parameters: QKd, Central BP, Cardiac Rhythm

## 1 - Assessing Cardiac Risk - QKd

In a cohort of 412 patients, QKd has been shown to have a direct correlation with cardiovascular risk. It is the **Only Clinically Validated** and reproducible, ambulatory measurement of Arterial Stiffness or Compliance.

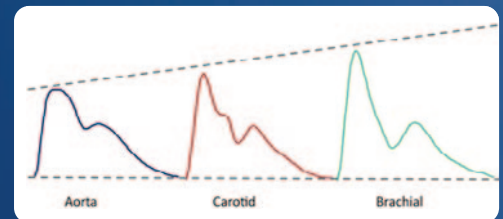
*“Independent of Blood Pressure ambulatory measurement of the QKd interval showed that an increase in arterial stiffness was a marker of cardiovascular risk.”*

Arterial stiffness evaluated by measurement of the QKd interval is an independent predictor of cardiovascular events. *Am J Hypertension (2005)*



## 2 - Measuring Central BP

Our new non-invasive method **clinically validated by an invasive study on 145 patients** for the automatic measurement of Central Blood pressure is based on both the highly accurate brachial blood pressure and associated QKd interval.



*“The measurement of central blood pressure has become a matter of growing importance, it may explain why different antihypertensive strategies, that achieve similar improvements in brachial blood pressure, seem to lead to different reductions in cardiovascular risk.”*

Determination of central blood pressure by a noninvasive method (BP and QKd interval). *J. Hypertension (2012)*

## 3 - Cardiac Rhythm Detection

The Bluetooth Sternal Patch automatically provides RR intervals in the form of a strip, for every BP measurement, helping the clinician to make a diagnosis.



Regular Heart Rhythm



Atrial fibrillation

## Position & Activity

Corroborate and enhanced the embedded Accelerometer and Barometer assessment of patient positional changes and activity.

4 pertinent activity states

