CONNEQT®
Health

FDA CLEARED

CONNEQT PULSE

Vascular Biometric Monitor

Arterial Health Insights for Precision Management of Heart Disease

The CONNEQT Pulse measures central and brachial blood pressures as well as vascular biomarkers that are indicative of arterial stiffness and vascular health. These advanced physiological measurements enable physicians to make informed diagnosis and treatment decisions based on clinically-validated insights.

"New methods that assess arterial pressure and flow dynamics, beyond focus on conventional upper-arm blood pressure, are needed"

Lancet Commission on Hypertension

BETTER DATA, BETTER OUTCOMES

Identifying patients at increased risk for hypertension and vascular related disease.

Patients with elevated central pressures may have an increased risk that is not apparent otherwise. For patients with slightly elevated brachial pressure, diagnosing risk can be done more confidently by considering additional factors like central systolic pressure and augmentation index, which indicate increased arterial stiffness.

Reducing over-treatment

Perhaps the most compelling example is the problem of white-coat hypertension. A normal or low central pressure suggests white-coat hypertension and a management decision to follow a patient with life-style recommendations without immediately initiating pharmacotherapy. In treated hypertension patients, a slightly elevated brachial BP might lead to increased drug treatment, which may not be needed if central pressures are normal or low. More aggressive treatment than necessary could lead to adverse effects related to over-treatment (i.e., hypotension, syncope, falls, organ damage).

Improving under-treatment

In patients where there is a hesitancy to initiate or increase medication, the concurrent elevation of brachial and central pressures or where other centrally derived variables identify significant increases in risk can inform health care providers to more confidently, although always judiciously, increase treatment.

Refining monitoring requirements

It is evident from numerous research publications that central and peripheral pressures are not redundant and provide independent yet complementary information allowing physicians to enhance or reduce monitoring depending upon risk. High risk and unstable pressure readings may lead to prescription for increased monitoring while improved and stable central aortic pressure responses to a therapeutic plan could lead to reduced recommendations for monitoring. In addition, changes in variables such as SEVR in the setting of suspected or known cardiac disease may further guide targeted investigations (e.g., imaging).

Parameter Quick Reference

		CONNEQT Pulse	Automated BP Monitor
Heart Rate (HR)	The number of heart beats per minute and can indicate cardiac health and fitness levels.	✓	✓
Brachial Blood Pressure	The pressure of blood in the brachial artery in the upper arm, an indicator of cardiovascular health.	✓	✓
Central Blood Pressure (SP & DP)	The pressure of blood at the root of the aorta, providing a more accurate assessment of cardiovascular risk compared to brachial blood pressure alone.	✓	
Central Pulse Pressure (PP)	Pressure experienced by the major organs such as the brain, kidney, and liver..	✓	
Augmentation Pressure (AP)	The additional pressure exerted by the heart to overcome rigidity in the arterial wall, reflects both arterial stiffness and the extra workload on the heart.	✓	
Augmentation Index (AIx)	A % measurement of your heart's workload due to arterial stiffness.	✓	
Subendocardial Viability Ratio (SEVR)	The supply & demand of oxygenated blood to the myocardium.	✓	
Pulse Pressure Amplification (PPA)	The increase in amplitude of arterial pulse waves as they travel from central to peripheral arteries, providing insights into arterial stiffness and blood flow efficiency.	P	
SphygmoCor Reference Age	Estimates arterial age based on central pressure and arterial stiffness parameters, providing a reference for comparison with healthy individuals.	P	

P = displayed in provider portal

FOUNDED ON 40 YEARS HEMODYNAMICS STUDIES, VALIDATED BY 20+ YEARS OF RESEARCH, AND CLOUD-ENABLED FOR CONNECTED CARE.

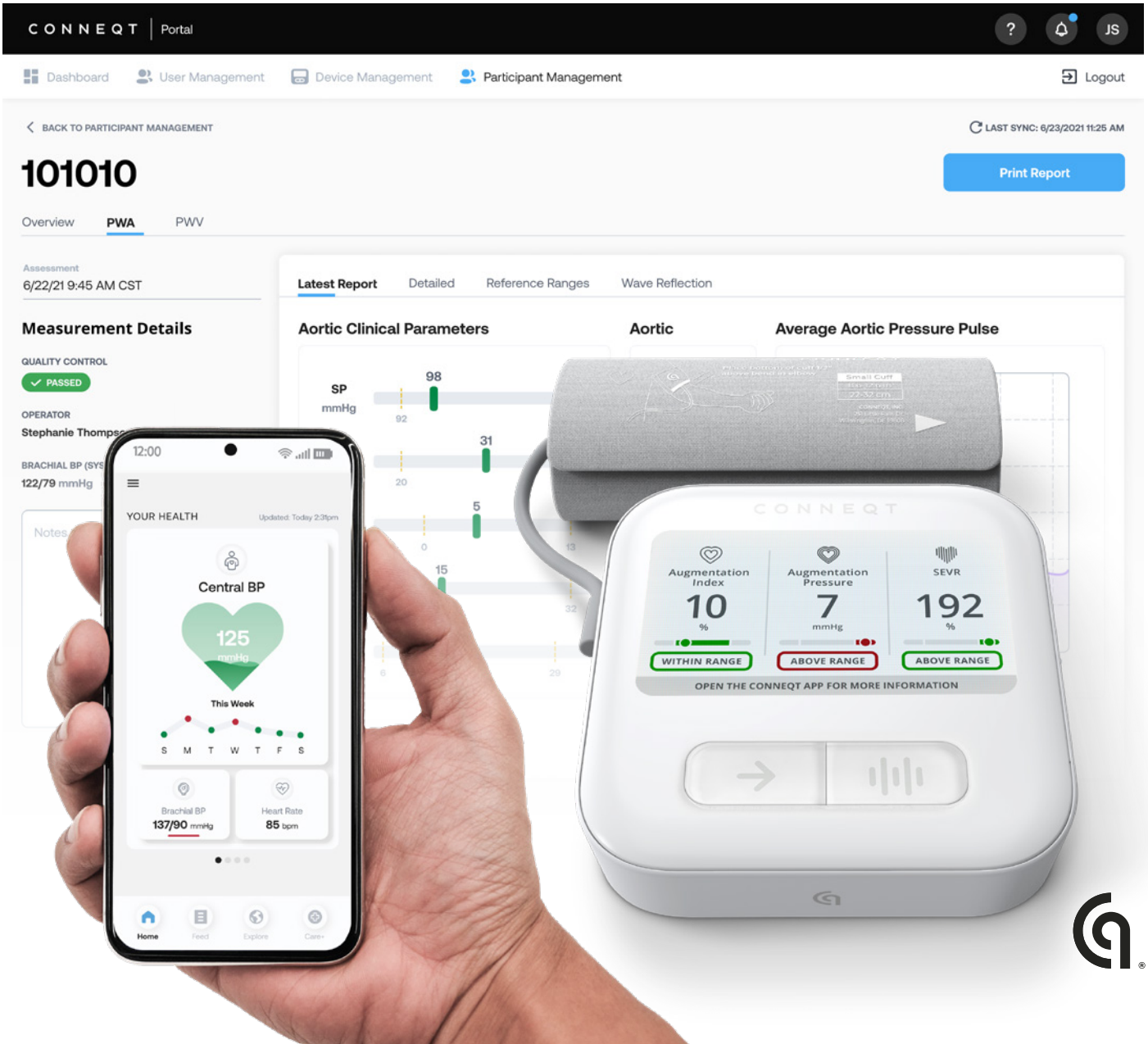
SphygmoCor® Technology

Our pioneering technology was enabled by more than 40 years of hemodynamic studies of the cardiovascular system and set the foundation for noninvasive measurement of vascular biomarkers including central aortic pressures and arterial stiffness indices.

The SphygmoCor technology has been independently validated by researchers worldwide and supported studies that resulted in over 2,300 peer-reviewed publications.

ARTY™ Engine

- Arterial health analytics and insights on vascular aging based on clinically validated and peer-reviewed data.
- Intelligent notification engine supporting seamless user onboarding and reinforcing lifestyle and pharmacological interventions.
- Integration with EHR/EMR and 3rd party applications with an open API.



Product Specifications

External Dimensions (Approximate)	Length: 4.7in (119mm) Width: 4.6in (118mm) Height: 2in (51mm)
Weight (Approximate)	12.3oz (350g) (excluding cuff)
Display	Customizable digital LCD display (4.3in diagonal)
Power Options	Power: DC:5V 1.0A Battery: 1*3.7V Li-ion 2200mAh
Method	Oscillometric
Measurement Range	Cuff pressure: 0-300 mmHg Systolic: 60-260 mmHg Diastolic: 40-199 mmHg Pulse rate: 40-180 beats/minute
Accuracy	Brachial Blood Pressure: ±3 mmHg
Cuff circumference:	Small: 8.6in-12.6in (22cm-32cm) Large: 12.6in-16.5in (32cm-42cm)
Connectivity	Bluetooth
Compatible Devices:	iPhone (6S or higher) running iOS 13 or higher Android-based phones running Android 8 or higher
Regulatory Approvals:	FDA 510(K) K221742

Note:

These specifications are subject to change; where practicable or necessitated per regulatory guidance, changes will be communicated as appropriate.

Classification: Internally powered, Type BF applied part, IP21, No AP or APG, Continuous operation

All components belonging to the pressure measuring system, including accessories: Pump, Valve, LCD, Cuff, Sensor