ATCOR

Empowering clinical research using novel digital vascular biomarkers.

FDA | NMPA | CLEARED | CE | USA CPT Reimbursement Code

Digital vascular biomarkers accelerate a researcher's understanding of vascular health and the relationships with socioeconomic disparities in health and chronic diseases. ATCOR SphygmoCor® technology is designed to identify emerging risk factors associated with disease pathophysiology to advance global research opportunities. Develop novel grants targeting disease states and interventions where objective quantifiable physiologic information is highly desirable to prove challenging hypotheses.

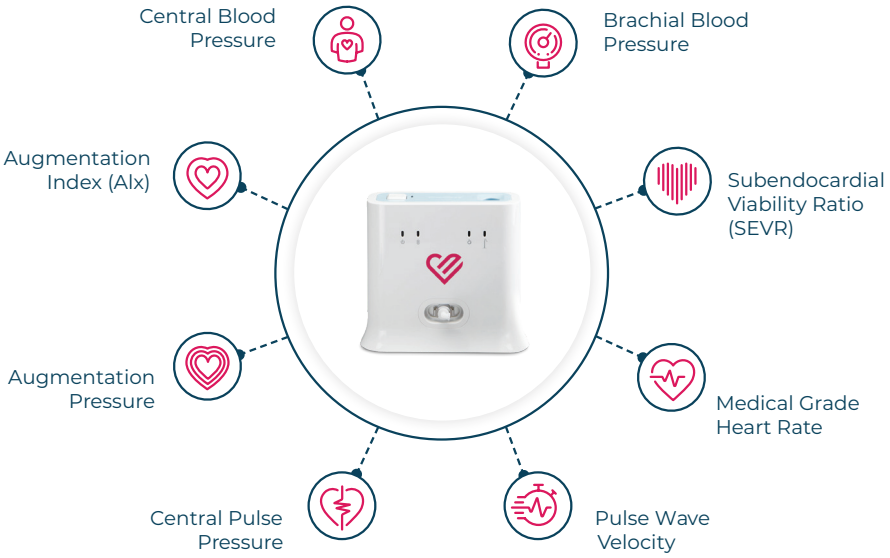
Gold Standard Central Blood Pressure

- Automated, cuff-based system
- Clinically validated assessments of both brachial and central blood pressures
- Arterial stiffness measures recorded using carotid tonometry and thigh cuff
- Accuracy comparable to an intravascular catheter
- Digital vascular biomarkers captured in < 3 minutes using pulse wave analysis
- Full data outputs for comprehensive analysis and correlation with other clinical research data
- Library of peer reviewed publications across multiple therapeutic areas
- Complimentary scientific support for developing grant aims and reference publications

SphygmoCor XCEL

Clinical Researchers Choose ATCOR

Across multiple therapeutic areas, clinical researchers choose ATCOR's SphygmoCor® technology for its long history in providing high quality, validated, and scientifically accepted digital biomarker data. Our patented noninvasive Pulse Wave Analysis (PWA) and Pulse Wave Velocity (PWV), technology that includes evaluations of arterial stiffness, enables researchers to expand grant aims and applications through the application of novel biomarkers.



SphygmoCor Library of Clinical Research

1,400+ publications have been published in leading peer-reviewed journals like *Hypertension, Journal of Clinical Hypertension,* and the *Journal of the American College of Cardiology*

120+ Global Research Studies Currently in Process

ATCOR's Digital Vascular Biomarker Glossary

Brachial Blood Pressure	Brachial Systolic and Diastolic Blood Pressure is the pressure of blood at the brachial artery in the upper arm.
Central Blood Pressure (cBP)	Central Systolic and Diastolic Blood Pressure is the pressure in the ascending aorta, just outside the left ventricle. It is the pressure that the target organs are exposed to, and due to arterial pressure amplification is lower than brachial cuff pressures.
Central Pulse Pressure (cPP)	Central Pulse Pressure is the amount of pressure on the heart during the cardiac cycle. This pressure differs significantly from the pressure measured by the conventional cuff blood pressure devices. The central pulse pressure is indicative of major organ risk.
Subendocardial Viability Ratio (SEVR)	Subendocardial Viability Ratio (SEVR) is a measure which reflects the cardiac ability to supply oxygen to the body during high demand. This non-invasive assessment can provide early indications of heart disease and identify patients with underlying heart disease who may be at a very high risk of serious adverse events (e.g., angina and myocardial infarction). This measurement can also help in assessing risk of adverse events when the need for increased oxygen supply is high (e.g., during exercise).
Augmentation Pressure (AP)	Augmentation Pressure is the added pressure from the backward reflected pressure wave. A measure of the extra work the heart must generate to eject oxygenated blood to the body. The measure is a reflection of arterial stiffness, a consequence of aging and disease. Accelerated arterial stiffness is a marker of an abnormal vascular pathophysiology.
Augmentation Index (Aix)	Augmentation Index (Alx) is a measure of the percentage of the blood pressure on the heart not related to blood pumping, but to arteries stiffness. This is indicative of the extra load on the heart which is shown to be a risk factor for major cardiovascular diseases.
Pulse Wave Velocity (PWV)	Pulse wave velocity measures arterial stiffness, the loss of elasticity in the aorta artery walls over time. Increasing arterial stiffness increases the strain on the heart. Increased aortic stiffness using PWV is a well validated predictor of cardiovascular events and all-cause mortality.
Medical Grade Heart Rate Measurement	Medical grade heart rate is the beat-to-beat heart rate measurement on par with standard ECG-based methods. A consistently high resting heart rate may be a sign of coronary heart disease.

Learn more about how ATCOR can help facilitate and improve your research objectives: **info@atcormedical.com**

www.atcormedical.com

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