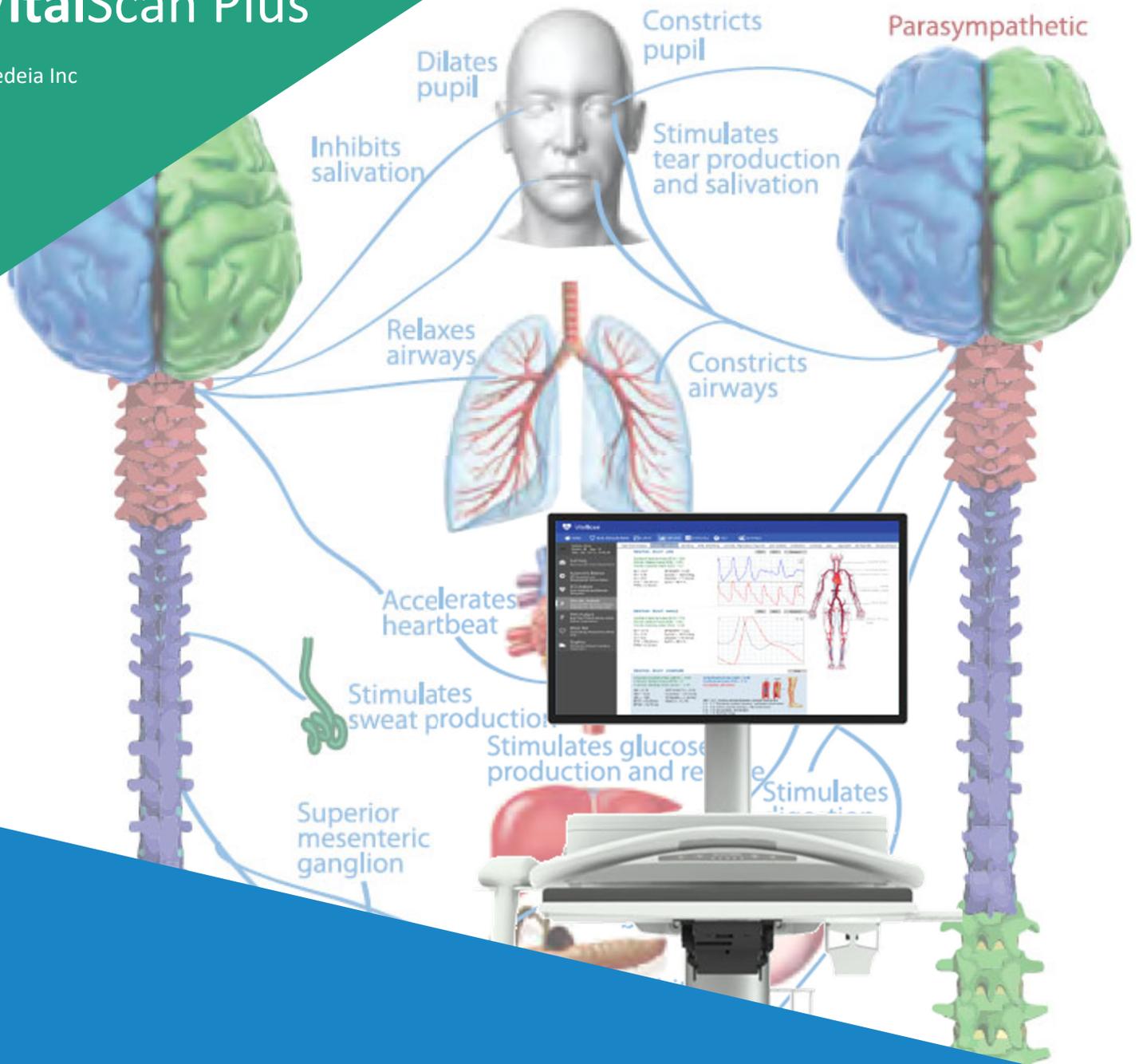


VitalScan Plus

Medeia Inc



Autonomic Dysfunction Assessment

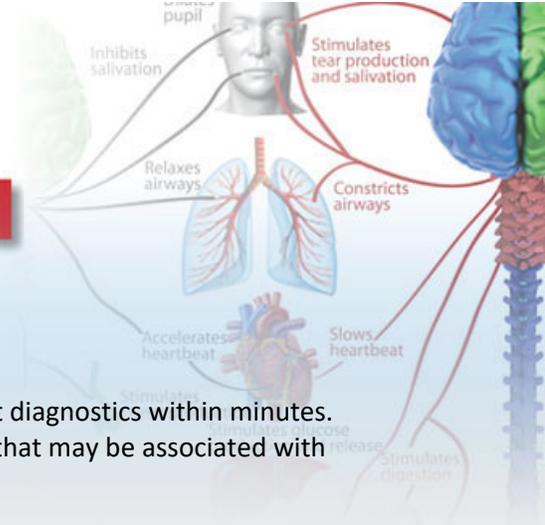
In 15 Minutes Identify Patients at Risk

The VitalScan diagnostic test provides next generation non-invasive patient diagnostics within minutes. The FDA cleared equipment is used by physicians to help identify diseases that may be associated with Autonomic Nervous System, Vascular and Sudeomotor disorders.

ANS Balance Assessment

Sympathetic

Parasympathetic



The VitalScan diagnostic test provides next generation non-invasive patient diagnostics within minutes. The FDA cleared equipment is used by physicians to help identify diseases that may be associated with Autonomic Nervous System, Vascular and Sudomotor disorders.

- VitalScan is a simple test performed in the physician's office
- VitalScan is non-invasive, not painful and has no side effects
- Easy to use hardware and software systems
- Detailed POC reports and recommendations to guide patient treatment

The ultimate goal of VitalScan diagnostic testing is to establish a sufficiently strong correlation between symptoms, suspected diseases and detected abnormalities to aid in the assessment of an appropriate treatment plan. For this reason, VitalScan diagnostic testing is important in the overall evaluation of the patient. This early diagnostic approach delivers initial risk stratification in order to exclude possible diseases and complications that may be reversed.

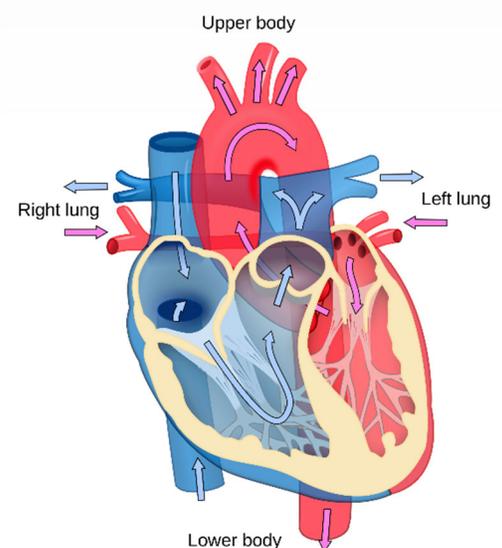
The VitalScan Test is Performed in Four Non-Invasive Phases

Phase 1: The Autonomic Nervous System assessment is performed while the patient is in a relaxed state and a baseline evaluation is performed. The software is analyzing HRV, PWV and ECG beat to beat at rest to understand the regulation of heart rate by the Autonomic Nervous System through Sympathetic and Parasympathetic innervations.

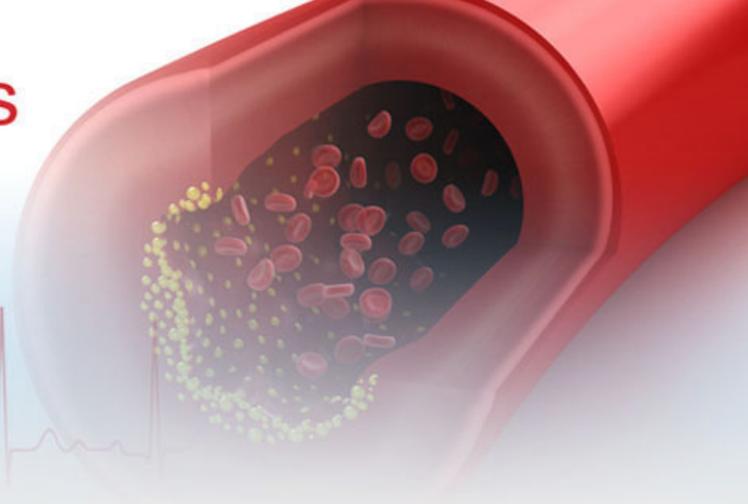
Phase 2: The patient performs paced breathing exercises: Deep Breathing and Valsalva Maneuver and will complete a postural change (sitting to standing).

Phase 3: The Vascular assessment is performed while the patient is in a relaxed state and a baseline evaluation is performed using Peripheral Arterial Tone (PAT) technology. Arterial tone changes in peripheral arterial beds is measured.

Phase 4: The Sudomotor function is measured. The patient is seated and relaxed with their hands and feet on steel plates.



Uncover Major Illness & Other Hidden Diseases



Early detection of Peripheral Small Fiber Neuropathy

Frequently associated with Diabetes, Pre-Diabetes and Metabolic Syndrome. Other conditions may include: HIV, Guillain-Barre Syndrome, Celiac Disease, Hepatitis C, Restless Leg Syndrome, Abnormal Thyroid Function.

Early detection for Cardiac Autonomic Neuropathy (CAN)

High blood glucose levels over a period of years may cause CAN. Nerves that signal the heart to beat faster are called Autonomic Nerves. When nerve damage affects the heart, it is referred to as CAN. CAN is not a disease of the heart; it is a problem with the nerves that control heart rate.

Early detection for Cardiovascular and Peripheral Artery Disease

Atherosclerosis is the most common cause of CVD. Plaque buildup thickens and stiffens artery walls which inhibit blood flow through arteries to organs and tissues. In the heart it is known as coronary artery disease and in the legs it is known as peripheral arterial disease (PAD). CVD and PAD can be caused by correctable problems, such as an unhealthy diet, lack of exercise, being overweight and smoking.

Early detection for Endothelial Dysfunction

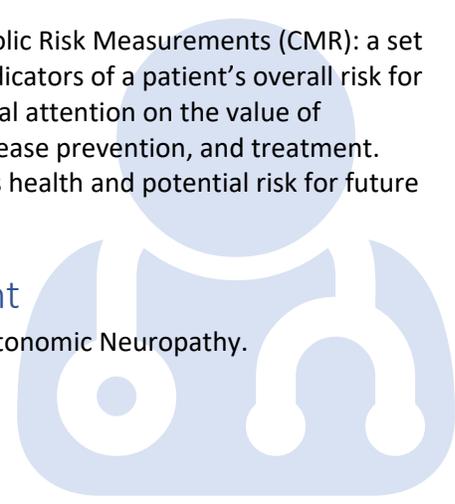
Endothelial dysfunction is a well-established response to cardiovascular risk factors and precedes the development of atherosclerosis. When cardiovascular risk factors are treated the endothelial dysfunction may be reversed. It is an independent predictor of cardiac events.

Cardio-Metabolic Risk Markers (CMR)

The combination of VitalScan tests provides important Cardiometabolic Risk Measurements (CMR): a set of results used to assess the cluster of risk factors which are good indicators of a patient's overall risk for type 2 diabetes and cardiovascular disease (CVD). CMR focuses clinical attention on the value of systematic evaluation, education, lifestyle and behavior changes, disease prevention, and treatment. Assessing CMR provides a more comprehensive picture of a patient's health and potential risk for future disease.

Adjunct in Diabetes Treatment and Management

Early detection of Peripheral Small Fiber Neuropathy and Cardiac Autonomic Neuropathy.



The VitalScan Analyzes ANS/HRV, Peripheral Arterial Tone and Sudomotor Function as a Measure of Overall Autonomic Nervous System Balance

VitalScan measures overall Autonomic Balance between the activities of the sympathetic and parasympathetic branches of the Autonomic Nervous System by assessing heart rate variability in response to resting balance and paced respirations: deep breathing, Valsalva maneuver, and standing position. The VitalScan system provides spectral analysis of ECG, HRV, and PWV, allowing for the quantification of the influence each component has on the heart rate.

ANS analysis assess cardiac autonomic function non-invasively. Higher variations in the heart rate lead to a greater heart rate variability, which means a healthy individual with well-balanced autonomic function; on the contrary, a steadier heart rate leads to a lower heart rate variability, which means an imbalance in the autonomic function and implies the presence of physiological malfunction. ECG Analysis reliably discovers ventricular and supraventricular extrasystoles, or premature heartbeats which may result from disturbances of the autonomic nervous system. PWV analysis is a classic measure of arterial stiffness and is a predictor of cardiovascular health, hypertension, blood circulation status, management of disease progression, etc.

Peripheral Arterial Tone (PAT) data imparts early-stage information. PAT technology is highly valuable in disease detection and follow-up, thereby improving patient treatment and healthcare costs. In addition to detecting cardiovascular disease, the PAT system also presents the potential for improving the diagnosis and management of other medical conditions including metabolic syndrome, diabetes, peripheral arterial disease and many others.

The Sudomotor device is used for the measurement of sweat gland function and provides information that determines Cardiometabolic Risk. The test, equivalent to a galvanic skin response stress test, measures the sweat glands' capacity to release chloride ions in response to an electrochemical activation.

Sudomotor dysfunction has been established as one of the earliest detectable abnormalities in small fiber neuropathies. The quantitative assessment of sweat response is an index of the severity of autonomic failure, and serves as an early indicator for regeneration of small fibers.



VitalScan

Medeia Inc