A POWERFUL CLINICAL, EASY TO USE, NON-INVASIVE SYSTEM

In 15 Minutes Identify Patients at Risk for Sudden Death, Silent Heart Attack, Hypertension Cardiac Autonomic Neuropathy, Diabetic Autonomic Neuropathy, Vascular Abnormalities, Orthostatic Hypotension, Syncope, and other Hidden Diseases. Testing of the Sympathetic and Parasympathetic Nervous System is a Recommended Standard of Care by the American Diabetes Association for patients with Type 1 and Type 2 diabetes.

Comprehensive Non-Invasive System Includes:

- Autonomic Balance Analysis
- Pulse Wave Velocity Analysis
- Arterial Vascular Assessment
- Peripheral Arterial Index
- Ankle Brachial Index
- SpO2
- Pulse Volume Recording
- HRV Stress Index
- HRV Analysis
- Sweat Gland Analysis
- Valsalva Ration
- Historical Data

The System includes:

- Biogenic Device
- GSR Device
- Laptop
- Testing Software
- Tactile Disposable Electrodes
- Dual Plethysmography
- Printer
- USB Hub
- Blood Pressure Cuffs
- Pulse Oximeter

Testing of Arterial Circulation and the Nervous System accepted by most private and public insurance.
THE FUTURE OF HEALTH CARE:
NERVOUS AND VASCULAR SYSTEM TESTING

The Biogenic system provides comprehensive, fully automated nervous and vascular testing that is useful for physicians to gauge their patient’s health and uncover hidden disease.

Testing the nervous and vascular system can identify clinical disorders, uncover major illness and other hidden diseases, such as:

- Sudden Death
- Silent Heart Attack
- Hypertension
- Cardiac Autonomic Neuropathy
- Vascular Abnormalities
- Orthostatic Hypotension
- Syncope

PHYSICIAN BENEFITS

The Biogenic system is a valuable tool in diagnosing hidden illnesses. Having the ability to test patients quickly and easily and receive immediate comprehensive interpretive reports after the test is invaluable to medical practitioners. The benefits of Biogenic Assessments are numerous, including:

- Testing takes only 15 minutes to run a full battery of tests.
- The individual test modules take as little as 6 to 10 minutes.
- Interpretive reports are generated immediately after testing. The reports are very easy to read and understand and include additional details and graph options for the physician.
HOW A BIOGENIC TEST CAN HELP YOUR PATIENTS

Have you recently been informed that your hospital or clinic should begin administering these tests? Are you aware of healthcare guidelines that require a care path for your patients? Nervous and Vascular System testing is designed to best evaluate your patient’s bodily functions and plays an important role in investigating those who suffer from various diseases. There are no invasive or potentially harmful procedures involved, and often, a single exam lasts less than a half hour and can be performed by an MA. The comprehensive report is also interpreted.

The test involves four separate procedures, each of which is designed to determine a particular aspect of your patient’s Nervous and Vascular System. The four portions are:

Resting Phase:
Heart Rate Variability combined with beat-to-beat blood pressure is measured to obtain a baseline of how the autonomic system is functioning during the resting phase.

Heart Rate during Deep Breathing (HRDB) Test:
Heart Rate Variability combined with beat-to-beat blood pressure is measured and monitored during Deep Breathing. Additional comparisons are made to determine the changes during HRDB from the baseline.

Valsalva Test:
Heart Rate Variability combined with beat-to-beat blood pressure is measured during Valsalva Maneuver. Additional monitoring and comparisons are obtained to determine the change from the baseline in comparison with the Valsalva maneuver.

Standing:
Heart Rate Variability coupled with beat-to-beat blood pressure is monitored and measured during Standing, and changes are compared with the baseline.

The data obtained from the Biogenic system tests evaluates the Parasympathetic (rest and digest) and the Sympathetic (fight, flight response) system to make sure the entire system is in balance.

Obtaining objective data on the parasympathetic and sympathetic component of the patient can pinpoint health risks such as sudden death, silent heart attacks, syncope, hypertension, and other hidden diseases; likewise, beat-to-beat blood pressure under various conditions can be used to test adrenergic functions for conditions like orthostatic hypotension (OH). OH, is widely known to be a consequence of chronic diabetes frequently found amongst the elderly population. Since many OH symptoms can be difficult to trace – impaired concentration, fatigue, etc. – Biogenic testing can fill this void and bring these problems to light sooner.
WHY TEST?

“According to Published Studies “Cardiovascular autonomic neuropathy occurs in about 17% of patients with type 1 diabetes and 22% of those with type 2”

“Of patients with symptomatic autonomic dysfunction, 25% to 50% die within 1 to 5 years of diagnosis.”

“A patient’s history and physical examination are ineffective for early detection of CAN, and therefore noninvasive tests that have demonstrated efficacy are required”.

“Screening for Autonomic Neuropathy should be instituted at Diagnosis of Type 2 Diabetes and 5 years after the diagnosis of type 1 Diabetes - 2005 ADA Standard of Diabetes Care”

“Although it can cause severe cardiovascular problems and sudden death, surveys show that only 2% of people with diabetes are tested for cardiovascular autonomic neuropathy (CAN)”.

FEATURES AND BENEFITS

Easily adaptable towards general and specific requirements of almost all medical branches.

Presents a quick and reliable supplementary assessment of basic health risk factors.
Assesses the balance between the activities of the sympathetic and parasympathetic branches of the autonomic nervous system.

Reliably discovers ventricular and supraventricular extra systoles.

Assesses accumulated HRV stress.

Reveals development of possible health risks.

Provides early indications of health risks for quick detection and prevention of illness, disease, and progressive stress conditions before onset and development.

Efficiently screen mass population to detect potential risks and reserve costly, full medical checkups for only those exhibiting health threats.
APPLICATIONS

Higher variations in the heart rate lead to greater heart rate variability which indicates good health and well-balanced autonomic function (sympathetic and parasympathetic nervous systems). In contrast, steadier heart rate leads to lower heart rate variability which indicates an imbalance in the autonomic function and implies the presence of physiological malfunction.

Biogenic delivers laboratory analyses to the physician’s office, enabling professionals to assess patient health conveniently and reliably. Applications include:

Verifying the effectiveness of treatment and intervention
Monitoring overall patient health, Screening the general population
Identifying various health issues such as heart palpitations, pain management, sleep apnea, anxiety, stress, psychological disorders, asthma, and neurological conditions
Examining for CAN (Cardiac Autonomic Neuropathy) and DAN (Diabetes Autonomic Neuropathy)
Measuring the Sympathetic Nervous System’s predominance in cases such as Metabolic Syndrome, Hypertension, or Heart Failure

HOW IT HELPS YOU:

- Monitoring current health of the individual patient closely;
- Verifying the efficacy of current treatment protocol and intervention;
- Examining patients for CAN and DAN – Cardiac Autonomic Neuropathy and Diabetes Autonomic Neuropathy;
- Measuring the Metabolic Syndrome, Hypertension, Heart Failure;
- Exploring Asthma, COPD, Palpitations, Pain management, PLUS;
- Optimization of treatment for each individual patient;

Immediate reports – qualitative, quantitative, and graphic analysis and results of parasympathetic, sympathetic, cardiovascular stress, and overall health assessment for comparison with patient case history and necessary procedural actions;

Efficient patient-centered multiple symptoms treatment management;

- Diabetes
- Hypertension
- Obesity
- Smoking

- Increasing Age
- Family History of Heart problems
- Hypercholesterolemia
- Hypertriglyceridemia
AUTONOMIC BALANCE MONITORING IS RECOMMENDED AS A STANDARD OF CARE BY THE FOLLOWING PRESTIGIOUS ORGANIZATIONS

COMPREHENSIVE NON-INVASIVE SYSTEM INCLUDES:

- Comprehensive Autonomic Analysis
- Arterial Vascular Assessment
- Ankle-Brachial-Index (ABI)
- Pulse Wave Velocity
- Peripheral Arterial Disease
- Photoelectrical Analysis
- K30/15
- Sweat Gland Function
- Synchronous Blood Pressure Analysis
- Stiffness Index (SI)
- Peripheral Arterial Tone Assessment (PAT)
- SpO2
- Ewing Test
- Overall Health Risk Factor