

SP

SAMPLE PATIENT

Patient

GENDER
Male

AGE
35

DOB
XX/XX/XXXX

NEUROLOGIST-INTERPRETED AUTONOMIC, SUDOMOTOR, ENDOTHELIAL AND VASCULAR ASSESSMENT

Autonomic Function Report

TEST DATE
2026

REQUESTED ON
2026

ASSIGNED TO
Your Neurologist

REPORT DATE
2026

Your Neurologist

Board-certified neurologist

SIGNATURE ON FILE

BOARD CERTIFICATIONS

Redacted for the public sample

LICENSE NO.

On file, redacted for the public sample

AT A GLANCE



Autonomic

1 borderline

BORDERLINE



Sudomotor

Acceptable

ACCEPTABLE



Endothelial and cardiovascular

1 abnormal

ABNORMAL



Lower-extremity vascular

1 borderline

BORDERLINE



Lifestyle

1 severe

SEVERE

Scale: ■ Normal ■ Acceptable ■ Borderline ■ Abnormal ■ Severe

NEUROLOGIST STATEMENT

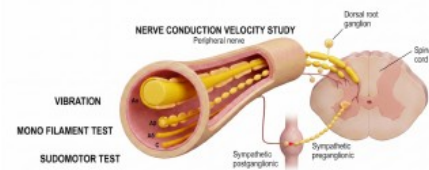
Technical Comments

Neurologist statement withheld in this sample

REFERENCE

Peripheral distal neuropathy testing

Peripheral distal neuropathy symptoms may be caused by dysfunction or damage of the peripheral motor nerve and/or A-alpha (large) fibers, A-beta or A-delta (sensory) fibers, and/or C fibers (autonomic cholinergic sympathetic fibers controlling sudomotor function). Diagnostic tools used: vibration, monofilament and sudomotor testing.



Large motor, sensory and autonomic C fibers of a peripheral nerve, with the test that probes each.

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PLAIN LANGUAGE Your results, in plain language

This page restates the signed clinical report in everyday language. It is not a diagnosis; your treating physician makes the final determination with your history, symptoms and other studies. If anything here differs from the clinical sections, the clinical sections govern.

What was this test?

This test checks your autonomic nervous system (heart rate, blood pressure, sweating and circulation), the small nerves in your skin, your blood vessel health and the circulation in your legs, all against healthy norms.

Your results, one at a time

Heart rate variability	Normal	Heart rate variability is a measure of the variation in time between heartbeats. A normal result indicates a healthy autonomic nervous system.
Baroreceptor sensitivity	Normal	Baroreceptor sensitivity is a measure of the body's ability to detect changes in blood pressure. A normal result indicates a healthy autonomic nervous system.
Sweat response	Normal	Sweat response is a measure of the body's ability to sweat. A normal result indicates a healthy autonomic nervous system.
Circulation in the legs	Normal	Circulation in the legs is a measure of the blood flow in the lower extremities. A normal result indicates a healthy autonomic nervous system.
Heart rate response to stress	Normal	Heart rate response to stress is a measure of the heart rate increase in response to a stressor. A normal result indicates a healthy autonomic nervous system.
Blood pressure response to stress	Normal	Blood pressure response to stress is a measure of the blood pressure increase in response to a stressor. A normal result indicates a healthy autonomic nervous system.
Skin temperature response to stress	Normal	Skin temperature response to stress is a measure of the skin temperature increase in response to a stressor. A normal result indicates a healthy autonomic nervous system.
Heart rate response to relaxation	Normal	Heart rate response to relaxation is a measure of the heart rate decrease in response to a relaxation stimulus. A normal result indicates a healthy autonomic nervous system.
Blood pressure response to relaxation	Normal	Blood pressure response to relaxation is a measure of the blood pressure decrease in response to a relaxation stimulus. A normal result indicates a healthy autonomic nervous system.
Skin temperature response to relaxation	Normal	Skin temperature response to relaxation is a measure of the skin temperature decrease in response to a relaxation stimulus. A normal result indicates a healthy autonomic nervous system.
Heart rate response to cold	Normal	Heart rate response to cold is a measure of the heart rate decrease in response to a cold stimulus. A normal result indicates a healthy autonomic nervous system.
Blood pressure response to cold	Normal	Blood pressure response to cold is a measure of the blood pressure decrease in response to a cold stimulus. A normal result indicates a healthy autonomic nervous system.
Skin temperature response to cold	Normal	Skin temperature response to cold is a measure of the skin temperature decrease in response to a cold stimulus. A normal result indicates a healthy autonomic nervous system.
Heart rate response to heat	Normal	Heart rate response to heat is a measure of the heart rate increase in response to a heat stimulus. A normal result indicates a healthy autonomic nervous system.
Blood pressure response to heat	Normal	Blood pressure response to heat is a measure of the blood pressure increase in response to a heat stimulus. A normal result indicates a healthy autonomic nervous system.
Skin temperature response to heat	Normal	Skin temperature response to heat is a measure of the skin temperature increase in response to a heat stimulus. A normal result indicates a healthy autonomic nervous system.

Plain-language explanations withheld in this sample

NEUROLOGIST STATEMENT

What the neurologist concluded

The patient's autonomic nervous system function is within normal limits. The patient's heart rate, blood pressure, sweating, and circulation in the legs are all within normal limits. The patient's heart rate response to stress, blood pressure response to stress, skin temperature response to stress, heart rate response to relaxation, blood pressure response to relaxation, skin temperature response to relaxation, heart rate response to cold, blood pressure response to cold, skin temperature response to cold, heart rate response to heat, blood pressure response to heat, and skin temperature response to heat are all within normal limits. The patient's autonomic nervous system function is within normal limits.

Plain-language conclusion withheld in this sample

SECTION I Observations and Findings

 Scale: ■ Normal ■ Acceptable ■ Borderline ■ Abnormal ■ Severe

1. Autonomic assessment

HRV Total Power

Abnormal results are consistent with abnormal autonomic function at rest

Normal: > 1200 ms2

NORMAL

1760 ms2

SDANN

Abnormal numbers represent exercise intolerance

Normal: >= 40 ms

ACCEPTABLE

33 ms

Valsalva Ratio

Low values suggest baroreceptor failure

Normal: >= 1.21 (ratio)

NORMAL

1.75

SPRS

Abnormal numbers suggest orthostatic hypotension

Normal: < 10 and > - 20 mmHg

BORDERLINE

27 mmHg

DPRS

Abnormal numbers suggest orthostatic hypotension

Normal: < 10 and > - 20 mmHg

ACCEPTABLE

19 mmHg

K30/15 Ratio

Abnormal numbers suggest POTS

Normal: >= 1.04 and < 1.14 (ratio)

NORMAL

1.04

Parasympathetic activity, RMSSD

Parasympathetic system activity

Normal: > 35 ms

ACCEPTABLE

27 ms

Sympathetic activity, LF/HF

LF/HF using HRV exercise capacity

Normal: > 0.6 and < 2.0 (ratio)

ACCEPTABLE

2.31

2. Sudomotor testing

Left Sweat Peak

C-fiber response: marker of sweat gland function

Normal: >= 832 and < 1100 mV

ACCEPTABLE

1229 mV

Right Sweat Peak

C-fiber response: marker of sweat gland function

Normal: >= 832 and < 1100 mV

ACCEPTABLE

1229 mV

Left Nitric Oxide Peak

Marker of distal neuropathy

Normal: >= 832 mV

NORMAL

1152 mV

Right Nitric Oxide Peak

Marker of distal neuropathy

Normal: >= 832 mV

NORMAL

1100 mV

SECTION I Observations and Findings, continued

3. Endothelial and cardiovascular function

Endothelial Stress Index

Correlates to inflammation and CRP levels

Normal: < 180 Vs

NORMAL

132 Vs

PTG Index

Correlates with arterial aging and atherosclerotic disease

Normal: >= 40 Vs

NORMAL

46.3 Vs

PTG Total Power

Correlates with insulin resistance, metabolic disorders and fatty liver

Normal: <= 406 ms2

ABNORMAL

415 ms2

PTGVLF

Correlates with blood viscosity, microcirculation and fibrinogen

Normal: <= 32 Vs/microS

NORMAL

19 Vs/microS

Central Blood Pressure

Estimated central aortic systolic pressure during the ejection phase

Normal: < 116 mmHg

NORMAL

104 mmHg

Delta Right/Left Arm

Screens for subclavian or axillary stenosis

Normal: N/A

NOT TESTED

N/A

4. Lower-extremity vascular assessment

Right Ankle Brachial Index (ABI)

Marker of peripheral arterial disease

Normal: >= 1.0 and < 1.30 (ratio)

BORDERLINE

0.89

Left ABI

Marker of peripheral arterial disease

Normal: >= 1.0 and < 1.30 (ratio)

ACCEPTABLE

0.97

5. Lifestyle assessment

BMI

High BMI is consistent with obesity

Normal: 18.5 to 24.9 kg/m2

ABNORMAL

34.7

Estimated Fat Mass

Percentage of body weight

Normal: < 21 percent

SEVERE

34 percent

Heart Rate

Abnormal levels can limit moderate and vigorous exercise

Normal: > 50 and < 85 bpm

NORMAL

71 bpm

SpO2

Blood oxygen saturation; low levels can limit exercise

Normal: >= 94 percent

NORMAL

96 percent

Systolic BP

High systolic pressure can limit moderate and vigorous exercise

Normal: <= 130 mmHg

BORDERLINE

155 mmHg

SECTION I Interpretations and Recommendations

Interpretations

Interpretations withheld in this sample

Recommendations

Recommendations withheld in this sample

Final determination rests with the treating physician. All results should be considered within the clinical context of the patient's case, history, symptoms, known diagnosis, findings from other diagnostic studies, current medications, treatment plan and therapies. The interpretation of the results is the responsibility of the medical doctor; this report provides objective autonomic, sudomotor, endothelial and vascular metrics to aid that work-up.

SECTION II Methods and Reference

About this report

The Autonomic Function Report is Brainwave MedTech Group's neurologist-interpreted reading of an autonomic, sudomotor, endothelial and vascular test session exported from the practice's testing system and ordered by the treating provider. It documents each marker against the system's reference ranges, with a signed neurologist statement, interpretations and recommendations for clinical correlation. It is a supplemental tool for licensed providers, used alongside other clinical information. It does not replace professional medical judgment, and the treating provider remains responsible for diagnosis and treatment.

Device and clearance

ITEM	DETAIL
Testing system	TM-Flow System (LD Technology), a medical device data system integrating three separately cleared modules
Cardiac autonomic and endothelial module	Oxi-W System, FDA 510(k) K200141
Sudomotor module	SudoC (SweatC), FDA 510(k) K152216
Vascular module	TBL-ABI System, FDA 510(k) K173696
Assessment basis	Cardiac autonomic reflex tests per the CAN subcommittee of the Toronto Consensus Panel; sudomotor response per the module's clinical studies; ABI per the ACC/AHA peripheral artery disease guideline
Reference ranges	Printed with every marker from the system's normative ranges; the interpretation of results is the responsibility of the reading physician

Each module carries its own FDA 510(k) clearance as listed. The integrated system is a medical device data system; it is not itself cleared as a single device, and no diagnostic claim is made by this report.

Glossary

HRV: Heart rate variability: the beat to beat variation in heart rate, a window on autonomic balance.

SDANN: Standard deviation of averaged normal beat intervals across the recording; a stability measure linked to exercise tolerance.

SPRS / DPRS: Systolic and diastolic pressure response to standing, in mmHg. Values outside range suggest orthostatic hypotension.

RMSSD: Root mean square of successive beat differences; a marker of parasympathetic (rest and digest) activity.

Sweat peak: Peak sudomotor response at the foot electrodes, in millivolts; a C-fiber marker of small fiber function.

Endothelial Stress Index: A stress measure of the inner lining of the blood vessels, correlated with inflammation and CRP.

ABI: Ankle brachial index: ankle systolic pressure divided by arm systolic pressure; screens for peripheral artery disease.

Total Power: The overall size of the heart rate variability signal, in ms2. Higher generally means more autonomic reserve.

Valsalva ratio: Heart rate response to forced exhalation against resistance. Low values suggest baroreceptor failure.

K30/15 ratio: Heart rate at beat 30 versus beat 15 after standing up; screens for POTS.

LF/HF: Low frequency to high frequency power ratio; a summary of sympathetic to parasympathetic balance.

Nitric oxide peak: Peak nitric oxide related response at the foot electrodes. Low values suggest distal neuropathy.

PTG index, total power, VLF: Photoplethysmography measures of arterial aging, metabolic status and microcirculation.

Central blood pressure (CASP): Central aortic systolic pressure: the pressure the heart works against at the aortic root.

Notices

Professional scope: this report provides objective neurophysiological data to support clinical decision-making by qualified medical professionals. It does not establish a physician-patient relationship, provide a definitive diagnosis or create treatment recommendations independent of the treating physician's judgment. All findings should be interpreted within the patient's complete history, examination and other studies.

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