

What Does the AngioDefender™ System Test?

The AngioDefender™ system technology assesses your risk of developing cardiovascular disease before symptoms appear. Administered similarly to a blood pressure reading, the AngioDefender™ system measures your endothelial function, producing an AngioDefender™ Score that represents how healthy your vascular system is. These results, along with the advice of your doctor, can lead to lifestyle, dietary, and/or pharmacological interventions to protect and improve your long-term heart health.

Patient Preparation Checklist

Similar to a blood pressure test, there are factors that can affect an accurate reading of the AngioDefender™ system. Follow the checklist below to limit test variability and to optimize your score's meaning:

- Have not consumed food or non-alcoholic beverage, other than water, within **8 hours** prior to test.
- Have not strenuously exercised within **4 hours** prior to test.
- Have not consumed caffeine within **4 hours** prior to test.
- Have not used tobacco products within **4 hours** prior to test.
- Have not consumed any recreational drugs or alcohol within **8 hours** prior to test.
- Are not currently experiencing symptoms of stress (rapid heartbeat, shortness of breath, etc.).
- Have rested and relaxed 10 minutes prior to test.
- Have alerted your healthcare provider about medications you have been prescribed since your last test.

Note: All boxes should be checked for optimal results. If a box is unchecked, consult your healthcare provider.

Other important considerations include:

- + Please do not use your mobile device while resting prior and during the test.
- + Under some circumstances, your healthcare provider may recommend you take the test again.
- + When taking the test again, make sure it is taken around the same time of day as previous tests. There are minor, but normal daily variations in your endothelial function.

How is the Test Performed?*

- + Your arm and back should be supported, legs uncrossed, and feet on the floor. Your upper arm should be bare, with any sleeve comfortably rolled up.
- + Your healthcare provider will wrap the AngioDefender cuff snugly around your upper arm.
- + After initiating the test, you will hear a buzzing sound and the cuff will inflate. You will feel tightness around your arm, followed by a reduction in airflow and loosening of the cuff.
- + This process will continue for 15 cycles followed by a five-minute cuff-tightening cycle when your arm might feel a tingling sensation or numbness— this is normal. After an additional 25 cycles the test will be complete. The test will take under 20 minutes and will generate an AngioDefender Score instantly.

What Does the AngioDefender™ Score Mean?

The AngioDefender™ system technology takes various readings during the test and converts them to an AngioDefender™ Score based on Flow Mediated Dilation (%FMD) of your brachial artery. Your healthcare provider interprets this score along with other factors, including age and lifestyle, to paint a comprehensive picture of your heart's health and future risk of cardiovascular disease.*

**Please consult your healthcare provider or AngioDefender™ operator if you have any questions regarding the AngioDefender™ system technology or its use*

FAQs: Endothelial Dysfunction

What is the endothelium?

The endothelium is the single-cell-thick interior lining of all the blood vessels in your body. Endothelial cells play key roles in regulating blood flow and the passage of materials and white blood cells into and out of the bloodstream.

What is endothelial dysfunction?

Loss of proper endothelial function, i.e. endothelial dysfunction, is a hallmark of cardiovascular disease (CVD). It is regarded as an important **early event** in the development of atherosclerosis, which occurs when your artery wall thickens as a result of the accumulation of calcium and fatty materials.

Which risk factors lead to endothelial dysfunction?

A number of emerging and classical risk factors greatly increases your chance of endothelial damage, including: physical inactivity, poor diet, tobacco smoking, high cholesterol, hypertension, aging, and diabetes.

What are the consequences of endothelial dysfunction?

Disruption of mechanisms mediated by endothelial cells initiates a chronic inflammatory process which leads to atherosclerosis. This can trigger a number of CVD events, such as coronary heart disease and cerebrovascular diseases, which can result in a heart attack and/or stroke, respectively.

How is endothelial dysfunction treated? Can it be reversed?

Lifestyle, dietary, and pharmacological interventions can treat and even **reverse damage** done to your endothelium. This includes: getting more exercise, eating healthier foods, quitting smoking tobacco, taking lipid-lowering medications like statins and taking antihypertensives like ACE inhibitors, to name a few.

FAQs: The AngioDefender™ System

How does the AngioDefender™ system work?

The AngioDefender™ system measures the health of your endothelium using a process called Flow-Mediated Dilation (%FMD). It does this by running through a series of inflations and deflations to analyze the endothelium's response to increased blood flow. The healthier your endothelium, the higher your %FMD.

Why should I get tested with the AngioDefender™ system?

Before the AngioDefender™ system, measuring damage to your arteries required highly technical, expensive, and even invasive procedures. Moreover, the AngioDefender™ system identifies endothelial dysfunction earlier than traditional measures such as cholesterol counts. Now you can receive an accurate and consistent assessment of your vascular health and overall risk of CVD **in just minutes**.

How accurate is the AngioDefender™ system?

Impaired %FMD of the brachial artery (the main artery in the upper arm) as measured by the gold standard test, Brachial Artery Ultrasound Imaging (BAUI), has been positively correlated with coronary heart disease and future CVD events. A 2010 study comparing AngioDefender with BAUI shows statistical equivalence between the two techniques.

What is an AngioDefender™ Score? What is a good score?

The AngioDefender™ system technology takes various readings during the test and converts them to an AngioDefender™ Score based on flow-mediated dilation (%FMD) of your brachial artery. Your healthcare provider interprets this score along with other factors, including age and lifestyle, to paint a comprehensive picture of your heart's health and future risk of CVD.

How is the AngioDefender™ system data saved?

Your personal data is never stored on Everist Health's servers. Only your healthcare provider has access to your patient report and personal data.