

# Blood tests for heart disease

## Cholesterol

Cholesterol tests determine your risk of having a heart attack or stroke caused by blockage of blood vessels or hardening of the arteries.

Your healthcare provider may order the following blood tests to identify your risk of heart disease. Blood tests for heart disease can be split into four areas: cholesterol, inflammation, metabolic and genetic.

### Total Cholesterol

Total amount of cholesterol in your blood which includes mainly two forms, your 'good' HDL cholesterol and your 'bad' LDL cholesterol

### Triglyceride

Type of fat found in cholesterol particles

### HDL-C

'Good' cholesterol in your blood made up of many different particles; five major particles are important to heart disease risk.

### ApoA-I

Protein that is located in your 'good' HDL cholesterol

### Boston Heart HDL Map®

Measures the amount of ApoA-I in the five major HDL particles most directly related to heart disease. You want high amounts of alpha 1 ( $\alpha$ -1), the largest and most protective HDL particle for your heart.

### LDL-C

'Bad' cholesterol in your blood

### Lp(a)

A particle similar to LDL; your level of Lp(a) is determined by your genes. You want a low amount.

### ApoB

Protein that is located in your 'bad' LDL cholesterol

### sdLDL-C

Small, dense form of your 'bad' LDL cholesterol; increased levels indicate build up of fatty materials in your arteries.

### Boston Heart Cholesterol Balance®

Provides valuable information about how your body produces and absorbs 'bad' LDL cholesterol; can help your doctor determine the right treatment for you.

# Inflammation

Inflammation is a way in which your body reacts to infection, irritation or other injury. Inflammation in your arteries (caused by plaque buildup) leads to narrowing or blockage and increases your risk of heart disease.

## **hs-CRP**

Protein produced in response to inflammation and excess build up of cholesterol and other fats

## **LpPLA<sub>2</sub>**

Special type of protein produced by white blood cells that causes inflammation in your artery walls.

## **MPO**

Marker of unstable plaque in an artery wall; elevated values indicate you have a near term risk of having a heart attack or stroke

# Metabolic

Metabolic tests show your risk of developing diabetes, or, if you already have diabetes, how your body is responding to treatment. If you have diabetes or have a high risk of developing diabetes, you are at a higher risk of having heart disease or a stroke.



## **Boston Heart Prediabetes Assessment™**

A highly predictive assessment that determines your risk of developing diabetes within ten years

### **Glucose**

Amount of sugar in your blood

### **Insulin**

Hormone that controls the level of sugar in your blood (glucose)

### **HbA1c**

Indicator of how well your glucose levels were controlled over the past two to three months

## Genetic

Genetic tests help determine whether you are genetically more likely to have risks linked to heart disease. They may also indicate how you will respond to certain treatments.

## Other

Your healthcare provider may also order these blood tests for underlying conditions that may affect how you respond to certain treatments.

 Only from Boston Heart



### **Boston Heart Statin Induced Myopathy (SLC01B1) Genotype**

Determines if you may develop muscle aches, spasms and pain on statin therapy and helps your healthcare provider select a statin and dose that is least likely to cause you complications

### **ApoE**

A protein that provides useful information about how well you would respond to diet and statin therapy

### **Factor II / Factor V**

Proteins essential for clotting; measures gene defects that may determine if you are more likely to develop harmful blood clots

### **NT-proBNP**

Hormone that is released into your blood due to decreased function of heart muscle

### **Vitamin D**

Vitamin that is important for your heart health