WHAT ARE THE RISK GROUPS FOR AHTN?

INDIVIDUALS WITH PERSONAL HISTORY OF AHTN

INDIVIDUALS WITH FAMILY HISTORY OF AHTN

WHAT IS ARTERIAL HYPERTENSION?

Blood pressure (BP) is the force of the blood on the walls of arteries as blood flows through them.

The blood pressure values vary according to age, and optimal values should be lower than 120/130 mmHg for systolic blood pressure (maximum) and 70/80 mmHg regarding the diastolic blood pressure (minimum). A blood pressure level of 140/90 mmHg or higher is considered arterial hypertension (AHTN).

A family history of AHTN may contribute to the identification of asymptomatic individuals at risk for developing arterial hypertension. A family history of AHTN encompasses one or more relatives with AHTN in younger ages, pregnant women with AHTN and / or preeclampsia.

AHTN diagnosis requires multiple and consecutive measurements of blood pressure over a time period, pre-described by a physician.

SIGNS AND SYMPTOMS

Most people with high blood pressure have no signs or symptoms, and hence they are asymptomatic.

- HEADACHE
- PALPITATIONS
- CHEST PAIN
- UNEXPLAINED IRRITABILITY
- SLEEPINESS
- BLURRED VISION
- FLUSHED FACE

HEARTGENETICS
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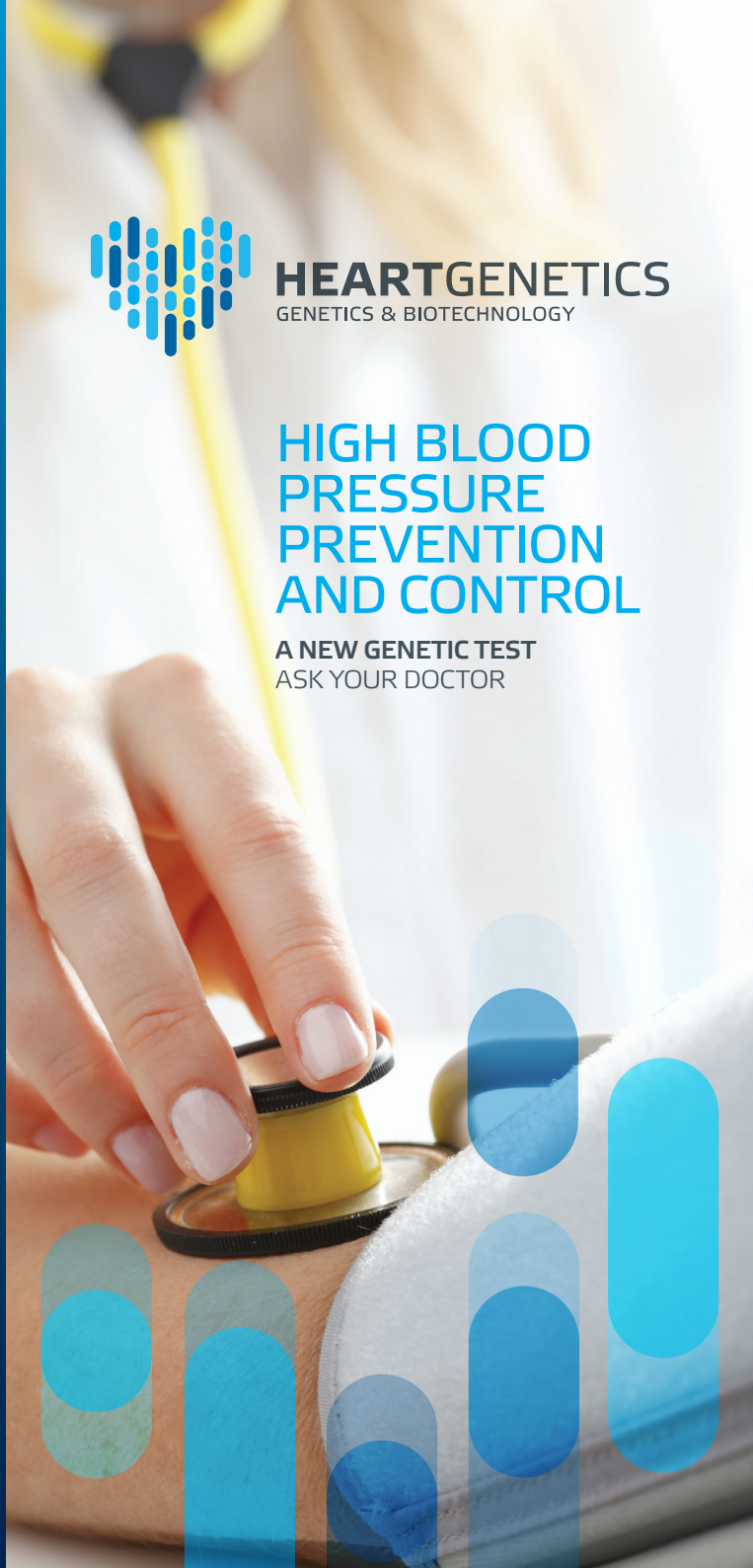
HEARTGENETICS
GENETICS & BIOTECHNOLOGY

HIGH BLOOD PRESSURE PREVENTION AND CONTROL

A NEW GENETIC TEST
ASK YOUR DOCTOR



HEARTGENETICS
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EARLY DETECTION **IS THE KEY TO PREVENTION**

ANTICIPATION IS THE RIGHT ATTITUDE TO PREVENT CARDIOVASCULAR DISEASES

The objective of the new genetic test made available by HEARTGENETICS is the early detection of arterial hypertension (AHTN) of individuals at risk.

The most relevant risk factors that contribute to arterial hypertension are related to lifestyles: high salt content in diets, fast food, smoking, physical inactivity, excess weight and obesity. Genetics may become an additional risk factor.

A regular physical activity, healthy eating habits and specialized medical counselling help in keeping a stable blood pressure.

Pay attention and make the right choices. Add more years to your healthy life.

WHITHOUT HEARTGENETICS
Detection only from the Pre AHTN

WITH HEARTGENETICS
Early detection of AHTN risk

Pre **AHTN** 120-139 80-89

Phase1 **AHTN** 140-159 90-99

Phase2 **AHTN** ≥160-≥100

Normal **BP** <120-130 <70-80

HEARTGENETICS´S NEW DIAGNOSTIC METHOD

HOW CAN A GENETIC TEST BE USED TO PREVENT AHTN?

A genetic test detects the presence or absence of a known genetic alteration, by evaluating the DNA from each individual.

From the assessment of the genetic alterations, known as molecular risk markers, it is possible to perform an early evaluation of the individuals at risk of developing arterial hypertension. Based on this evaluation it is possible to perform a personalized counselling regarding lifestyles, adapt therapeutics and start a personalized medicine approach.

HOW IS A GENETIC TEST DONE?

ALL IS NEEDED IS A BLOOD SAMPLE

THE GENETIC TEST IS PERFORMED USING AN INNOVATIVE AND VERY ACCURATE TECHNOLOGICAL APPROACH

IDENTIFIES GENETIC ALTERATIONS THAT MAY BE ASSOCIATED WITH THE RISK OF DEVELOPING AHTN

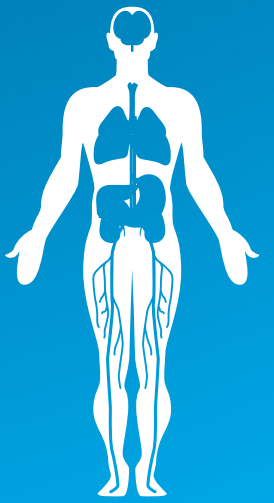
THE RESULT IS REPORTED IN 10 DAYS

WHAT ARE THE CAUSES OF AHTN?

In some individuals, AHTN has identifiable causes such as renal diseases, adrenal and thyroid related diseases, autoimmune diseases, vascular defects, and some long term therapies. Some risk factors, mostly related to lifestyle, increase the predisposition for AHTN. Systolic arterial hypertension is the most common form of hypertension in people older than 50 years.

Some individuals with an inherited predisposition for AHTN usually manifest symptoms in younger ages or during pregnancy.

TARGET ORGANS



BRAIN
STROKE

EYES
BLINDNESS AND RETINOPATHY

HEART
HEART FAILURE, MYOCARDIAL INFARCTION, CARDIAC INSUFFICIENCY

KIDNEY
KIDNEY FAILURE

ARTERIES
PERIPHERAL ARTERIAL DISEASE

WHAT IS THE PREVALENCE?

Arterial Hypertension is an important and growing public health problem worldwide. An estimated one billion people worldwide have AHTN, and this number is expected to increase to 1.56 billion people by the year 2025. This translates to about 1 in 4 adults being afflicted with AHTN worldwide.

AHTN AND CARDIOVASCULAR DISEASES

Blood pressure regulation is controlled by a complex interaction of electrical, mechanical, and hormonal forces in the body regarding the following systems: heart, kidneys, arterial vessels, and autonomous nervous system.
An uncontrolled AHTN causes serious complications.

For more information, talk to your doctor.
This is HEARTGENETICS's advice.