

## Patient Information CT Coronary Artery Calcium Score

A CT Coronary Calcium Score is a well-established non-invasive technique to obtain information about the presence, location and extent of calcified atherosclerotic plaque in the coronary arteries. Heart Vision and Pacific Radiology - Canterbury have extensive experience in performing CT Calcium Score with an advanced Cardiac capable CT scanner.

Calcified plaque in the coronary arteries results when there is a build-up of fat and other substances under the inner layer of the artery. This material can calcify which signals the presence of atherosclerosis, a disease of the vessel wall, also called coronary artery disease (CAD). The goal of the Cardiac CT scan for Calcium Scoring is to determine if CAD is present and to what extent, even if asymptomatic. The amount of calcification reflects coronary artery plaque build-up and allows stratification of your cardiovascular risk (low vs high risk)

## What to Expect

The procedure is very quick; the actual time in the scanner room is about 10 minutes. The key to a good scan is a steady heart rate so the procedure will be explained to you every step of the way. We aim to create a calm environment so that you are able to relax and thus maintain a steady heart rate.

You will have ECG (electrocardiogram) leads attached to your chest, which give important information to the scanner to help form the images of your heart.

The scan itself will be over in approximately 10-20 seconds. You will need to hold your breath for this, so please let us know if you have difficulties breathing or lying flat for any length of time.



The scanner is shaped like a bagel/donut. The scanner is much more open than an MRI scanner, and a lot less noisy! If you tend to get claustrophobic (fear of enclosed spaces), let us know before you attend. It often helps people to come in and see the scanner beforehand.

If you have any questions about the test there are radiographers and radiologists on hand, during the scan to address any of your concerns.

## What are the Risks?

<u>Radiation</u>: The amount of X-Ray radiation used during the scan varies but is less than that you naturally receive in a year from background natural sources such as cosmic rays and from rocks in the Earth's crust. To put this in perspective, the lifetime risk of developing cancer due to the x-rays involved in this scan is around 1:12,000 compared with a background risk of developing cancer of 1:300 per year.

Your doctor will have considered the risk of this versus the risk of dying from a heart attack before advising you to have this scan. Heart Vision continually monitors and audits radiation doses. All dose reduction techniques and technologies available are used.

## After The Scan

Your doctor and/or cardiologist will be able to advise you on the results and any further treatment

Please feel free to contact us if you have any questions with regard to your booking or any of the information provided to you.

**Heart Vision Appointments** 

Phone: 03 355 6073 or 0800 TO XRAY