



Theranostics Lab provides a specialised service for the delivery of molecular diagnostics to clinicians and the public.

A core philosophy of the company is to improve public health through effective screening programmes and improve sustainability in medicine by matching the right treatment to the right individual.

We also support a strong social responsibility programme.

Please find more information at [www.theranosticslab.com](http://www.theranosticslab.com)

TheranostiC<sup>LAB</sup>s. Your Genes. Your Health.

Clinical Laboratory Services  
Waitemata District Health Board  
North Shore Hospital  
Shakespeare Road, Takapuna  
North Shore  
Auckland 0622



For Technical Advice:  
Theranostics Laboratory  
Phone: 09 486 8325  
Email: [LABADMIN@waitematadhb.govt.nz](mailto:LABADMIN@waitematadhb.govt.nz)

For Clinical Advice:  
Freephone: 0508 GENOME (436 663)  
Email: [info@theranostics.co.nz](mailto:info@theranostics.co.nz)

Your Genes. Your Health.



Coronary Artery Disease  
Genomic Test

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## Personalised Medicine

Personalised medicine is a holistic approach to medicine, and uses molecular diagnostic tools, in combination with advanced informatics, eg using a person's age, gender, weight etc, to individualise a treatment strategy.

The aim is to make medicine more predictive, preventive, personalised and participatory – in short, P4 medicine. This is a philosophy change to current practice and will lead to improved patient care and reduced costs by reducing wastage and treatment injury.

Pharmacogenomics, proteomics, metabolomics and nanomedicine are emerging fields of science which sit within the framework of personalised medicine.

Theranostics Lab will translate relevant discoveries from each of these areas into tools that assist in patient care.



## Ordering a Test

### Specimen Requirements

**Access [www.theranosticslab.com](http://www.theranosticslab.com) to order a test. A cheek swab kit will be sent to you in the post. Please follow the instructions enclosed with the kit.**

### Storage Conditions

**Room Temperature.**

### Documentation

**Print your receipt of purchase from the website after ordering a test. This will be enclosed with your swab to identify the sample.**

### Availability

**Turnaround time of one week from the lab's receipt of a swab.**

### Reporting

**A paper report will be issued to you and your general practitioner.**

## Coronary Artery Disease Genomic Test

The risk of developing coronary heart disease depends on multiple factors that are related both to lifestyle and genetics. Inherited factors account for as much as 30–60% of the variation in risk. Common genetic variants in more than 27 genes are associated with coronary heart disease. Although the ability for single genetic variants to predict risk is low, the variants can be summated into a score, to predict risk similar to other established risk factors.<sup>1</sup>

This genetic risk score has identified individuals at increased risk of coronary heart disease across both primary (without proven disease) and secondary prevention (with proven disease) populations. People with high genetic risk scores have the largest relative and absolute risk reductions with statin therapy.

Whilst statins are considered to be effective in secondary prevention, in primary prevention their role is less clear. The number of patients needed to treat (NNT) is between 66 and 104 to prevent a single event, in primary prevention. Contrarily the number of patients needed to harm (NNH) is between 65 and 255 for the lifetime risk of statin induced diabetes.<sup>1,2</sup>

This genetic test can be used in situations in which optimisation of the number needed to treat is relevant, such as in the primary prevention setting. A patient with a high genetic risk score has a threefold reduction in the NNT to prevent an event (NNT 25) compared to low risk patients. This test can be used in conjunction with a statin metabolism genetic test to predict myopathy risk and optimise dose.

  
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1. Mega, J et al. Lancet. Volume 385, No. 9984, p2264–2271, 6 June 2015
2. <http://www.thennt.com/nnt/statins-for-heart-disease-prevention-without-prior-heart-disease/>