#### WHAT DOES THE PHARMACOGENOMICS TEST COST?

Ampath is offering this test for R1950.00 including VAT (valid until 31 December 2019). You will need to pay upfront and you may be able to claim from your medical aid. We are working with the medical aids to get approval for this to be reimbursed by them.

## HOW DO I GET THE RESULTS OF MY PHARMACOGENOMICS TEST?

Log onto Ampath's website, www.ampath.co.za, and go onto the patient's "My Lab Results" to register to get your results using your computer, tablet or smartphone. Your results will be available 10 working days after having your blood collected.

Request a pharmacogenomics test to take away the trial-anderror approach with your medication and choose the "best-fit" drug from the beginning.

#### WHO CAN HELP ME INTERPRET MY LAB REPORT?

Should you need help interpreting your lab report, you have a few options available to you:

- Speak to your Doctor or Pharmacist who can advise you on your results
- Speak to one of Ampath's Genetics Specialists who can be contacted on telephone number 012- 678 0645
- Access additional pharmacogenomics information available on Ampath's website: www.ampath.co.za



Your consulting pathologists



**AMPATH National Laboratory Services** 

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Your consulting pathologists

# PHARMACOGENOMICS: WHAT DOES IT MEAN FOR YOUR HEALTH?



## PHARMACOGENOMICS: WHAT DOES IT MEAN FOR YOUR HEALTH?

#### WHAT IS PHARMACOGENOMICS?

Pharmacogenomics is the study of differences in your genetic code and how that affects medication you may be taking. It identifies what makes you unique and different from other people, and may assist in predicting how your body may respond to certain medications either prescription or obtained over-the-counter (OTC).

## WHY WOULD YOU BE INTERESTED IN THIS TEST FOR YOU OR YOUR FAMILY?

If you or anyone in your family are taking prescription or OTC medication, this test may reveal how effective or safe the medicine will be in that person and predict likely side effects.

We all have some differences in our genes, which means some medicines will work well for us, and some will not. Some people react badly to some medicine; this is what doctors' call an Adverse Drug Reaction (ADR), and different medicine needs to be prescribed. Drugs have been developed with the idea that each drug will work much the same on everybody. Prescribing medication is however not that simple - it is not a "one size fits all" approach, which is why your doctor and pharmacist need to know which medicines will work for you and which won't and which are likely to cause side-effects or not.

#### DOES ANYTHING ELSE AFFECT MY PRESCRIPTION?

Other things that affect your medication prescription and how you respond to your medication include:

- Your age
- Your weight
- Your height
- Your kidney and liver function
- Other medications you may also be taking

## WHAT IS THE EVIDENCE THAT THIS IS A USEFUL TEST?

The field of pharmacogenomics has grown rapidly and there is sufficient evidence to support the routine use of pharmacogenomic testing, especially for patients taking long term prescribed medications.

A recent large study by Coriell and ThermoFisher was done by performing pharmacogenomics on retired teachers over 65 years of age in Kentucky, USA. These people were taking an average of 12 different medications each. After testing it was discovered that 64% of people required an immediate medication change due to likely adverse effects. Physicians also agreed with 94% of all the recommended prescription changes from the pharmacogenomics test results. Some of the benefits of the test were:

- 29% decrease in hospitalisation
- 18% decrease in pharmacy spend
- 24% decrease in patient slips and falls

## HOW MANY TIMES DO I HAVE TO DO MY PHARMACOGENOMICS TEST?

Only once. Your genetic makeup does not change you will always be able to refer to your test should you need to take OTC or prescribed medication. You will be given a result that your doctor and pharmacist will be able to look at every time they need to decide what medicines should be prescribed.

### DO I HAVE TO BE TAKING ANY MEDICATION TO DO THE TEST?

No, you do not have to be taking medication to do the test. The test measures how your genes will react to certain medications and does not measure the actual medicine.



#### SHOULD ONLY OLD PEOPLE DO THE TEST?

No, people of any age should have the pharmacogenomics test done. A study of 35 000 young working people in the USA working for ThermoFisher did the test, and the results showed that over 50% of those tested would benefit from a change to the medications they were on at that time and over half of the people showed a genetic risk to some medications. Overall there was a 13% decrease in their annual healthcare spend in the first year after having the test.

## WHERE DO I GO TO GET THE PHARMACOGENOMICS TEST DONE?

You can go to any Ampath collection centre (depot) in South Africa, and ask to have the test done. We will collect one tube of blood as this provides the best results (we do not test swabs from your cheek). The test is performed in Ampath's Genetics Laboratory and the result may take up to 10 working days to be checked and resulted by our pathologists.



#### "Personalized Medicine"

