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about Pharmacogene Testing

**Personalised Medicine Service****Molecular Diagnostic Laboratory**

# Pharmacogene Testing





# What is Pharmacogenomics (PGx) test?

Pharmacogenomics (PGx) test identified variations within genes that predict how one respond to medications.

Many medications that are currently available are “one size fits all”, but they do not work the same way for everyone. A medication that works well for one person may not work as well when administered in another person. The unique sets of genes we inherit make us respond differently to the same drug. We may require a different dosage or even develop adverse events to the drug.

PGx can help doctors to identify which drugs may work best for the patient, determine the optimal dosage and avoid drugs that can potentially cause side effects for the patient.

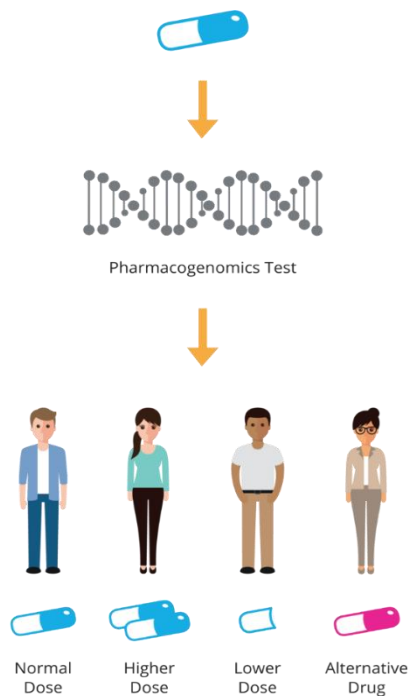


Figure 1. PGx identified the optimal dosage and suitability of the drug for each individual.

# What are the Benefits of PGx Test?

PGx test will only need to be conducted once as your genes do not change over time. The results can be added to your records for easy access and used as a reference for medication and treatment choices throughout your life.

## Benefits of PGx Test:

- Narrow down options and help doctors prescribe the right medicine faster
- Reduce treatment failure and improve recovery speed
- Reduce risk of medication side effects
- Reduce medical costs
- Prevents delay for future treatment

## Drugs and Therapeutic Areas Covered by PGx Test

PGx test provides results for certain medication, most commonly those for cardiology, pain management, depression or mental illness.

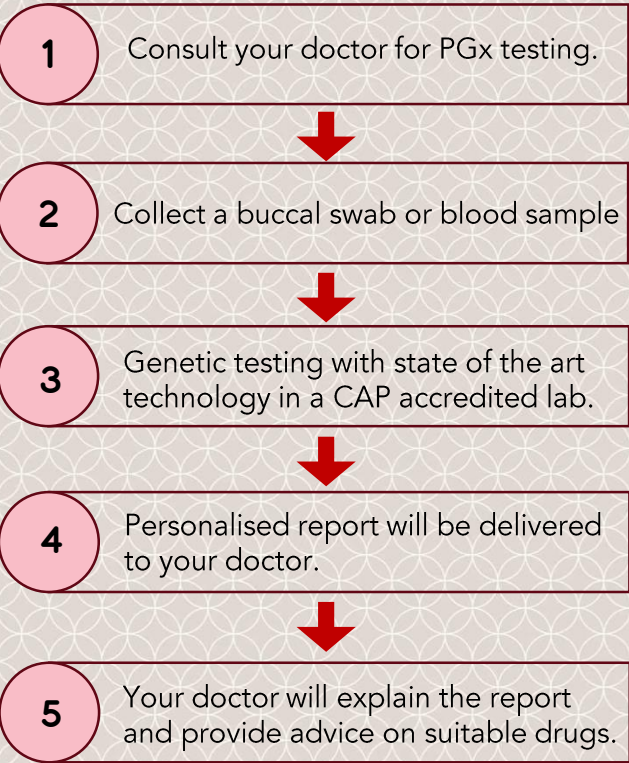
<b>Cardiology</b> Antiarrhythmics Anticoagulants Antiplatelet agents Beta blockers Statins	<b>Gastroenterology</b> Antiemetics Proton pump inhibitors
<b>Psychiatry</b> Antipsychotics MAOIs SSRIs SNRIs Tricyclic antidepressants	<b>Infectious Diseases</b> Antibiotics Antifungals
<b>Anticonvulsants</b>	<b>Pain Management</b> Opioids NSAIDs
	<b>Immunosuppressants</b>

# Who Should do the PGx Test?

PGx testing should only be performed based upon medical necessity. Medical necessity is determined by your doctor and he/she can order the test for

- Patients taking a large number of medications with a high probability of developing serious side effects
- Patients who have limited medication options and are not responding well to their medications
- Patients with an unexpected pattern of side effects to medication

## How is the Test Performed?



The whole process takes about 3 to 4 weeks.