



OMNIHEALTH
DIAGNOSTICS



PHARMACOGENOMICS (PGX) TESTING

PHARMACOGENOMICS (PGx) TESTING

"The PGx test is your one test for life.

The test will cover your metabolic response to medications at all stages in life, and can be referred back to at any time regardless of your age or health status."

Pharmacogenomics is the analysis of how genes affect a person's response to drugs. Most drugs are broken down (metabolised) in the body by drug-metabolising enzymes (DMEs). Specific genes code for these enzymes, and variations in these genes can cause significant differences to drug-metabolising enzymes, drug transporters and drug targets.

As everyone has a unique genetic makeup, this can affect how you will respond or react to certain medications. A medication or dose that works for one person may be ineffective or cause harmful side effects in another. Through pharmacogenomics testing, individualised medicine treatment plans can be developed based on each patient's genetic makeup, to determine optimal drugs and dosages, and limit harmful side effects.

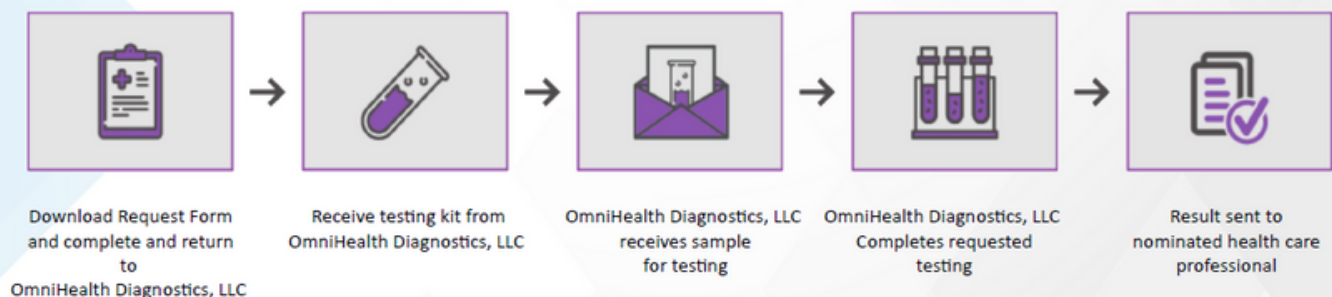


◀ Potential Benefits Of Pgx Testing

Using the results from PGx testing, health care providers can individualize drug therapy selection and dosages for patients based on their genetic makeup. Testing patients prior to beginning treatment may help determine their response to certain drug classes and help avoid drugs that may be ineffective or cause harmful side effects. For patients currently on treatment, it may identify new treatment options or identify why current treatments aren't working.

◀ Advantages of PGx testing may include

- Decreasing and potentially eliminating the need for a "trial and error" approach to find effective therapy and dosages
- Decreasing the number of adverse drug reactions a patient experiences
- Saving patients time and money on ineffective medications
- Decreasing the amount of time patients are on medication
- Improving patient quality of life by finding effective treatments faster



WHAT WILL THE RESULTS FROM PGX TELL ME?

◀ How you process different types of drugs

Variations in genes influence how quickly or how thoroughly individuals metabolise specific drugs. Individuals may be classed as a poor, intermediate, normal or ultra-rapid metabolizer for certain drugs.

- More than 75% of people have variations in drug metabolism that fall outside of what is regarded as “normal” metabolizers. In some cases, these differences can cause significant side effects or mean the medication is ineffective. In severe cases, side effects may be life threatening.

◀ Likelihood to respond to a given medication

In a patient classified as a “poor” metabolizer, some drugs will not be processed effectively by the body, resulting in no response or minimal response which may require the selection of alternative medication

- In patients who are classified as an “ultra-rapid” metabolizer, the drug is processed and removed from the body rapidly. This may mean that the drug is less effective at the standard dose, requiring a higher dose to be effective.

◀ Risk of an adverse drug response (side effects)

In a patient classified as a “poor” metabolizer, drugs may be eliminated slowly and accumulate in the body, requiring a lower than normal dose to avoid adverse reactions.

- For patients who are classified as an “ultra-rapid” metabolizer, some drugs may be processed quickly leading to rapid onset of the drug’s effect and increased side effects, requiring a reduction in the drug dosage to achieve the desired outcome.

◀ Who Should Have PGx Testing done?

PGx testing is available to everyone but may be most useful for patients who are currently on or about to begin taking medications for any of the conditions covered. It may also be useful for people who have tried numerous drugs to find one that may effectively treat their symptoms.

PGx is particularly relevant in psychiatry where antidepressants are essential components in treatment. 30-50% of patients do not respond to their first antidepressant, and lengthy trials are often required before the optimal treatment type and dose is identified.

Patients who have had genetically-guided prescribing may have a greater chance of remission compared to patients without genetic prescribing. What Medications are covered by PGx Testing?

The following chart illustrates impacted medications analyzed by the OmniHealth Diagnostics, LLC pharmacogenomics test with supporting clinical evidence. Lists are updated periodically to incorporate new medications and clinical evidence as appropriate. Please also refer to established clinical resources, including the FDA’s Table of Pharmacogenomic Associations and the Clinical Pharmacogenomics Implementation Consortium (CPIC®) Guidelines for Genes-Drugs Pairs, for the latest information regarding pharmacogenomics test interpretations and

interventions. A pharmacogenomics report is one of multiple pieces of information that a clinician should consider in guiding their therapeutic choice for each patient.

◀ Limitations of Testing

The PGx report provides information on how your body will metabolise drugs, which may be helpful in choosing medications. It is however, only one component of how a person may react to any particular drug. Drug reactions may be caused by other mechanisms apart from the known effect of the drug itself.

These include hypersensitivity reactions (allergies), intolerance and drug interactions. The PGx report can be used as an aid in choosing medications but must be used in conjunction with previous medical history and other medical information available to your health care practitioner.

UNLOCKING THE SECRETS OF YOUR GENETIC HEALTH

COMPREHENSIVE ENT GENETIC TESTING AT OMNIHEALTH DIAGNOSTICS, LLC

OmniHealth Diagnostics, LLC may be a good choice for Genetic testing for several reasons:



High-quality testing

OmniHealth Diagnostics, LLC uses advanced technology and have experienced technicians to ensure that the testing is performed to the highest standards



Fast turnaround time

OmniHealth Diagnostics, LLC has a fast turnaround time for test results. This means that doctors can quickly get the information they need to make informed decisions about their patients' treatment.



Comprehensive testing options

We offer a wide range of genetic testing options, including tests for Diabetes predict, Cancer genetics, Cardiovascular, Drug-Gene Interactions and Neurological disorders.



Collaborative approach

OmniHealth Diagnostics, LLC works closely with doctors to ensure that the testing is tailored to the specific needs of each patient. They provide personalized support and guidance throughout the testing process.

