
PSYCHOTROPIC PHARMACOGENOMIC TESTING

Pharmacology + **Genomics** = **Pharmacogenomics**
(the science of drugs) (the study of genes & their function)

Who benefits from pharmacogenomics testing?

- People who have had multiple medications leading to little or no positive response
- People who have histories of adverse reactions to medications
- People who frequently experience side effects from medications
- People who are taking multiple medications to treat the same thing (polypharmacy)
- People who may have difficulty recognizing and expressing when they experience adverse effects of medication

How is testing done?

The person's doctor (typically the psychiatrist when it is neuropsychiatric) orders this relatively inexpensive test, which consists of a simple cheek swab that is then sent to a lab for analysis.

What information does Neuropsychiatric Pharmacogenomic Testing provide?

The test analyzes genetically-determined enzymes that are responsible for how the person's body metabolizes (breaks down) medications. This can guide the prescriber in choosing medication most likely to result in a desired response while limiting adverse reactions.

Example: Psychotropic pharmacogenomic testing done by GeneSight (a pioneer in developing the testing) would currently include information on the following classes of medications: **antidepressants, anxiolytics and hypnotics, mood stabilizers, and antipsychotics.** Specific medications within each class would then be listed under one of three categories:

- **Use as directed** = a good choice for that person
- **Use with caution** = moderate gene-drug interaction
- **Use with increased caution & with more frequent monitoring** = significant gene-drug interaction

There are additional sections in the report regarding specific genetic information that may benefit the prescribing clinician as he/she weighs the potential risks vs. benefits of medications.

Learn more at: genesight.com, pathway.com/pharmacogenomics/, or rxright.com