About PGx results:
- **DO NOT** make any changes to your medication without talking to your healthcare provider or pharmacist.
- Share your results with your healthcare provider as part of your personal health history.
- PGx results are specific to the person being tested only. **DO NOT** use your PGx results to guide medication decisions for others.
- PGx results provide medication guidelines only.
- PGx testing DOES NOT:
  - Apply to all medications
  - Address all drug side effects or drug allergies
  - Explain drug-drug interactions or drug-food interactions
- PGx testing is a type of genetic test
  - Your results may indicate blood relatives may benefit from PGx testing

For more information, go to:
Mayo Clinic Center for Individualized Medicine:
Drug-Gene Testing
www.mayo.edu/druggenetesting

The Right Drug at the Right Dose Based on Your Genes
What is Pharmacogenomics (PGx)?
PGx is the study of how your genes may affect your body's response to, and interaction with, some prescription or over-the-counter medications.

Genes, which are inherited from your parents, carry information that determine characteristics such as eye color and blood type. Genes can also influence how you process and respond to medications.

Depending on your genetic make-up, some medications may work faster or slower, or produce more or fewer side effects.

What factors impact response to medications?
PGx testing is one tool your healthcare provider can use to help identify the right drug for you. Many factors impact how a person responds to medication including:

- Genetic factors
- Age
- Sex
- Race/ethnicity
- Illness or organ dysfunction, especially kidney or liver function
- Smoking/alcohol
- Food interactions
- Other medications

When might PGx testing be recommended or considered?
There are different reasons why your healthcare provider may order PGx testing to help guide your current or future medication use, such as:

- To avoid or prevent serious side effects related to certain medications
- To adjust the dose of a current medication or recommend a different medication
- To identify a medication, or dose of a medication, most likely to work for you before you take it

How is PGx testing done?
PGx testing can be done by providing a small sample of blood or saliva, or collecting a cheek swab for lab testing. Results for most PGx tests are available within two weeks.

How much does PGx testing cost and is it covered by insurance?
The cost varies depending on which test(s) is ordered. Depending on your policy and reasons for testing, some insurance companies may cover pharmacogenomic testing. Contact your insurance provider about coverage prior to testing if this is a concern.

Will PGx testing affect my insurance coverage?
GINA, the Genetic Information Nondiscrimination Act, prohibits medical insurance companies and employers from discriminating against individuals on the basis of genetic information, including PGx test results. [www.genome.gov/10002328/](http://www.genome.gov/10002328/)

What should I do with my results?
- **DO NOT** make any changes to your medication without talking to your healthcare provider or pharmacist.
- Share your results with your healthcare provider as part of your personal health history.

[www.genome.gov/10002328/](http://www.genome.gov/10002328/)