HOW YOUR GENETIC INFORMATION MAY BE USED AT UF HEALTH

UF Health is using knowledge resulting from pharmacogenomics research to advance health care for our patients. Guided by scientific and medical experts, UF Health identifies medications for which it is beneficial to perform a genetic test.

If your health care team believes you may need one of these medications, they may order a simple blood test through the UF Health Personalized Medicine Program. The test will show whether you have specific genetic variations known to influence the body’s response to that medication. The blood test will be processed in our lab, similar to other medical or diagnostic tests. The test results will be stored in your UF Health electronic medical record along with other information used in your care.

HOW YOUR GENETIC INFORMATION IS PROTECTED

Protecting the privacy of our patients is of utmost importance to UF Health. All of your health information, including genetic information, is protected by strict security policies and safeguards.

In addition, the federal Genetic Information Nondiscrimination Act of 2008 also protects you from discrimination on the basis of genetic information in both health insurance and employment. The law does not cover life insurance, disability insurance or long-term care insurance.

HOW TO LEARN MORE

To learn more about personalized medicine at UF Health and how your information is protected, visit our patient resources page on the UF Health Personalized Medicine Program’s website. We provide information about which medications and health care providers are part of our program, as well as links to UF Health and other resources on patient privacy and the Genetic Information Nondiscrimination Act.

personalizedmedicine.UFHealth.org

The UF Health Personalized Medicine Program is part of the UF Clinical and Translational Science Institute and has been funded to date by NIH grants U01 GM074492 and U01 HL105198 (as part of the TPP project in the NIH PPRN); NIH/NCATS UF CTSA U11 TR000064; IGNITE Network grant U01 HG007209; and substantial institutional support from the University of Florida.
WHAT IS PERSONALIZED MEDICINE?

To “personalize” or identify the preferred treatment options for individual patients, doctors typically consider a patient’s health conditions, family history and other factors such as diet or lifestyle. Advances in science and technology have made it possible to add one more piece to the puzzle: genetic variations that influence how our bodies respond to certain medicines.

Your genes influence everything from your eye color and height to your health. Through personalized medicine, also called “individualized” or “precision” medicine, your health care providers can use information about your genes alongside knowledge about your medical history to make more accurate predictions about how well certain medications are likely to work for you.

HOW YOUR GENES AFFECT YOUR RESPONSE TO MEDICATIONS

Genes, which are made of DNA, act as the instruction manual for making all of the proteins in your body. Every cell in your body depends on proteins. Proteins provide structure and support to cells, block germs from causing infection, and much more.

In some cases, variations in your genes affect proteins that process certain medications. Differences in genes can affect how well a medication works for you or how sensitive your body is to certain side effects. For some medications, screening for genetic variations can help you receive the proper dose, experience fewer side effects or avoid drugs that might not work well.

The study of how genes affect an individual’s response to medicines is called pharmacogenomics. More than a decade of pharmacogenomics research has led to a better understanding of why, when and how to use genetic information to better identify the preferred medication and dose for a patient. In recent years, for example, the U.S. Food and Drug Administration began revising its guidelines for drug labels to include information about genetic variations known to affect the body’s response to a medicine.