Helpful Websites

Iowa Institute of Human Genetics
Information for patients, health care providers, researchers, and students
>> www.medicine.uiowa.edu/humangenetics

Genetics Home Reference
Information about how genes affect your health: what genes are, how they work, and how they can cause illnesses

The Pharmacogenomics Knowledgebase
Information about how genes interact with medicines
>> www.pharmgkb.org
What is clopidogrel (Plavix®)?

- Clopidogrel (Plavix®) is a medicine used to thin your blood to prevent blood clots.
- People with heart disease take clopidogrel to prevent heart attack and stroke.

What are genes?

- Genes are short pieces of DNA that contain information about our bodies.
- Genes are passed down to us from our parents before we are born.
- Genes have DNA changes (variants) in them that determine a great deal about us, including what we look like and how our bodies react to medicine.

What is a genetic screen?

- It is a test used to show the gene changes in a person.

Why would I have a genetic screen for clopidogrel (Plavix®)?

- Your body may process clopidogrel normally, very fast, or poorly.
- The CYP2C19 gene controls how your body will process (metabolize) clopidogrel.
- The type of CYP2C19 gene you have will help your doctor decide if clopidogrel will work for you.
- Learning about your CYP2C19 gene can help your doctor choose the right medicine and the right dose for you.

How do variants in this gene affect me?

- If your CYP2C19 gene is the type that processes clopidogrel poorly, the drug will not work well for you.
- If your CYP2C19 gene is the type that processes clopidogrel too fast, you may get too much clopidogrel in your bloodstream.

What do I need to do for a genetic screen?

- You will be given a small sponge to wipe across the inside of your cheek to collect a sample of your DNA (genes).
- The sample will be used to study your CYP2C19 gene.
- You also may be asked for a sample of saliva or blood in case the sponge does not work.

How will I learn about my results?

- Your doctor or nurse can tell you the results at your next appointment.
- The results also will be in your MyChart account (mychart.uihealthcare.org).

Are there any limitations to this screen?

- This screen only looks at the four most common variants of CYP2C19.
- Other variants in CYP2C19 will not be found, but they can affect how your body will process clopidogrel.
- Please let your doctor or nurse know if you are taking other medicines.

Can my insurance get my genetic screen results?

- Yes, your insurance company can get the results of this screen from your medical records.
- We have a genetic counselor who can answer your questions about insurance companies and genetic information.