## CLOPIDOGREL (PLAVIX®)

Information about the drug and genetic variation

## What is clopidogrel?

- Clopidogrel is a medication that is used for patients with unstable angina, a condition where your heart does not receive enough blood flow or oxygen causing chest pain.
- Clopidogrel works by keeping platelets from sticking together and forming clots. This medication also helps prevent stents from "clotting off."

## Genetic Variations

- The major gene of interest with clopidogrel is <u>CYP2C19</u>.
- The gene <u>CYP2C19</u> forms an enzyme that the body uses to convert clopidogrel to its active form.

## Drug-Gene Interaction

- Patients carrying variants \*2/\*2, \*2/\*3, or \*3/\*3 have a partial or complete loss of function in the enzyme CYP219 codes for. The enzyme will not be able to properly convert clopidogrel to its active form and the medication will not work properly.
- Genetic testing can be done to see if patients have the variants listed above which do not allow clopidogrel to function properly.

If you have any more questions please visit the websites listed below or talk to a healthcare professional.

- http://drugsandgenes.com/
- https://www.pharmgkb.org