

CYP2C19: Ultrarapid metabolizer

What is CYP2C19?

CYP2C19 is a gene that provides the instructions to make the CYP2C19 enzyme, which is involved in the breakdown (metabolism) and activation of medications within the body.

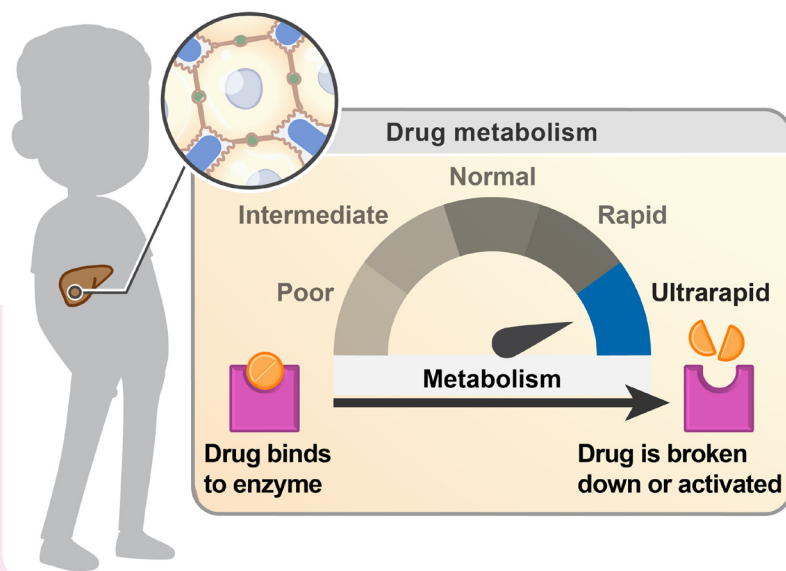
CYP2C19 metabolizer status:

Ultrarapid metabolizer

What it means: These pharmacogenetic results predicted that the CYP2C19 enzyme has **significantly increased activity**. Medication may **be broken down or activated significantly faster** than in most individuals.

Why it matters: Medication may leave the body before it can work or be activated properly.

What happens next: The health-care team may recommend **starting with a higher dose of medication or switching to a different medication** to ensure the medication works safely and effectively.



This status is not an indicator of health. The health-care team will still consider medical history and other factors to ensure the best treatment.

Example medications affected by CYP2C19

- **Abrocitinib**, a medication that treats inflammation in eczema (Janus kinase [JAK] 1 inhibitor)
- Anticonvulsants – medications that help prevent seizures (e.g., **brivaracetam**, **clobazam**)
- Antidepressants – medications that help with feeling sad or anxious
 - Selective serotonin reuptake inhibitors (SSRIs) (e.g., **citalopram**, **escitalopram**, **sertraline**)
 - Tricyclic antidepressants (TCAs) (e.g., **amitriptyline**, **clomipramine**, **doxepin**, **imipramine**, **trimipramine**)
- **Clopidogrel**, a medication that prevents blood clotting (antiplatelet agent)
- Proton pump inhibitors (PPIs) – medications that help with excess stomach acid (e.g., **dexlansoprazole**, **lansoprazole**, **omeprazole**, **pantoprazole**)
- **Voriconazole**, a medication that treats fungus growth (antifungal)

The medications listed above are referred to by their generic names. You may hear the medication called by a different brand name.