G6PD and Medications **Does it matter for me?**

The *G6PD* gene makes a protein that helps red blood cells function. Specific variants in this gene can cause G6PD deficiency, or a milder form called variable G6PD deficiency. People with these conditions may have a higher chance of hemolytic anemia, a blood problem where red blood cells break down too quickly. This can happen when taking certain medications or eating specific foods, like fava beans. Not everyone with variable G6PD deficiency will have symptoms. If symptoms do appear, they can be different for each to person

Based on your *G6PD* result below <u>and</u> if you are taking any of the associated medications please, discuss this result with your prescribing healthcare provider or pharmacist. You can print out your test result and this guide to bring to your appointment.

Healthcare providers consider many factors when prescribing a medication including health history, other medications you are taking, lifestyle factors, and genetics. **Do not change your medication habits without talking to your prescribing healthcare provider.**

| Genetic Result | Which medications can be impacted? |
|-----------------------------|--|
| No variants detected | No impact on medication decisions |
| | Anesthesia: Articaine/epinephrine (Septocaine), Bupivacaine (Exparel, Marcaine), Lidocaine (Lidocaine CV, Lidopen), Mepivacaine (Polocaine), Prilocaine (Citanest), Ropivacaine (Naropin) |
| | Antibiotics: Ceftriaxone (Rocephin, Ceftrisol Plus), Chloramphenicol (Chloromycetin), Ciprofloxac (Cetraxal), Dapsone (Aczone), Erythromycin ethylsuccinate/sulfisoxazole acetyl (Pediazole), Nalidixic acid (NegGram), Nitrofurantoin (Macrodantin, Furadantin, Macrobid), Norfloxacin (Noroxin), Ofloxacin (Ocuflox, Floxin), Sulfadiazine (Silvadene, Thermazene), Sulfamethoxazole/trimethoprim (Sulfatrim, Bactrim) |
| Variable G6PD deficiency | Antimalarials/Anti-parasites: Chloroquine (Aralen), Mefloquine (Lariam), Primaquine, Quinine (Qualaquin), Tafenoquine (Arakoda, Krintafel) |
| | Cancer treatment: Dabrafenib (Tafinlar, Rafinlar), Flutamide (Eulexin), Rasburicase (Elitek) |
| G6PD deficiency | Diabetes treatment: Chlorpropamide (Diabinese), Gliclazide (Diamicron), Glibenclamide (Glynase Glimepiride (Amaryl), Glipizide (Glucotrol), Tolazamide (Tolinase), Tolbutamide (Orinase) |
| | Digestive medications: Metoclopramide (Reglan), MoviPrep |
| | Heart medications: Amlodipine (Norvasc), Bisoprolol fumarate/perindopril arginine (Monocor, Zebeta), Nitroglycerine (Rectiv, Nitro-Time, Nitrolingual), Perindopril (Coversyl) |
| | Immunosuppressant: Hydroxychloroquine (Plaquenil, Sovuna) |
| | Pain management: Chloroprocaine (Nasacaine), Pegloticase (Krystexxa), Probenecid (Benemid), Sulfasalazine (Azulfidine) |
| | Other medications: Mafenide (Sulfamylon), Methylene blue (ProvayBlue), Oxymetazoline (Afrin, Kovanaze), Sodium nitrite (Nithiodote) |

This guide is an informational resource. Medications listed here could be impacted by specific genetic results, according to FDA drug labels, or the Clinical Pharmacogenetics Implementation Consortium (CPIC)

- www.fda.gov/medical-devices/precision-medicine/table-pharmacogenetic-associations
- cpicpgx.org/guidelines

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