

The GeneSight Test Genetic Insights for Non-Psychiatric Medications

While the GeneSight Test is intended to provide helpful information to health care providers prescribing psychotropic medications, some of the genes evaluated on the GeneSight Test play a role in the metabolism or response to a broader range of medications. For certain non-psychiatric medications, the GeneSight Test results may provide valuable insights that can be helpful to prescribers. The GeneSight Table of Additional Medications shown below includes non-psychiatric medications where Clinical Pharmacogenetics Implementation Consortium (CPIC®) Guidelines (Level A or B) or the Food and Drug Administration (FDA) Table of Pharmacogenetic Associations (Sections 1 or 2) provide potentially actionable information based on the genes evaluated by GeneSight.

If your patient's results indicate that they have a non-normal phenotype for a gene included on the GeneSight Table of Additional Medications, it may be helpful to review the relevant CPIC Guideline or FDA Table to help inform medication management. However, it is important to note that the information provided is mostly based on single gene-drug interactions, and there may be other genes involved in the metabolism or mechanism of action of these medications.

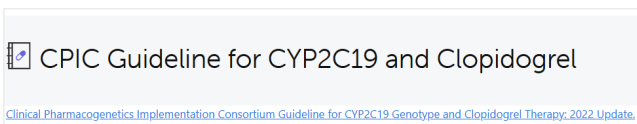
How do I Use CPIC Guidelines and the FDA Table for Medications not on the GeneSight Test?

1. Use the GeneSight Table of Additional Medications to identify whether a medication has CPIC or FDA Guidance available, then assess if the patient has a non-normal phenotype for the gene associated with that medication.
2. Visit the [CPIC Guidelines](#)¹ or [FDA Table of Pharmacogenetic Associations](#)² webpage and find the relevant information.
3. Consider the CPIC or FDA Guidance alongside other clinical factors and resources such as clinical practice guidelines.

*EXAMPLE: The medication **clopidogrel** is being considered for a **CYP2C19 poor metabolizer**.*

*Use the **Medication Category** (Cardiovascular) on the **GeneSight Table of Additional Medications** to locate the **Medication** (clopidogrel), **Gene** (CYP2C19), and **CPIC or FDA Guidance** links available. In this example, the patient's pharmacogenomic test results indicate a non-normal phenotype for CYP2C19 (poor metabolizer).*

CPIC Guideline for CYP2C19 and Clopidogrel:



ClinPGx Summary: The CPIC Dosing Guideline for clopidogrel recommends an alternative antiplatelet therapy for CYP2C19 poor or intermediate metabolizers (cardiovascular indications: prasugrel or ticagrelor if no contraindication; neurovascular indications: alternative P2Y12 inhibitor if clinically indicated and no contraindication.)

FDA Table of Pharmacogenetic Associations for CYP2C19 and Clopidogrel:

Drug	Gene	Affected Subgroups+	Description of Gene-Drug Interaction
Clopidogrel	CYP2C19	intermediate or poor metabolizers	Results in lower systemic active metabolite concentrations, lower antiplatelet response, and may result in higher cardiovascular risk. Consider use of another platelet P2Y12 inhibitor.

Have More Questions? We're Here to Help

If you have a pharmacogenomics question about a medication listed below, our GeneSight Medical Information team is available to assist you. Please reach out to us by emailing your inquiry to medinfo@genesight.com or by calling **855.891.9415**. Our team is dedicated to supporting your efforts to provide the best possible care for your patients.

References

1. CPIC® Guidelines. ClinPGx Clinical Pharmacogenomic Resource. <https://www.clinpgx.org/cpic/guidelines> [accessed March 2026]
2. Table of Pharmacogenetic Associations – U.S. Food and Drug Administration. <https://www.fda.gov/medical-devices/precision-medicine/table-pharmacogenetic-associations>

GeneSight Table of Additional Medications

Medications included on this table are approved by the FDA and have CPIC Level A/B or FDA Table Section 1/2 guidance for a Gene on the GeneSight Test.

Medication Category*	Medication Name	Gene(s)	CPIC or FDA Guidance
Anti-infectives	efavirenz voriconazole	CYP2B6 CYP2C19	CPIC Guideline FDA Table CPIC Guideline FDA Table
Antiemetic	dronabinol meclizine metoclopramide ondansetron	CYP2C9 CYP2D6 CYP2D6 CYP2D6	FDA Table FDA Table FDA Table CPIC Guideline
Antineoplastic	belzutifan erdafitinib gefitinib tamoxifen	CYP2C19 CYP2C9 CYP2D6 CYP2D6	FDA Table FDA Table FDA Table CPIC Guideline
Antiseizure	brivaracetam clobazam phenytoin/fosphenytoin	CYP2C19 CYP2C19 CYP2C9, HLA-B*15:02	FDA Table FDA Table CPIC Guideline FDA Table
Cardiovascular	carvedilol clopidogrel fluvastatin mavacamten metoprolol propafenone warfarin	CYP2D6 CYP2C19 CYP2C9 CYP2C19 CYP2D6 CYP2D6 CYP2C9	FDA Table CPIC Guideline FDA Table CPIC Guideline FDA Table CPIC Guideline FDA Table CPIC Guideline FDA Table
Dermatology	abrocitinib	CYP2C19	FDA Table
Female Sexual Dysfunction	flibanserin	CYP2C19	FDA Table
Metabolic Disorder	eliglustat nateglinide	CYP2D6 CYP2C9	FDA Table FDA Table
Movement Disorder	tetrabenazine	CYP2D6	FDA Table
Muscarinic Receptor Agonist	cevimeline	CYP2D6	FDA Table
Narcolepsy	pitolisant	CYP2D6	FDA Table
Neuroimmune	siponimod	CYP2C9	FDA Table
Neuroleptic	pimozide	CYP2D6	FDA Table
NSAIDs (non-steroidal anti-inflammatory drugs)	celecoxib flurbiprofen ibuprofen meloxicam piroxicam	CYP2C9 CYP2C9 CYP2C9 CYP2C9 CYP2C9	CPIC Guideline FDA Table CPIC Guideline FDA Table CPIC Guideline CPIC Guideline FDA Table CPIC Guideline FDA Table
Opioid Analgesics	codeine hydrocodone olicecidine tramadol	CYP2D6 CYP2D6 CYP2D6 CYP2D6	CPIC Guideline FDA Table CPIC Guideline FDA Table CPIC Guideline FDA Table
Opioid Withdrawal	lofexidine	CYP2D6	FDA Table
Overactive Bladder	tolterodine	CYP2D6	FDA Table
PPIs (proton pump inhibitors)	lansoprazole omeprazole pantoprazole dexlansoprazole	CYP2C19 CYP2C19 CYP2C19 CYP2C19	CPIC Guideline CPIC Guideline CPIC Guideline FDA Table CPIC Guideline

* The medications listed in this document are grouped into broader categories based on their FDA-approved indications and other therapeutic classification information. While many of these medications have multiple uses and may belong to more specific pharmacologic subclasses, they have been consolidated into broader categories for clarity and ease of reference. This organizational approach is intended solely to enhance usability and does not replace the detailed classifications provided in individual prescribing information.

Content provided from CPIC Guidelines and the FDA Table of Pharmacogenetic Associations are subject to updates and modifications. Users should refer to <https://www.clinpgx.org/cpic> or <https://www.fda.gov/medical-devices/precision-medicine/table-pharmacogenetic-associations> to confirm they are accessing the most current content. Evaluation of PGx data may lead to different interpretations by expert PGx groups, evidence grading bodies, or PGx companies. GeneSight genotype to phenotype conversion may not be consistent with CPIC genotype to phenotype conversion in all cases. The pharmacogenomic insights described in this white paper are derived solely from established genotype-phenotype relationships. These analyses do not account for phenoconversion or variability in drug response arising from drug-drug interactions, age-related changes, disease states, organ function, environmental influences, or other clinical factors. As such, the information contained herein should be interpreted within the context of a comprehensive medical assessment.