

# Gene and Drug Lists

## GENE PANEL

The Tempus|nP test reports on the following 15 genes. Information about these genes and their relevance to pharmacogenomics can be found in a variety of publicly available sources, such as [ClinGen](#), [GeneCards](#), [PharmGKB](#), and more.

<a href="#">CYP1A2</a>	<a href="#">CYP2C19</a>	<a href="#">CYP3A5</a>	<a href="#">HTR2A</a>	<a href="#">UGT2B15</a>
<a href="#">CYP2B6</a>	<a href="#">CYP2D6</a>	<a href="#">HLA-A</a>	<a href="#">SLC6A4</a>	<a href="#">COMT</a>
<a href="#">CYP2C9</a>	<a href="#">CYP3A4</a>	<a href="#">HLA-B</a>	<a href="#">UGT1A4</a>	<a href="#">MTHFR</a>

\*If viewing this electronically, each gene is hyperlinked to the relevant content from [pharmGKB.org](http://pharmGKB.org).

## DRUG LIST

The reference information provides classifications for the following list of medications. Providers should use their clinical judgment to select which medication they think is appropriate for their patient, based on their unique clinical history. This list is not exhaustive and these medications are only provided as support for clinician decision making.

Abacavir	Clopidogrel	Fluphenazine	Olanzapine	Tetrabenazine
Allopurinol	Clorazepate	Fluvoxamine	Oxazepam	Thioridazine
Alprazolam	Clozapine	Gabapentin	Oxcarbazepine	Thiothixene
Amitriptyline	Codein	Haloperidol	Paliperidone	Topiramate
Amoxapine	Desipramine	Iloperidone	Paroxetine	Tramadol
Aripiprazole	Desvenlafaxine	Imipramine	Perampanel	Tranylcypromine
Asenapine	Deutetrabenazine	Isocarboxazid	Perphenazine	Trazodone
Aspirin	Dextroamphetamine	Lacosamide	Phenelzine	Triazolam
Atomoxetine	Dextroamphetamine/ Amphetamine	Lamotrigine	Phenobarbital	Trifluoperazine
Brexanolone	Dextromethorphan/ quinidine	Levetiracetam	Phenytoin	Trimipramine
Brexipiprazole		Levomilnacipran	Pimavanserin	Valbenazine
Bupropion	Diazepam	Lisdexamfetamine	Pregabalin	Valproic acid
Buspirone	Doxepin	Lithium	Propranolol	Venlafaxine
Carbamazepine	Duloxetine	Lorazepam	Protriptyline	Vilazodone
Cariprazine	Epidiolex	Loxapine	Quetiapine	Voriconazole
Chlordiazepoxide	Escitalopram	Lurasidone	Ramelteon	Vortioxetine
Chlorpromazine	Esketamine	Maprotiline	Risperidone	Ziprasidone
Citalopram	Eszopiclone	Milnacipran	Selegiline	Zolpidem
Clobazam	Felbamate	Mirtazapine	Sertraline	Zonisamide
Clomipramine	Fluoxetine	Nefazodone	Tamoxifen	
Clonazepam		Nortriptyline	Temazepam	

## **SOURCES**

The reference information surfaces classifications from the following publicly available sources. Clear distinction between levels of evidence supporting the pharmacogenetic results and the interpretation of these results is provided. The ordering physician should interpret these sources in the context of their patient's full medical history.

### **U.S Food and Drug Administration (FDA)**

Over 250 medications have information concerning pharmacogenomic biomarkers in their FDA drug labeling. These range from dosing considerations and risk for adverse events to explicit contraindications.

### **Clinical Pharmacogenetics Implementation Consortium (CPIC)**

CPIC releases guidelines to help clinicians understand how certain pharmacogenomic results can be used to optimize therapy. Evidence for associations between genotypes and certain medications are graded based on the strength of the association

### **Dutch Pharmacogenetics Working Group (DPWG)**

The Dutch Pharmacogenetics Working Group (DPWG) is a professional organization formed in part to help make pharmacogenomics based drug recommendations, based on existing studies and literature. The group is multidisciplinary and contains chemists, pharmacists, pharmacologists, physicians, and toxicologists.

### **Primary Scientific Literature (PMID)**

Clinical studies can be used to identify associations between certain genes and medications in a patient population. Such studies can include pharmacokinetic analyses, inducer/inhibitor studies, or other drug interaction studies. Studies are reported by their PubMed Identifier (PMID).