

VARIABILITY IN DRUG EFFICACY AND DRUG SAFETY IS A LEADING CHALLENGE IN CURRENT CLINICAL PRACTICE

	59% of American adults take at least one medication, and 15% take 5 or more ¹		\$3.5 billion is spent on extra medical costs for adverse drug events annually ³
	1.1 million emergency department visits and 272,000 hospitalizations are due to adverse drug events annually ²		Pre-emptive pharmacogenomic testing prevents 20% of adverse drug events ⁴

Help predict a patient’s medical and pharmaceutical response

Pharmacogenomics is an important tool in helping to understand how patients metabolize medications based on their DNA, and it is a pillar in the personalized medicine movement. 2 out of 3 individuals take medications that are impacted by pharmacogenomics.⁵



Our testing is flexible with ordering options by category or comprehensive panels.

Using a patient’s DNA sample and an accompanying list of current medications, the pharmacogenomics test report indicates guidance levels based on a patient’s genotype:

	Medication has potentially reduced efficacy or increased toxicity, or the patient has an increased risk for the indicated condition
	Guidelines exist for adjusting dosage or increased vigilance, or the patient has a moderate risk for the indicated condition
	Medication can be prescribed according to standard regimens, or the patient’s risk for the indicated condition is not increased

We include the pharmacogenomic information for many FDA- approved drugs' labeling in our panels and specify actions to be taken based on the biomarker information. ⁶

PANEL	CLASS OF MEDICATIONS	# OF MEDICATIONS	SELECTION OF MEDICATIONS	GENES
CARDIOVASCULAR	Angiotensin II antagonist, anti-anginal, anticoagulant antiplatelet, blockers, statins	35	Carvediolol, clopidogrel, metoprolol, prasugrel, propafenone, propranolol, ticagrelor, simvastin, warfarin	Cytochrome p450 (CYP), VKORC1, SLCO1B1
PAIN	Fibromyalgia, muscle relaxants, NSAIDs, opioids	35	Carisoprodol, Celecoxib, Codeine, Diclofenac, Dihydrocodeine, Fentanyl, Flurbiprofen, Hydrocodone, Ibuprofen, Indomethacin, Meloxicam, Methadone, Morphine, Oxycodone, Piroxicam, Tizanidine, Tramadol	Cytochrome p450 (CYP) OPRM1, COMT
PSYCHOTROPIC	Anti- depressants, ADHD, anti-seizure, dementia, antidepressants, antipsychotic, benzodiazepine	95	Amitriptyline, atomoxetine, citalopram, diazepam, doxepin, fluoxetine, paroxetine, perphenazine, pimozide, protriptyline, risperidone, trimipramine, venlafaxine	Cytochrome p450 (CYP), OPRM1
COMPREHENSIVE	Cardiovascular, pain, psychotropic, diabetes, gastrointestinal, infections, urologicals	200	Chlorpropamide, Darifenacin, Dexlansoprazole, Dolasetron, Esomeprazole, Fesoterodine, Glimepiride, Glipizide, Glyburide, Lansoprazole, Metoclopramide, Mirabegron, Omeprazole, Ondansetron, Palonosetron, Pantoprazole, Rabeprazole, Ondansetron, Palonosetron, Pantoprazole, Rabeprazole, Tamulosin, Tollerodine, Voriconazole	Includes all genes

PHARMACOGENOMICS TESTING PROCESS

THE PROCESS	The DNA collection procedure is simple and requires only an in-office buccal (cheek) swab with our sample collection kit. UPS will pick up your patient samples and deliver them directly to our lab (labels and instructions are included in each kit). Dedicated account services are always available to answer questions and manage requests.
THE TURNAROUND TIME	7 to 10 days
THE REPORT	Upon completion of DNA extraction and evaluation at our advanced laboratory facility, a comprehensive report is generated and uploaded to a secure portal with dedicated physician log-in and downloading capabilities. Physician-to-physician consultation is also available with our Medical Director or our Genetic Counselor. Monograph is available upon request.

**Talk to your representative or visit www.PremierGx.com for our full catalog of genetic testing solutions.
Personalized Genetic Medicine // Inherited Genetic Disorders // Women's Genetic Health**

ABOUT PREMIER GENOMICS

Premier Genomics is committed to advancing the field of personalized genetic medicine by offering cutting-edge genetic screening services to help practitioners and their patients in pursuit of tailored treatment and optimized, personalized health care. We work together with patients and their insurance providers to help ensure that access to these important genetic tests does not cause patients financial hardship.



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CLIA-accredited, CAP-certified clinical laboratory

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