# **PHARMACOGENOMICS**

#### What is Pharmacogenomics?

Pharmacogenomics is the relationship between a patient's unique genetic makeup and their response to certain

medications. Genetic mutations can cause either higher or lower rates of metabolism for known drugs. According to the FDA, each year, approximately 4.5 million Americans visit

their doctors or the emergency room due to adverse drug reactions.

#### How will Pharmacogenomics benefit my patients?

Aeon's PGx Advantage<sup>™</sup> test will provide a comprehensive report based on an individual patient's genetic makeup that will indicate metabolic rates for defined medications. This information will help clinicians prescribe the **right drug** at the **right dose** based on your patient's DNA profile.

### Why trust Aeon with your Pharmacogenomics testing?

Aeon uses the latest in high-throughput DNA sequencing technology to analyze patient samples in an expedient and precise approach. All genetic scientists at Aeon are highly trained, handle testing with the utmost care, and are always available for in-depth consultations. Aeon pharmacogenomics reports are easy to read and provide you with clinically significant data based on the most recent medical innovations.

**Prescribe with Confidence**® using Aeon's PGx Advantage™ testing services.





## **PGx Advantage™ Options**

Category	Drug Class	Generic Name	Trade Name	Gene
Cardiovascular	Angiotensin II Receptor Antagonists	Losartan	Cozarr	CYP2C9
Cardiovascular	Antianginal Agents	Ranolazine	Ranexa	CYP2D6
Cardiovascular	Antiarrhythmics	Flecainide	Tambocor	CYP2D6
Cardiovascular	Anticoagulants	Warfarin	Coumadin	CYP2C9
Cardiovascular	Antiplatelets	Clopidogrel	Plavix	CYP2C19
Cardiovascular	Beta Blockers	Metoprolol	Lopressor	CYP2D6
Cardiovascular	Diuretics	Torsemide	Demadex	CYP2C9
Cardiovascular	Statins	Simvastatin	Zocor	SLC01B1
Diabetes	Meglitinides	Nateglinide	Starlix	SLC01B1, CYP2C9
Diabetes	Sulfonylureas	Glimepiride	Amaryl	CYP2C9
Gastrointestinal	Antiemetics	Dolasetron	Anzemet	CYP2D6
Gastrointestinal	Proton Pump Inhibitors	Lansoprazole	Prevacid	CYP2C19
Infections	Antifungals	Voriconazole	Vfend	CYP2C19
Infections	Antimalarials	Proguanil	Malarone	CYP2C9
Pain	Muscle Relaxants	Carisoprodol	Soma	CYP2C19
Pain	NSAIDs	Celecoxib	Celebrex	CYP2C9
Pain	Opioids	Hydrocodone	Vicodin	CYP2D6
Pain	Antiaddictives	Naltrexone	Contrave	OPRM1
Psychotropic	Anti-ADHD	Amphetamine	Adderall	COMT
Psychotropic	Anticonvulsants	Phenytoin	Dilantin	CYP2C9
Psychotropic	Antidementia Agents	Donepezil	Aricept	CYP2D6
Psychotropic	Antidepressants	Sertraline	Zoloft	CYP2C19
Psychotropic	Antipsychotics	Aripiprazole	Abilify	CYP2D6
Psychotropic	Benzodiazepines	Diazepam	Valium	CYP2C19
Psychotropic	Other Neurological agents	Filbanserin	Addyi	CYP2D6
Rheumatology	Immunomodulators	Leflunomide	Arava	CYP2C19
Transplantation	Immunosupressants	Tacrolimus	Prograf	CYP3A5
Urologicals	5-AlphaReductase Inhibitors	Dutasteride	Avodart	CYP3A4
Urologicals	Alpha-Blockers for Hyperplasia	Alfuzosin	Uroxatral	CYP3A4
Urologicals	Antispasmodics	Oxybutynin	Ditropan	CYP3A4
Urologicals	Phosphodiesterase	Avanafil	Stendra	CYP3A4

<sup>\*</sup>The above listing is not inclusive of all drugs or genes tested, but does include all drug classes tested in Aeon's PGx Advantage™ test.