PHD LABORATORY

PATIENT INFORMATION
NAME: PGX1-A 1 PGX1-A 1
DOB:
SEX AT BIRTH: Unknown

SPECIMEN DETAILS
BARCODE: X241300004
SAMPLE ID: X241300004
TYPE: Saliva
COLLECTED: 08/May/2024

ORDERED BY

REPORT GENERATED: 09/May/2024

This pharmacogenetic information is based on best evidence compiled from guidelines and databases including the FDA Table of Pharmacogenetic Associations and the Clinical Pharmacogenetics Implementation Consortium (CPIC). In some cases, PharmGKB and the Dutch Pharmacogenetics Working Group (DPWG) may also be referenced.
Please refer to the Methods, Limitations, and Liability Disclaimer at the end of this report.

Current Medications Impacted In This Report

The medications listed below indicate the patient's **Current Medications** impacted in this report.

No current medications impacted in this report.

Summary of Genetic Lab Data & Phenotypes

Gene	Allele Result	Phenotype Result
CYP 3A4	*1A/*1A	Norm al Metabolizer
CYP 2D6	*4/*41	Interm ediate Metabolizer
CYP 2C 9	*1/*1	Norm al Metabolizer
CYP 2C 19	*2/*7	Poor Metabolizer
SLCO 1B1	*1/*37	Norm al Function
CYP 2B6	*1/*6	Interm ediate Metabolizer
CYP 3A5	*3/*3	Poor Metabolizer
DPYD	*1/*1	Norm al Metabolizer
NUDT15	*1/*1	Norm al Metabolizer
TPMT	*1/*1	Norm al Metabolizer

This is a short summary of the full medication report. The patient's results are now accessible within the clinical decision support software, TreatGx and ReviewGx, and can be used with other clinical information to enable precision prescribing and medication management. The final genotype/phenotype call is at the discretion of the laboratory director. Medication changes should only be initiated at the discretion of the patient's healthcare provider after a full assessment.

Methodology

Array based assays detect listed alleles, including all common and most rare variants with known clinical significance at analytical sensitivity and specificity >99%.

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Limitation

This test will not detect all the known alleles that result in altered or inactive tested genes. This test does not account for all individual variations in the individual tested. Absence of a detectable gene mutation does not rule out the possibility that a patient has different phenotypes due to the presence of an undetected polymorphism or due to other factors such as drug-drug interactions, comorbidities, and lifestyle habits.

Lab Disclaimer

Nucleic acid was extracted via magnetic bead-based, solid-phase commercially available technology and reagents. Genotyping was performed by qPCR for the alleles and targets listed on the report, and that passed QC. Genotype and drug metabolism association is made using commercially available software and recommendations from CPIC and PharmGKB. This test does not assay all known alleles that result in altered or inactive function and is limited to the alleles and targets listed on the report. Alleles that re "no-call" or failed QC are not analyzed. Absence of a detectable gene mutation does not rule out the possibility that the patient has a phenotype due to the presence of an undetected polymorphism or due to other factors such as drug-drug interactions, comorbidities, and lifestyle habits. The performance characteristics of this test were determined by Ph.D. Laboratories (CLIA: 34D2214106, COLA: 30912). It has not been cleared or approved by the U.S. Food and Drug Administration (FDA). The FDA has determined that such clearance or approval is not necessary. This test is for clinical purposes only and not for investigational and/or research use. The laboratory is regulated under the Clinical Laboratory improvement Act of 1988 as qualified to perform high complexity testing.

09/May/2024

Date of Signature

Cynthe L Sims PhD, HCLD(ABB),
Laboratory Director, MD, FRCP(C),
FRSC, ABIM, CLIA #34D2214106

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	1 Mild or no known interaction	2 Moderate gene-drug interaction: Consider alternative medications	2 Moderate gene-drug interaction: May require an increased dose	2 Moderate gene-drug interaction: May require a reduced dose	2 Moderate gene-drug interaction: May reduce efficacy	2 Moderate gene-drug interaction: May increase adverse events	3 Serious drug-gene interaction: evaluate and consider alternative medications
Analgesia	Alfentanil Carisoprodol Celecoxib Codeine Fentanyl Flurbiprofen Hydrocodone Ibuprofen Meloxicam Morphine Piroxicam Tenoxicam Tramadol Venlafaxine			Desipramine Nortriptyline		Desipramine Nortriptyline	Amitriptyline Imipramine
Autoimmune	Azathioprine Cyclosporine Mercaptopurine Siponimod Tacrolimus Thioguanine						
Cancer	Capecitabine Erdafitinib	Tamoxifen	Tamoxifen		Tamoxifen		

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1 Mild or no known interaction

2 Moderate gene-drug interaction

3 Serious drug-gene interaction: evaluate and consider alternative medications

		Consider alternative medications	May require an increased dose	May require a reduced dose	May reduce efficacy	May increase adverse events	
	Fluorouracil Mercaptopurine Thioguanine						
Cardiovascular	Atorvastatin Carvedilol Fluvastatin Lovastatin Nebivolol Pitavastatin Pravastatin Propranolol Rosuvastatin Simvastatin		Warfarin	Flecainide Warfarin	Flecainide Metoprolol Propafenone Warfarin	Flecainide Metoprolol Propafenone Warfarin	Clopidogrel
Gastroenterology	Dronabinol Metoclopramide Ondansetron			Dexlansoprazole Lansoprazole Meclizine Omeprazole Pantoprazole	Dexlansoprazole Lansoprazole Meclizine Omeprazole Pantoprazole	Dexlansoprazole Lansoprazole Meclizine Omeprazole Pantoprazole	
Infection		Voriconazole		Efavirenz	Voriconazole	Efavirenz Voriconazole	
Mental Health	Alprazolam Amoxapine	Citalopram Escitalopram		Atomoxetine Citalopram	Atomoxetine	Aripiprazole Asenapine	Amitriptyline Clomipramine

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Mild or no known interaction	Moderate gene-drug interaction					Serious drug-gene interaction: evaluate and consider alternative medications
	Consider alternative medications	May require an increased dose	May require a reduced dose	May reduce efficacy	May increase adverse events	
Amphetamine	Sertraline		Clobazam		Atomoxetine	Doxepin
Aripiprazole lauroxil			Desipramine		Brexpiprazole	Imipramine
Bromazepam			Escitalopram		Cariprazine	Trimipramine
Chlordiazepoxide			Nortriptyline		Chlorpromazine	Zuclopenthixol
Clonazepam			Paroxetine		Citalopram	
Clorazepate			Sertraline		Clobazam	
Diazepam					Clozapine	
Flurazepam					Desipramine	
Lofexidine					Escitalopram	
Lorazepam					Flupentixol	
Nitrazepam					Fluphenazine	
Oxazepam					Fluvoxamine	
Protriptyline					Haloperidol	
Risperidone					Iloperidone	
Temazepam					Loxapine	
Triazolam					Lurasidone	
Venlafaxine					Methotrimeprazine	
					Molindone	
					Nortriptyline	
					Olanzapine	
					Paliperidone	
					Paroxetine	
					Perphenazine	
					Pimozide	
					Prochlorperazine	
					Promethazine	
					Quetiapine	

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						Sertraline Thioridazine Trifluoperazine Vortioxetine Ziprasidone	
Neurology	Clonazepam Deutetrabenazine Diazepam Donepezil Fosphenytoin Galantamine Phenytoin Propranolol Tetrabenazine Valbenazine Venlafaxine			Brivaracetam Clobazam Desipramine Nortriptyline	Brivaracetam Metoprolol	Brivaracetam Clobazam Desipramine Metoprolol Nortriptyline	Amitriptyline
Other	Avatrombopag Cevimeline Elagolix Eltrombopag Oral contraceptives			Flibanserin	Flibanserin	Flibanserin	Eliglustat
Respiratory	Formoterol Salmeterol						

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Rheumatology							
	Azathioprine						
	Celecoxib						
	Flurbiprofen						
	Ibuprofen						
	Meloxicam						
	Piroxicam						
	Tenoxicam						
Urology							
	Darifenacin						
	Fesoterodine						
	Mirabegron						
	Tamsulosin						
	Tolterodine						