

INTRODUCING OUR NEW PHARMACOGENOMICS PGX120 PANEL

Pharmacogenomic testing aims to identify unique genetic changes that can be used to predict a patient's response to certain medications, as well as their risk of developing adverse drug reactions. Ampath Laboratories is proud to announce the upgrading of its existing PGx60 panel to the new and more comprehensive PGx120 Pharmacogenomics panel. Our newly upgraded panel provides genotype-based dosing guidance for 15 additional frequently prescribed medications (150 in total) across various clinical disciplines, as outlined below. Several new pharmacogenes have been added (+23), as well as numerous additional alleles of previously reported genes, including those that are known to be more prevalent in our African population groups. Our upgraded panel is offered at the same price and using the same test mnemonic.

TABLE 1: PGX120 PANEL – MEDICATIONS WITH GENOTYPE-BASED DOSING GUIDELINES

Antihistamines	Gastrointestinal	Oncology	Psychotropics	Psychotropics (cont.)	Transplant medicine
Histamine receptor antagonists • Meclizine	Antiemetics • Dolasetron • Dronabinol • Fosnetupitant/ Palonosetron • Granisetron • Metoclopramide • Netupitant/ Palonosetron • Ondansetron • Palonosetron	Anti-estrogens • Tamoxifen	Anti-addictives • Bupropion • Lofexidine • Naltrexone*	Antipsychotics • Aripiprazole • Brexpiprazole • Chlorpromazine • Clozapine • Haloperidol • Iloperidone • Olanzapine • Paliperidone • Perphenazine • Pimozide • Risperidone* • Thioridazine • Zuclopenthixol	Immunosuppressants • Tacrolimus
Cardiovascular		Anifolates • Methotrexate	Anti-ADHD agents • Amphetamine • Atomoxetine • Dexamethylphenidate • Dextroamphetamine • Lisdexamfetamine • Methylphenidate	Urologicals	
Angiotensin II receptor antagonists • Azilsartan • Irbesartan • Losartan		Fluoropyrimidines • Capecitabine* • Fluorouracil*		Alpha-blockers for benign prostatic hyperplasia • Tamsulosin	
Antianginal agents • Ranolazine	Proton pump inhibitor • Dexlansoprazole • Esomeprazole • Lansoprazole • Omeprazole • Pantoprazole • Rabeprazole	Protein kinase inhibitors • Erdafitinib • Gefitinib	Anticonvulsants • Brivaracetam • Fosphenytoin • Phenobarbital • Phenytoin • Primidone • Zonisamide	Antispasmodics for overactive bladder • Darifenacin • Fesoterodine • Mirabegron • Tolterodine	
Antiarrhythmics • Flecainide • Mexiletine • Propafenone		Taxanes • Paclitaxel*		Benzodiazepines • Clobazam • Diazepam • Lorazepam* • Oxazepam*	
Anticoagulants • Warfarin	Gaucher's disease	Thiopurines • Azathioprine • Mercaptopurine • Thioguanine	Antidementia agents • Donepezil • Galantamine	Other neurological agents • Deutetrabenazine • Dextromethorphan/ Quinidine • Flibanserin • Tetrabenazine • Valbenazine	
Antiplatelets • Clopidogrel	Endocrine-metabolic • Eliglustat	Pain	Antidepressants • Amitriptyline • Amoxapine • Clomipramine • Citalopram • Desipramine • Desvenlafaxine • Doxepin • Escitalopram • Fluoxetine • Fluvoxamine • Imipramine • Maprotiline • Nefazodone • Nortriptyline • Paroxetine • Protriptyline • Sertraline • Trimipramine • Venlafaxine • Vortioxetine	Rheumatology	
Beta blockers • Carvedilol • Metoprolol • Nebivolol • Propranolol • Timolol	Gynaecology	Muscle relaxants • Carisoprodol • Tizanidine		Antihyperuricemics and anti-gout agents • Allopurinol* • Lesinurad	
Diuretics • Torsemide	Endometriosis pain agents • Elagolix	NSAIDs • Celecoxib • Flurbiprofen • Ibuprofen • Lornoxicam • Meloxicam • Piroxicam		Immunomodulators • Leflunomide	
Statins • Atorvastatin • Fluvastatin • Lovastatin • Pitavastatin • Pravastatin* • Rosuvastatin* • Simvastatin	Haematology	Opioids • Benzhydrocodone • Codeine • Dihydrocodeine • Fentanyl* • Hydrocodone • Methadone • Morphine • Oliceridine • Oxycodone • Tramadol		Other antirheumatic agents • Sulfasalazine*	
Diabetics	Haemostatic agents • Avatrombopag • Eltrombopag • Luspitrombopag			Sjogren's Syndrome	
Meglitinides • Nateglinide • Repaglinide*	Infections			Cholinergic agonists • Cevimeline	
Thiazolidinediones • Pioglitazone* • Rosiglitazone*	Antifungals • Flucytosine* • Voriconazole			Sleep disorder	
	Anti-HIV agents • Efavirenz			Narcoleptic agents • Pitolisant	
	Multiple sclerosis				
	Disease-modifying agents • Siponimod				

*Newly-included medications

ADDITIONAL INFORMATION

Genes targeted [36]	ABCB1, ABCG2, ADRA2A, ADRB2, ANKK1, APOE, C11orf65, COMT, CYP1A2, CYP2B6, CYP2C, CYP2C8, CYP2C9, CYP2C19, CYP2D6, CYP3A4, CYP3A5, CYP4F2, DPYD, DRD2, EPHX1, F2, F5, GRIK4, HTR1A, HTR2A, HTR2C, ITGB3, MTHFR, NUDT15, OPRM1, SLC6A2, SLCO1B1, TPMT, UGT2B15, VKORC1
Sample type	Buccal swab or peripheral blood sample (EDTA)
Mnemonic	PHARMA
Cash price	R2 641.00*
Turnaround time	10 working days from sample being received at the NRL Genetics Laboratory

*Price valid until 31 December 2023

For more information or assistance please email pgx@ampath.co.za.