

Medication	Gene(s)
Cardiology	
Carvedilol	CYP2D6
Clopidogrel	CYP2C19
Flecainide	CYP2D6
Metoprolol	CYP2D6
Warfarin	VKORC1, CYP2C9
Lipid Lowering Medication	
Atorvastatin	SLCO1B1, CYP3A4
Fluvastatin	SLCO1B1, CYP2C9
Lovastatin	SLCO1B1
Pitavastatin	SLCO1B1
Pravastatin	SLCO1B1
Rosuvastatin	SLCO1B1
Simvastatin	SLCO1B1
Gastroenterology	
Anti-Emetic	
Metoclopramide	CYP2D6
Ondansetron	CYP2D6
Tropisetron	CYP2D6
Proton Pump Inhibitors	
Esomeprazole	CYP2C19
Lansoprazole	CYP2C19
Omeprazole (Losec)	CYP2C19
Pantoprazole	CYP2C19
Rabeprazole	CYP2C19
Mental Health	
Anti-ADHD	
Atomoxetine	CYP2D6
Anti-Depressants (MOAs)	
Moclobemide	CYP2C19
Anti-Depressants (SNRIs)	
Venlafaxine	CYP2D6
Anti-Depressants (SSRIs)	
Citalopram	CYP2C19
Escitalopram	CYP2C19
Fluvoxamine	CYP2D6
Paroxetine	CYP2D6
Sertraline (Zoloft)	CYP2C19

Please note that this is a guide for gene selection. The test is not intended to cover possible allergies to certain drugs. Due to a lack of evidence, some specific medications may not be reported even if they are part of the same drug class that is metabolised by the relevant gene.

*The following genes are not included in our Comprehensive PGx Gene Panel and need to be ordered individually: UGT1A1, TPMT and DPYD.

Medication	Gene(s)
Mental Health	
Anti-Depressants (TCAs)	
Amitriptyline	CYP2D6, CYP2C19
Clomipramine	CYP2D6, CYP2C19
Desipramine	CYP2D6, CYP2C19
Doxepin	CYP2D6, CYP2C19
Imipramine	CYP2D6, CYP2C19
Nortriptyline	CYP2D6
Trimipramine	CYP2D6, CYP2C19
Anti-Depressants (Other)	
Vortioxetine	CYP2D6
Anti-Psychotics	
Aripiprazole	CYP2D6
Brexpiprazole	CYP2D6
Haloperidol	CYP2D6
Quetiapine	CYP3A4
Risperidone	CYP2D6
Zuclopenthixol	CYP2D6
Benzodiazepines (Anxiolytics)	
Clobazam	CYP2C19
Diazepam (Valium)	CYP2C19
Neurology	
Anti-Dementia	
Donepezil	CYP2D6
Galantamine	CYP2D6
Anti-Epileptics	
Phenytoin/ Fosphenytoin	CYP2C9
Multiple Sclerosis	
Siponimod	CYP2C9

Medication	Gene(s)
Oncology	
Atazanavir	UGT1A1*
Azathioprine	TPMT*
Belinostat	UGT1A1*
Binimetinib	UGT1A1*
Capecitabine	DPYD*
Cisplatin	TPMT*
Gefitinib	CYP2D6
Irinotecan	UGT1A1*
Mercaptopurine	TPMT*
Nilotinib	UGT1A1
Pazopanib	UGT1A1*
Tamoxifen	CYP2D6
Tegafur	DPYD*
Thioguanine	TPMT*
5-Fluorouracil	DPYD*
Organ Transplant	
Tacrolimus	CYP3A5
Pain Management	
NSAIDs	
Celecoxib	CYP2C9
Flurbiprofen	CYP2C9
Ibuprofen	CYP2C9
Piroxicam	CYP2C9
Meloxicam	CYP2C9
Opioids	
Codeine (prodrug)	CYP2D6
Dihydrocodeine	CYP2D6
Tramadol	CYP2D6
Urology	
Darifenacin	CYP2D6
Mirabegron	CYP2D6
Tamsulosin	CYP2D6
Tolterodine	CYP2D6
Anti-Fungal	
Voriconazol	CYP2C19

About the author:



Assoc. Prof. Mirette Saad

MBBS (HONS) MD (HONS) MAACB FRCPA PHD

National Director of Molecular Genetics
Australian Clinical Labs

Lab: Clayton (Vic)

Speciality: Chemical Pathology

Areas of Interest: Molecular genetics, precision medicine, cancer genetics, antenatal screening, NIPT, endocrine, fertility testing and research, medical teaching

Phone: (03) 9538 6777

Email: mirette.saad@clinicallabs.com.au