medcheck from dnalife

**PATIENT INFORMATION**

**NAME:** Sample Patient
**DOB:** 15/Nov/1984
**SEX AT BIRTH:** Female

**SPECIMEN DETAILS**

**BARCODE:** TST-NL-000000
**SAMPLE ID:** 34027
**TYPE:** DBS
**COLLECTED:** 01/Oct/2025

**ORDERED BY**

**Sample Practitioner**
**GENERATED:** 11/Nov/2025

# Summary of Genetic and Phenotype Data

| Gene | Genotype Result | Phenotype Result OR Genotype Explanation |
|---|---|---|
| CYP3A4 | *1/*1 | Normal Metabolizer |
| CYP2D6 | *4/*41 | Intermediate Metabolizer |
| CYP2C9 | *1/*1 | Normal Metabolizer |
| CYP2C19 | *1/*1 | Normal Metabolizer |
| SLCO1B1 | *1/*1 | Normal Function |
| CYP2B6 | *1/*9 | Intermediate Metabolizer |
| CYP3A5 | *3/*3 | Poor 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.**

## Methods

DNA was extracted from dried blood spot (DBS) card by Chemagic 360 system (Revvity) and processed in a SmartChip system (Takara Bio) with Thermo Fisher Scientific TaqMan Assays.

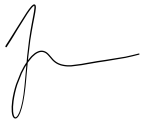
## Limitations

The annotations and interpretations provided in this report are based on scientific literature and do not take into account drug-drug interactions, medical conditions or other clinical factors that may affect medication response. Gene-drug interactions are ranked according to guidelines, level of evidence and clinical utility. GenXys reports and TreatGx Clinical Decision Support are regularly updated. Current predicted phenotype and allele functionality may change in the future depending on new evidence. Phenotype annotations for CYP2C9 are based on total activity scores as defined by CPIC[79]. Genetic test results and interpretation may be inaccurate for individuals who have undergone or are receiving non-autologous blood transfusion, tissue, or organ transplant therapies.

The report includes alleles of proteins involved in the metabolism of many medications. In rare cases, a variant that is not covered may be typed as *1 or other variants. In the case of pseudogenes and mutations in the untranslated regions of genes, incorrect allele typing may occur despite proper SNP detection. Preferential amplification of one allele over another present in the sample may also lead to incorrect genotyping.

## Liability Disclaimer

This test was developed and its performance characteristics determined by GenXys Health Care Systems. It has not been cleared or approved by the US Food and Drug Administration. The report is not a diagnostic test, and TreatGx is not a prescribing system. You should discuss your pharmacogenetic information with a physician or other health care provider before you act upon the pharmacogenetic information resulting from this report. The medication brand names are not an exhaustive list and do not include combination therapies. Not all medications in this report are included in the TreatGx or ReviewGx software or other GenXys derivative works.



Dr Juha Matilainen, PhD, Laboratory Director

11/Nov/2025

Date of Signature

# Medication Summary Table

**The Medication Summary Table lists medications with pharmacogenetic associations, organized by therapeutic area and drug-gene interaction severity. Some medications appear in multiple columns within moderate drug-gene interactions due to various possible effects or associations with multiple genes. The highest severity is prioritized (moderate/severe) from all relevant sources and genes for a medication.**
**Warfarin appears in multiple columns because its dosing cannot be predicted based on PGx alone and other factors may increase or reduce dose requirement. See Medication Report for full details.**
*** Indicates current medications**

| | 1 Mild or no drug-gene interaction: no PGx-based action; standard precautions apply | 2 Moderate drug-gene interaction: Consider alternative medications | 2 Moderate drug-gene interaction: May require an increased dose | 2 Moderate drug-gene interaction: May require a reduced dose | 2 Moderate drug-gene interaction: May reduce efficacy | 2 Moderate drug-gene interaction: May increase adverse events | 3 Serious drug-gene interaction: avoid/select alternative |
|---|---|---|---|---|---|---|---|
| **Analgesia** | Carisoprodol<br>Celecoxib<br>Codeine<br>Flurbiprofen<br>Hydrocodone<br>Ibuprofen<br>Meloxicam<br>Methadone<br>Oliceridine<br>Oxycodone<br>Piroxicam<br>Tenoxicam<br>Tramadol<br>Venlafaxine | | | Alfentanil<br>Amitriptyline<br>Desipramine<br>Fentanyl<br>Imipramine<br>Morphine<br>Nortriptyline | Fentanyl | Amitriptyline<br>Desipramine<br>Imipramine<br>Nortriptyline | |
| **Autoimmune** | Siponimod | | Tacrolimus | Cyclosporine | | Methotrexate | |

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|---|---|---|---|---|---|---|---|
| **Cancer** | Erdafitinib<br>Gefitinib | Tamoxifen | Tamoxifen | | Tamoxifen | Methotrexate | |
| **Cardiovascular** | Atorvastatin<br>Carvedilol<br>Clopidogrel<br>Fluvastatin<br>Lovastatin<br>Mavacamten<br>Metoprolol<br>Nebivolol<br>Pitavastatin<br>Pravastatin<br>Propranolol<br>Rosuvastatin<br>Simvastatin | Propafenone | Warfarin | Flecainide<br>Propafenone<br>Warfarin | Flecainide<br>Propafenone<br>Warfarin | Flecainide<br>Propafenone<br>Warfarin | |
| **Endocrinology** | Nateglinide | | | | | | |
| **Gastroenterology** | Dronabinol<br>Esomeprazole<br>Metoclopramide<br>Ondansetron | | Dexlansoprazole<br>Lansoprazole<br>Omeprazole<br>Pantoprazole | Meclizine | Dexlansoprazole<br>Lansoprazole<br>Meclizine<br>Omeprazole | Meclizine<br>Methotrexate | |

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|---|---|---|---|---|---|---|---|
| | Rabeprazole | | | | Pantoprazole | | |
| **Infection** | Nevirapine<br>Voriconazole | | | Efavirenz | | Efavirenz | |
| **Mental Health** | Amoxapine<br>Amphetamine<br>Aripiprazole<br>Aripiprazole lauroxil<br>Brexpiprazole<br>Bupropion<br>Citalopram<br>Clozapine<br>Dextromethorphan/ Bupropion<br>Diazepam<br>Escitalopram<br>Fluoxetine<br>Haloperidol<br>Iloperidone<br>Lofexidine<br>Methadone<br>Methylphenidate<br>Mirtazapine | | | Amitriptyline<br>Atomoxetine<br>Clomipramine<br>Desipramine<br>Doxepin<br>Imipramine<br>Nortriptyline<br>Paroxetine<br>Sertraline<br>Trimipramine<br>Zuclopenthixol | Atomoxetine<br>Nicotine replacement therapy | Amitriptyline<br>Atomoxetine<br>Clomipramine<br>Desipramine<br>Doxepin<br>Fluvoxamine<br>Imipramine<br>Nortriptyline<br>Paroxetine<br>Trimipramine<br>Vortioxetine<br>Zuclopenthixol | |

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|---|---|---|---|---|---|---|---|
| | Perphenazine | | | | | | |
| | Pimozide | | | | | | |
| | Protriptyline | | | | | | |
| | Quetiapine | | | | | | |
| | Risperidone | | | | | | |
| | Thioridazine | | | | | | |
| | Venlafaxine | | | | | | |
| | Viloxazine | | | | | | |
| Neurology | Brivaracetam | | | Amitriptyline | | Amitriptyline | |
| | Clobazam | | | | | | |
| | Deutetrabenazine | | | | | | |
| | Dextromethorphan/ Quinidine | | | | | | |
| | Diazepam | | | | | | |
| | Donepezil | | | | | | |
| | Fosphenytoin | | | | | | |
| | Galantamine | | | | | | |
| | Metoprolol | | | | | | |
| | Phenytoin | | | | | | |
| | Pitolisant | | | | | | |
| | Propranolol | | | | | | |
| | Tetrabenazine | | | | | | |
| | Valbenazine | | | | | | |
| | Venlafaxine | | | | | | |

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|---|---|---|---|---|---|---|---|
| **Rheumatology** | Celecoxib<br>Flurbiprofen<br>Ibuprofen<br>Meloxicam<br>Piroxicam<br>Tenoxicam | | | | | Methotrexate | |
| **Urology** | Darifenacin<br>Fesoterodine<br>Mirabegron<br>Tamsulosin<br>Tolterodine | | | | | | |
| **Other** | Abrocitinib<br>Avatrombopag<br>Cevimeline<br>Elagolix<br>Eltrombopag<br>Flibanserin<br>Lusutrombopag<br>Oral contraceptives | | | | | | Eliglustat |