

Name: Mutze User

Date: 08-06-2024

Name	Pharmacological action	Results
Celecoxib (Dosage)	Non-steroidal anti-inflammatory drugs	Intermediate CYP2C9 metabolizer. Start treatment with the lowest recommended dose.
Docetaxel (Adverse effects)	Antineoplastics	Decreased risk of adverse effects, leukopenia and neutropenia (Asians)
Efavirenz (Adverse effects)	Antivirals	Increased risk of adverse reactions
Fluvastatin (Dosage)	Hypolipidemic agents	Increased risk of myopathy. Do not exceed the dose of 40mg or use alternative treatment.
Ibuprofen (Dosage)	Anti-inflammatory	Intermediate CYP2C9 metabolizer. Start treatment with the lowest recommended dose.
Ivacaftor (Efficacy)	Other drugs for the respiratory system	In case of cystic fibrosis, the use of ivacaftor is not recommended.
Methotrexate (Adverse Reactions)	Immunomodulators	Increased risk of toxicity
Methotrexate in rheumatoid arthritis (Efficacy)	Immunomodulators	Decreased response to treatment
Olanzapine (Adverse effects)	Antipsychotics	Increased likelihood of certain adverse effects
Olanzapine (Efficacy)	Antipsychotics	Probable worse response to treatment
Phenytoin (Dosage)	Antiepileptics	Intermediate CYP2C9 metabolizer. Start treatment with the recommended dose. Successive doses should be reduced by 5%.
Tacrolimus (Dosage)	Immunosuppressants	Poor CYP3A5 metabolizer. Initiate treatment with standard dose and monitor
Thioguanine, Azathioprine, Mercaptopurine (Dosage)	Immunosuppressants	Intermediate TPMT metabolizer and normal NUDT15. Reduce dose and adjust according to the degree of adverse effects for each indication.
Valproic Acid (Adverse effects)	Antiepileptics	Increased risk of liver toxicity
Warfarin (Adverse Reactions)	Antithrombotics	Increased risk of bleeding at standard doses
Abacavir (Adverse effects)	Antivirals	Reduced risk of hypersensitivity
Acenocoumarol, Fenprocoumon (Adverse effects)	Antithrombotics	It presents a copy of c.-1639G>A in VKORC1. Risk of adverse effects unchanged
Amifampridine (Dosage)	Cholinergics	Probably NAT2 intermediate acetylator. Usual dose
Aminoglycoside antibiotics (Adverse effects)	Antibiotics	No variation in the risk of developing hearing loss
Amitriptyline (Dosage)	Antidepressants	It is recommended to initiate therapy with standard doses
Aripiprazole (Dosage)	Antipsychotics	Normal CYP2D6 metabolizer. Use the recommended dose
Atazanavir (Adverse effects)	Antivirals	Normal UGT1A1 metabolizer. Very low probability of hyperbilirubinemia.
Atomoxetine (Dosage)	Centrally acting psychostimulants	Normal CYP2D6 metabolizer. Consider increasing initial dose if there is no response or adverse effects.
Atorvastatin (Dosage)	Hypolipidemic agents	Normal SLCO1B1 activity. Treatment with standard doses
Brexiprazole (Dosage)	Antipsychotics	Normal CYP2D6 metabolizer. Use the recommended dose

Brivaracetam (Dosage)	Anti-acid treatment	Normal CYP2C19 metabolizer. Standard dose is recommended
Carbamazepine (Dosage)	Antiepileptics	A lower dose of carbamazepine would be necessary.
Citalopram (Dosage)	Antidepressants	Normal CYP2C19 metabolizer. Standard dose is recommended
Clobazam (Adverse Reactions)	Muscle relaxants	CYP2C19 metabolizer normal. Typical probability of adverse effects
Clomipramine (Dosage)	Antidepressants	It is recommended to initiate therapy with standard doses
Clopidogrel (Dosage)	Antithrombotics	Normal CYP2C19 metabolizer. Standard dose is recommended
Codeine (Dosage)	Opioid analgesics	Normal CYP2D6 metabolizer. Use the recommended dose
Desipramine (Dosage)	Antidepressants	Normal CYP2D6 metabolizer. Use the recommended dose
Diazepam (Adverse Reactions)	Anxiolytics	CYP2C19 metabolizer normal. Typical probability of adverse effects
Doxepin (Dosage)	Antidepressants	It is recommended to initiate therapy with standard doses
Escitalopram (Dosage)	Antidepressants	Normal CYP2C19 metabolizer. Standard dose is recommended
Fentanyl (Efficacy)	Opioid analgesics	No variation in response
Flecainide (Dosage)	Antiarrhythmics	Normal CYP2D6 metabolizer. Use the recommended dose
Floxacillin (Adverse effects)	Antibiotics	No variations in the risk of developing severe liver injury
Fluorouracil, Capecitabine (Dosage)	Antineoplastics	Normal DPYD metabolizer. Normal risk of fluoropyrimidine toxicity.
Fluvoxamine (Dosage)	Antipsychotics	Normal CYP2D6 metabolizer. Initiate therapy with standard doses
G6PD Deficiency and Adverse Drug Reactions	Multiple pharmacological actions	Low risk of hemolytic anemia for certain drugs
Haloperidol (Dosage)	Antipsychotics	Normal CYP2D6 metabolizer. Use the recommended dose
Hydrochlorothiazide (Efficacy)	Antihypertensives	No variation in response
Iloperidone (Dosage)	Antipsychotics	Normal CYP2D6 metabolizer. Use the recommended dose
Imipramine (Dosage)	Antidepressants	It is recommended to initiate therapy with standard doses
Inhalation anesthetics and succinylcholine (Adverse Reactions)	General anesthetics	Low risk of developing malignant hyperthermia (see report)
Irinotecan (Adverse effects)	Antineoplastics	Normal UGT1A1 metabolizer. Lower probability of adverse effects
Isoniazid (Adverse effects)	Antibiotics	Probably NAT2 intermediate acetylator. Lower risk of liver toxicity
Lansoprazole, Dexlansoprazole (Dosage)	Anti-acid treatment	Normal CYP2C19 metabolizer. Consider dose increase in certain situations
Lovastatin (Dosage)	Hypolipidemic agents	Normal SLCO1B1 activity. Treatment with standard doses
Lumacaftor + Ivacaftor (Efficacy)	Other drugs for the respiratory system	Cystic Fibrosis treatment with lumacaftor/ivacaftor not recommended
Metoprolol (Dosage)	Beta-blockers cardiovascular system	Normal CYP2D6 metabolizer. Use the recommended dose
Mirtazapine (Adverse Reactions)	Antidepressants	Normal CYP2D6 metabolizer. Standard risk of adverse effects
Nortriptyline (Dosage)	Antidepressants	Normal CYP2D6 metabolizer. Use the recommended dose
Omeprazole (Dosage)	Anti-acid treatment	Normal CYP2C19 metabolizer. Consider dose increase in certain situations
Pantoprazole (Dosage)	Anti-acid treatment	Normal CYP2C19 metabolizer. Consider dose increase in certain situations

Paroxetine (Dosage)	Antidepressants	Normal CYP2D6 metabolizer. Use the recommended dose
Peginterferons alfa-2a -2b and ribavirin (Efficacy)	Antivirals	Increased probability of response
Pimozide (Dosage)	Antipsychotics	Normal CYP2D6 metabolizer. Standard dose is recommended
Pitavastatin (Dosage)	Hypolipidemic agents	Normal SLCO1B1 activity. Treatment with standard doses
Pravastatin (Dosage)	Hypolipidemic agents	Normal SLCO1B1 activity. Treatment with standard doses
Quetiapine (Dosage)	Antipsychotics	Probably normal CYP3A4 metabolizer. It is recommended to use standard doses
Risperidone (Dosage)	Antipsychotics	Normal CYP2D6 metabolizer. Use the recommended dose
Rosuvastatin (Dosage)	Hypolipidemic agents	Treatment with standard doses is recommended
Selective Serotonin Reuptake Inhibitors (SSRIs) (Adverse effects)	Antidepressants	No variations in the likelihood of sexual dysfunction associated with SSRI treatment
Sertraline (Dosage)	Antidepressants	Normal CYP2C19 metabolizer. Standard dose is recommended
Simvastatin (Dosage)	Hypolipidemic agents	Normal SLCO1B1 activity. Treatment with standard doses
Statins (Dosage and risk of myopathy)	Hypolipidemic agents	Normal risk of myopathy. Treatment with standard doses
Tamoxifen (Efficacy)	Antipsychotics	Normal CYP2D6 metabolizer. Standard dosage is recommended. Avoid CYP2D6 inhibitors.
Tramadol (Dosage)	Opioid analgesics	Normal CYP2D6 metabolizer. Use the recommended dose
Trimipramine (Dosage)	Antidepressants	It is recommended to initiate therapy with standard doses
Venlafaxine (Dosage)	Antidepressants	Normal CYP2D6 metabolizer. Use the recommended dose
Voriconazole (Dosage)	Antifungals	Normal CYP2C19 metabolizer. Standard dose is recommended
Vortioxetine (Dosage)	Antidepressants	Normal CYP2D6 metabolizer. Initiate therapy with standard doses
Zuclopenthixol (Dosage)	Antipsychotics	Normal CYP2D6 metabolizer. Use the recommended dose

Pharmacology sample report

Celecoxib (Dosage)

Celecoxib is a non-steroidal anti-inflammatory drug indicated for pain in patients with osteoarthritis and rheumatoid arthritis. The presence of genetic polymorphisms in the CYP2C9 cytochrome gene may have an important impact on drug response.

Your result is

Intermediate CYP2C9 metabolizer. Start treatment with the lowest recommended dose.

SNP	GEN OR REGION	GENOTYPE	INTERPRETATION
rs754487195	CYP2C9	GG	You do not have the CYP2C9*46 reduced function allele.
rs9332239	CYP2C9	CC	You do not have the CYP2C9*12 reduced function allele.
rs199523631	CYP2C9	CC	You do not have the CYP2C9*45 loss-of-function allele.
rs28371686	CYP2C9	CC	You do not have the CYP2C9*5 reduced function allele.
rs72558192	CYP2C9	AA	You do not have the CYP2C9*16 reduced function allele.
rs72558189	CYP2C9	GG	You do not have the CYP2C9*14 reduced function allele.
rs9332131	CYP2C9	II	You do not have the CYP2C9*6 loss-of-function allele.

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Warfarin (Adverse Reactions)

Warfarin is one of the most widely used anticoagulant drugs at present, although its narrow therapeutic margin implies a high risk of hemorrhagic complications. The genetic study of variants in the genes involved in its metabolism makes it possible to guide the dose requirement necessary to maintain an effective and safe anticoagulant effect.

Your result is

Increased risk of bleeding at standard doses

SNP	GEN OR REGION	GENOTYPE	INTERPRETATION
rs1799853	CYP2C9	CC	You do not have the CYP2C9*2 reduced function allele.
rs9923231	VKORC1	CT	You have one copy of the c.-1639G>A variant in the VKORC1 gene.
rs781583846	CYP2C9	GG	You do not have the CYP2C9*30 reduced function allele.
rs56165452	CYP2C9	TT	You do not have the CYP2C9*4 reduced function allele.
rs754487195	CYP2C9	GG	You do not have the CYP2C9*46 reduced function allele.
rs199523631	CYP2C9	CC	You do not have the CYP2C9*45 loss-of-function allele.
rs72558192	CYP2C9	AA	You do not have the CYP2C9*16 reduced function allele.

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