University of Pennsylvania Pharmacogenomic Program Epic patient facing genomic indicator language

Indicator	PATIENT FACING INDICATOR NAME	PATIENT FACING TEXT v1 - drug name/classes + indications
CYP2B6 Intermediate Metabolizer	CYP2B6 Intermediate Metabolizer	The CYP2B6 enzyme contributes to the metabolism of efavirenz, a medication used for HIV infections.
CYP2B6 Normal Metabolizer	CYP2B6 Normal Metabolizer	The CYP2B6 enzyme contributes to the metabolism of efavirenz, a medication used for HIV infections.
CYP2B6 Poor Metabolizer	CYP2B6 Poor Metabolizer	The CYP2B6 enzyme contributes to the metabolism of efavirenz, a medication used for HIV infections.
CYP2B6 Rapid Metabolizer	CYP2B6 Rapid Metabolizer	The CYP2B6 enzyme contributes to the metabolism of efavirenz, a medication used for HIV infections.
CYP2B6 Ultrarapid Metabolizer	CYP2B6 Ultrarapid Metabolizer	The CYP2B6 enzyme contributes to the metabolism of efavirenz, a medication used for HIV infections.
CYP2C19 Intermediate Metabolizer	CYP2C19 Intermediate Metabolizer	The CYP2C19 enzyme contributes to the metabolism of a large number of clinically relevant drugs and drug classes such as antidepressants, voriconazole (anti-fungal medication), proton pump inhibitors (acid reflux medication) and clopidogrel (anti-platelet medication given after a cardiac stent).
CYP2C19 Normal Metabolizer	CYP2C19 Normal Metabolizer	The CYP2C19 enzyme contributes to the metabolism of a large number of clinically relevant drugs and drug classes such as antidepressants, voriconazole (anti-fungal medication), proton pump inhibitors (acid reflux medication) and clopidogrel (anti-platelet medication given after a cardiac stent).
CYP2C19 Poor Metabolizer	CYP2C19 Poor Metabolizer	The CYP2C19 enzyme contributes to the metabolism of a large number of clinically relevant drugs and drug classes such as antidepressants, voriconazole (anti-fungal medication), proton pump inhibitors (acid reflux medication) and clopidogrel (anti-platelet medication given after a cardiac stent).
CYP2C19 Rapid Metabolizer	CYP2C19 Rapid Metabolizer	The CYP2C19 enzyme contributes to the metabolism of a large number of clinically relevant drugs and drug classes such as antidepressants, voriconazole (anti-fungal medication), proton pump inhibitors (acid reflux medication) and clopidogrel (anti-platelet medication given after a cardiac stent).
CYP2C19 Ultrarapid Metabolizer	CYP2C19 Ultrarapid Metabolizer	The CYP2C19 enzyme contributes to the metabolism of a large number of clinically relevant drugs and drug classes such as antidepressants, voriconazole (anti-fungal medication), proton pump inhibitors (acid reflux medication) and clopidogrel (anti-platelet medication given after a cardiac stent).
CYP2C9 Intermediate Metabolizer	CYP2C9 Intermediate Metabolizer	The CYP2C9 enzyme contributes to the metabolism of clinically relevant drugs and drug classes such as nonsteroidal anti-inflammatory drugs (for pain), phenytoin (anti-convulsant medication), and warfarin (blood thinner medication).
CYP2C9 Normal Metabolizer	CYP2C9 Normal Metabolizer	The CYP2C9 enzyme contributes to the metabolism of clinically relevant drugs and drug classes such as nonsteroidal anti-inflammatory drugs (for pain), phenytoin (anti-convulsant medication), and warfarin (blood thinner medication).
CYP2C9 Poor Metabolizer	CYP2C9 Poor Metabolizer	The CYP2C9 enzyme contributes to the metabolism of clinically relevant drugs and drug classes such as nonsteroidal anti-inflammatory drugs (for pain), phenytoin (anti-convulsant medication), and warfarin (blood thinner medication).
CYP2D6 Intermediate Metabolizer	CYP2D6 Intermediate Metabolizer	The CYP2D6 enzyme contributes to the metabolism of a large number of clinically relevant drugs and drug classes such as antidepressants, antiemetics (to prevent/treat nausea) and opioid analgesics (for pain).
CYP2D6 Normal Metabolizer	CYP2D6 Normal Metabolizer	The CYP2D6 enzyme contributes to the metabolism of a large number of clinically relevant drugs and drug classes such as antidepressants, antiemetics (to prevent/treat nausea) and opioid analgesics (for pain).
CYP2D6 Poor Metabolizer	CYP2D6 Poor Metabolizer	The CYP2D6 enzyme contributes to the metabolism of a large number of clinically relevant drugs and drug classes such as antidepressants, antiemetics (to prevent/treat nausea) and opioid analgesics (for pain).
CYP2D6 Ultrarapid Metabolizer	CYP2D6 Ultrarapid Metabolizer	The CYP2D6 enzyme contributes to the metabolism of a large number of clinically relevant drugs and drug classes such as antidepressants, antiemetics (to prevent/treat nausea) and opioid analgesics (for pain).
CYP3A5 Intermediate Metabolizer	CYP3A5 Intermediate Metabolizer	The CYP3A5 enzyme contributes to the metabolism of tacrolimus, a medication used for immunosuppression.
CYP3A5 Normal Metabolizer	CYP3A5 Normal Metabolizer	The CYP3A5 enzyme contributes to the metabolism of tacrolimus, a medication used for immunosuppression.
CYP3A5 Poor Metabolizer	CYP3A5 Poor Metabolizer	The CYP3A5 enzyme contributes to the metabolism of tacrolimus, a medication used for immunosuppression.
DPYD Intermediate Metabolizer	DPYD Intermediate Metabolizer	The DPYD gene contributes to the metabolism of fluorouracil (5-FU) and capecitabine, chemotherapy medications used to treat certain cancers.
DPYD Normal Metabolizer	DPYD Normal Metabolizer	The DPYD gene contributes to the metabolism of fluorouracil (5-FU) and capecitabine, chemotherapy medications used to treat certain cancers.

DPYD Poor Metabolizer	DPYD Poor Metabolizer	The DPYD gene contributes to the metabolism of fluorouracil (5-FU) and capecitabine, chemotherapy medications used to treat certain cancers.
HLA-A *3101 Negative	HLA-A *3101 Negative	The HLA-A*31: 01 gene contributes to the risk of side effects to carbamazepine, an anticonvulsant medication.
HLA-A *3101 Positive	HLA-A *3101 Positive	The HLA-A*31: 01 gene contributes to the risk of side effects to carbamazepine, an anticonvulsant medication.
HLA-B *1502 Negative	HLA-B *1502 Negative	The HLA-B*15:02 gene contributes to the risk of side effects to the anticonvulsant medications carbamazepine and oxcarbamazepine.
HLA-B *1502 Positive	HLA-B *1502 Positive	The HLA-B*15:02 gene contributes to the risk of side effects to the anticonvulsant medications carbamazepine and oxcarbamazepine.
HLA-B *5701 Negative	HLA-B *5701 Negative	The HLA-B*57:01 gene contributes to the risk of side effects to abacavir, a medication used for HIV infections.
HLA-B *5701 Positive	HLA-B *5701 Positive	The HLA-B*57:01 gene contributes to the risk of side effects to abacavir, a medication used for HIV infections.
HLA-B *5801 Negative	HLA-B *5801 Negative	The HLA-B*58:01 gene contributes to the risk of side effects to allopurinol, a medication used for gout.
HLA-B *5801 Positive	HLA-B *5801 Positive	The HLA-B*58:01 gene contributes to the risk of side effects to allopurinol, a medication used for gout.
IFNL4 Favorable response genotype	IFNL4 Favorable response genotype	The IFNL4 gene predicts response to peg interferon-alpha, a medication used for Hepatitis C infections.
IFNL4 Unfavorable response genotype	IFNL4 Unfavorable response genotype	The IFNL4 gene predicts response to peg interferon-alpha, a medication used for Hepatitis C infections.
NUDT15 Intermediate Metabolizer	NUDT15 Intermediate Metabolizer	The NUDT15 gene contributes to the metabolism of clinically relevent medications of the thiopurine drug class to treat certain cancers and immune disorders.
NUDT15 Normal Metabolizer	NUDT15 Normal Metabolizer	The NUDT15 gene contributes to the metabolism of clinically relevent medications of the thiopurine drug class to treat certain cancers and immune disorders.
NUDT15 Poor Metabolizer	NUDT15 Poor Metabolizer	The NUDT15 gene contributes to the metabolism of clinically relevent medications of the thiopurine drug class to treat certain cancers and immune disorders.
NUDT15 Possible Intermediate Metabolizer	NUDT15 Possible Intermediate Metabolizer	The NUDT15 gene contributes to the metabolism of clinically relevent medications of the thiopurine drug class to treat certain cancers and immune disorders.
SLCO1B1 Decreased Function	SLCO1B1 Decreased Function	The SLCO1B1 protein contributes to risk of side effects to the statin medications, used to treat high cholesterol, including atorvastatin, fluvastatin, lovastatin, pitavastatin, pravastatin, rosuvastatin, and simvastatin.
SLCO1B1 Normal Function	SLCO1B1 Normal Function	The SLCO1B1 protein contributes to risk of side effects to the statin medications, used to treat high cholesterol, including atorvastatin, fluvastatin, lovastatin, pitavastatin, pravastatin, rosuvastatin, and simvastatin.
SLCO1B1 Poor Function	SLCO1B1 Poor Function	The SLCO1B1 protein contributes to risk of side effects to the statin medications, used to treat high cholesterol, including atorvastatin, fluvastatin, lovastatin, pitavastatin, pravastatin, rosuvastatin, and simvastatin.
SLCO1B1 Increased Function	SLCO1B1 Increased Function	The SLCO1B1 protein contributes to risk of side effects to the statin medications, used to treat high cholesterol, including atorvastatin, fluvastatin, lovastatin, pitavastatin, pravastatin, rosuvastatin, and simvastatin.
SLCO1B1 Possible Decreased Function	SLCO1B1 Possible Decreased Function	The SLCO1B1 protein contributes to risk of side effects to the statin medications, used to treat high cholesterol, including atorvastatin, fluvastatin, lovastatin, pitavastatin, pravastatin, rosuvastatin, and simvastatin.
TPMT Intermediate Metabolizer	TPMT Intermediate Metabolizer	The TPMT gene contributes to the metabolism of clinically relevent medications of the thiopurine drug class for certain cancers and immune disorders.
TPMT Normal Metabolizer	TPMT Normal Metabolizer	The TPMT gene contributes to the metabolism of clinically relevent medications of the thiopurine drug class for certain cancers and immune disorders.
TPMT Poor Metabolizer	TPMT Poor Metabolizer	The TPMT gene contributes to the metabolism of clinically relevent medications of the thiopurine drug class for certain cancers and immune disorders.
TPMT Possible Intermediate Metabolizer	TPMT Possible Intermediate Metabolizer	The TPMT gene contributes to the metabolism of clinically relevent medications of the thiopurine drug class for certain cancers and immune disorders.
UGT1A1 Intermediate Metabolizer	UGT1A1 Intermediate Metabolizer	The UGT1A1 enzyme contributes to the metabolism of irinotecan, a chemotherapy medication used to treat certain cancers, and atazanavir, a medication used for HIV infections.
UGT1A1 Normal Metabolizer	UGT1A1 Normal Metabolizer	The UGT1A1 enzyme contributes to the metabolism of irinotecan, a chemotherapy medication used to treat certain cancers, and atazanavir, a medication used for HIV infections.
UGT1A1 Poor Metabolizer	UGT1A1 Poor Metabolizer	The UGT1A1 enzyme contributes to the metabolism of irinotecan, a chemotherapy medication used to treat certain cancers, and atazanavir, a medication used for HIV infections.