

**Supplemental Figure 1. Examples of medications and jurisdictions covered by the new LCDs.**

Drug	Gene(d)	Drug	Gene(s)	Drug	Gene(s)
abacavir*	<i>HLA-B</i>	isoflurane*	<i>CACNA1S, RYR1</i>	phenytoin*	<i>CYP2C9, HLA-B</i>
allopurinol	<i>HLA-B</i>	ivacaftor*	<i>CFTR</i>	piroxicam*	<i>CYP2C9</i>
amitriptyline	<i>CYP2C19, CYP2D6</i>	lansoprazole	<i>CYP2C19</i>	rasburicase*	<i>G6PD</i>
atazanavir	<i>UGT1A1</i>	lornoxicam	<i>CYP2C9</i>	sertraline	<i>CYP2C19</i>
atomoxetine*	<i>CYP2D6</i>	meloxicam*	<i>CYP2C9</i>	sevoflurane*	<i>CACNA1S, RYR1</i>
azathioprine*	<i>TPMT, NUDT15</i>	mercaptopurine*	<i>TPMT, NUDT15</i>	simvastatin	<i>SLCO1B1</i>
capecitabine*	<i>DPYD</i>	methoxyflurane	<i>CACNA1S, RYR1</i>	succinylcholine*	<i>CACNA1S, RYR1</i>
carbamazepine*	<i>HLA-A, HLA-B</i>	nortriptyline*	<i>CYP2D6</i>	tacrolimus	<i>CYP3A5</i>
celecoxib*	<i>CYP2C9</i>	omeprazole*	<i>CYP2C19</i>	tamoxifen*	<i>CYP2D6</i>
citalopram*	<i>CYP2C19</i>	ondansetron	<i>CYP2D6</i>	tenoxicam	<i>CYP2C9</i>
clomipramine	<i>CYP2C19, CYP2D6</i>	oxcarbazepine*	<i>HLA-B</i>	thioguanine*	<i>TPMT, NUDT15</i>
clopidogrel*	<i>CYP2C19</i>	pantoprazole*	<i>CYP2C19</i>	trimipramine	<i>CYP2C19, CYP2D6</i>
codeine*	<i>CYP2D6</i>	paroxetine	<i>CYP2D6</i>	voriconazole*	<i>CYP2C19</i>
desflurane*	<i>CACNA1S, RYR1</i>	peginterferon alfa-2a or 2b	<i>IFNL3</i>	warfarin <sup>†</sup>	<i>CYP2C9, CYP4F2, VKORC1</i>
desipramine*	<i>CYP2D6</i>				
dexlansoprazole*	<i>CYP2C19</i>				
doxepin*	<i>CYP2C19, CYP2D6</i>				
efavirenz*	<i>CYP2B6</i>				
enflurane*	<i>CACNA1S, RYR1</i>				
escitalopram*	<i>CYP2C19</i>				
fluorouracil*	<i>DPYD</i>				
flurbiprofen*	<i>CYP2C9</i>				
fluvoxamine*	<i>CYP2D6</i>				
halothane	<i>CACNA1S, RYR1</i>				
ibuprofen	<i>CYP2C9</i>				
imipramine	<i>CYP2C19, CYP2D6</i>				

The map shows the US states shaded according to jurisdiction coverage:

- MolDx MACs (green): Includes most states, except for a cluster of states in the Northeast (CT, IL, NH, MA, ME, MN, NY, WI, RI, VT) which are shaded grey.
- NGS (light grey): States shaded light grey include IL, WI, VT, and several states in the Northeast.
- Novitas (medium grey): States shaded medium grey include AR, CO, DE, LA, MD, MS, NJ, NM, OK, PA, and TX.
- First Coast (dark grey): FL is shaded dark grey.

The figure includes gene/drug pairs that are actionable and included in CPIC guidelines as of August 1, 2020; \* indicates drugs for which FDA label considers genetic testing actionable, recommended, or required. <sup>†</sup> warfarin coverage is limited in a separate MolDx LCD (A55179). Source: <https://cpicpgx.org/genes-drugs/>.

States within MolDx jurisdictions (shaded green) as well as those that are outside of the MolDx [CT, IL, NH, MA, ME, MN, NY, WI, RI, and VT (administered by NGS); AR, CO, DE, LA, MD, MS, NJ, NM, OK, PA, and TX (administered by Novitas), and FL (administered by First Coast)] are shown.

Map used with permission from P.E./PharmGKB.