

Pharmacogenetics

Drug	Indication
Abacavir (Ziagen)	Patients who carry the HLA-B*5701 allele were at high risk for hypersensitivity to this drug
Herceptin (Trastuzumab)	If tumor tested for high levels of HER2, then Herceptin (Trastuzumab) is indicated
Thiopurine methyltransferase (TPMT)	Used to treat lymphoblastic leukemia, autoimmune disease, inflammatory bowel disease, and after organ transplantation
Warfarin	Precautions for patients with genetic variations in two genes, CYP2C9 and Vitamin K Epoxide Reductase Complex-1 (VKORC1). Hemorrhagic complications are more common in persons who carry these alleles
vemurafenib (Zelboraf)	Companion diagnostics, used for the treatment of unresectable melanomas in patients with BRAF V600E mutation. Found in approximately 50% of melanoma patients.
Codeine	Cytochrome P450 allele CYP2D6 is the metabolizing enzyme of codeine in the liver