Term/Gene Category	Final Term ^a	Functional Definition	Genetic Definition	Example diplotypes/alleles
Allele Functional Status-all genes	Increased Function	Function greater than normal function	N/A	CYP2C19*17
	Normal Function	Fully functional/wild-type	N/A	CYP2C19*1
	Decreased Function	Function less than normal function	N/A	<i>CYP2C19*9</i>
	No Function	Non-functional	N/A	<i>CYP2C19*2</i>
	Unknown Function	No literature describing function or the allele is novel	N/A	CYP2C19*29
	Uncertain Function	Literature supporting function is conflicting or weak	N/A	CYP2C19*12
Phenotype-Drug Metabolizing Enzymes (<i>CYP2C19</i> , <i>CYP2D6</i> , <i>CYP3A5</i> , <i>CYP2C9</i> , <i>TPMT</i> , <i>DPYD</i> , <i>UGT1A1</i>)	Ultra-rapid Metabolizer	Increased enzyme activity compared to rapid	Two increased function alleles, or more than 2 normal function alleles	CYP2C19*17/*17
		metabolizers.		<i>CYP2D6*1/*1XN</i>
	Rapid Metabolizer	Increased enzyme activity compared to normal metabolizers but less than ultra-rapid metabolizers.	Combinations of normal function and increased function alleles	<i>CYP2C19*1/*17</i>
	Normal Metabolizer	Fully functional enzyme activity	Combinations of normal function and decreased function alleles	CYP2C19*1/*1
	Intermediate Metabolizer	Decreased enzyme activity (activity between normal and poor metabolizer)	Combinations of normal function, decreased function, and/or no function alleles	<i>CYP2C19*1/*2</i>
	Poor Metabolizer	Little to no enzyme activity	Combination of no function alleles and/or decreased function alleles	<i>CYP2C19*2/*2</i>
Phenotype- Transporters and non-drug metabolizing enzymes ^b (<i>SLCO1B1</i>)	Increased Function	Increased transporter function compared to normal function.	One or more increased function alleles	SLCO1B1*1/*14
	Normal Function	Fully functional transporter function	Combinations of normal function and/or decreased function alleles	SLCO1B1*1/*1
	Decreased Function	Decreased transporter function (function between normal and poor function)	Combinations of normal function, decreased function, and/or no function alleles	SLCO1B1*1/*5
	Poor Function	Little to no transporter function	Combination of no function alleles and/or decreased function alleles	SLCO1B1*5/*5
Phenotype-Carrier status (<i>HLA-B</i>)	Positive	Detection of high-risk allele	Carrier of high-risk allele	HLA-B*15:02
	Negative	High risk-allele not detected	Not a carrier of high-risk allele	