

Various Phenotypes: Clinical Consequences

Drug Type	Metabolizer Phenotype	Effect on Drug Metabolism	Potential Clinical Consequences
Prodrug Metabolized to active drug	Poor to intermediate	Slow	Decreased levels of active drug Patient at risk for therapy failure Accumulation of prodrug may lead to drug-induced side effects
	Rapid to Ultra Rapid	Fast	Increased levels of active drug Increased therapeutic effect Accumulation of active drug may lead to drug-induced side effects
Active Drug Metabolized to inactive drug	Poor to Intermediate	Slow	Increased level of active drug Patient at increased risk for drug-related side effects Lower doses may be needed
	Rapid to Ultra Rapid	Fast	Decreased levels of active drug Patient at risk for therapy failure Increased doses may be needed