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Pharmacogenomic Testing Available

MercyOne Des Moines Laboratory is able to offer testing for preemptive or reactive genotyping of patients for pharmacogenomics purposes.

This test is referred to Mayo Clinical Laboratories and includes the following targeted genes: CYP1A2, CYP2C9, CYP2C19, CYP2D6, CYP3A4, CYP3A5, SLCO1B1, VCORC1, CYP4F2 and rs12777823. The comprehensive testing algorithm is included below.

Mayo Test Name: Focused Pharmacogenomics Panel, Varies

Mayo Test ID: PGXQP

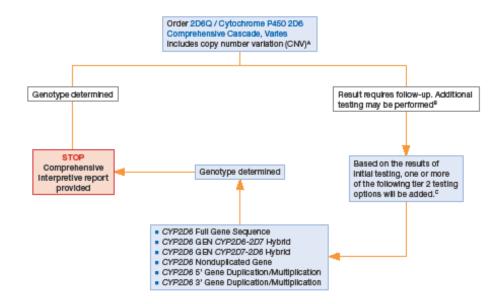
Sample Requirement: Whole blood, Lavender (EDTA), 3 ml.

Laboratory Location	Test Order Instruction
Central Iowa/Des Moines	Order as: PGXQP – Focused Pharmacogenomics Panel, Varies
	Order available in Allscripts, Atlas and Cerner

NOTE: Some payers are deeming this testing as "experimental" and therefore are not covering charges. Please have patient complete a waiver to accept charges should insurance deny payment.



CYP2D6 Comprehensive Cascade Testing Algorithm*





^{*}Additional testing is performed to derive as accurate a phenotype as possible. *Always performed

- 1. No call on an assay for a single nucleotide variant
- Genotype pattern does not fit known star allele
 Duplication involving alleles with different levels of activity
 Genotype/phenotype discord
- Laboratory director request (CYP2D6 real time PCR and CNV assays must be completed first).
 Ambiguous genotype leading to ambiguous phenotype.

Additional testing may be performed (only approximately 3% of individuals may need additional testing) for the following reasons:

^c Tier 2 testing performed on blood specimens only: The number of sequencing tests needed to determine the phenotype will vary depending on the fler 1 result. Due to lower concentration of DNA yielded from saliva, testing cannot proceed to tier 2 sequencing and will stop after fler 1 testing is complete.