

DPYD GENOTYPING

Orderable - E-order/Requisition

Turnaround Time: 7 days

Alternate Name(s):

Dihydropyrimidine dehydrogenase genotyping
Fluoropyrimidine toxicity

Specimen:

Whole blood-2 x 4mL Lavender EDTA top Vacutainer tube

Collection Information:

Blood samples must be maintained at room temperature.

Reference Ranges:

See report

Interpretive Comments:

Variants in the DPYD gene have shown to alter the metabolism of fluoropyrimidines, resulting in poor metabolism of these drugs and severe toxicity. DPYD genotyping in patients with advanced cancer being considered for fluoropyrimidines treatment is now recommended by the Clinical Pharmacogenetics Implementation Consortium (CPIC) and the Royal Dutch Association for the Advancement of Pharmacy - Pharmacogenetics Working Group (DPWG). DPYD genotype can guide therapeutic options and dosage alterations in patients who are DPYD poor metabolizers and its recommendation is included in the FDA and Health Canada-approved drug label for 5-fluorouracil and capecitabine. (PMID: 29152729)



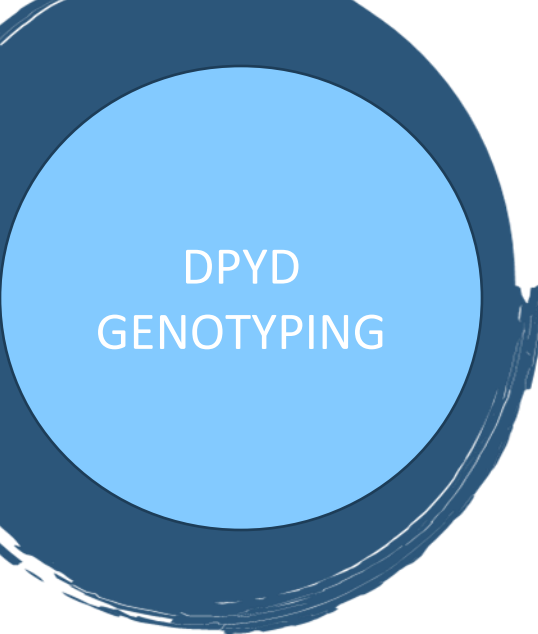
Laboratory:
Molecular Diagnostics Lab



Requisition:
[MOLECULAR DIAGNOSTIC REQUISITION](#)



Method of Analysis:
4 well-established risk DPYD variants: c.1905+1G>A, c.1679T>G, c.2846A>T and c.1236G>A / c.1129-5923C>G are screened as per Clinical Pharmacogenetics Implementation Consortium (CPIC) recommendation (2017) using the commercially available VeriDose® DPYD Panel by Agena Bioscience followed by SpectroCHIP® Array detection using the MassARRAY System (Agena).



DPYD GENOTYPING

Specimen Stability:

Must be received in testing laboratory within 5 days of collection, shipped at room temperature by courier/overnight delivery.



Test Schedule:

As required,
Monday to Friday 0800-
1600 hours