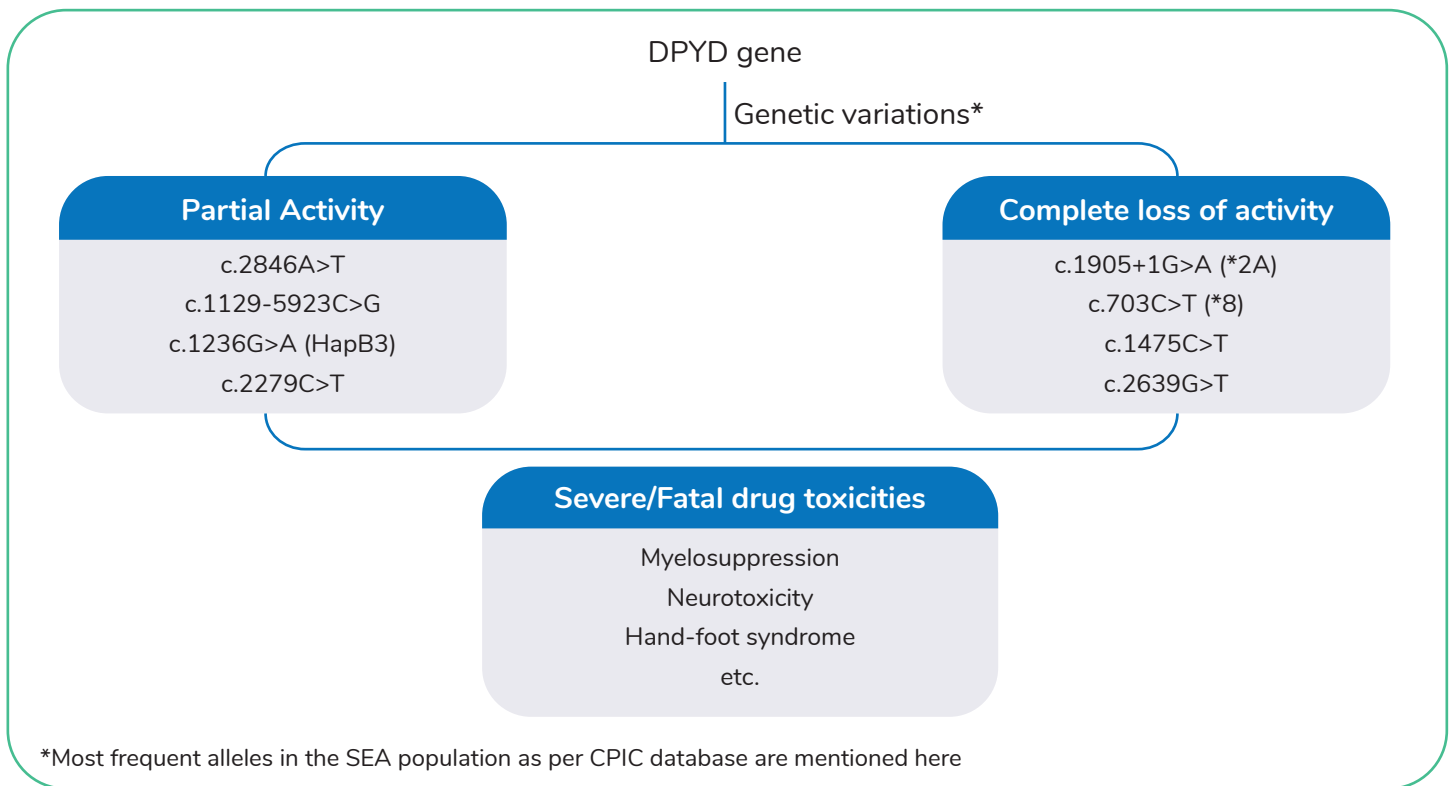


Comprehensive DPYD Gene Mutations (5-FU Toxicity) Detection Test

Dihydropyrimidine dehydrogenase (DPD) enzyme is responsible for the detoxifying metabolism of fluoropyrimidines, a class of drugs that includes 5-Fluorouracil, Capecitabine, and Tegafur.



DPYD gene mutation analysis

NGS based comprehensive assay

- Covers all exonic/intronic mutations as recommended by CPIC guideline recommendation for Fluoropyrimidines and DPYD
- All these variants can be covered by single NGS assay
- Cost effective with better coverage
- Covers most frequent HapB3 intermediate function allele and all other frequent/non-frequent alleles
- Accuracy and sensitivity is higher with NGS based panels

Hotspot assay (Sanger/PCR based)

- Covers one or few variants.
- All these variants cannot be covered by single assay as they occur in 4 different exons/intronic regions
- The cost will be higher than NGS if we perform Sanger analysis for all of these variants
- Most of the available assays in the market covers *2A allele with a frequency of 0.8% but NOT HapB3 allele which is known to occur at 1.97%.
- Accuracy and sensitivity is higher with NGS based panels

