

# QUICKTEXT: Codeine CYP2D6 ULTRARAPID METABOLIZER

## RESULT

CYP2D6 GENOTYPE:    ##

## INTERPRETATION

### ULTRARAPID METABOLIZER

This result predicts that this individual has the ultrarapid metabolizer phenotype. **Avoid codeine** use due to potential for toxicity. Consider alternative analgesics such as morphine or a non-opioid. Avoid using tramadol.

It is possible that this individual has a rare variant in the *CYP2D6* gene that is not examined by this assay.

## SUPPLEMENTAL INFORMATION

Refer to Clinical Pharmacogenetics Implementation Consortium (CPIC) guidelines for additional information (<http://www.pharmgkb.org/drug/PA449088>). The predicted metabolizer status is based on genotype alone. Variants not detected by the assay and non-genetic factors can affect metabolizer status. For additional information, please consult with a clinical pharmacology professional to discuss drug and dose selection. Clinical pharmacology or personalized medicine consultative services are available. Call either 317-944-5000 (Inpatient) or 317-274-2810 (Outpatient).

## METHODOLOGY

Amplification of the *CYP2D6* gene was performed by real-time polymerase chain reaction (PCR) microarray and copy number analysis.

## VARIANTS TESTED:

CYP2D6*2 (c.2850C>T and c.4180G>C)
CYP2D6*3 (c.2549delA)
CYP2D6*4 (c.1846G>A and c.100C>T)
CYP2D6*5 (gene deletion)
CYP2D6*6 (c.1707delT)
CYP2D6*7 (c.2935A>C)
CYP2D6*9 (c.2615_2617delAAG)
CYP2D6*10 (c.100C>T and c.4180G>C)
CYP2D6*17 (c.1023C>T)
CYP2D6*29 (c.3183G>A)
CYP2D6*41 (c.2988G>A)
CYP2D6*1XN (duplication)
CYP2D6*2XN (c.2850C>T, c.4180G>C, duplication)
CYP2D6*4XN (c.1846G>A, c.100C>T, duplication)

Only the targeted variants will be detected. Mutations or variants in other genes will not be detected. Although rare, false positive or false negative results may occur. All results should be interpreted in context of clinical findings, relevant history, and other laboratory data.

This test was developed and its performance characteristics determined by the Indiana University Pharmacogenomics Laboratory. It has not been cleared or approved by the U.S. Food and Drug Administration. This test is used for clinical purposes. It should not be regarded as investigational or for research. The laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA '88) as qualified to perform high complexity clinical laboratory testing.