

**SPECIMEN TYPE:** Buccal Swab  
**COLLECTION DATE:** 2/22/2020  
**RECEIVED DATE:** 2/24/2020  
**REPORT DATE:** 3/2/2020

FOR ACADEMIC PURPOSES ONLY - NOT FOR CLINICAL USE

## Test Details

| Gene    | Genotype      | Phenotype                                   | Alleles Tested  |
|---------|---------------|---|---|
| CYP2C19 | *1/*2         | Intermediate Metabolizer                    | *2, *3, *4, *4B, *5, *6, *7, *8, *9, *17                                  |
| CYP2D6  | *1/*4         | Intermediate Metabolizer                    | *2, *3, *4, *4M, *6, *7, *8, *9, *10, *12, *14A, *14B, *17, *29, *35, *41 |
| CYP3A5  | *3/*3         | Poor Metabolizer                            | *1D, *2, *3, *3B, *3C, *6, *7, *8, *9                                     |
| CYP3A4  | *1/*1         | Normal Metabolizer                          | *1B, *2, *3, *12, *17, *22  |
| VKORC1  | -1639G>A G/A  | Intermediate Warfarin Sensitivity           | -1639G>A  |
| CYP4F2  | *1/*1         | Normal Function                             | *2, *3  |
| CYP2C9  | *1/*3         | Intermediate Metabolizer                    | *2, *3, *4, *5, *6, *11   |
| CYP2B6  | *1/*1         | Normal Metabolizer                          | *6, *9  |
| CYP1A2  | *1F/*1F       | Normal Metabolizer<br>- Higher Inducibility | *1C, *1D, *1F, *1K, *1L, *1V, *1W   |
| SLCO1B1 | 521T>C T/C    | Decreased Function                          | 521T>C, 388A>G  |
| CFTR    | F508del/R553X | Negative                                    | Numerous  |
| DPYD    | *1/*1         | Normal Metabolizer                          | Numerous  |
| TPMT    | *2/*2         | Poor Metabolizer                            | *2, *3A, *3B, *3C, *4   |
| NUDT15  | *1/*2         | Intermediate Metabolizer                    | *2, *3, *4, *5, *6, *7, *8, *9  |
| UGT1A1  | *1/*36        | Normal Metabolizer                          | *6, *27, *28, *36, *37, *60, *80  |
| G6PD    | B or B/B      | Normal                                      | Numerous  |

## Additional Test Results (added to this original report)

HLA-B\*15:02    negative/negative    Negative    HLA-A\*31:01    negative/negative    Negative  
 HLA-B\*57:01    negative/positive    Positive  
 HLA-B\*58:01    negative/negative    Negative

*Limitation: This test will not detect all the known alleles that result in altered or inactive tested genes. This test does not account for all individual variations in the individual tested. Absence of a detectable gene mutation does not rule out the possibility that a patient has different phenotypes due to the presence of an undetected polymorphism or due to other factors such as drug-drug interactions, comorbidities and lifestyle habits.*

*Methodology: Array based assays detect listed alleles, including all common and most rare variants with known clinical significance at analytical sensitivity and specificity >99%.*

*Disclaimer: Manchester University developed the Genotype test. The performance characteristics of this test were determined by Manchester University. It has not been cleared or approved by the U.S. Food and Drug Administration.*

*Translational Software Disclaimer: The information presented on this report is provided as general educational health information. The content is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Only a physician, pharmacist or other healthcare professional should advise a patient on the use of the medications prescribed.*

*The pharmacogenetic assay involves use of reporting software and genotype-phenotype associations performed by Translational Software (www.translationalsoftware.com). The software has not been evaluated by the Food and Drug Administration. The software, and the report generated by the software, is not intended to diagnose, treat, cure, or prevent any disease. A qualified designee within the lab uses Translational Software to generate and subsequently review the report. The pharmacogenetic report is one of multiple pieces of information that clinicians should consider in guiding their therapeutic choice for each patient. It remains the responsibility of the health-care provider to determine the best course of treatment for a patient. Adherence to dose guidelines does not necessarily assure a successful medical outcome.*