

# GENOMADIX CUBE CYP2C19 SYSTEM

DNA TESTING ON THE MOVE

RAPID<sup>4</sup>, ACCURATE<sup>4</sup> AND PORTABLE DNA TESTING AT YOUR FINGERTIPS



## SMALL FOOTPRINT

At only 4 inches cubed,<sup>9</sup> the Genomadix Cube provides the power of molecular genotyping right at your fingertips, in any clinical setting.

## NON-INVASIVE TEST, WITH NO SAMPLE PREPARATION REQUIRED

Simply swab the subject's cheek and insert the sample into the tube. No pipetting. No DNA extraction. No complicated procedures.<sup>4</sup>

## IDENTIFYING CYP2C19 VARIANTS

APPROXIMATELY 3 IN 10 PEOPLE CARRY HIGH RISK MUTATIONS<sup>1</sup>

The CYP2C19 enzyme plays a role in metabolizing at least 10% of current clinically used drugs including anti-platelet medication, antidepressants, and proton pump inhibitors.<sup>1,2</sup> Genetic variability of CYP2C19 can affect the clinical effectiveness and safety of these drugs.<sup>2</sup> The Genomadix Cube CYP2C19 System identifies a patient's CYP2C19 \*2, \*3, and \*17 genotype.<sup>4</sup>

## RAPID CYP2C19 GENOTYPING

EMERGING EVIDENCE SUGGESTS THAT CYP2C19 GENOTYPING CAN IMPROVE OUTCOMES IN BOTH CARDIOVASCULAR AND CEREBROVASCULAR DISEASE<sup>3,5</sup>

Genomadix's compact, sample-to-result test allows real-time determination of a person's genotype. This allows Interventional Cardiologists, Neurologists and Radiologists access to rapid, DNA results for guided anti-platelet therapy. The Genomadix Cube CYP2C19 System performs PCR and delivers results in about an hour with no sample preparation required.<sup>4</sup>

## PEER-REVIEWED CLINICAL PUBLICATIONS

SEVERAL STUDIES HAVE USED GENOMADIX CYP2C19 TECHNOLOGY<sup>6,7,8</sup>

Publications include the TAILOR-PCI Randomized Clinical Trial published in JAMA<sup>6</sup>, an open-label randomized clinical trial of 5,302 US, Canadian, South Korean and Mexican patients undergoing percutaneous coronary intervention (PCI) for acute coronary syndromes (ACS) and stable coronary artery disease (CAD). The European POPular Genetics trial published in NEJM<sup>7</sup>, a randomized, open-label, assessor-blinded, 2,488 patient trial performed at 10 European sites and the RAPID-GENE trial published in the Lancet<sup>8</sup>, a prospective, randomized, proof-of-concept trial in 187 Canadian patients.

1. Biswas M. Global distribution of CYP2C19 risk phenotypes affecting safety and effectiveness of medications. Pharmacogenomics J. 2021 Apr;21(2):190-199. doi: 10.1038/s41397-020-00194-3. Epub 2020 Oct 20. PMID: 33082528. 2. Zanger UM, Schwab M. Cytochrome P450 enzymes in drug metabolism: regulation of gene expression, enzyme activities, and impact of genetic variation. Pharmacol Ther. 2013;138:103-41. doi: 10.1016/j.pharmthera.2012.12.007. 3. Klein MD, Williams AK, Lee CR, Stouffer GA. Clinical Utility of CYP2C19 Genotyping to Guide Antiplatelet Therapy in Patients With an Acute Coronary Syndrome or Undergoing Percutaneous Coronary Intervention. Arterioscler Thromb Vasc Biol. 2019 Apr;39(4):647-652. doi: 10.1161/ATVBAHA.18.311963. PMID: 30760018. 4. Genomadix Cube CYP2C19 System EU Instructions for Use. S.Lin, M.D., Ph.D., et al. Ticagrelor versus Clopidogrel in CYP2C19 Loss-of-Function Carriers with Stroke or TIA. December 30, 2021. N Engl J Med 2021; 385:2520-2530. doi: 10.1056/NEJMoa2111749. 5. Rihal et al. Effect of Genotype-Guided Oral P2Y12 Inhibitor Selection vs Conventional Clopidogrel Therapy on Ischemic Outcomes After Percutaneous Coronary Intervention: The TAILOR-PCI Randomized Clinical Trial. JAMA. 2020;324(8):761-771. doi:10.1001/jama.2020.12443. 6. Jen Berg, MD, PhD et al., A Genotype-Guided Strategy for Oral P2Y12 Inhibitors in Primary PCI. Engl J Med. 2019;381:1621-31. doi: 10.1056/NEJMoa1907096. Lancet 2012; 379: 1705-11 doi:10.1016/S0140-6736(12)60161-5. 8. So et al., Point-of-care genetic testing for personalisation of antiplatelet treatment (RAPID-GENE): a prospective, randomised, proof-of-concept trial. Lancet 2012; 379: 1705-11 doi:10.1016/S0140-6736(12)60161-5.9. Data on file at Genomadix.