Clopidogrel genotype testing after ischaemic stroke (provisional title)

[NICE technology appraisal 210 (TA210)](https://www.nice.org.uk/guidance/ta210) recommends clopidogrel as an option to prevent further occlusive vascular events (such as ischaemic stroke, transient ischaemic attack or myocardial infarction) for people who have had an ischaemic stroke.

The CYP2C19 gene encodes a protein that is needed to convert (metabolise) clopidogrel to its active form. Clopidogrel may be less effective in people with particular mutations in this gene (‘poor metabolisers’), and consequently have a reduced impact on lowering risk of, for example, a further stroke. Genetic testing for CYP2C19 variant alleles could identify people who may benefit from use of an alternative antiplatelet therapy.

This could reduce the risk of another ischaemic stroke, transient ischaemic attack or myocardial infarction for carriers of CYP2C19 mutations. Secondary strokes have a large impact on people’s health related quality of life. Testing would be associated with increased costs, but any longer-term reduction of these clinical events could improve patient outcomes, reduce costs and use of resources.

The NICE diagnostics assessment programme will assess the clinical and cost-effectiveness of clopidogrel genotype testing after an ischaemic stroke in order to make recommendations on its use in the NHS.