Project scope: Clopidogrel genotype testing after non-embolic ischaemic stroke or transient ischaemic attack (TIA)

Revised April 2024

Research question

1. What is the clinical effectiveness and safety of clopidogrel genotype testing compared with no testing after non-embolic ischaemic stroke or TIA?

2. What are the cost effectiveness/budget impact implications for Scotland of clopidogrel genotype testing compared with no testing after non-embolic ischaemic stroke or TIA?

3. What are patient experiences and preferences in relation to clopidogrel genotype testing after non-embolic ischaemic stroke or TIA?

Inclusion criteria

The literature review on the clinical effectiveness and safety of clopidogrel genotype testing after non-embolic ischaemic stroke or TIA will mainly be based on the evidence review underpinning the NICE diagnostic guidance on this topic. The criteria used to select studies for inclusion in the NICE evidence review are:

Population	Adults or children who have experienced a non-embolic ischaemic stroke or TIA, including people who may have CYP2C19 gene variants associated with poor metabolism of clopidogrel
Intervention/exposure	Any CYP2C19 genotype test, including both point of care tests and laboratory based testing
Comparator	No testing All patients treated with clopidogrel alone or in combination with a second antiplatelet drug
Outcomes	Incidence of secondary vascular occlusive events Adverse events (e.g. bleeding or headache) Mortality

	Impact of test result on decisions about care Health care resource use (e.g. length of hospital stay) Quality of life Healthcare costs Diagnostic accuracy of the tests

Planned activities

SHTG have agreed on the following activities to support an assessment on clopidogrel genotype testing after ischaemic stroke or TIA:

1. An assessment of the clinical effectiveness and safety evidence presented in the NICE technology assessment report (TAR) underpinning the NICE diagnostic guidance on clopidogrel genotype testing after ischaemic stroke or TIA.
2. We will conduct a budget impact assessment on the implementation of clopidogrel genotype testing in NHSScotland using data from Scotland provided by Public Health Scotland where appropriate.
3. A supplementary literature search to identify any patient aspects relating to clopidogrel genotype testing.
4. Development of a plain language version of the SHTG Assessment.
5. Engagement with clinical experts through peer review.

Public Health Scotland (PHS) has agreed on the following activities to support ANIA decision making on clopidogrel genotype testing after ischaemic stroke or TIA:

1. PHS will conduct an outcome and service impact assessment on the implementation of clopidogrel genotype testing in NHSScotland.

End products

At the end of the project, SHTG will publish:

- An SHTG Assessment including a budget impact assessment for NHSScotland.
- A plain language summary of the SHTG Assessment.

At the end of the project, PHS will publish:

- An outcome and service impact assessment.

Timescales (approximate)

The SHTG Assessment will be published on the SHTG website in September 2024. The PHS outcome and service impact assessment will be available from September 2024.