NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Technology Appraisals and Guidance Information Services

Static List Review (SLR)

Title and TA publication number of static topic:	**TA73; Myocardial perfusion scintigraphy for the diagnosis and management of angina and myocardial infarction**
Final decision:	The guidance will remain on the static guidance list.

1. Publication date:	TA73 was published in November 2003. (CG126 Stable angina: management was published in July 2011; CG95 Chest pain of recent onset: assessment and diagnosis was published in March 2010.)
2. Date added to static list:	November 2010.
3. Date the last searches were run:	May 2010.
4. Current guidance:	1.1 This recommendation has been updated and replaced by recommendation 1.3.6.1 in NICE clinical guideline 95. *This says:*

1.3.6.1 When offering non-invasive functional imaging for myocardial ischaemia use:

- *myocardial perfusion scintigraphy with single photon emission computed tomography (MPS with SPECT)* ***or***
- *stress echocardiography* ***or***
- *first-pass contrast-enhanced magnetic resonance (MR) perfusion* ***or***
- *MR imaging for stress-induced wall motion abnormalities.*

Take account of locally available technology and expertise, the person and their preferences, and any contraindications when deciding on the imaging method. [This recommendation updates and replaces recommendation 1.1 of Myocardial perfusion scintigraphy for the diagnosis and management of angina and myocardial infarction (NICE technology appraisal guidance 73)].

1.2 MPS using SPECT is recommended as part of the investigational strategy in the management of established CAD in people who remain symptomatic following myocardial infarction or reperfusion interventions. *This recommendation has been partially updated by recommendations 1.5.2 and 1.5.12 in NICE clinical guideline 126.*

These say the following:

1.5.2 Offer coronary angiography to guide treatment strategy for people with stable angina whose symptoms are not satisfactorily controlled with optimal medical treatment. Additional non-invasive or invasive functional testing may be required to evaluate angiographic findings and guide treatment decisions. [This recommendation partially updates recommendation 1.2 of Myocardial perfusion scintigraphy for the diagnosis and management of angina and myocardial infarction (NICE technology appraisal guidance 73).]

1.5.12 After discussion (see 1.5.11) with people whose symptoms are satisfactorily controlled with optimal medical treatment, consider a functional or non-invasive anatomical test to identify people

	who might gain a survival benefit from surgery. Functional or anatomical test results may already be available from diagnostic assessment. [This recommendation partially updates recommendation 1.2 of Myocardial perfusion scintigraphy for the diagnosis and management of angina and myocardial infarction (NICE technology appraisal guidance 73).] *The review decision in Nov 2010 says the following, which led to the partial update in CG126:* • *section 1.2 of the guidance should be updated, for people who remain symptomatic following myocardial infarction or reperfusion interventions because of their stable angina, in the clinical guideline on stable angina that is currently in development.* • *section 1.2, only in as far as it applies to those not included in the scope of the stable angina guideline, should be transferred to the 'static guidance list'.*
5. Research recommendations from original guidance:	5.1 Further research is recommended in patients with established CAD regarding the value of SPECT relative to other tests of cardiac function such as echocardiography, magnetic resonance imaging and positron emission tomography in order to inform future assessment of the needs of the NHS.
6. Current cost of technology/ technologies:	No information found.
7. Cost information from the TA (if available):	3.6 The cost of a SPECT scan is estimated to be around £265, whereas the costs for sECG and CA are £104 and £1103, respectively (2002 NHS reference costs).
8. Alternative company(ies):	N/A
9. Changes to the original indication:	N/A

10. New relevant trials:	No new relevant trials were found.
11. Relevant NICE guidance (published or in progress):	Stable angina: management (2011) NICE guideline CG126 Chest pain of recent onset: assessment and diagnosis of recent onset chest pain or discomfort of suspected cardiac origin (2010) NICE guideline CG95. Unstable angina and NSTEMI: the early management of unstable angina and non-ST-segment-elevation myocardial infarction (2010) NICE guideline CG94. Myocardial infarction (acute): Early rule out using high-sensitivity troponin tests (Elecsys Troponin T high-sensitive, ARCHITECT STAT High Sensitive Troponin-I and AccuTnI+3 assays) (2014) NICE diagnostics guidance 15. New generation cardiac CT scanners (Aquilion ONE, Brilliance iCT, Discovery CT750 HD and Somatom Definition Flash) for cardiac imaging in people with suspected or known coronary artery disease in whom imaging is difficult with earlier generation CT scanners (2012) NICE diagnostics guidance 3.
12. Relevant safety issues:	None found.
13. Technical Lead comments and recommendation:	Myocardial perfusion scintigraphy (MPS) is being used as part of a range of investigational strategies for the management of established coronary artery disease. It is also recommended in NICE clinical guideline 95 when a non-invasive functional imaging for myocardial ischaemia is being considered. No new relevant trials were found, and so the evidence base underpinning the current recommendation 1.2 in TA73 remains relevant. In addition, the past several years have seen significant reductions in radiation dose to the patient in single-photon emission computed tomography (SPECT) without compromising image quality, primarily because of new developments in scanner

	hardware and reconstruction software (Dey et al., 2014). This suggests improved safety with this procedure. As MPS using SPECT has become established in clinical practice, and no new evidence of substantial nature seems to have emerged, it is recommended that TA73 remains on the static list.

SLR paper sign off: Janet Robertson – Associate Director, Technology Appraisals

Contributors to this paper:

Technical Lead: Ahmed Elsada

Information Specialist: Toni Price

Project Manager: Andrew Kenyon

Date of IS searching: 3 December 2015

Appendix 1 – explanation of options

Options	Consequence	Selected – 'Yes/No'
The guidance will remain on the 'static guidance list'	The guidance will remain in place, in its current form, unless NICE becomes aware of substantive information which would make it reconsider. Literature searches are carried out every 5 years to check whether any of the Appraisals on the static list should be flagged for review.	**Yes**
The decision to review the guidance will be deferred to specify date or trial	NICE will consider whether a review is necessary at the specified date. NICE will actively monitor the evidence available to ascertain when a consideration of a review is more suitable.	No
A full consideration of a review will be carried out through the Review Proposal Process	There is evidence that could warrant a review of the guidance. NICE will schedule a consideration of a review, including a consultation with relevant consultees and commentators.	No
The guidance will be withdrawn	The guidance is no longer relevant and an update of the existing recommendations would not add value to the NHS. NICE will schedule a consideration of a review, including a consultation with relevant consultees and commentators.	No
The guidance should be updated in an on-going	Responsibility for the updating the technology appraisal passes to the NICE Clinical Guidelines programme. Once	No

clinical guideline.	the guideline is published the technology appraisal will be withdrawn. NICE will schedule a consideration of a review, including a consultation with relevant consultees and commentators.	