NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Multiple Technology Appraisal (MTA)

Prasugrel with percutaneous coronary intervention for treating acute coronary syndrome (review of TA182)

Thank you for agreeing to give us a statement on your organisation's view of the technology and the way it should be used in the NHS.

Healthcare professionals can provide a unique perspective on the technology within the context of current clinical practice which is not typically available from the published literature.

To help you in making your statement, we have provided a template. The questions are there as prompts to guide you. It is not essential that you answer all of them.

Please do not exceed the 8-page limit.

About you

Your name:

Dr Tim Kinnaird

Name of your organisation

Department of Cardiology, University Hospital of Wales, Cardiff

Are you (tick all that apply):

- a specialist in the treatment of people with the condition for which NICE is considering this technology?
-

Yes I am an interventional cardiologist in a tertiary cardiac centre.

- a specialist in the clinical evidence base that is to support the technology (e.g. involved in clinical trials for the technology)?

- an employee of a healthcare professional organisation that represents clinicians treating the condition for which NICE is considering the technology? If so, what is your position in the organisation where appropriate (e.g. policy officer, trustee, member etc.)?

- other? (please specify)

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What is the expected place of the technology in current practice?

How is the condition currently treated in the NHS? Is there significant geographical variation in current practice? Are there differences of opinion between professionals as to what current practice should be? What are the current alternatives (if any) to the technology, and what are their respective advantages and disadvantages?

Are there any subgroups of patients with the condition who have a different prognosis from the typical patient? Are there differences in the capacity of different subgroups to benefit from or to be put at risk by the technology?

In what setting should/could the technology be used – for example, primary or secondary care, specialist clinics? Would there be any requirements for additional professional input (for example, community care, specialist nursing, other healthcare professionals)?

If the technology is already available, is there variation in how it is being used in the NHS? Is it always used within its licensed indications? If not, under what circumstances does this occur?

Please tell us about any relevant **clinical guidelines** and comment on the appropriateness of the methodology used in developing the guideline and the specific evidence that underpinned the various recommendations.

STEMI is treated in the vast majority of cases in current UK practice with primary PCI. To support this physicians need to use dual anti-platelet therapy with aspirin plus either clopidogrel, ticagrelor or prasugrel. The advantages of prasugrel over clopidogrel in primary PCI are its rapidity of onset and predictability of effect. However some clinicians use ticagrelor and others still use clopidogrel. The primary drivers of this variation are differential interpretation of the clinical data, inertia to change and cost. The use of the newer antiplatelet such as prasugrel over clopidogrel however is supported by the ESC and AHA STEMI guidelines and based of the Triton trial.

For NSTEMI the use of prasugrel is less widespread with often clopidogrel or ticagrelor used. This is because the design on the Triton trial meant that patients were given the drug after a diagnostic angiogram. This is OK if there are delays of a few hours to angiography as in Europe and the US but in UK practice delays to angiography are typically 72hrs+ meaning that physicians would wish to give anti-platelets prior to the angiogram whilst patients wait. However if delays to angiography are short prasugrel use would be supported by the data and this is endorsed approach by AHA and ESC, The diabetic sub-group in Triton did even better than the overall population and therefore a lot of interventionalists will convert their NSTEMI patients to prasugrel after the PCI has been performed.

This technology is usually prescribed in secondary of tertiary care and continued for 12-monhs afterwards by primary care.

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The advantages and disadvantages of the technology

NICE is particularly interested in your views on how the technology, when it becomes available, will compare with current alternatives used in the UK. Will the technology be easier or more difficult to use, and are there any practical implications (for example, concomitant treatments, other additional clinical requirements, patient acceptability/ease of use or the need for additional tests) surrounding its future use?

If appropriate, please give your view on the nature of any rules, informal or formal, for starting and stopping the use of the technology; this might include any requirements for additional testing to identify appropriate subgroups for treatment or to assess response and the potential for discontinuation.

If you are familiar with the evidence base for the technology, please comment on whether the use of the technology under clinical trial conditions reflects that observed in clinical practice. Do the circumstances in which the trials were conducted reflect current UK practice, and if not, how could the results be extrapolated to a UK setting? What, in your view, are the most important outcomes, and were they measured in the trials? If surrogate measures of outcome were used, do they adequately predict long-term outcomes?

What is the relative significance of any side effects or adverse reactions? In what ways do these affect the management of the condition and the patient's quality of life? Are there any adverse effects that were not apparent in clinical trials but have come to light subsequently during routine clinical practice?

I have partly answered this above. The advantage of prasugrel over clopidogrel is its rapidity of action and its predictability. Rapidity of action is particularly important in primary PCI where an early onset is preferable as the PCI usually takes within the first 3 or 4 hours of the onset of the event. With regard to predictability of action many patients (>30%) are resistant to clopidogrel because of a variety of genetic and polygenetic factors. This resistance has been associated with worse outcomes but it is clearly shown that patients who are resistant to clopidogrel are almost always sensitive to prasugrel. Therefore use of prasugrel means the majority of patients will respond.

The disadvantage of prasugrel is mainly a bleeding excess over clopidogrel. Any anti-coagulant drug that is more potent and predictable must increase the risk of bleeding and this was seen in the landmark Triton trial (and also the PLATO trial of ticagrelor). There was a small excess of bleeding but this was most marked in patients over 75years of age, under 60kgs in weight or with a previous history of stroke or TIA. Therefore in clinical practice we avoid using prasugrel in these patients.

In my opinion the technology is used in line with guidelines and the body of clinical evidence.

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Equality and Diversity

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others. Please let us know if you think that this appraisal:

- Could exclude from full consideration any people protected by the equality legislation who fall within the patient population for which [the treatment(s)] is/are/will be licensed;
- Could lead to recommendations that have a different impact on people protected by the equality legislation than on the wider population, e.g. by making it more difficult in practice for a specific group to access the technology;
- Could lead to recommendations that have any adverse impact on people with a particular disability or disabilities

Please tell us what evidence should be obtained to enable the Committee to identify and consider such impacts

None that I am aware of.

Any additional sources of evidence

Can you provide information about any relevant evidence that might not be found by a technology-focused systematic review of the available trial evidence? This could be information on recent and informal unpublished evidence, or information from registries and other nationally coordinated clinical audits. Any such information must include sufficient detail to allow a judgement to be made as to the quality of the evidence and to allow potential sources of bias to be determined.

None that I am aware of

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Implementation issues

The NHS is required by the Department of Health and the Welsh Assembly Government to provide funding and resources for medicines and treatments that have been recommended by NICE technology appraisal guidance. This provision has to be made within 3 months from the date of publication of the guidance.

If the technology is unlikely to be available in sufficient quantity, or the staff and facilities to fulfil the general nature of the guidance cannot be put in place within 3 months, NICE may advise the Department of Health and the Welsh Assembly Government to vary this direction.

Please note that NICE cannot suggest such a variation on the basis of budgetary constraints alone.

How would possible NICE guidance on this technology affect the delivery of care for patients with this condition? Would NHS staff need extra education and training? Would any additional resources be required (for example, facilities or equipment)?

None that I am aware of