Review of TA47 Glycoprotein IIb/IIIa inhibitors in the treatment of acute coronary syndromes

This guidance was issued in September, 2002
The review date for this guidance: A review of glycoproteins was considered during July 2007. It was decided (after consultation) that the existing guidance should be updated within the NICE clinical guideline on unstable angina and non-ST-segment-elevation myocardial infarction (NSTEMI). However, only part of the current guidance has been updated by NICE clinical guideline 94 ‘Unstable angina and NSTEMI’ (sections 1.1 - 1.6). This review covers sections 1.7 and 1.8 of the guidance.

Recommendation

- A review of the guidance should be transferred to the static list. That we consult on the proposal.

Consideration of options for recommendation:

<table>
<thead>
<tr>
<th>Options</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A review of the guidance should be planned into the appraisal work programme.</td>
<td>No new evidence</td>
</tr>
<tr>
<td>The decision to review the guidance should be deferred</td>
<td>No significant evidence has emerged</td>
</tr>
<tr>
<td>A review of the guidance should be combined with a review of a related technology and conducted at the scheduled time for the review of the related technology.</td>
<td>No related technology appraisal</td>
</tr>
</tbody>
</table>
A review of the guidance should be combined with a new appraisal that has recently been referred to the Institute. | No relevant guidance
---|---
A review of the guidance should be incorporated into an on-going clinical guideline. | No relevant clinical guideline for sections 1.7 - 1.8
A review of the guidance should be updated into an on-going clinical guideline. | No relevant clinical guideline for sections 1.7 - 1.8
A review of the guidance should be transferred to the ‘static guidance list’. | No new evidence has emerged. The guidance should be transferred to the ‘static guidance list’.

Original remit(s)

Glycoproteins was a 2nd wave topic with no remit.

Current guidance

Sections 1.1 – 1.6 have been updated by NICE clinical guideline 94 on unstable angina and NSTEMI (Unstable angina and NSTEMI: the early management of unstable angina and non-ST segment elevation myocardial infarction) issued in March 2010.

1.7. It is recommended that a GP IIb/IIIa inhibitor is considered as an adjunct to PCI for all patients with diabetes undergoing elective PCI, and for those patients undergoing complex procedures (for example, multi-vessel PCI, insertion of multiple stents, vein graft PCI or PCI for bifurcation lesions); currently only abciximab is licensed as an adjunct to PCI. In procedurally uncomplicated, elective PCI, where the risk of adverse sequelae is low, use of a GP IIb/IIIa inhibitor is not recommended unless unexpected immediate complications occur.

1.8. GP IIb/IIIa inhibitors are not currently licensed in the UK for use as an adjunct to thrombolytic therapy in ST-segment-elevation MI.
Relevant Institute work


Unstable angina and NSTEMI: the management of unstable angina and non-ST segment elevation myocardial infarction. Clinical guideline CG94. Issued March 2010, review date to be confirmed.

Chest pain of recent onset: assessment and diagnosis of recent onset chest pain/discomfort of suspected cardiac origin. Clinical guideline CG95. Issued in March 2010, review date to be confirmed.


Coronary imaging: Myocardial perfusion scintigraphy for the diagnosis and management of angina and myocardial infarction. Technology appraisal TA73. Issued November 2003, reviewed in December 2009 when it was proposed the guidance should be updated in the on-going clinical guideline on the ‘Assessment and investigation of recent onset chest pain of discomfort of suspected cardiac origin’ which is currently due to be published in March 2010.

Ticagrelor for the treatment of acute coronary syndromes (ACS). Technology appraisal due to be issued July 2011.

Guidance on the prevention of cardiovascular disease at the population level. Public health guidance due to be issued in April 2010.
On-going trials

<table>
<thead>
<tr>
<th>Trial name and contact</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>The INFUSE - anterior myocardial infarction (AMI) study (NCT00976521)</td>
<td>The primary objective of the study is to demonstrate that among subjects undergoing primary PCI for anterior STEMI treated with a bivalirudin monotherapy anticoagulation strategy, the intracoronary infusion of an abciximab bolus with or without thrombus aspiration prior to stent implantation, compared to no infusion with or without thrombus aspiration (standard of care), results in 1) reduced infarct size measured by cardiac MRI at 30 days (range -7 days/+14 days; i.e., between 23 and 44 days), 2) reduce microvascular obstruction (MVO) by cardiac MRI at 5 + 2 days (i.e., between 3 and 7 days), 3) enhanced ST-segment resolution, 4) improved myocardial perfusion, 5) reduced thrombus burden and angiographic complications, and 6) no increase in major and minor bleeding. Estimated enrolment: 452. Estimated Study Completion Date: May 2012</td>
</tr>
</tbody>
</table>

New evidence

The search strategy from the original assessment report was re-run on the Cochrane Library, Medline, Medline(R) In-Process and Embase. References from 2007 onwards were reviewed.

Implementation

A submission from Implementation is attached at the end of this paper.

Equality and diversity issues

No equality and diversity issues were identified.
**Appraisals comment:**

The literature search of this review identified an ongoing trial that examines different ways of administration of abciximab (if intracoronary bolus administration is superior to intravenous bolus administration). However, the population in this study (CICERO) does not match the population being considered in recommendation 1.7 of the current guidance, and is not considered relevant. Therefore, no significant new data appear to be available that indicate the need for a review of sections 1.7 and 1.8 of the current guidance at this time. No changes have been made to the marketing authorisations for these drugs in this population and no new indications or licence extensions are expected.

Since no new evidence base has emerged, no changes have been made to the marketing authorisations and no new indications or licence extensions are anticipated, it would be appropriate that recommendations 1.7 and 1.8 of the technology appraisal 47 Glycoprotein IIb/IIIa inhibitors in the treatment of acute coronary syndromes be transferred to the 'static guidance list'.

**Summary**

It would be appropriate that recommendations 1.7 and 1.8 of the technology appraisal 47 Glycoprotein IIb/IIIa inhibitors in the treatment of acute coronary syndromes be transferred to the 'static guidance list'.

**GE paper sign off:**

Frances Sutcliffe  
11/03/10

**Contributors to this paper:**

Information Specialist: Daniel Tuvey
1. National Prescribing

1.1 Data showing trends in prescribing costs and volume are presented below. Unfortunately this data does not link to diagnosis so needs to be treated cautiously in relation to the specific recommendations of the guidance. Estimated costs are also calculated by IMS using the drug tariff and other standard price lists. Many hospitals receive discounts from suppliers and this is not reflected in the estimated cost.
Figure 1 Trend in volume of prescribing eptifibatide and tirofiban in hospitals in England

Figure 2 Trend in cost of prescribing eptifibatide and tirofiban in hospitals in England
TA47 (September 2002) - Acute coronary syndromes - glycoprotein IIb/IIIa inhibitors (review)
2. External literature

2.1 ERNIE


**Description:** A national review of medicines management in 173 acute and specialist NHS trusts in England. Data from a trust questionnaire as part of this review found that for technology appraisal 47, 92% of organisations treat some patients according to guidance and 69% treat all patients according to the guidance. 89% of trusts have an agreement about funding in place with commissioners and 56% of organisations reported having an audit completed or in progress.
2.1.2 The Information Centre for Health and Social Care (2009) Hospital Prescribing, 2008: England

http://www.ic.nhs.uk/webfiles/publications/Primary%20Care/Prescriptions/hospre08/Hospital_prescribing_2008_report2.pdf

<table>
<thead>
<tr>
<th>Cost (£000s)</th>
<th>Primary care</th>
<th>% growth primary</th>
<th>FP10HP*</th>
<th>% growth</th>
<th>Hospital</th>
<th>% growth hospital</th>
<th>Total</th>
<th>% growth total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eptifibatide</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>296.7</td>
<td>-2.0</td>
<td>296.7</td>
<td>-</td>
</tr>
<tr>
<td>Tirofiban</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,506.9</td>
<td>-10.9</td>
<td>1,506.9</td>
<td>-10.9</td>
</tr>
</tbody>
</table>

*FP10HP = prescriptions written in hospitals but dispensed in the community

The data shows that all prescribing for Eptifibatide and Tirofiban is carried out in a hospital setting.


Description: Authors audited use of GPI against NICE guidance. Data was collected from 1,685 patients between Sept-Nov in 2002,2003,2004,2007. In 2007, 44.5% of patients did not receive a GPI as NICE guidelines recommend. The study found a decline in compliance to NICE guidelines on GPI usage