Costing statement: Routine antenatal anti-D prophylaxis for women who are rhesus D negative (review of NICE technology appraisal guidance 41)

The guidance on ‘Routine antenatal anti-D prophylaxis for women who are rhesus D negative’ (NICE technology appraisal guidance 156) is unlikely to result in a significant change in resource use in the NHS.

The guidance states that routine antenatal anti-D prophylaxis (RAADP) is recommended as a treatment option for all pregnant women who are rhesus D (RhD) negative and who are not known to be sensitised to the RhD antigen.

It also recommends that, when a decision has been made to give RAADP, the preparation with the lowest associated cost should be used. This cost should take into account the lowest acquisition cost available locally and costs associated with administration.

Patient numbers affected

In England there are approximately 609,300 women giving birth each year\(^1\), of these an estimated 16%\(^2\) are RhD negative (about 97,500 women).

In England an estimated 500 pregnant RhD-negative women each year are known to be sensitised to the RhD antigen (see NICE technology appraisal guidance 156, section 2.5). Therefore it can be estimated that approximately 97,000 RhD-negative women who are not known to be sensitised to the RhD antigen give birth each year.


women who are rhesus-negative. Health Technology Assessment 7: iii–62. Available from: www.hta.ac.uk/1244

Resource impact

The recommendation that RAADP should be offered to all pregnant women who are RhD negative and who are not known to be sensitised to the RhD antigen was originally included in ‘Guidance on the use of routine antenatal anti-D prophylaxis for RhD-negative women’ (NICE technology appraisal guidance 41; www.nice.org.uk/TA041). Therefore costs associated with implementing this recommendation have already been incurred.

NICE technology appraisal guidance 156 goes on to recommend that the preparation with the lowest associated cost should be used. Given the uncertainty around prices paid locally, we recommend that prices and availability of RAADP are assessed locally. The list price of the different RAADP preparations for pregnant RhD-negative women are outlined in Table 1.

Table 1 Estimated average drug cost per patient for RAADP

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Regimen</th>
<th>Cost/dose⁴</th>
<th>Cost per patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-Gam (Bio Products Laboratory)</td>
<td>500-IU doses at 28 and 34 weeks gestation</td>
<td>£27.00 per 500-IU vial</td>
<td>£54.00</td>
</tr>
<tr>
<td>Partobulin SDF (Baxter BioScience)</td>
<td>1000–1650-IU doses at 28 and 34 weeks gestation</td>
<td>£35.00 per 1250-IU prefilled syringe</td>
<td>£70.00</td>
</tr>
<tr>
<td>Rhophylac (CSL Behring)</td>
<td>1500-IU dose given between 28 and 30 weeks gestation</td>
<td>£46.50 per 1500-IU prefilled syringe</td>
<td>£46.50</td>
</tr>
<tr>
<td>WinRho SDF (Baxter BioScience)³</td>
<td>1500-IU dose given at 28 weeks gestation</td>
<td>£313.50 per 1500-IU vial</td>
<td>£313.50</td>
</tr>
</tbody>
</table>

⁴ All costs exclude VAT and are from the ‘British national formulary’ (edition 55).

IU, international unit.

³ WinRho SDF is licensed for RAADP, it is not marketed for this indication in the UK.
If vials or syringes of different sizes are used for RAADP, estimated costs may differ. Costs could also be affected by the need to consider limiting a woman’s exposure to different batches of anti-D immunoglobulin. In addition, the use of individual RAADP products may occasionally be affected by supply problems.

Additional costs may be incurred in treating patients experiencing an allergic reaction. Also, costs may vary in different settings because of locally negotiated procurement discounts.

Discussion with clinicians about potential changes to the type of RAADP offered to pregnant RhD-negative women have suggested that current practice is to use the preparation with the lowest associated cost. Therefore it is not anticipated that the recommendations in NICE technology appraisal guidance 156 will have a significant impact on NHS resources.