Local Recommendations for Active Surveillance of Prostate Cancer

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Summary and Recommendations

1. There is no single set of recommendations for Active Surveillance of prostate cancer

2. Recent NICE guidance 2014 (NICE Clinical Guideline 175 2014) suggests **Active Surveillance for men with localized prostate cancer or intermediate risk prostate cancer**. NICE states do NOT offer active surveillance to men with high risk prostate cancer

3. These groups are defined as below

<table>
<thead>
<tr>
<th>Level of risk</th>
<th>PSA</th>
<th>Gleason score</th>
<th>Clinical stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low risk</td>
<td>&lt; 10 ng/ml</td>
<td>≤ 6</td>
<td>T1–T2a</td>
</tr>
<tr>
<td>Intermediate risk</td>
<td>10–20 ng/ml</td>
<td>7</td>
<td>T2b</td>
</tr>
<tr>
<td>High risk</td>
<td>&gt; 20 ng/ml</td>
<td>8–10</td>
<td>≥T2c</td>
</tr>
</tbody>
</table>

4. Follow up Protocol
   a. There is no agreed Follow up protocol
   b. NICE produced the following recommendation in 2014

<table>
<thead>
<tr>
<th>Timing</th>
<th>Tests</th>
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<tbody>
<tr>
<td>At enrolment in active surveillance</td>
<td>Multiparametric MRI if not previously performed</td>
</tr>
<tr>
<td>Year 1 of active surveillance</td>
<td>Every 3–4 months: measure PSA&lt;sup&gt;a&lt;/sup&gt;&lt;br&gt;Throughout active surveillance: monitor PSA kinetics&lt;sup&gt;a&lt;/sup&gt;&lt;br&gt;Every 6–12 months: DRE&lt;sup&gt;d&lt;/sup&gt;&lt;br&gt;At 12 months: prostate re-biopsy</td>
</tr>
<tr>
<td>Years 2–4 of active surveillance</td>
<td>Every 3–6 months: measure PSA&lt;sup&gt;a&lt;/sup&gt;&lt;br&gt;Throughout active surveillance: monitor PSA kinetics&lt;sup&gt;a&lt;/sup&gt;&lt;br&gt;Every 6–12 months: DRE&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td>Year 5 and every year thereafter until active surveillance ends</td>
<td>Every 6 months: measure PSA&lt;sup&gt;a&lt;/sup&gt;&lt;br&gt;Throughout active surveillance: monitor PSA kinetics&lt;sup&gt;a&lt;/sup&gt;&lt;br&gt;Every 12 months: DRE&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

a. Note that **Multiparametric MRI** is recommended at enrolment into AS if not previously performed, but does not form part of the regular surveillance program as outlined by NICE

b. **Note that Prostate re biopsy is recommended by NICE at 12 months after start of AS, but is not suggested thereafter**

c. A recent article in the BJUI commented on biopsy protocols (Kates et al 2015). The Johns Hopkins University performs annual prostate biopsy on patients on AS, whereas the PRIAS study recommends biopsy at years 1, 4, and 7

d. Of patients where were “reclassified” because of prostate biopsy 52% were reclassified at the 1 year biopsy

e. Some patients would have missed reclassification in years 2-3 if following the PRIAS schedule, but whether the delay in re-diagnosis affects subsequent treatment is not known
f. Annual biopsy carries a financial cost and also subjects the patient to the risk of complications (both ED, and complications directly as a result of the TRUSB)

g. **In short; at present there is no agreed biopsy protocol for patients on AS beyond the 1 year phase – use of the PRIAS schedule (1, 4 and 7 years) may therefore be an acceptable compromise**

5. **There is no agreed role for the continuing use of MRI** but MRI could be requested in cases where there is diagnostic doubt (e.g. suspicion of abnormal DRE, concern about change in PSA kinetics), as a way of deciding on whether (earlier) biopsy is necessary, and what kind of biopsy may be most appropriate (e.g. standard biopsy, fusion biopsy, or transperineal biopsy)

6. **Indications for change from AS to Active Treatment** (Soloway 2008)

   a. **NICE 2014 does not make specific recommendations**

   b. Other recommendations (Soloway 2008)
      
      i. PSA doubling time < 3 years (see Van den Bergh 2009) – PSA DT to be assessed only after 1yr of follow up and using at least 5 PSA measurements (Van den Bergh 2009)
      
      ii. Re biopsy with Gleason ≥7
      
      iii. Increase in tumour volume – i.e. >2 cores positive, or any core >50% involvement
      
      iv. Stage progression - >T2
      
      v. Patient preference
References used

Short-term outcomes of the prospective multicentre 'Prostate Cancer Research International: Active Surveillance' study, *BJU international.*