

**NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE**

**Proposed Health Technology Appraisal**

**Enzalutamide for treating metastatic hormone-relapsed prostate cancer  
not previously treated with chemotherapy**

**Draft scope (pre-referral)**

**Draft remit/appraisal objective**

To appraise the clinical and cost effectiveness of enzalutamide within its licensed indication for treating metastatic, hormone-relapsed prostate cancer that has not been previously treated with chemotherapy.

**Background**

Prostate cancer is a disease in which tumours develop in the prostate, a gland in the male reproductive system. Its cause is thought to be multi-factorial, involving both environmental and genetic factors. The incidence of prostate cancer increases with age and is higher in men of African-Caribbean family origin. In England and Wales, there were over 37,000 people newly diagnosed with prostate cancer and over 9900 deaths from prostate cancer in 2010.

Around 55–65% of people with prostate cancer develop metastatic disease (that is, the cancer spreads to other parts of the body). Over 90% of people with metastatic prostate cancer initially respond to hormonal therapy but eventually become resistant to it. This clinical condition is described as hormone-relapsed prostate cancer (but the terms 'castration-resistant prostate cancer', 'hormone-refractory prostate cancer' and 'androgen-independent prostate cancer' are also used).

Treatment options after hormonal therapy include docetaxel or abiraterone. NICE clinical guideline 58 'Prostate cancer: Diagnosis and treatment' and NICE technology appraisal guidance 101 recommend docetaxel as a treatment option for men with metastatic hormone-relapsed prostate cancer who have a Karnofsky performance status score of 60% or more. Abiraterone with prednisone or prednisolone is indicated for treating hormone relapsed-prostate cancer in people who are asymptomatic or mildly symptomatic after failure of hormonal therapy and in whom chemotherapy is not yet clinically indicated.

**The technology**

Enzalutamide (Xtandi, Astellas Pharma) is an androgen receptor antagonist that acts on different steps in the androgen receptor signalling pathway to decrease proliferation of cancer cells and induce cancer cell death leading to tumour regression. Enzalutamide is administered orally.

Enzalutamide does not currently have a UK marketing authorisation for the treatment of metastatic, hormone-relapsed prostate cancer not previously treated with chemotherapy. It has been studied in clinical trials compared with placebo in men with histologically confirmed prostate cancer showing signs of disease progression despite hormonal therapy and whose disease was asymptomatic or mildly symptomatic.

<b>Intervention(s)</b>	Enzalutamide
<b>Population(s)</b>	Adults with asymptomatic or mildly symptomatic metastatic hormone-relapsed prostate cancer.
<b>Comparators</b>	<ul style="list-style-type: none"> <li>• abiraterone</li> <li>• docetaxel</li> <li>• best supportive care</li> </ul>
<b>Outcomes</b>	<p>The outcome measures to be considered include:</p> <ul style="list-style-type: none"> <li>• overall survival</li> <li>• progression-free survival</li> <li>• response rate</li> <li>• prostate specific antigen response</li> <li>• adverse effects of treatment</li> <li>• health-related quality of life.</li> </ul>
<b>Economic analysis</b>	<p>The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year.</p> <p>The reference case stipulates that the time horizon for estimating clinical and cost effectiveness should be sufficiently long to reflect any differences in costs or outcomes between the technologies being compared.</p> <p>Costs will be considered from an NHS and Personal Social Services perspective.</p> <p>The availability of any patient access scheme for the intervention or comparator technologies should be taken into account.</p>
<b>Other considerations</b>	Guidance will only be issued in accordance with the marketing authorisation.

<p><b>Related NICE recommendations and NICE pathways</b></p>	<p>Related Technology Appraisals:</p> <p>Technology Appraisal No. 101, June 2006, 'Docetaxel for the treatment of hormone refractory prostate cancer'. Currently being updated with NICE clinical guideline No. 58.</p> <p>Suspended Technology Appraisal, February 2013, 'Abiraterone in combination with prednisolone for the treatment of metastatic, hormone-relapsed prostate cancer in people who have not been previously treated with chemotherapy'.</p> <p>Technology Appraisal in preparation, 'Sipuleucel-T for the treatment of asymptomatic or minimally symptomatic metastatic hormone relapsed prostate cancer'. Earliest anticipated date of publication: February 2014.</p> <p>Technology Appraisal in preparation, 'Enzalutamide for the treatment of metastatic hormone relapsed prostate cancer previously treated with a docetaxel-containing regimen'. Earliest anticipated date of publication: February 2014.</p> <p>Related Guidelines:</p> <p>Clinical Guideline No. 58, February 2008, 'Prostate Cancer: diagnosis and treatment'. Currently being updated. Earliest anticipated date of publication: November 2013</p> <p>Related Public Health Guidance:</p> <p>Cancer Service Guidance, September 2002. <a href="#">'Improving outcomes in urological cancers'</a>.</p> <p>Related Pathway:</p> <p>NICE Pathway, 'Prostate cancer' Pathway created: October 2011. Last updated October 2012  <a href="http://pathways.nice.org.uk/pathways/prostate-cancer">http://pathways.nice.org.uk/pathways/prostate-cancer</a></p>
<p><b>Related NHS England Policy</b></p>	<p>Specialist cancer services 105, Manual for prescribed specialised services, November 2012, NHS Commissioning Board, <a href="http://www.england.nhs.uk/wp-content/uploads/2012/12/pss-manual.pdf">http://www.england.nhs.uk/wp-content/uploads/2012/12/pss-manual.pdf</a></p>

### Questions for consultation

Have all relevant comparators for enzalutamide been included in the scope?  
 Which treatments are considered to be established clinical practice in the NHS for metastatic hormone-relapsed prostate cancer in people who are asymptomatic or mildly symptomatic?

- Is abiraterone routinely used in clinical practice for treating people with metastatic hormone-relapsed prostate cancer who are asymptomatic or mildly symptomatic?
- Is docetaxel a relevant comparator for enzalutamide for this appraisal?
- How should best supportive care be defined? Is it a relevant comparator for this appraisal?

Are there any subgroups of people in whom enzalutamide is expected to be more clinically effective and cost effective or other groups that should be examined separately?

Where do you consider enzalutamide will fit into the existing NICE pathway, [‘Prostate cancer’](#)?

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 the proposed remit and scope may need changing in order to meet these aims. In particular, please tell us if the proposed remit and scope:

- could exclude from full consideration any people protected by the equality legislation who fall within the patient population for which enzalutamide 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 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.

Do you consider the technology to be innovative in its potential to make a significant and substantial impact on health-related benefits and how it might improve the way that current need is met (is this a ‘step-change’ in the management of the condition)?

Do you consider that the use of the technology can result in any potential significant and substantial health-related benefits that are unlikely to be included in the QALY calculation?

Please identify the nature of the data which you understand to be available to enable the Appraisal Committee to take account of these benefits.

NICE intends to appraise this technology through its Single Technology Appraisal (STA) Process. We welcome comments on the appropriateness of appraising this topic through this process. (Information on the Institute's Technology Appraisal processes is available at [http://www.nice.org.uk/aboutnice/howwework/devnicetech/technologyappraisalprocessguides/technology\\_appraisal\\_process\\_guides.jsp](http://www.nice.org.uk/aboutnice/howwework/devnicetech/technologyappraisalprocessguides/technology_appraisal_process_guides.jsp))