Appendix A

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

Single Technology Appraisal

Dutasteride for reducing the risk of developing prostate cancer

Draft scope

Remit/Appraisal objective

To appraise the clinical and cost effectiveness of dutasteride within its licensed indication for reducing the risk of developing prostate cancer in men who are considered to be at increased risk of developing the disease.

Background

Prostate cancer is a disease in which tumours develop in the prostate, a gland in the male reproductive system. It is the most common cancer in men in the UK, with 32,188 new cases diagnosed in England and Wales in 2006. The incidence of prostate cancer increases with age and is more common in older men, with around 20% of cases occur in men under the age of 65 years. It is also the second most common cause of cancer mortality in men, with 9222 deaths recorded in England and Wales in 2007.

There is no national screening programme for prostate cancer in England and Wales. At present no modifiable risk factor for prostate cancer has been identified and therefore there is insufficient evidence on which to base a prevention strategy. Established risk factors are are age, family history and ethnicity (men of black African or black Caribbean) In addition increased body mass index and elevated serum PSA are considered to be risk factors.,The latter is also a marker for the presence of prostate cancer itself.

Currently there is no treatment that is known to prevent the development of prostate cancer. It has been suggested that certain drugs used in the treatment of another condition of the prostate, benign prostatic hyperplasia (BPH), may reduce the overall risk of prostate cancer. BPH is not a precancerous condition.

The technology

Dutasteride (Avodart, GlaxoSmithKline) is a type-1 and type-2 5-alpha reductase inhibitor that inhibits the conversion of testosterone to dihydrotestosterone, a more potent androgen that is thought to be influential in the development of prostate cancer. It is administrated orally as a 0.5mg capsule once daily.

Dutasteride does not currently have a marketing authorisation for use in the prevention of prostate cancer. It is being studied in comparison with placebo in clinical trials in men between the ages of 50-75 with elevated serum PSA concentration who have had a negative prostate biopsy within 6 months prior to enrolment, that is, men considered to be at increased risk of prostate cancer who have not yet known to have developed the disease. Dutasteride

has a marketing authorisation for the treatment of moderate to severe symptoms of BPH.

Intervention	Dutasteride
Population	Men who are at increased risk of developing prostate cancer on the basis of factors such as age, family history, ethnicity, body mass index, elevated serum PSA concentration or other known risk factors
Comparators	No intervention to reduce the risk of prostate cancer.
Outcomes	The outcome measures to be considered include: • histological grade at prostate cancer diagnosis • time of diagnosis to prostate cancer • severity • mortality • PSA • adverse effects of treatment • health-related quality of life.
Economic analysis	The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year. 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. Costs will be considered from an NHS and Personal Social Services perspective. Costs to the NHS associated with the case finding/serum PSA concentration testing should be included in the economic analysis.
Other considerations	If the evidence allows subgroups based on the level of risk at which intervention with dutasteride is clinically- and cost-effective will be considered. Risk factors may include PSA level, age, ethnicity, body mass index and family history. Guidance will only be issued in accordance with the marketing authorisation

Related NICE recommendations	Related Guidelines: Guidance on Cancer Services, September 2002, Improving outcomes in urological cancers. Clinical Guideline 58, Prostate Cancer: diagnosis and treatment, February 2008.

What criteria are used in UK clinical practice to identify men who are at increased risk of developing prostate cancer? How are risk factors such as age and ethnicity taken into consideration in the assessment of increased risk?

Have the most appropriate comparators for the prevention of prostate cancer been included in the scope?

What do you consider to be the relevant clinical outcomes and other potential health related benefits of dutasteride in the prevention of prostate cancer, particularly when compared with currently used treatment options? How should severity be defined?

Are the subgroups suggested in ‘other considerations appropriate? Are there any other subgroups of people in whom the technology is expected to be more clinically effective and cost effective or other groups that should be examined separately?

Are there any issues that require special attention in light of the duty to have due regard to the need to eliminate unlawful discrimination and promote equality?

What do you consider to be the relevant clinical outcomes and other potential health related benefits of dutasteride in the prevention of prostate cancer, particularly when compared with currently used treatment options? How should severity be defined?

Do you consider dutasteride 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 dutasteride 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.