

# key points

SELECTED BY

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**Prostate cancer is the most common cancer in men in the UK.** Men have a 1 in 8 lifetime risk of being diagnosed with the disease. GP referral is the route by which the highest proportion of prostate cancer cases are diagnosed at an early stage. In the UK, at least 4 in 10 prostate cancer cases are diagnosed at a late stage. When prostate cancer cases are identified as an emergency presentation, more than 70% have advanced disease when treatment options may be more limited. Factors associated with an increased risk of the disease include age > 50 years, black ethnicity, a first-degree relative with prostate cancer, and obesity.

**Patients may present with erectile dysfunction or lower urinary tract symptoms (LUTS)** such as frequency, hesitancy, nocturia, or haematuria. However, LUTS may be due to benign prostate enlargement. Asymptomatic men may request an assessment of their prostate cancer risk because of a family history or in response to awareness campaigns. Asymptomatic men should be counselled about the risks and benefits of undergoing a PSA test prior to making a decision.

**Repeated PSA screening at one-, two- or four-year intervals** has been shown to reduce prostate cancer mortality and metastatic disease whereas a single PSA screening intervention did not reduce mortality. PSA testing should not be carried out in the presence of an active urinary tract infection, if ejaculation or vigorous exercise has taken place in the past 48 hours, or if a prostate biopsy has been performed in the previous six weeks. Digital rectal examination should be performed in all men presenting with concerns about possible prostate cancer. The PSA test should be repeated prior to referral to secondary care.

**Untargeted systematic transrectal ultrasound (TRUS) guided prostate biopsies**, which until recently accounted for more than 90% of prostate biopsies performed in the UK have been shown to miss around half of clinically significant prostate cancers. Multiparametric magnetic resonance imaging (MP-MRI) followed by targeted prostate biopsies if abnormal lesions are identified has been shown both to improve detection of clinically significant prostate cancers and enable approximately 28% of men to avoid a prostate biopsy.

**PSA is an excellent test for monitoring prostate cancer** patients after active treatment to identify recurrent disease at a stage where further treatment might be effective. After radical prostatectomy, successful treatment should result in a PSA which is either undetectable or < 0.1 ng/ml. A PSA rise to > 0.2 ng/ml is considered indicative of recurrent disease and should trigger a referral for specialist review. After radiotherapy, successful treatment should result in the PSA being very low. The definition of biochemical evidence of disease recurrence after treatment is a rise of  $\geq 2$  ng/ml above the lowest post-treatment PSA value. A rise above this level should trigger a referral for specialist review.