

Prostate cancer: understanding your test results

PSA test

What is it?

A blood test that measures the levels of a particular protein in the blood. The protein is prostate specific antigen, or PSA.

Why is it performed?

Increases in PSA levels in the blood, or very high levels, sometimes (but not always) indicate that prostate cancer is present.

The PSA level increases with age, and the average levels for each age group are shown in the table below.

Your age	50–59 years	60–69 years	70+ years
Expected average PSA level	3.5	4.5	5.5

Comments:

Digital rectal examination

What is it?

A doctor inserts a lubricated gloved finger into the rectum (back passage) and feels the prostate.

Why is it performed?

To check the size and shape of the prostate.

Comments:

Prostate biopsy

What is it?

A procedure that uses a special needle to take several small pieces of tissue from the prostate which are then examined under a microscope.

Why is it performed?

To confirm whether cancer is present and, if it is, to find out more about it. If a biopsy confirms the presence of prostate cancer, doctors can use the 'Gleason score' to describe how aggressive the cancer is and how quickly it may spread - this is explained in more detail below.

Bone scan

What is it?

A scan of the skeleton that is performed a few hours after a tiny, harmless amount of radioactive material is injected into a vein.

Why is it performed?

To find out whether the cancer has entered the bones.

Comments:

CT scan and MRI scan

What is it?

Scans that are sometimes used to create detailed pictures of the prostate and nearby tissues. A computer tomography (CT) scan uses x-rays to create the images, while a magnetic resonance imaging (MRI) scan uses magnetic fields.

Why is it performed?

To look at the prostate in more detail.

CT scan

MRI scan

Comments:

What is the Gleason score?

The Gleason score is worked out after a specialist doctor called a pathologist has looked at the samples of tissue taken from the prostate during a biopsy (see above for information on biopsy).

Cancer cells within the prostate may be at different stages of development, with some growing faster than others. The fast-growing cancer cells are called 'aggressive'. The pathologist can decide if cancer cells are aggressive by looking at the patterns they make under a microscope. After the biopsy, the pathologist identifies the two most common types of cell pattern in the biopsy sample. Each of these cell patterns is then given a grade between 1 and 5, with grade 1 being the least aggressive (least likely to grow or spread) and grade 5 being the most aggressive (most likely to grow or spread). The grades for the two most common cell patterns are then added together to give the Gleason score, which ranges between 2 and 10.

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Gleason Scale – Appearance of Tissue



Least aggressive

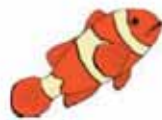
(Gleason score 2-4)

Moderately aggressive

(Gleason score 5-7)

Most aggressive

(Gleason score 8-10)



Your results Grade for pattern 1

Grade for pattern 2

Gleason score

Comments:

Your treatment choices

- Active surveillance
- Open radical prostatectomy
- Laparoscopic radical prostatectomy
- External beam radiotherapy
- Prostate brachytherapy
- Hormone therapy
- Clinical trials/other treatments

For more information about the choices open to you, see the leaflet 'Treatment options for localised prostate cancer', and talk to your doctor and nurse.

Some useful internet sites:

Prostate Brachytherapy Advisory Group: www.prostatebrachytherapyinfo.net

Prostate Cancer Charity: www.prostate-cancer.org.uk

Prostate Cancer Foundation: www.prostatecancerfoundation.org

Prostate Cancer Research Foundation: www.thepcrf.org

Prostate UK: www.prostateuk.org

Other: