

Glossary for State of the Nation 2023 Patient Summary

Gleason Score

The Gleason score is a measure assigned by a pathologist to determine how aggressive an individual's prostate cancer is when the prostate cancer tissue is examined using a microscope. It is made up of two separate scores between 3 and 5 which are then added together to make a final score graded between 6 and ten. Along with PSA and TNM, the Gleason score can be used to predict how a prostate cancer might behave in the future. This process is used for risk stratification, i.e., to help to predict how a specific cancer might progress and/or respond to treatment.

Hypofractionated radiotherapy

Patients undergoing radiotherapy receive one treatment (known as a fraction) with each hospital visit. Hypofractionated radiotherapy is where the total dose of radiation is divided into larger doses (per treatment session) over a shorter period, which means that a patient has fewer fractions but each fraction is of a higher dose. In prostate cancer treatment, standard fractionated radiotherapy involves 37 treatment sessions over seven or eight weeks (i.e. 2Gy per fraction) compared with hypofractionated radiotherapy which involves 20 treatment sessions over four weeks (higher doses per fraction than in standard fractionated radiotherapy).

Having fewer treatment sessions over four weeks has been found to work just as well for men with localised prostate cancer as having more sessions over a longer time. The risk of side effects is also similar and as it involves fewer hospital visits, men may find a shorter course of radiotherapy more convenient.

Localised Disease

When cancer is confined within the edges of the prostate, and does not have a high Gleason score, it is considered low/intermediate risk. High risk clinically localised prostate cancer (e.g. T2 disease) is confined to the prostate but has a high Gleason sum score. This type of cancer has a higher risk of progressing and it is usually treated radically.

Locally advanced disease

Where the cancer is starting to spread into surrounding tissues close to the prostate, regardless of Gleason score.

Metastatic Disease

When cancer has spread from its initial site of development in the prostate (the primary site) to distant sites of the body (the metastatic site(s)). These sites are in the bones and lymph nodes in the first instance.

Radical Prostatectomy

The surgical removal of all the prostate gland and the associated seminal vesicles. Seminal vesicles are structures closely associated with the prostate. Their function is to produce and store fluid which is a component of semen. The fluid helps the sperm to stay alive and feed them.

Radical treatment

Potentially curative treatment aimed at curing prostate cancer (removing cancer tissue or killing all cancer cells in their primary location). These treatments include radical prostatectomy and radiotherapy.

Radiotherapy

The use of radiation to destroy cancer cells. There are different types of radiotherapy, including external beam radiotherapy (radiotherapy delivered from a radiation source outside the body) and brachytherapy (radiotherapy delivered directly by implanting a radiation source within the tumour itself).

Staging/stage

The anatomical extent of a cancer. This indicates whether a cancer is only present in the prostate/primary site (localised disease) or whether it has spread to other areas of the body (metastatic spread). It is usually denoted by the TNM staging process where "T" represents the local stage, "N" the presence of lymph node involvement and "M" represents the presence of metastatic disease.

- T1 means the cancer is too small to be seen on a scan
- T2 means the cancer is completely inside the prostate gland
- T3 means the cancer has broken into or through the capsule (covering) of the prostate gland
- T4 means the cancer has spread into other body organs nearby, such as the back passage, bladder, or the pelvic wall
- N0 means that the nearby lymph nodes do not contain cancer cells
- N1 means there are cancer cells in lymph nodes near the prostate
- M0 means the cancer has not spread to other parts of the body
- M1 means the cancer has spread to other parts of the body outside the pelvis

Systemic Therapy

Systemic therapy is anti-cancer drug therapy. This can include chemotherapy (i.e. docetaxel) or other novel hormonal therapies (i.e. enzalutamide, abiraterone or apalutamide) for prostate cancer.