

# Glossary for Patient Summary of the State of the Nation Report 2024

# **Genitourinary or gastrointestinal complications**

Patients who have treatment for prostate cancer can experience side effects after their surgery or radiotherapy. These can include changes when passing urine (genitourinary) or opening bowels (gastrointestinal).

#### **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/ultra-hypofractionated/SBRT 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).

Ultra-hypofractionated radiotherapy is where the doses of radiation per treatment session are larger than hypofractionated, so patients need less treatment sessions e.g. 6 treatment sessions over six weeks. This radiotherapy tends to be used for patients who are not suited to longer courses of treatment.

Stereotactic radiotherapy (SBRT) is where the doses of radiation per treatment session are larger than ultra-hypofractionated, so patients need less treatment sessions e.g. 5 treatment sessions over one to two weeks.

### High-risk/locally advanced disease

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

### Low-risk, 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.

#### **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.