

## Appendix: Cancer terms and treatments

**Grade:** How abnormal cancer cells look. The higher the grade, the more abnormal the cells look and therefore are more likely to spread.

**Stage:** Used to describe the size of the cancer and its spread. This often impacts treatment options and prognosis. Often the TNM (tumour, node, metastasis) staging system is used.

**Curable intent:** The aim of treatment is to leave the patient cancer-free.

**Treatable but not curable:** Often due to location of the cancer or metastases, the cancer can be treated but not cured. Sometimes treatment can lead to long-term remission (these patients can survive for many years with treatment).

**Best supportive care:** The cancer is not treatable, or the decision has been made that the patient will not be undergoing cancer treatment but instead their care will focus on symptom control. Often these patients are under the palliative care team, and they still may be suitable for palliative treatments if required (such as single-dose palliative radiotherapy to control bleeding).

**SACT: systemic anti-cancer therapy.** Used to describe cancer treatment that is given orally / intravenously (IV) / subcutaneously (SC) to the whole body.

**Cancer surgery:** Usually the definitive/curative management for most cancers if appropriate. Can also be used as a palliative measure to debulk a tumour if it will improve symptoms / quality of life.

**Chemotherapy:** Cytotoxic anti-cancer drugs that are used to destroy cancer cells. Can be given via IV infusions or tablet forms and can be administered at home, in hospital or at a cancer day unit.

**Targeted treatments:** Biological treatments used to target specific proteins on cancer cells that give them a competitive advantage, or block blood vessel growth, thereby inhibiting growth and survival of cancer cells. Usually these drugs are used if specific mutations or proteins are present in the cancer cells and they are often taken as tablets.

**Immunotherapy:** Treatments that use the immune system to destroy cancer by helping it recognise and attack cancer cells. These include:

- > monoclonal antibodies, which attach to cancer cells and signal to the immune system
- > checkpoint inhibitors, which act on the immune system and prevent the binding of proteins that stop the immune system being activated
- > vaccines to treat cancer by priming the immune system to attack cancer cells
- > cytokine treatment and CAR T-cell therapy, which is a type of adoptive cell transfer.

**Radiotherapy:** High-energy/ionising radiation that destroys cancer cells by damaging their DNA. The aim is to give as high a dose as possible to the cancer cells while avoiding the healthy surrounding cells. Most side effects improve a few weeks after treatment, but other side effects occur later.

Radiotherapy can be given as radical radiotherapy with the aim of curing the cancer, or as palliative radiotherapy as a single dose to help symptoms (such as spinal cord compression, bleeding and pain).

**Chemoradiotherapy:** High-dose curative radiotherapy given at the same time as chemotherapy, usually with curative intent (often used in squamous cell cancers with no metastases).

**Hormone/endocrine treatment:** This is used to block or lower the amount of circulating hormones to help slow down or stop cancer growth. Commonly used in breast and prostate cancer.

**Adjuvant therapy:** Treatment used in addition to (after) the primary cancer treatment (usually after surgery).

**Neo-adjuvant:** Therapy used before definitive treatment, eg neo-adjuvant chemotherapy might be used before surgery to shrink a tumour.