

IMMUNOTHERAPY



WHAT IS IMMUNOTHERAPY?

Immunotherapy is a type of treatment that works by stimulating the immune system to fight against cancer.

HOW DOES IT WORK?

Our immune system is geared to attack anything that looks foreign or different to our normal cells. Cancer cells have abnormal molecules on their surface that act like “antennas” and can alert our immune system to their presence.

One of the ways cancer cells avoid attack by the immune system is by putting extra signal molecules or “white flags” on their surface to fool the immune cells into thinking they are harmless and to leave them alone.

Cancer cells can also avoid attack from the immune system by “camouflage” or hiding from it. They do this by limiting the abnormal antennas on their surface. In this way they escape recognition by the immune system.

The most important immunotherapy treatments that we have today are called immune checkpoint inhibitors. These work by blocking the cancer cells from putting up the “white flags”. This allows the immune system to recognise these abnormal cancer cells and attack them.

Another group of immunotherapy treatments, called therapeutic anti-cancer vaccines, work by alerting or “priming” the immune system to the abnormal cancer cells so that it can still recognise the abnormal cancer cell and attack it.

One of the newest immunotherapy treatments works by modifying the patient’s own immune cells. This is known as adoptive T-cell therapy. In this treatment, the patient’s immune cells are collected and “taught” in a laboratory to be able to recognise and attack cancer cells. The modified immune cells are then re-infused back into the patient.

WHAT IMMUNOTHERAPY TREATMENTS ARE AVAILABLE FOR PATIENTS WITH HEAD AND NECK CANCER IN AUSTRALIA TODAY?

There are two main aims in cancer treatment: cure or palliation. Curative treatments aim to get rid of the cancer completely. This generally applies to patients where the cancer has not spread beyond the head and neck region of the body (non-metastatic).

Palliative treatments aim to alleviate symptoms caused by incurable cancer, and to extend patient's lives as much as possible.

With time, cancers may evolve to become resistant to the treatment that is being given, particularly when the treatment is palliative; this is somewhat similar to how bacteria becomes resistant to antibiotics given time. When this happens, your oncologist might change the treatment to one that the cancer has not previously "seen" or been treated with.

In Australia, an immune checkpoint inhibitor called "nivolumab" is currently funded by the Pharmaceutical Benefits Scheme (PBS) for head and neck cancer patients who have incurable disease, but only after the cancer becomes resistant to chemotherapy. Unfortunately, not everyone's cancer will respond to immunotherapy. So there are several clinical trials happening right now to investigate combinations of multiple immunotherapy agents, immunotherapy in combination with chemotherapy, and other new anti-cancer therapies.

WHERE CAN I FIND ADDITIONAL INFORMATION?

We encourage you to discuss treatment options with your oncologist, as each patient's treatment needs to be tailored to their unique needs and type of cancer. For further information see links below.

MORE INFORMATION

- [Cancer Australia: Immunotherapy](#)
- [Cancer Australia: Australian Cancer Trials](#)
- [National Cancer Institute: Immunotherapy to treat cancer](#)

You may want to write additional questions here to ask your doctor or cancer care team

About Head and Neck Cancer Australia

Head and Neck Cancer Australia (formerly Beyond Five) is Australia's only charity dedicated to providing information and support to people living with head and neck cancer, caregivers, family and healthcare professionals.

Head and Neck Cancer Australia's mission is to improve the quality of life of everyone affected by head and neck cancer through education and access to support and to raise awareness of head and neck cancer nationally.

Head and Neck Cancer Australia supports people through their cancer journey, from diagnosis to treatment and life after cancer by providing comprehensive, easy to understand and easy to access information. We have the only Directory of Head and Neck Cancer services and support groups available in Australia and New Zealand helping people to find the right services and support when they need it most.

Phone: 1300 424 848

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Web: www.headandneckcancer.org.au

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