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UNDERSTANDING SKIN CANCER

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WHAT IS SKIN?

The skin is divided into two main layers. These include:

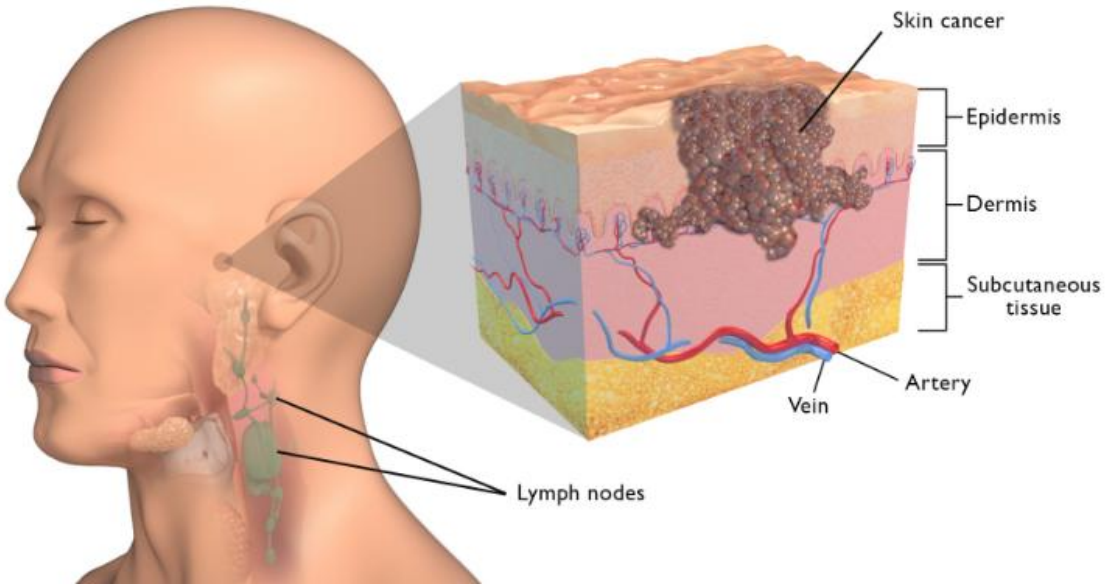
- **epidermis (outer layer)**
- **dermis (inner layer)**

The epidermis contains three main types of cells. On the surface are flat cells, known as squamous cells. Under these are round cells called basal cells. In between the basal cells are melanocytes.

The dermis contains nerve endings, blood vessels, and oil and sweat glands. It's held together by a protein called collagen.

The hypodermis (subcutaneous fat and connective tissue) attaches the skin to bone and muscles, as well as supplying blood vessels and nerves.

Layers of the skin



WHAT DOES THE SKIN DO?

The skin is the largest organ in the body with many purposes including:

- acting as a barrier to protect the body from injury and infection
- helping to maintain the body's temperature

- protecting the body from the harmful effects of ultraviolet (UV) light
- keeping necessary fluids and proteins in the body
- detecting the sensations of touch, heat and cold.

WHAT IS SKIN CANCER?

Cancer occurs when cells become abnormal, grow uncontrollably and have the potential to spread to other parts of the body. These cells build up to form a mass (or lump).

Skin cancers occur when cells are damaged by harmful ultraviolet (UV) radiation found in light from the sun and use of solariums. Other less common causes of skin cancer can include repeated X-ray exposure, scars from burns, or occupational exposure to certain chemicals. When found early, most skin cancers can be managed with local treatment that does not have long-term side-effects.

Skin cancer can be found on any part of the body. It is the most common cancer diagnosed in Australia. These cancers are either: non-melanoma skin cancers (NMSC) or melanoma. The treatment for types of skin cancer is different, so it is important to know the type of skin cancer.

NMSC are far more common than melanoma and are typically found on the head and neck in middle aged and older people due to long term sun exposure. People can also get skin cancers on their arms, legs and trunk.

There are two common types of NMSC:

- **Basal cell carcinoma (BCC):** is a tumour of the basal layer of the skin. BCCs are mostly a local problem. They usually grow slowly but can become very big and destroy tissue close to the tumour (locally) but rarely spread to other parts of the body (metastasise).
- **Squamous cell carcinoma (SCC):** starts in the top layer of skin cells. It often starts as hard scaly skin (actinic keratosis) and abnormal cells (dysplasia) and SCC *in situ* (sometimes referred to as Bowen's disease). A small number can travel to (metastasise) nearby lymph nodes, or be locally aggressive, and require more complex treatment.

Melanomas are less common than NMSC and can occur in younger people often as a result of previous sunburns. In Australia, melanoma is the fourth most common cancer. Sunburn causes 95% of melanomas and it is very treatable when found in its early stages

Melanoma is a cancer of melanocytes, the pigment cell in the basal layer of the skin. Like other skin cancers, melanoma is only invasive when it breaks through the bottom membrane of the skin and invades deeper tissues. Melanoma is more likely to come back (recur) and to metastasise if it has invaded the deep tissue. The chance that a melanoma will spread is related to how thick or deep it has grown into the deep tissue, presence of sores (ulceration) and other microscopic features. Melanoma can grow anywhere on the body including sun exposed skin, soles of the feet, under finger and toenails and in the eye.

Merkel cell carcinoma (MCC) (cancer of neuroendocrine cells in the skin) is a rare skin cancer that may spread to the lymph nodes. It is most commonly found in older people. Sun exposed areas, including the head and neck, arms and legs are the areas usually affected. MCC **can be** treated with radiation therapy alone, although surgery may **also be necessary**.

WHAT CAUSES SKIN CANCER?

In Australia, **sun exposure** is a major risk factor for skin cancer. UV exposure in childhood and built up over a lifetime increases the risk of skin cancer, especially NMSC.

Other factors that may increase the risk of skin cancer are:

- previous skin cancer
- fair complexion and inability to tan
- poor immune system
- family history of melanoma
- moles on the skin
- genetic predisposition (e.g. basal cell naevus syndrome, dysplastic naevus syndrome, xeroderma pigmentosum)

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WHAT ARE THE SIGNS AND SYMPTOMS OF SKIN CANCER?

The signs and symptoms of skin cancer depend on where the cancer is, its size and how far it has spread in the body.

Symptoms and signs that indicate skin cancer may include:

- **crusty, non-healing sores (or ulcers)**
- **small persistent lumps (these can be red, pale or pearly)**
- **new spots, freckles or lumps**
- **moles that change in thickness, colour or shape over a period of weeks to months.**

You can check the parts of your skin that get exposed to sunlight (e.g. face, back and neck) for any changes. If you notice any changes or have any of the symptoms speak to your doctor.

HOW IS SKIN CANCER DIAGNOSED?

It is important that your doctor establishes the diagnosis and type of skin cancer, assesses the extent of the cancer and whether it has spread to the lymph nodes.

To answer these questions, your doctor will need to do the following things:

- talk with you about changes to your skin/mole (if any) and discuss other health conditions and medications you are taking (**called a medical history**)
- perform an examination and may use an instrument (dermatoscope) to view the mole clearly
- order some tests.

Not everyone will need to have every test for skin cancer. Your doctor will recommend the tests that are right for you.

Common tests include:

- **Biopsy:** This involves removing a small piece (sample) from the cancer. The sample is then examined under a microscope to check for cancer cells. This is often the only sure way to tell if you have cancer.
  Your doctor may recommend:
  - **Incision biopsy: this is when a doctor removes a small amount of tissue from the affected area using a surgical knife. These are commonly done in the doctor's office.**
  - **Excision biopsy: to remove the cancer completely with a narrow margin; or if the cancer is large. This may be done in the clinic or in the operating room under general anaesthesia.**
  - For both types of biopsies, your doctor will inject the area with an anaesthetic so that you don't feel any pain. Depending on the size and location of the biopsy, you may need stitches. There may be some bleeding after the biopsy. If you take blood thinners (e.g. warfarin), you may need to stop these before the biopsy.

If the physical examination or other procedures suggest that the cancer has spread to the lymph nodes, your doctor may order a:

- Imaging of the area which may include an ultrasound or a CT scan with contrast.
- **Needle biopsy (also called Fine Needle Aspiration or FNA):** This is used when there is a lump (enlarged lymph node) in your neck that could have cancer cells in it. This is done by a radiologist or pathologist using an ultrasound to see that the needle is in the right spot. You may feel a bit uncomfortable during the biopsy.
- **Core biopsy:** This uses a larger bore needle to get more tissue in the biopsy. It can provide more information than fine needle biopsy but can be more uncomfortable. Your doctor will decide the type of biopsy that is most appropriate for you.

THE CANCER CARE TEAM

Most people diagnosed with skin cancer will be referred to a dermatologist, plastic surgeon or surgical cancer specialist. For patients who are diagnosed with a **high-risk or advanced skin cancer**, or if there is evidence of cancer spread to lymph nodes, the specialist is likely to discuss the treatment plan with the cancer care team they work with. This is known as a head and neck cancer

MDT (multidisciplinary team). You may be asked to attend an appointment where the MDT talks about how best to treat your cancer and coordinate your treatment and care. This team includes experts who will review the diagnosis and tests performed and considers all parts of your treatment and recovery. The purpose of the MDT is to decide on the best treatment for your cancer and to help you regain the best function possible in the long-term.

Healthcare professionals that are a part of your head and neck cancer MDT	
Dermatologists	specialist doctors who are expert in skin conditions and in diagnosing skin cancer, doing tests to look for new cancers during follow-up and looking after other aspects of skin damage
Head and neck surgeons	specialist doctors who remove cancers in the face, mouth, throat and neck. This includes surgeons with a background in otolaryngology (Ear Nose and Throat), general surgery, maxillofacial surgery, and reconstructive surgery. If surgery is required, the head and neck surgeon will carry out the procedure.
Reconstructive (plastic) surgeons	specialist doctors with expertise in reconstructing the head and neck. Some head and neck surgeons also do reconstructive surgery, depending on their training and experience.
Radiation oncologists	specialist doctors trained in the use of carefully directed radiation to treat cancer.
Radiation therapists	healthcare professionals who deliver the radiation treatment prescribed by the radiation oncologist.
Medical oncologists	specialist doctors who are experts in the use of medicines like chemotherapy and immunotherapy to treat cancer.
Speech pathologists	healthcare professionals who work with people who have difficulties speaking or swallowing.
Dietitians	healthcare professionals who give food and dietary advice.
Dentist/oral medicine specialists	healthcare professionals who care for the mouth and teeth. Mouth care is very important in head and neck cancer, especially if radiation therapy is needed.

Pathologists	specialist doctors who are experts in looking at cells under a microscope and determining if they are cancer.
Radiology and nuclear medicine specialists	specialist doctors who interpret scans such as CT, MRI and PET scans.
Palliative care team	specialist doctors and nurses who have expertise in managing symptoms and improving quality of life, often in patients where the cancer can't be cured.
Nurses	healthcare professionals who are experts in the care of people with cancer, and work with all members of the cancer care team. Often, specialist cancer nurses are part of the MDT. They will help to plan and coordinate your care.
Psychologists	healthcare professionals who assist people with worries about coping and living with cancer (mental health).
Social workers	healthcare professionals who provide practical and emotional support to people living with cancer.

WHAT IS STAGING?

Once your doctor has made a diagnosis of cancer, it is important that they assess the extent (or stage) of the cancer. Staging a cancer is important because it helps doctors to choose the best treatment for you. It also gives information about the chances of cure. The stage is based on the size of the cancer, whether it has invaded into nearby areas and whether it has spread to lymph nodes in the neck (called nodal or regional metastases) or other sites in the body, such as the lungs, liver or bone (called distant or systemic metastases).

Some people will need more tests such as CT or PET scans to see if their skin cancer has spread, or not, and help in deciding the stage of the cancer.

Most people with a NMSC (a small BCC or SCC) do not need more tests after a biopsy. People with more advanced tumours may be advised to have some extra tests. People with an advanced NMSC, melanoma or MCC are more likely to be advised to have more tests.

The staging systems for NMSC, melanoma and MCC are all different. The **TNM (Tumour, Node, Metastases) system** is used to stage cancer. This system is used to summarise information about the size of the cancer and whether it has spread to lymph nodes or other parts of the body.

THE TNM SYSTEM

- **T** stands for the size of the cancer. A T value can range from 1 (small cancer) to 4 (large cancer).
- **N** indicates whether the cancer has spread to the lymph nodes. Where there is no cancer in the lymph nodes, the N value is 0. An N value can range from 1 to 3, depending on the size and number of cancerous lymph nodes.
- **M** stands for distant metastases, or whether the cancer has spread to other parts of the body outside the head and neck. An M value can be either 0 (cancer has not spread to other parts of the body) or 1 (cancer has spread to other parts of the body).

Once the values for T, N and M have been worked out, they are combined to give an overall score between 1 and 4. Your doctor may write this in Roman numerals: I, II, III and IV.

Staging is complicated but in broad terms cancers may be described as:

- **Early stage cancer (Stage I or II cancers),** which are small (less than 4 cm in size) and have not spread to the lymph glands or other parts of the body.
- **Advanced stage cancer (Stage III or IV cancers),** which are more advanced due to their size and have spread to nearby parts of the body, the lymph nodes or other parts of the body.

WHAT IS GRADING?

Staging and grading are not the same. Your doctor may also be interested in the grade of the cancer. Grading refers to the growth pattern of the cancer. The grade of the cancer is determined by a pathologist who examines the biopsy sample under a microscope. The pathologist determines the grade of the cancer by how the cells look. The grade can be used to estimate how quickly the cancer is likely to grow and spread.

Grading is not always important in a skin cancer diagnosis.

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TREATMENT OPTIONS FOR SKIN CANCER

The most suitable treatment for skin cancer depends on many factors. These include:

- **type, size and location of the cancer**
- **whether the cancer has spread**
- **personal factors (e.g. age, general health and treatment history)**
- **types of treatment available**
- **your preferences for treatment.**
- **experience of your treating doctor**

Most common skin cancers (e.g. non melanoma skin cancer) will be treated by a **local excision** only. Skin cancers become invasive when they break through the bottom layer of the skin (dermis) and invade into the deeper tissues. Ideally, skin cancers are treated when still within the skin - "*in situ* cancer". Treatment of *in situ* skin cancer can be with **surgery (including simple excision, curettage (also called scooping), or Moh's surgery),** radiation therapy or other treatments including liquid nitrogen therapy (freezing), cautery (using heat) or topical medications (e.g. creams or ointments).

SURGERY

Surgery is an important treatment for many skin cancers. For people, where the cancer has invaded the skin, there is a chance that the cancer may invade deeper structures and spread.

HOW CAN I PREPARE FOR SURGERY?

Your doctor will explain details of the surgery, general risks and side effects of surgery. Ask your doctor if you have questions. They may recommend:

- **stopping blood thinners (e.g. aspirin) before surgery to reduce the risk of bleeding**
- **special stockings to reduce the risk of blood clots**
- **early mobilisation to reduce the risk of blood clots and chest infection**
- **antibiotics to reduce to risk of wound infection.**

Before starting treatment, it is important that you consider stopping smoking to reduce the risk of infection and help you fully recover after your treatment.

SURGICAL PROCEDURES

The different options that can be used for skin cancer are:

- **Local excision (wide local excision):** This operation involves cutting out the skin cancer with a margin of healthy tissue to ensure all of the cancer is removed. It may require cutting away skin, or other soft tissue and bone.
- **Moh's Surgery:** This technique is usually performed by dermatologists who have a particular interest and further specialized training. It involves serial cutting of the tumour and immediate pathologic evaluation until the margins are found to be clear of cancer. Reconstruction is often necessary.
- **Sentinel lymph node biopsy:** This is an investigation that may be done at the time a skin cancer is treated. It is done when there is a high risk of the cancer spreading to lymph nodes, but no nodes are obviously involved. This is most often done in people with melanoma or MCC, occasionally done for people with SCC, but rarely for BCC.
- **Reconstructive surgery:** This may be considered if a large area of tissue is removed. This operation is done by your head and neck surgeon or a surgeon who specialises in reconstructive surgery. Reconstructive surgery may involve:
    - **Skin grafting,** which is taking skin from another part of your body (such as your thigh) and transplanting it to cover the area where you had surgery.
    - **Flap repair,** which involves taking local tissue (Local Flap Surgery) or from another part of your body (Free Flap Surgery) to rebuild the area where you have had surgery.
- **Neck dissection:** This involves removal of lymph nodes from your neck. This is important in more advanced skin cancers even when there is no sign of cancer in the lymph nodes on your scan, because there is a risk of microscopic cancer in the lymph glands of the neck.

- **Parotidectomy:** This is the removal of one of your parotid glands (pair of major salivary glands located in front of each ear) and the surrounding tissue, because of direct invasion into the gland or because of spread to lymph nodes lying within the salivary gland.
- **Facial nerve sacrifice (radical parotidectomy):** This is the removal of your facial nerve, which controls changes in face or expressions. It is used when a cancer in the parotid gland has spread to the nearby facial nerve.
- **Lateral temporal bone surgery:** This is the removal of some or all of the bone behind the ear. It is used when a cancer in the parotid gland has spread into the nearby bone.
- **Orbital Exenteration:** This is the removal of the soft tissue of the eye and eyelid. It is used when a cancer has spread into the skin near the eye and cannot be treated any other way.

SIDE EFFECTS OF SURGERY

Treatment for skin cancer may lead to late side effects. You may not experience all of the side effects, however, talk to your doctor if you are concerned.

RADIATION THERAPY

Radiation therapy can be used to treat both melanoma and NMSC. Most people with melanoma will have surgery but some people with widespread *in situ* melanoma, or with metastatic lymph nodes after surgery may be referred to a radiation oncologist to consider having radiation therapy.

The common type of radiation therapy for skin cancer is called **external beam** radiation therapy. This type of radiation therapy is applied from outside of the body. The machines used to deliver radiation therapy for skin cancer give less penetrating radiation that is because these skin cancers are on the skin surface. Some people will need deeper treatment with deeply penetrating x-rays called megavoltage photons.

Radiation therapy can be used in the following ways:

- **Definitive radiation therapy:** This is used on its own (without surgery) to cure skin cancer. It may be recommended if surgery is not appropriate because of the size and location of the skin cancer or an operation is not safe for the person involved. This therapy is more common for people with a NMSC.

- **Adjuvant radiation therapy:** This is done after surgery. It is used as an additional treatment to kill any cancer cells that may not have been removed during surgery.
- **Palliative radiation therapy:** This is used to relieve symptoms of advanced skin cancer, such as pain and bleeding or if the cancer has spread to other parts of the body such as the bones and cannot be cured.

HOW DO I PREPARE FOR RADIATION THERAPY?

You will meet with many members of the cancer care team, who will help you learn how to look after yourself through radiation therapy, recovery and long-term follow-up. They will also talk to you about side effects and how to manage them. It may be helpful to write down questions as they come up, so you can ask anyone in your cancer care team when you see them.

- **Radiation therapy mask-making and simulation:** Radiation therapy is a precise treatment. In order to make sure that the cancer is covered by the treatment, you will need to be very still during the treatment, usually for about five minutes. A **radiation therapy mask** that is made to fit perfectly to your shape, will be put on you during each treatment to help the machine consistently target where the cancer is.
    - You will have a planning **CT scan** (and sometimes other scans) with the mask on. Your radiation oncologist and radiation therapist will use these scans with all your other clinical information to develop a radiation therapy plan just for you (a personalised plan). Your plan will be checked by the radiation therapy and radiation oncology physics team, before it is ready to be used for your treatment. This whole process can take approximately 2-3 weeks.
- **Teeth and mouth care:** You might need to have some of your teeth taken out. This will depend on the area being treated and the dose of radiation therapy. It is important to take out any broken or infected teeth before radiation therapy. Taking out unhealthy teeth after radiation therapy can cause problems with the jawbone.
- **Diet and nutrition:** Your cancer and its treatment can make it hard to eat and drink. Your doctor will recommend you see a dietitian to maximise your nutrition during treatment as well as while you are recovering. Sometime feeding tubes may be recommended depending on the area being treated and the dose of radiation therapy. There are two common types of feeding tubes:

- **Gastrostomy tube (sometimes called a PEG tube):** This type of tube is inserted through your abdominal wall into your stomach, with part of the tube staying outside the stomach. A syringe can be attached to the tube to give you food this way if needed. The tube is inserted using a camera through the mouth into the stomach (gastroscopy) or using a CT scanner to guide insertion directly through the skin. If a PEG tube is needed, your doctor will organise this before starting your radiation therapy.
- **Nasogastric tube:** This type of tube goes through the nose down into the stomach and is usually used for short periods (days or weeks). A nasogastric tube can be inserted at any time (before, during or after treatment).

There are many other aspects of supportive care that are available. Ask your doctor if you have any specific needs.

SIDE EFFECTS OF RADIATION THERAPY

The side effects of radiation therapy can start during treatment and progress through treatment to peak at the end of treatment and the week after treatment. They begin to improve 2–3 weeks after the end of treatment.

Side effects associated with radiation therapy depend on:

- the dose of radiation therapy
- the area being treated
- whether or not chemotherapy is added to the radiation therapy.
- how quickly the treatment is delivered.

Each person responds to radiation therapy differently. Some people may experience a few side effects while others may not experience any at all.

Common early side effects of radiation therapy may include:

- **tiredness**
- **skin irritation in the treated area e.g. redness, dryness and itching, weeping skin, scaling and sometimes skin breakdown by the end of treatment**

- **local loss of beard (in men) or hair if the scalp is treated**
- **nasal cavity crusting, congestion and bleeding of nose, if treated.**

Most side effects are short lived and may go away shortly after you finish radiation therapy. Some side effects may last for some time after you finish radiation therapy, and some may be permanent.

Once your radiation therapy ends, you will have regular follow-up appointments, so that your doctor can check your recovery and monitor any side effects that you may have.

Your doctor may recommend specific supportive care options to help during your treatment and recovery.

CHEMOTHERAPY

Chemotherapy for non-melanoma skin cancers is rarely used but is usually given into a vein through a needle with a cannula (tube) attached. Chemotherapy works by attacking rapidly dividing cells, such as cancer.

People with skin cancers, both melanoma and non-melanoma, may be recommended types of systemic treatment called immunotherapy. Many people with skin cancers may also be asked to take part in a clinical trial of different types of these drugs.

FOLLOW-UP CARE

Regardless of the type of skin cancer, once a person has had one skin cancer, they are at increased risk for the same or other types of skin cancer. Regular follow-up is recommended and is best in partnership with your GP and dermatologist. It is very important that you attend follow up appointments/visits with your doctor. How often you should attend a follow up can be different, but commonly it is every 3 -4 months for the first 2 years.

If you have had a major resection, involving surgery of the lymph nodes, ongoing follow-up of this area is required, in addition to routine checking of your skin by your GP or dermatologist.
You may also need to have follow-up scans to catch any early signs of recurrence of the cancer. This

may include CT, MRI and PET scanning. Remember you should contact your cancer doctor or GP if you have any concerns in the time between your visits.

MENTAL HEALTH FOR PEOPLE WITH CANCER

Sometimes this is referred to as psychosocial aspects or survivorship. Being diagnosed with cancer and having treatment can lead to extra worries or concerns for you and the people caring for you. Depending on the treatment, you may experience any of the following:

- **low mood or depression**
- **anxiety**
- **disfigurement**
- **difficulties with eating**
- **difficulties with speaking**
- **changes in sexual activity.**

You may get through the diagnosis and treatment for skin cancer but may find it difficult to deal with some of the side effects of treatment. Speak with your doctor about any difficulties you may be experiencing. Your doctor may give you a referral to a psychologist or another healthcare professional who can help you. Speak with your family and friends too about any concerns you may have.

You may find it helps to join a patient support group and speak with others who are having treatment for head and neck cancer. You can also find help and advice in online self-help resources such as Beyond Blue.

QUESTIONS TO ASK YOUR CANCER CARE TEAM

Being diagnosed with cancer can be overwhelming and confusing. There are a lot of information and treatment decisions to make at a distressing time for you and your family. To help you understand everything and get the information you need to make decisions about your health, consider asking the following questions to your cancer care team:

- Exactly what type of skin cancer do I have? Where is it located?
- Why did I get this cancer?
- What stage is the cancer? What are the chances of cure with treatment?
- What are my treatment options? Which treatment do you recommend for me and why?
- Have you discussed my case at a Multidisciplinary Team meeting and what were the recommendations?
- Who will be part of the cancer care team, and what does each person do? Should I see another specialist before treatment, such as a radiation oncologist, medical oncologist, plastic surgeon, dentist, dietician or speech pathologist?
- What are the possible side effects of treatment in the short- and long-term? How can they be prevented or managed?
- Will the treatment affect my ability to eat, swallow, or speak? Will I need a feeding tube?
- What will happen if I don't have any treatment?
- How much will the treatment and/or operation cost? Will Medicare or my health insurance cover it?
- What follow-up tests will I need? How often will they be?
- Am I suitable for any clinical trials?
- What lifestyle changes (diet, exercise) do you recommend I make?
- Who can I call if I have any problems or questions?
- Where can I find emotional support for me and my family? Is there a support group or psychologist you can recommend?
- If I wanted to get a second opinion, can you provide all my medical details?

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

About Head and Neck Cancer Australia

Head and Neck Cancer Australia is the only national charity dedicated to providing free, trusted and easy to understand information, education and support to people affected by Head and Neck Cancer.

We represent over 5,300 people who are newly diagnosed each year and more than 17,000 people who are living with Head and Neck Cancer across Australia.

We also lead the national effort to advocate for government support to encourage prevention, increase early diagnosis and improve the quality of life of people living with Head and Neck Cancer in Australia.

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Key updates since the 2020 edition

Melanoma remains among the top three most diagnosed cancers in Australia (2024 estimates ~19,000 new cases). [1]

Staging references in this factsheet align with AJCC 8th edition; WHO 5th edition (2025 Skin Tumours volume) updates dermatopathology terminology. [2,6,10,11]

Sentinel lymph node biopsy (SLNB) recommendations for melanoma reflect modern thresholds (generally ≥ 1.0 mm, or ≥ 0.8 mm with high-risk features) per recent European/ESMO guidance. [3]

Radiation therapy indications and dosing approaches for keratinocyte cancer align with ASTRO 2020 and Australian eviQ protocols. [4,5]

Australian solariums (commercial sunbeds) have been banned nationwide since 2015–2016; past exposure remains a risk factor, but new exposure should be rare due to regulation. [8,9]

References (2025 update)

1. Cancer Australia. Melanoma of the skin statistics (2024 projections). Available at: https://www.canceraustralia.gov.au/cancer-types/melanoma-skin/melanoma-skin-statistics

2. National Comprehensive Cancer Network (NCCN). Squamous Cell Skin Cancer. Version 1.2026. Available at: https://www.nccn.org/guidelines/guidelines-detail?category=1&id=1465

3. ESMO Guidelines Committee. Cutaneous melanoma: ESMO Clinical Practice Guideline (2024). See: https://www.annalsofoncology.org/article/S0923-7534(24)04912-3/fulltext and https://www.ejcancer.com/article/S0959-8049(24)01760-X/fulltext

4. ASTRO Clinical Practice Guideline: Radiation therapy for basal and squamous cell skin cancers (2020). Available at: https://www.astro.org/provider-resources/guidelines/skin-cancer-guideline

5. eviQ (Australia). Skin cancer – squamous cell carcinoma – adjuvant external beam radiotherapy (post-operative). Available at: https://www.eviq.org.au/radiation-oncology/skin/1033-skin-cancer-squamous-cell-carcinoma-adjuvant

6. WHO Classification of Tumours, 5th Edition (2025), Volume 12: Skin Tumours. Available at: https://www.iarc.who.int/news-events/publication-of-the-who-classification-of-tumours-5th-edition-volume-12-skin-tumours/

8. Cancer Council Australia. Commercial solariums in Australia (policy/ban). Available at: https://www.cancer.org.au/about-us/policy-and-advocacy/prevention/uv-radiation/related-resources/solariums

9. ARPANSA. Solaria (sunbeds) radiation sources and regulations in Australia. Available at: https://www.arpansa.gov.au/understanding-radiation/radiation-sources/more-radiation-sources/solaria

10. National Comprehensive Cancer Network (NCCN). Basal Cell Skin Cancer. Version 1.2026. Available at: https://www.nccn.org/guidelines/category_1

11. National Comprehensive Cancer Network (NCCN). Merkel Cell Carcinoma. Version 1.2026. Available at: https://www.nccn.org/guidelines/category_1

