

# Mucosal melanoma

## Patient information

### What is mucosal melanoma?

Mucosal melanoma is a rare type of melanoma that grows on your mucous membranes – the moist surfaces that line cavities inside your body.

Mucosal melanoma can be found along the respiratory tract, the gastrointestinal tract or the genitourinary tract. Some common sites for mucosal melanoma include:

- inside the mouth or nose
- inside the sinuses
- inside and at the anus
- inside the vulva or vagina.

Mucosal melanoma of the genital area is more common in females. Mucosal melanoma can affect people of any age, although it is more common in those aged over 70.

### How does mucosal melanoma differ from cutaneous melanoma?

All melanomas develop when there is abnormal growth of melanocytes – the cells that give your skin its colour.

Cutaneous melanomas develop in the melanocytes of the skin covering the outside of your body, while mucosal melanomas develop in the melanocytes of the mucosa covering the internal cavities of your body.

Mucosal melanomas differ from cutaneous melanomas as they are not associated with sun exposure or sun damage.

# What causes mucosal melanoma?

The exact causes of mucosal melanoma remain incompletely understood. Unlike skin melanoma, mucosal melanoma is not caused by ultraviolet (UV) radiation exposure since it develops within the membrane linings of internal body cavities.

## The role of genetics in mucosal melanoma

Cancer cells can carry genetic mutations that are thought to 'drive' the growth of the cancer. The genetic mutations associated with mucosal melanoma typically differ to those seen in melanoma of the skin.

While knowledge on genetic mutations in mucosal melanoma is still emerging, some common mutations include:

- c-KIT
- BRAF
- NRAS
- SF3B1.



Identifying genetic mutations of mucosal melanoma may help to inform the development of targeted therapies in the future.

# What are the signs and symptoms of mucosal melanoma?

Mucosal melanomas can be difficult to diagnose because they are hidden inside your body. Some mucosal melanomas may appear as areas of irregular pigmentation, while others will not. The signs and symptoms vary depending on the location of the cancer.

- **Mucosal melanomas in the mouth, nose or throat** may cause symptoms such as mouth ulcers, unexplained nose bleeds or lumps in the neck, jaw or mouth. Some people may experience pain, difficulty talking or a loss of smell.
- **Mucosal melanomas of the vagina or vulva** can cause bleeding, pain, discomfort during intercourse or discharge. Some people may be able to feel or see a lump.
- **Mucosal melanomas of the anus** can cause bleeding, constipation, pain or discomfort. Some people may be able to feel or see a lump.



Examples of how mucosal melanoma can present in the mouth.

## How is mucosal melanoma diagnosed?

If your doctor thinks you may have a mucosal melanoma, you will undergo a biopsy of the suspect tissue. A small sample of cells will be removed from the affected area and examined under a microscope. Because mucosal melanoma is rare, often other diagnoses are initially suspected until melanoma is confirmed with a biopsy.

If the result of the biopsy indicates mucosal melanoma, you may have further tests to find out more about the melanoma and if it has spread to your lymph nodes or other areas of your body. These may include:

- a Computed Tomography (CT) scan
- a Magnetic Resonance Imaging (MRI) scan
- a Positron Emission Tomography (PET) scan
- an ultrasound scan of the regional lymph nodes.



An ultrasound can be used to help identify if your melanoma has spread to nearby lymph nodes.

# How is mucosal melanoma treated?

Treatments for mucosal melanoma depend on the location of the cancer and whether it has spread to other parts of your body.

## Surgery

- Surgery is often the best form of treatment for a mucosal melanoma.
- A surgeon will aim to remove the cancer with a clear margin, but this may not always be possible. Sometimes, nearby lymph nodes are investigated or removed as part of the surgical treatment.
- If the melanoma is small/superficial and hasn't spread, surgery may be the only treatment required.

## Radiotherapy

- Radiotherapy uses targeted x-rays to destroy cancer cells.
- You may have radiotherapy after surgery for mucosal melanoma, especially if the cancer cells have spread.
- You may have radiotherapy alone if:
  - the mucosal melanoma is in a place that is difficult to reach with surgery
  - surgery will be particularly disfiguring
  - complete removal of the melanoma has not been able to be achieved with surgery.

## Medical treatments

- Mucosal melanoma that has spread to the lymph nodes or other parts of the body can also be treated with medical (drug) treatments including:
  - **Immunotherapy** – drugs that stimulate your body's own immune system to identify and destroy cancer cells.
  - **Targeted therapy** – drugs that block the growth of cancer by attacking specific features of a cancer cell, known as molecular targets.
- These treatments may be used after surgery (called adjuvant therapy), or when mucosal melanoma has spread or cannot be surgically removed.

# Who makes up the treatment team for mucosal melanoma?

Treatment for mucosal melanoma should be provided by a multidisciplinary team (MDT) of healthcare professionals. The MDT will be made up of:

- **specialists who have expertise in treating mucosal melanoma**, such as a surgeon, a radiation oncologist and a medical oncologist
- **specialists who have expertise in treating the area of the body where your melanoma is located**, such as a head and neck surgeon, a gastroenterologist or a gynaecologist
- **nurses** to care for your needs during and after treatment
- **allied health professionals**, such as a psychologist, counsellor, social worker, physiotherapist or occupational therapist
- **palliative care specialists** to enhance your quality of life and reduce the impact of side effects and pain.

## Clinical trials

Despite advances in the understanding of mucosal melanoma, it can be difficult to treat. Research is underway to identify new treatment approaches for mucosal melanoma.

Clinical trials are used to test new treatments to see if they are better than the currently available treatments. They are vital for improving outcomes for people with cancer.

Your doctor may suggest that you should take part in a clinical trial as part of your treatment for mucosal melanoma. You can read more about clinical trials at [australiancancertrials.gov.au](https://australiancancertrials.gov.au).

# What is the prognosis for mucosal melanoma?

Mucosal melanoma is more aggressive than cutaneous melanoma and has a poorer prognosis. This is true regardless of the location of mucosal melanoma.

In some people, mucosal melanoma will have spread to other areas of the body before the primary melanoma is diagnosed. In other people, mucosal melanoma will spread following treatment. Once mucosal melanoma has spread, curing the cancer is more difficult.

While recent advances in immunotherapy and targeted therapy may extend life expectancy in some people with mucosal melanoma that has spread, they do not work for everyone.

Research is ongoing to identify new treatments for mucosal melanoma and improve the outcomes of people affected.

## Where can I find more information and support?

Melanoma Institute Australia has a number of supports available for people through the diagnosis and treatment of melanoma, including psychology and nurse services, and downloadable resources. You can find more information at [melanoma.org.au/for-patients/patient-support/](https://melanoma.org.au/for-patients/patient-support/).

Melanoma Patients Australia runs a specific mucosal melanoma support group, in addition to its other support programs for people affected by melanoma. You can find out more at [melanomapatients.org.au](https://melanomapatients.org.au) or via the National Support Line on 1300 88 44 50.

## Further reading

You may like to read some other patient information brochures and resources which may be relevant, dependent on the stage of your melanoma at [melanoma.org.au](https://melanoma.org.au):

- Sentinel lymph node biopsy
- Your Guide to Stage III Melanoma
- Your Guide to Stage IV Melanoma

**Please note: The information in this brochure is of a general nature and should not replace the advice of healthcare professionals. All care has been taken to ensure the information presented here is accurate at the time of publishing (August 2025).**