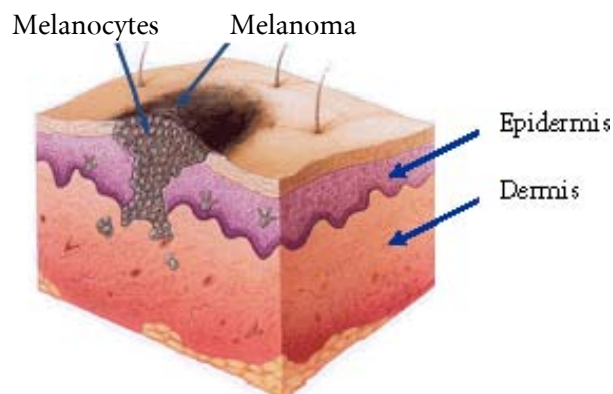


## Skin cancer (melanoma)

### What is melanoma?

Malignant\* melanoma is the most aggressive type of skin cancer characterised by the uncontrolled growth of melanocytes, the pigment producing cells of the skin<sup>1</sup>. Malignant melanoma is treatable if diagnosed at an early stage but currently the prognosis is poor once the disease has spread to other parts of the body (metastasised)<sup>1</sup>.



### Prevalence

- Worldwide there are approximately 160,000 new cases of melanoma each year<sup>1</sup> of which almost 80% are in Europe, North America, Australia and New Zealand<sup>1</sup>.
- Malignant melanoma is the leading cause of death from skin cancer, accounting for nearly 80% of deaths.<sup>2</sup>
- Historically, patients with metastatic melanoma live for less than 60 days without their disease worsening and the median overall survival for these patients is less than 12 months.

### Risk factors

- Exposure to ultraviolet radiation (UVA and UVB) is one of the major contributors to the development of melanoma.<sup>3</sup>
- Use of sunbeds (with deeply penetrating UVA rays) has been linked to the development of skin cancers,

including melanoma<sup>3</sup> .

- Individuals with many irregular, or large moles, have increased risk of melanoma<sup>3</sup> .
- Fair skinned and red-headed individuals are at greater risk of melanoma than darker skinned individuals<sup>3</sup> .
- A personal or family history of melanoma<sup>3</sup> .

### Symptoms

Early melanoma is generally asymptomatic but a person with a melanoma may experience an intermittent itch<sup>1</sup> . A change in size, shape, colour or feel of an existing mole could be a sign of melanoma. In addition, melanoma also may appear as a new mole<sup>1</sup> . The 'ABCDE' system is commonly used to raise awareness of the symptoms<sup>1</sup> :

- **Asymmetry:** One half of the mole is different to the other.
- **Border:** The edges of the mole are poorly defined and often ragged, notched, blurred, or irregular in outline.
- **Colour:** The color is uneven and shades of black, brown, and tan may be present. Areas of white, grey, red, pink, or blue also may be seen.
- **Diameter:** There is a change in size, usually an increase. Melanomas are usually larger than the eraser of a pencil (5 millimeters).
- **Elevation:** As melanoma progresses, part or all of it will become elevated.

### Management of melanoma

Current treatments for the management of melanoma include surgery, radiotherapy, chemotherapy and biological therapies. These therapies may be used alone or in combination depending on the stage of the disease.

- **Surgery:** This may be a curative treatment option for patients whose melanoma has been diagnosed at an early stage. In addition, surgery can also be an option for patients with cancer that has spread to other parts of the body and can help to relieve symptoms.
- **Radiotherapy:** Radiotherapy may be used in metastatic melanoma to help alleviate symptoms.
- **Chemotherapy:** Chemotherapy has shown limited success in the treatment of melanoma<sup>1</sup> . While chemotherapy can be quite effective in treating certain cancers, it does not distinguish between normal healthy cells and cancer cells. There can therefore be many adverse side effects during chemotherapy treatment.
- **Cytokine therapy\*\*:** Immune system processes are thought to be important in the development of many

cancers. Cytokines such as interferon may improve outcomes for some patients with malignant melanoma .

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\* Malignant refers to a tumour that is characterised by uncontrolled, invasive growth with the potential for metastasis. \*\* Cytokine therapy describes a group of drugs that stimulate the body's immune system, such as interferon.

#### References

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4. [http://www.cancer.org/docroot/CRI/content/CRI\\_2\\_4\\_2X\\_What\\_are\\_the\\_risk\\_factors\\_for\\_melanoma\\_50.asp](http://www.cancer.org/docroot/CRI/content/CRI_2_4_2X_What_are_the_risk_factors_for_melanoma_50.asp)
5. Drummer R et al. Biologics. 2009;3:169-182