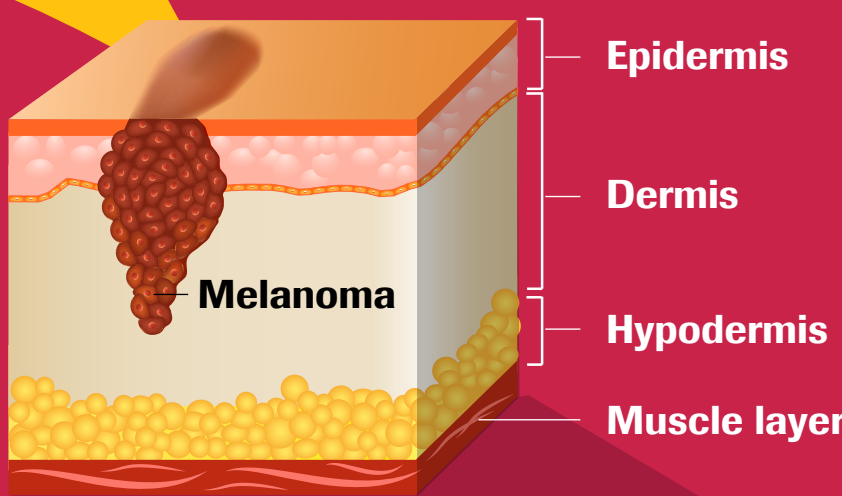


Melanoma facts

What is melanoma?



Melanoma is an **aggressive skin cancer** that originates from melanocytes,¹ which are cells in the skin and eyes that produce and contain melanin.²

Melanoma develops when **unrepaired DNA damage** to melanocytes triggers mutations that cause the melanocytes to grow rapidly and form malignant tumors.

Metastatic melanoma is melanoma that has spread to other parts of the body.

What is the global incidence and mortality of melanoma?

5th most common malignancy in the United States³

50% increment in annual cases of melanoma⁴

Deadliest cutaneous cancer

In 2020: 324,635 new cases and 57,043 deaths worldwide⁵

every **4** minutes

1 person dies from skin cancer

The World Health Organization predicts that from 2020 to 2025, the number of deaths resulting from melanoma

will increase by **20%** rising to **74%** by 2040

What are the risk factors?

Lifetime UV exposure is the most important environmental risk factor⁶



Age

Incidence rates increase after age 60³

Skin Damage

History of blistering sunburns

Cancer

Family history of melanoma or other skin cancer

Skin tone

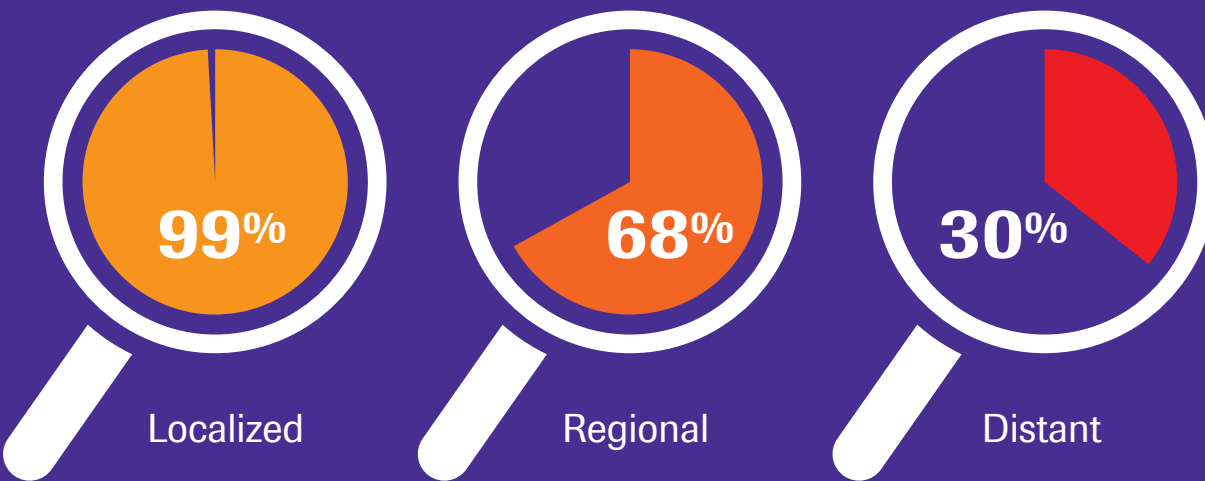
Fair skin pigmentation at higher risk⁴

Moles

Presence of atypical moles⁴

Why is early diagnosis important?

Melanoma survival rates



Localized melanoma is highly curable with a simple surgical excision.

Early stage survival rates are 99% whereas late stage is quite poor at 30%.⁷

Delaying treatment of a Stage 1 (localized) melanoma by just one month **increases the risk of death** by 5%.⁴

As it grows in the span of just a few millimeters, the melanoma's lethality increases markedly.

How is melanoma diagnosed?

Abnormal skin lesion*

"ABCDE" criteria³

- A= Asymmetry of a mole or birthmark
- B= Border irregularity
- C= Color variation
- D= Diameter is >6mm
- E= Evolving size, shape, color, bleeding or scabbing

Diagnostic excisional biopsy

Standard of care for suspicious pigmented skin lesions³

Clinical correlation

High percentage of melanomas diagnosed histologically which were not identified on clinical examination⁸

H&E is the primary tool for melanoma diagnostic evaluation and IHC the main complementary tool

Melanocytic versus non-melanocytic

IHC: HMB45, MART1/MelanA, S-100, SOX-10⁹

Benign versus Malignant

PRAME, p16 IHC,¹⁰ HMB-45, KI-67, cytogenetic tools, FISH¹¹, Gene Expression Profile¹⁰

In-situ versus Invasive

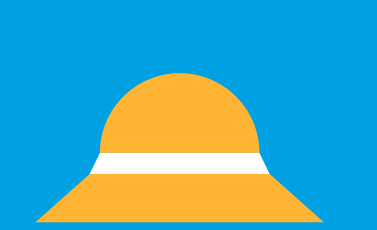
Deeper levels, MART1/MelanA, SOX-10

Complementary tools

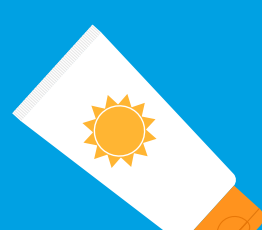
HMB45, MART1/MelanA, p16, are considered supportive to the morphologic diagnosis but not diagnostic per se.¹¹

*Cutaneous melanoma is the most frequent subtype; for other less common subtypes, diagnostic pathways may be different. **There are no p16 IHC tests labeled for use in evaluation of melanomas.

What should I do to reduce my potential for developing melanoma?



Wear sun protective clothing, a hat and sunglasses



Apply sunscreen and re-apply often especially after swimming



Make evaluation of your skin a routine and discuss any changes with your physician/dermatologist



Educate yourself and others