

## Preface

Melanoma is the most dangerous type of skin cancer; it develops from the melanin-producing cells known as melanocytes. It typically occurs in the skin, but may rarely occur in the mouth, intestines, or eye (uveal melanoma).

In women, melanomas most commonly occur on the legs; while in men, on the back. Melanoma is frequently referred to as malignant melanoma. However, the medical community stresses that there is no such thing as a 'benign melanoma' and recommends that the term 'malignant melanoma' should be avoided as redundant.

About 25% of melanomas develop from moles.[2] Changes in a mole that can indicate melanoma include increase—especially rapid increase—in size, irregular edges, change in color, itchiness, or skin breakdown.

The primary cause of melanoma is ultraviolet light (UV) exposure in those with low levels of the skin pigment melanin. The UV light may be from the sun or other sources, such as tanning devices. Those with many moles, a history of affected family members, and poor immune function are at greater risk a number of rare genetic conditions, such as xeroderma pigmentosum, also increase the risk. Diagnosis is by biopsy and analysis of any skin lesion that has signs of being potentially cancerous.

Avoiding UV light and using sunscreen in UV-bright sun conditions may prevent melanoma. Treatment typically is removal by surgery of the melanoma and the potentially affected adjacent tissue bordering the melanoma. In those with slightly larger cancers, nearby lymph nodes may be tested for spread (metastasis). Most people are cured if metastasis has not occurred. For those in whom melanoma has spread, immunotherapy, biologic therapy, radiation therapy, or chemotherapy may improve survival. With treatment, the five-year survival rates in the United States are 99% among those with localized disease, 65% when the disease has spread to lymph nodes, and 25% among those with distant spread. The likelihood that melanoma will reoccur or spread depends on its thickness, how fast the cells are dividing, and whether or not the overlying skin has broken down.

Melanoma is the most dangerous type of skin cancer. Globally, in 2012, it newly occurred in 232,000 people. In 2015, 3.1 million people had active disease, which resulted in 59,800 deaths. Australia and New Zealand have the highest rates of melanoma in the world. High rates also occur in Northern Europe and North America, while it is less common in Asia, Africa, and Latin America. In the United States, melanoma occurs about 1.6 times more often in men than women. Melanoma has become more common since the 1960s in areas mostly populated by people of European descent.<sup>i</sup>

In the present book, twelve typical literatures about Melanoma published on international authoritative journals were selected to introduce the worldwide newest progress, which contains reviews or original researches on Melanoma. We hope this book can demonstrate advances in Melanoma as well as give references to the

researchers, students and other related people.

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<sup>i</sup> <https://en.wikipedia.org/wiki/Melanoma>