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Metastatic Melanoma (mM)

What is melanoma?
Melanoma is a very serious form of skin cancer, which can be fatal if left untreated. The number of people with melanoma is predicted to double over the next decade from 138,000 new cases a year to 227,000 new cases by 2019.\(^1\) Melanoma is generally considered to be preventable and almost entirely treatable if detected early.\(^2,\,3\)

Who is at risk for developing melanoma?
Anyone can be at risk of developing melanoma, but some people are at greater risk than others. Having a family history of melanoma increases the risk: 5–10% of people diagnosed with a melanoma are related to someone who also had a melanoma.\(^5\) A person with a first-degree relative (e.g. mother, father, brother or sister) diagnosed with melanoma is more than twice as likely to develop the disease, compared with those who do not have a family history of the disease.\(^6,\,7\)

Melanoma is often found in people of a younger age compared to other cancers. The average age of being diagnosed with melanoma is around 50 years.\(^8\) This disease is also a common cancer in people aged 15–39 years, where 20% of cases occur.\(^8\)

Regional rates of melanoma vary considerably - the highest incidence is in Australia/New Zealand with over 65 per 100,000 population, followed by the U.S. (25 per 100,000), Europe (10 per 100,000) and Africa (0.1 per 100,000).\(^9\)

Individuals with fair, sun-sensitive skin prone to burning and/or an above-average number of moles on their skin are also at an increased risk of developing melanoma, especially those frequently exposed to the sun and/or UV rays (including through tanning bed usage).\(^4,\,8,\,10,\,11\) In contrast, people with heavily pigmented dark skin are less likely to develop melanoma.\(^12\)
What is metastatic melanoma?
As a melanoma grows, the cancerous cells advance deeper into the skin. The cells eventually reach the blood vessels or lymph channels that allow the cells to spread rapidly throughout the body, including major organs. This stage of the disease is called metastatic melanoma. Metastatic melanoma is the deadliest and most aggressive form of skin cancer.13,14

What is BRAF mutated metastatic melanoma?
In half of all melanoma patients the cancer is driven by a mutation in the BRAF gene, which can result in a fault in the BRAF protein. The faulty protein may become locked in an active ‘switched on’ state, causing uncontrolled cell growth and ultimately growth and spread of the tumour.11,12,13

Blocking the abnormal function of the BRAF protein can shrink tumours by causing the cancer cells to stop growing or even die.13 Patients carrying the BRAF gene mutation can be identified by a diagnostic test. These patients are eligible for a new and personalised approach to treat this form of metastatic melanoma.

What is the outlook for people with metastatic melanoma?
A person with metastatic melanoma typically has a short life expectancy. Until recently, in most cases this was less than a year14, though advances in treatment have extended survival rate for some patients to far beyond this. Many patients are young and in the prime of their life,23 so the disease has a devastating effect on both them and their families.

How is metastatic melanoma treated?
There is no cure for metastatic melanoma. In the 30 years up until 2010 there were no significant changes in the treatment of metastatic melanoma. Until recently, treatment options, including some types of chemotherapy and immunotherapy14 have been limited in their efficacy. However, new personalised medicine and immunotherapies are now providing additional treatment options and improving the outlook for patients with metastatic melanoma.

This document was prepared in May 2013. Due to on-going research and development, the information in this media backgrounder may change. To ensure you have the latest version of this document, contact the Media Relations department at Roche or email the Media Relations contact.
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References