

CUTANEOUS MELANOMA

Approximately 90,000 Americans will be diagnosed with melanoma of the skin in 2018. It represents the fifth most common malignancy in the US. There are several known risk factors that contribute to the development of melanoma of the skin, with the strongest factor being excessive sun exposure.

Public awareness campaigns and active medical screening are contributing to the early detection of melanoma of the skin. As cure rates are typically significantly higher for patients diagnosed at an early stage, awareness and early detection are both critical. The so-called “ABCDEs of melanoma” help the general population understand typical warning signs that suggest a skin lesion should be evaluated by a doctor, signifying asymmetry, border irregularity, color non-uniformity, diameter over 6 mm (pencil eraser size), and evolution (meaning change in these features over time.)

Fortunately, since so many cutaneous melanomas are detected early, a vast majority of patients can be cured with surgery alone. Surgical techniques for management of cutaneous melanoma have evolved over time, with recent years bringing refinement in standards for how the skin lesion should be removed and how the associated lymph nodes should be sampled. Today, sentinel lymph node biopsy is much more common than it was in the past, and offers advantages to patients by minimizing the risks involved with lymph node surgery, including swelling. For patients with more advanced disease, post-operative immunotherapy and/or radiation therapy may be needed. There have been dramatic advances in the field of immunotherapy in this decade. Survival times have improved greatly, thanks to new treatments that can be extremely active in prompting the body’s own immune system to fight and, in many cases, completely eradicate melanoma.

To assess our current practices in the diagnosis and treatment of cutaneous melanoma, we collected and analyzed data in our Tumor Registry, maintained at the Levine Cancer Institute (LCI) at Atrium Health from the most recently available year (2017).

Figure 1 displays the American Joint Committee on Cancer (AJCC) stage distribution for patients who were diagnosed with and/or treated for cutaneous melanoma in the LCI in 2017. It follows the expected distribution, with stage 0-I disease being the most common, by far, representing nearly 80% of our patient population.

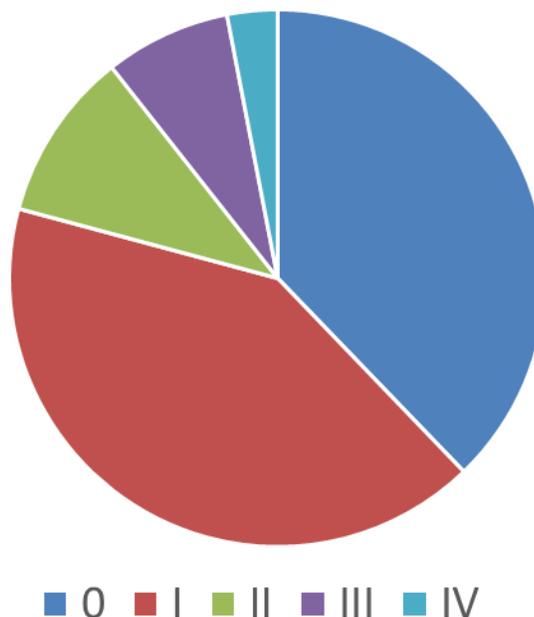
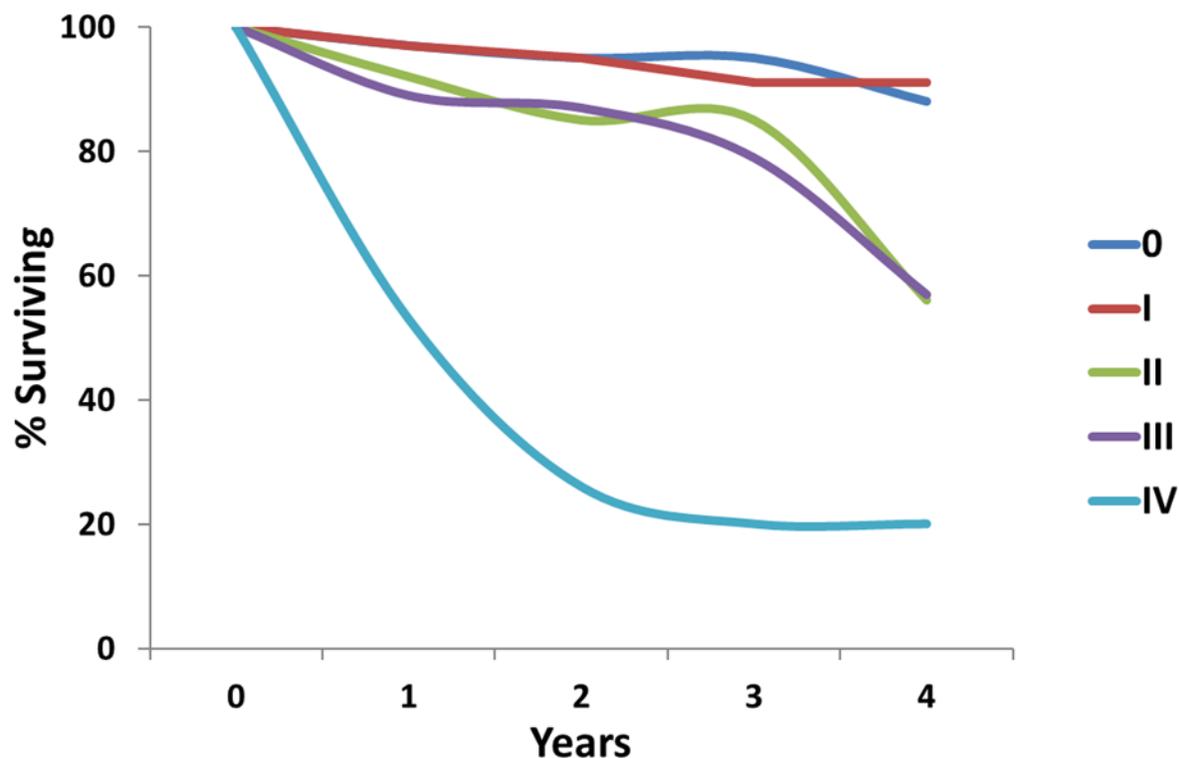


Figure 2 provides an overview of survival outcomes for patients diagnosed and/or treated for cutaneous melanoma at LCI, stratified by AJCC stage. For this analysis, we looked back at 2015 so that we could understand how survival rates are changing for our patients over time. These numbers largely track what would be expected from national averages.



We also sought to understand the specifics on how patients with cutaneous melanoma were being cared for through LCI in 2017. As outlined above, the initial step for most patients is to undergo surgical removal of the skin lesion. Patients with a skin tumor of sufficient depth or thickness will often undergo a surgical procedure to assess for spread of melanoma to the adjacent lymph nodes, and this is increasingly being done through the sentinel lymph node biopsy technique summarized above. Indeed, for the 136 patients undergoing surgery through the LCI in 2017 for a melanoma of the skin with between 1 and 4 mm of thickness, 88% had a sentinel lymph node biopsy done as part of their surgical care.

Appropriate post-operative care is also critical to achieving high cure rates for this type of cancer. Recent data has established short courses of post-operative radiation as standard for patients needing radiotherapy after surgery, in lieu of longer courses of treatment that were standard in the past. This change in practice offers our patients increased convenience and reduced cost of care, with no loss of efficacy. In 2017, 100% of patients receiving radiation through the LCI as part of post-operative management of skin cancer had a treatment course of 4 weeks or less in duration, as is appropriate based on this evolving standard.

Immunotherapy is currently making rapid advances in the care of patients with stage III and IV cutaneous melanoma. Based on the improved survival rates seen on many recent clinical trials in this setting, it is now considered a standard part of the post-operative care of stage III disease. The patterns of care within LCI reflect this. In 2017, 100% of the patients treated post-operatively for stage III cutaneous melanoma received ipilimumab and/or nivolumab-based immunotherapy.

In summary, though cutaneous melanoma remains a major health problem in the United States, early detection and advances in surgical and adjuvant therapy techniques are making strides towards improving outcomes both in terms of the likelihood of cure and the patient's quality of life during and after treatment. Atrium Health is committed to working to lessen the impact of this disease on our community, and will continue to support research and healthcare initiatives to improve outcomes for these patients.