
The AJCC revised staging system for cutaneous melanoma became official in 2002. The authors discuss the major changes in the system, which allows more precise classification and improves the accuracy of predicting prognosis and outcomes.


As BRAF is a serine/threonine kinase that is commonly activated by somatic point mutation in human cancer, it may provide new therapeutic opportunities in malignant melanoma.


The authors review the use of complementary DNA microarray technology to study gene expression patterns in cutaneous melanoma and highlight recent advances concerning the identification of novel melanoma disease-related genes. The fundamentals of microarray technology and analysis are also discussed.


In patients with high-risk resected melanoma, high-dose interferon for melanoma is effective adjuvant therapy with evidence for improved relapse-free survival and moderate improvement in overall survival based on two prospective randomized studies but not in the pooled analysis. Analyses of predictors of relapse and response are needed to improve the specificity of this treatment.


This meta-analysis provides the most reliable synthesis of the data currently available. Adjuvant interferon-alpha produces clear reductions in recurrence of high-risk melanoma, with some evidence of an effect of dose of interferon-alpha, but it is unclear whether this translates into a worthwhile survival benefit. Additional data are needed to resolve these issues.


To evaluate the association between measures of skin screening and death from cutaneous melanoma, data were collected from patients with cutaneous melanoma regarding measures of intermittent sun exposure, perceived awareness of the skin, skin self-screening, and physician screening. The authors reported that sunburn, high intermittent sun exposure, skin awareness histories, and solar elastosis were statistically significantly inversely associated with death from melanoma. Melanoma thickness, mitoses, ulceration, and anatomic location on the head and neck were statistically significantly positively associated with melanoma death.


This review article on cutaneous melanoma focuses on melanoma screening, high-risk populations, staging, and treatment, adjuvant therapy, and treatment of distant disease. More precisely targeted treatment approaches and rational treatment selection are needed; currently advanced disease is best managed by participation in clinical trials.


Good evidence shows that sunscreens, when assiduously applied, can reduce risk of actinic keratoses and squamous cell skin cancer. However, there is no convincing evidence that sunscreen use will reduce risk of basal cell carcinoma or melanoma.


Recent clinical trials show that autologous cell transfer after lympho-depleting chemotherapy can cause the regression of large, vascularized tumors in patients with refractory metastatic melanoma. These studies are clarifying the
requirements for successful immunotherapy of patients with advanced metastatic disease and are leading to additional clinical trials with gene-modified lymphocytes.


Although treatment trends are improving, SLN biopsy continues to be underused, particularly in the elderly and minority populations, in patients with truncal and head/neck melanomas, and in some geographic regions of the United States.

**Additional recommended readings:**


