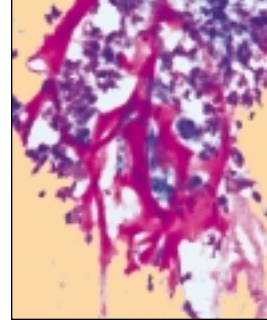


TEN BEST READINGS IN MELANOMA

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Rigel DS. Melanoma update: 2001. *Skin Cancer Found J.* 2001; 19:13-14.

There is truly an epidemic of melanoma in the United States. Darrell Rigel, MD, estimates that by the year 2010, the lifetime risk for an individual in the United States developing melanoma will be 1:50. Thirty years ago, the risk was 1 in 200 people. The 1:50 figure for 2010 has gradually increased from 1:75 due to projections based on incidence figures for the last 5 years.

Morton DL, Thompson JF, Essner R, et al. Validation of the accuracy of intraoperative lymphatic mapping and sentinel lymphadenectomy for early-stage melanoma: a multicenter trial. Multicenter Selective Lymphadenectomy Trial Group. *Ann Surg.* 1999;230: 453-465.

Successful sentinel node identification rates of 97% can be achieved, and the incidence of finding nodal metastases approaches that of the organizing center (John Wayne Cancer Institute). A multidisciplinary approach (surgery, nuclear medicine, and pathology) and a learning phase of ≥ 30 consecutive cases per center are sufficient for mastery of lymphatic mapping/selective lymphadenectomy in cutaneous melanoma. Lymphatic mapping performed using blue dye plus radiocolloid is superior to lymphatic mapping using blue dye alone.

Shivers SC, Wang X, Li W, et al. Molecular staging of malignant melanoma: correlation with clinical outcome. *JAMA.* 1998; 280: 1410-1415.

Routine histology of the regional basin or the sentinel lymph node will miss low-volume disease. This “submicroscopic” disease has been shown to be clinically significant in single institution studies. This concept is now being tested in a national multicenter study called the Sunbelt Melanoma Trial.

Kirkwood JM, Strawderman MH, Ernstoff MS, et al. Interferon alfa-2b adjuvant therapy of high-risk resected cutaneous melanoma: the Eastern Cooperative Oncology Group Trial EST 1684. *J Clin Oncol.* 1996;14:7-17.

Kirkwood J, Ibrahim JG, Sondak V, et al. High- and low-dose interferon alfa 2b in high-risk melanoma: first analysis of Intergroup Trial E1690/S9111/C9190. *J Clin Oncol.* 2000;18:2444-2458.

Kirkwood J, Ibrahim JG, Sosman JA, et al. High-dose interferon alfa-2b significantly prolongs relapse-free and overall survival compared with the GM2-KLH/QS-21 vaccine in patients with resected stage IIB-III melanoma: results of Intergroup Trial E1694/S9512/C509801. *J Clin Oncol.* 2001;19: 2370-2380.

These three national prospective, randomized trials performed by the Eastern Cooperative Oncology Group establishes interferon alfa-2b as a standard of care for patients at high risk for recurrence melanoma. Most of the patients on these ECOG trials had stage III melanoma or nodal metastases. In fact, most of the patients on the trial had gross nodal metastases. The Sunbelt Melanoma Trial is investigating whether patients

The 10 best articles in the medical literature relating to melanoma are reviewed here.

Ten Best Readings

with minimal disease in their regional basin (ie, those with one microscopic sentinel lymph node) benefit from interferon alfa-2b therapy. The last ECOG trial (E1694) randomized patients with mostly stage III melanoma to either the high-dose interferon or a ganglioside vaccine. The ganglioside vaccine shows initial promise. However, in the national multicenter study, it was inferior to the adjuvant interferon alfa-2b.

Morton DL, Ollila DW, Hsueh EC, et al. **Cytoreductive surgery and adjuvant immunotherapy: a new management paradigm for metastatic melanoma.** *CA Cancer J Clin.* 1999;49:101-116, 65.

These investigators have led the way in developing and testing melanoma vaccines for the adjuvant treatment of patients with both resected stage III and stage IV disease. The CancerVax vaccine is now in NIH-supported phase III national trials for these two populations of patients. There has been a resurgence of interest in resecting patients with stage IV melanoma if they can be rendered NED (no evidence of disease), followed by a systemic therapy — in this case, a melanoma vaccine.

Bittner M, Meltzer P, Chen Y, et al. **Molecular classification of cutaneous malignant melanoma by gene expression profiling.** *Nature.* 2000;406:536-540.

Using microarray technology, investigators from the National Institutes of Health provide a glimpse of the application of this powerful technology in the “fingerprinting” of tumors for prognostic

factor determination, the identification of possible targets for therapy and potentially to select treatments for cancers.

Brega K, Robinson WA, Winston K, et al. **Surgical treatment of brain metastases in malignant melanoma.** *Cancer.* 1990;66:2105-2110.

Brain metastases from malignant melanoma show the propensity to bleed and cause stroke in the patient due to the neovascularity of the tumor. Many patients present with this symptom complex. When central nervous system metastases are identified that are single and resectable, surgery should be the first option to prevent this devastating complication. Usually clear margins are not obtained and whole brain radiation therapy is also given. Gamma knife therapy can be used for multiple lesions or lesions that are not resectable. Most patients will also have disease at other systemic sites, so systemic therapy is often combined following the surgical treatment and radiation therapy.

Biasco G, Pantaleo MA, Casadei S. **Treatment of brain metastases of malignant melanoma with temozolomide.** *N Engl J Med.* 2001; 345:621-622

Central nervous system (CNS) metastases from malignant melanoma are a common cause of death for the patient, and many drugs and even immunotherapies do not cross the blood-brain barrier to be effective in this compartment. Temozolomide is a new oral drug that penetrates the CNS and is approved by the FDA to treat some primary brain tumors. The authors

report a complete response in the CNS in a patient with brain metastases from malignant melanoma.