

Ten Best Readings Relating to Melanoma

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Morton DL, Thompson JF, Cochran AJ, et al. Sentinel-node biopsy or nodal observation in melanoma. *N Engl J Med.* 2006;355(13):1307-1317.

The staging of intermediate-thickness (1.2 to 3.5 mm) primary melanomas according to the results of sentinel-node biopsy provides important prognostic information and identifies patients with nodal metastases whose survival can be prolonged by immediate lymphadenectomy.

Livestro DP, Kaine EM, Michaelson JS, et al. Melanoma in the young: differences and similarities with adult melanoma. A case-matched controlled analysis. *Cancer.* 2007;110(3):614-624.

Lymph node metastases were more prevalent in young patients with melanoma compared with adult (thickness-matched) control patients. However, the 5- and 10-year survival rates were similar.

Lin J, Hocker TL, Singh M, et al. Genetics of melanoma predisposition. *Br J Dermatol.* 2008;159(2):286-291. Epub 2008 Jun 28.

This review considers the clinical implications of genetic findings in melanoma for both diagnosis and treatment.

Downard CD, Rapkin LB, Gow KW. Melanoma in children and adolescents. *Surg Oncol.* 2007;16(3):215-220. Epub 2007 Oct 31.

The incidence of melanoma in children may be increasing. A high index of suspicion aids timely diagnosis.

Curtin JA, Fridlyand J, Kageshita T, et al. Distinct sets of genetic alterations in melanoma. *N Engl J Med.* 2005;353(20):2135-2147.

The genetic alterations identified in melanomas at different sites and with different levels of sun exposure indicate that there are distinct genetic pathways in the development of melanoma and implicate CDK4 and CCND1 as independent oncogenes in melanomas without mutations in BRAF or N-RAS.

Dudley ME, Yang JC, Sherry R, et al. Adoptive cell therapy for patients with metastatic melanoma: evaluation of intensive myeloablative chemoradiation preparative regimens. *J Clin Oncol.* 2008;26(32):5233-5239. Epub 2008 Sep 22.

Host lymphodepletion followed by autologous TIL transfer and IL-2 results in objective response rates of 50% to 70% in patients with metastatic melanoma refractory to standard therapies.

Ohtani Y, Harada T, Funasaka Y, et al. Metabotropic glutamate receptor subtype-1 is essential for in vivo growth of melanoma. *Oncogene.* 2008;27(57):7162-7170. Epub 2008 Sep 8.

These findings suggest that growth of melanoma can be inhibited in vivo by eliminating only one of the multiple genetic anomalies involved in tumorigenesis.

Schatton T, Murphy GF, Frank NY, et al. Identification of cells initiating human melanomas. *Nature.* 2008;451(7176):345-349.

Specific targeting of human malignant-melanoma-initiated cells inhibits tumor growth.

Lopez-Bergami P, Fitchman B, Ronai Z. Understanding signaling cascades in melanoma. *Photochem Photobiol.* 2008;84(2):289-306. Epub 2007 Dec 15.

The major signaling pathways currently known to be dysregulated in melanoma development and progression are reviewed.

Lomas J, Martin-Duque P, Pons M, et al. The genetics of malignant melanoma. *Front Biosci.* 2008;13:5071-5093.

New prevention and management strategies should follow better understanding of gene expression profiles in melanoma.