

Correlation of molecular human leukocyte antigen typing and outcome in high-risk melanoma patients receiving adjuvant interferon.

[Gogas H](#), [Kirkwood JM](#), [Falk CS](#), [Dafni U](#), [Sondak VK](#), [Tsoutsos D](#), [Stratigos A](#), [Markopoulos C](#), [Pectasides D](#), [Spyropoulou-Vlachou M](#).

Source

First Department of Medicine, University of Athens, Medical School, Athens, Greece.
hgogas@hol.gr

Abstract

BACKGROUND:

Interferon is approved for adjuvant treatment of patients with stage IIB/III melanoma. The identification of predictive markers that would permit selection of patients would be beneficial. Specific human leukocyte antigen (HLA) class I and II antigens have previously shown an association with response to therapy or overall survival of patients with metastatic melanoma.

METHODS:

A total of 284 high-risk melanoma patients participating in a randomized trial and 246 healthy controls were molecularly typed for HLA class I and II. Specific allele frequencies were compared between the healthy and patient populations, as well as presence or absence of these in relation to recurrence. Alleles related to autoimmune disease were also investigated.

RESULTS:

No significant differences were found between the distribution of HLA genotype in the melanoma population compared with healthy controls. Correlations between nonrecurrence and the presence of HLA-Cw 06 allele were noted present in 19.3% of melanoma patients. The median relapse-free survival of the Cw 06-positive cohort was 100.2 months versus 37.3 months in the Cw 06-negative cohort ($P = .013$). The median overall survival for the Cw 06-positive cohort has not yet been reached, versus 78.9 months in the Cw 06-negative cohort ($P = .025$). HLA-Cw 06 was present in 29.79% of patients in the autoimmunity group and 15.38% of patients in the nonautoimmunity group ($P = .049$).

CONCLUSIONS:

No allele was associated with absence of recurrence in patients receiving adjuvant interferon with the exception of HLA-Cw 06, an allele correlated with psoriasis. HLA-Cw 06-positive patients have better relapse-free and overall survival.