SKIN CANCER (OTHER THAN MELANOMA)

OVERALL SURVIVAL AND PROGNOSIS IN MYCOSIS FUNGOIDES: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: Mycosis fungoides (MF) is the most common cutaneous T-cell lymphoma, which confers significant mortality in advanced stage disease. Although stage-specific survival data are available from different cohorts there have been no attempts to combine existing overall survival (OS) data in this disease. Moreover, the published OS data are presented as Kaplan-Meier curves and mortality risks which are of limited utility for the patients, who prefer to have an estimate of their chances of survival ("how long time have I got?").

Objective: To discuss clinically significant pooled results regarding OS and prognosis for each stage of MF.

Materials and Methods: We performed a formal meta-analysis of OS for the various stages of MF (Stage IA – IVB). A formal pair-wise subgroup analyses was then completed to test for statistically significant differences in the pooled effects of overall survival between each stage of MF. Stage-specific pooled 5-year OS rates were calculated using the pooled HRs and ±95% confidence intervals (CI).

Results: Seven studies including 3567 patients were included. Six studies met the eligibility for meta-analysis for Stage IB (HR: 2.69, 95% CI: 1.99-3.63) and Stage IIB (HR: 7.75, 95% CI: 5.77-10.41) disease. Three studies were included in the pooled analysis for Stage IIIA (HR: 9.00, 95% CI: 6.28-12.90) and IIIB disease (HR: 11.85, 95% CI: 7.84-17.91). Four studies were included for Stage IV (HR: 12.19, 95% CI: 8.47-17.55). The pooled 5-year OS rates of MF were: Stage IA (93.6%), Stage IB (83.8%), Stage IIB (60.0%), Stage IIIA (55.4%), Stage IIIB (45.9%), Stage IV (44.9%).

Conclusions: This is the first study to demonstrate a comprehensive meta-analysis on stage-specific OS in MF. Our study affirms disease stage is a significant prognostic factor for survival. We demonstrate intuitively understandable prognostic metric in terms of the best-case and worst-case chances of survival rather than mortality risks.