

ZIDOVUDINE THERAPY, CD4+ AND CD8+ COUNTS ARE ASSOCIATED WITH A LONGER SURVIVAL FOLLOWING AIDS ONSET**M. Fiala, J. Swartz, S. Teklehaimanot, V. Kermani, A.S. Funnye, J.W. Sayre, J.A. Gornbein**

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ABSTRACT

In 60 patients followed from the onset of acquired immunodeficiency syndrome (AIDS) to death, survival was determined by Cox Proportional Hazards Analysis in relationship to seven variables: time-dependent CD4+ and CD8+ peripheral lymphocyte counts, zidovudine treatment, cytomegalovirus (CMV) retinitis, time from AIDS onset, calendar year of AIDS onset (cohort effect), and age. Two significant prognostic variables were identified: zidovudine therapy and either CD4+ or CD8+ counts (the latter could not be distinguished due to concomitant high correlation). Treatment with zidovudine reduced the death rate by 75% compared to no treatment. When included in a proportional hazards regression with all covariates except for the other T lymphocyte count, every increase in CD4+ count of 10 cells was equivalent to a decline in the mortality rate by 13% ($p=0.046$), and every increase in CD8+ count of 10 cells lowered the mortality by 1.4% ($p=0.0031$). Patients treated with zidovudine and without CMV retinitis showed the slowest decline of both CD4+ and CD8+ counts. Both CD4+ and CD8+ levels are useful predictors of survival in patients with AIDS.