Survival in HIV-1 positive individuals with diagnosis of lymphoma compared to general population

Antonella Cingolani, 1 Alessandro Cozzi Lepri, 1 Lucilla Testi, 1 Laura Galli 2, Valentina Mazzotta 1, Gian Mario Baidi 1, Stefano Iarclino 1, Andrea Antinori 1 2 83 (26.3) prognosis to 87.4 vs. 18%, 95% confidence interval (C.I.) 0.63-21%), P<0.001 in the general population. In the HIV-1 subgroup who ever started cART, the 3-year probability of death was comparable to that of HIV-negative patients (96%, 95% CI 31-42%).

Adjusted hazard ratios (HR) of death in different Cox regression models are shown in Table 2 for NHL and in Table 3 for HD.

Figure 1. Unadjusted estimates of survival according to HIV status and type of lymphoma

Table 2. Adjusted HR of death from fitting a separate Cox regression model in all NHL (A) and in DLBCL (B)

Table 3. Adjusted HR of death from fitting a Cox regression model in all HD

Conclusions/limitations

A poorer overall survival after a diagnosis of lymphoma was observed in HIV-infected compared to HIV-uninfected individuals in the unadjusted analysis

A shorter survival of HIV-infected people was confirmed for HD after adjusting for calendar year, age, gender, standard chemotherapy (ABVD), lymphoma stage

For NHL and DLBCL the association between HIV-status and risk of death was only independent of age and calendar year, suggesting a potential detrimental role on survival of more aggressive disease and different chemotherapy approach in HIV-infected people

Unmeasured confounding due to difference in lifestyle or other factors not measured in our study could not be ruled out.

Background

Since the introduction of combined antiretroviral therapy (cART), survival of HIV-associated lymphoma (Hodgkin and non-Hodgkin) has considerably improved, due to increased response to chemotherapy in people taking cART (1-4).

Table 1. Baseline tumor characteristics according to HIV status

Table 3. Adjusted HR of death from fitting a Cox regression model in all HD

Current Understanding

Overall survival in the whole population studied according to HIV status

The unadjusted 3-year overall probability of death was significantly higher in the HIV+ group (34%, 95% confidence interval (30-39%) vs. 18%, 95% confidence interval (C.I.) 0.63-21%), P<0.001 in the general population. In the HIV-1 subgroup who ever started cART, the 3-year probability of death was comparable to that of HIV-negative patients (96%, 95% CI 31-42%).

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