

O1195 Lung cancer outcomes among HIV-infected patients at an urban institution in the recent antiretroviral era

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Background: Lung cancer is the most common non-AIDS related malignancy among HIV-infected patients. This study investigates characteristics and outcomes of HIV-infected patients with lung cancer compared with the general lung cancer population from a single urban institution in the recent antiretroviral era.

Materials/methods: Medical records of all patients with HIV diagnosed with non-small cell lung cancer (NSCLC) between 2000-2016 at Yale New Haven Hospital (YNHH; New Haven, CT) as identified by ICD-9/10 coding were reviewed. This cohort was compared with all patients diagnosed with NSCLC at YNHH during the same time period based on data from the Yale tumor registry.

Results: 35 cases of patients with HIV and NSCLC (HIV-NSCLC) were identified and compared with 5,187 HIV-uninfected NSCLC patients. 66% were male, compared with 51% male from the general NSCLC population. At time of cancer diagnosis, median age was 54 compared with a median age of 68 in the NSCLC cohort. 97% of the HIV-NSCLC patients had a history of tobacco use, compared with 85% from the NSCLC cohort. At time of cancer diagnosis, 80% of HIV-NSCLC patients were on antiretroviral therapy, 60% had an HIV viral load <400 copies/ml, and median CD4 count was 407 cells/uL (IQR: 218-592). Between the HIV-NSCLC and NSCLC cohorts respectively, histology was notable for 66% vs 74% adenocarcinoma, 28% vs 21% squamous cell, and 6% vs 5% large cell. In both cohorts, 60% were stage III or IV at diagnosis. Treatment (chemotherapy, radiation, or surgery) was comparable for both groups when evaluated by stage. Overall 5-year survival in HIV-NSCLC patients was 18.5% (95% CI: 7.7-32.85) compared with 29.4% (95% CI: 27.98-30.85) among the general NSCLC population ($p=0.15$).

Conclusions: This study provides detailed characterization of patients with HIV and NSCLC from a single urban institution. At the time of cancer diagnosis, the majority of patients were on anti-retroviral therapy and virally suppressed with a relatively high CD4 count. Presentation occurred at a young age with high rates of smoking. HIV-infected patients received similar treatment regimens at each stage of diagnosis and mortality was not significantly different between HIV-infected patients and the general NSCLC population.

