individuals with a diagnosis of HIV and Kaposi's sarcoma between January 1, 2009 and December 31, 2018 based on ICD-9/10 codes. We collected demographic information, HIV history, variables related to HIV and KS diagnosis, treatment and outcomes data for each patient. We calculated hazard ratios using Cox proportional hazards modeling.

**Results.** We identified 252 patients with KS. 95% of patients were male, and the majority were MSM (men who have sex with men; 77% of all patients). 35% of patients were Hispanic, 34% were African-American and 31% were Caucasian. Over half (56%) of patients were funded through Ryan White or were uninsured. The median CD4 count and viral load at the time of cancer diagnosis were 44 and 73,450, respectively. 24% of patients were diagnosed with KS by the end of the frame. However, due to loss to follow-up, 35% of the cohort had an unknown vital status at the time of the final chart review. Variables most strongly associated with mortality were age >65 years (aHR = 3.40, P = 0.0003), race/ethnicity, particularly African-American men (aHR = 2.15, P = 0.0264), and CD4 count >200 cells/μL (aHR = 1.77, P = 0.0196).

**Conclusion.** We describe a large cohort of patients with HIV and HHV-8-related disease, who are predominantly of minority race/ethnicity, uninsured, and have advanced HIV disease. Factors associated with mortality include Black/African-American ethnicity, number of hospitalizations, IV drug use and T1 stage of KS. Our mortality analysis is limited due to high loss to follow-up rates, so we suspect overall mortality in our cohort is higher than currently reported.

**Disclosures.** All authors: No reported disclosures.

### 329. Health Disparities Among HIV-Positive Patients with Kaposi's Sarcoma

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**Session:** 43. HIV Complications: Cancer Thursday, October 3, 2019: 12:15 PM

**Background.** Kaposi's sarcoma (KS) is an AIDS-related condition that is mediated by HHV-8. Although incidence and mortality of KS in the United States have decreased over time since the advent of HAART, there may be disparities in mortality based on geographic location and race/ethnicity, particularly African-American men in the South.

**Methods.** A retrospective electronic medical record review was conducted using inpatient and outpatient data in EPIC from PHHS. We included all patients with a diagnosis of HIV and Kaposi's sarcoma between January 1, 2009 and December 31, 2018 based on ICD-9/10 codes. We collected demographic information, HIV history, variables related to HIV and KS diagnosis, treatment and outcomes data for each patient. We calculated hazard ratios using Cox proportional hazards modeling.

**Results.** We identified 252 patients with KS. 95% of patients were male, and the majority were MSM (men who have sex with men; 77% of all patients). 35% of patients were Hispanic, 34% were African-American and 31% were Caucasian. Over half (56%) of patients were funded through Ryan White or were uninsured. The median CD4 count and viral load at the time of cancer diagnosis were 44 and 73,450, respectively. 24% of patients were diagnosed with KS by the end of the frame. However, due to loss to follow-up, 35% of the cohort had an unknown vital status at the time of the final chart review. Variables most strongly associated with mortality were age >65 years (aHR = 3.40, P = 0.0003), IV drug use (aHR = 3.61, P = 0.0009), and T1 stage of KS (aHR = 2.15, P = 0.0264). African American patients had lower survival than Caucasian or Hispanic patients, with a 5-year survival of 69%, 81% and 80% respectively, although this did not reach statistical significance (aHR 1.77, P = 0.0196).

**Conclusion.** We describe a large cohort of patients with HIV and HHV-8-related disease, who are predominantly of minority race/ethnicity, uninsured, and have advanced HIV disease. Factors associated with mortality include Black/African-American ethnicity, number of hospitalizations, IV drug use and T1 stage of KS. Our mortality analysis is limited due to high loss to follow-up rates, so we suspect overall mortality in our cohort is higher than currently reported.

**Disclosures.** All authors: No reported disclosures.

### 330. Survival of HIV-Positive Patients with Hemophagocytic Lymphohistiocytosis

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**Session:** 43. HIV Complications: Cancer Thursday, October 3, 2019: 12:15 PM

**Background.** Hemophagocytic lymphohistiocytosis (HLH) is a rare but life-threatening disorder resulting from dysregulated cytokine production. The diagnosis of HLH requires five of eight abnormalities: fever, splenomegaly, bicytopenia, hypertriglyceridemia and/or hyperbirefringensemia, hyperferritinemia, hemophagocytosis on biopsy, low or absent NK cell activity, or elevated soluble CD25. The link between Human Immunodeficiency Virus (HIV) and HLH is incompletely understood; we sought to further define the characteristics and outcomes of this patient population.

**Methods.** We performed a retrospective study on HLH patients with and without concurrent HIV infection treated at our institution from January 2008 to July 2018. At the time of HLH diagnosis, we extracted data on the HIV status and associated malignancies. The primary outcome was overall survival from time of diagnosis of HLH in patients with HIV vs. those without HIV. Secondary analysis was performed with survival by HIV and malignancy status. Survival was analyzed by Kaplan-Meier curves with hazard ratios calculated using the log-rank test with significance set at \( P < 0.05 \).

**Results.** Forty-three patients were included; 11 had HIV at the time of diagnosis of HLH and all met criteria for AIDS at time of inclusion. Patients with HIV who were diagnosed with HLH had similar survival compared with patients without HIV (Hazard ratio for death (HR) 0.87 [95% confidence interval (CI) 0.37–2.90], \( P = 0.790 \)). All patients with malignancy had a worse survival (HR for death 3.68 [95% CI 1.804–9.169], \( P = 0.0099 \)) regardless of HIV status. HLH in HIV patients with malignancy resulted in a trend toward worse survival (HR 3.86 [95% CI 1.09–22.60], \( P = 0.0578 \)) compared with those without malignancy, although the limited number of patients prohibits a definitive conclusion. In HIV-negative patients, the presence of malignancy is associated with worse survival (HR 3.56 [95% CI 1.475–10.11], \( P = 0.0063 \)).

**Conclusion.** In this retrospective, single-institution review of HLH patients, HIV was not associated with worse overall survival compared with patients without HIV. The presence of malignancy resulted in worse survival in the overall population. Further investigation is needed to optimize the care of these patients.

**Disclosures.** Ank E. Nijhawan, MD, MPH, Gilead Sciences, Inc.: Research Grant.