Racial Disparities In Cancer Incidence Among Men Who Have Sex With Men With HIV in the US, 2001-2019

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Benton Meldrum[1], MPHc; Jennifer McGee-Avila[1], PhD; Qianlai Luo[1], PhD; Ruth Pfeiffer[1], PhD; Tyler Adamson[2], PhD; Colby Cohen[3], MPH; Tabassum Insaf[4], PhD; Adrianne Moreno[5], MPH; Eric Engels[1], MD; Meredith Shiels[1], PhD; Cameron Haas[1], PhD

[1] National Cancer Institute, Division of Cancer Epidemiology and Genetics, Bethesda, MD; [2]Maryland Department of Health, Center for Cancer Prevention and Control, Baltimore, MD; [3]Florida Department of Health, Division of Communicable Diseases, Tallahassee, FL; [4]New York State Cancer Registry, Albany, NY; [5]Texas Department of State Health Services, Austin, TX

BACKGROUND

- Men who have sex with men (MSM) represented 67% of all new HIV diagnoses in the US in 2021, with a disproportionate burden in Black and Hispanic/Latino communities.
- Disparities among MSM with HIV (MSMWH) in access to HIV care and reaching viral suppression have resulted in greater risk of progression to a diagnosis of AIDS for Black and Hispanic/Latino MSMWH.
- People with HIV are at elevated risk of cancer, and for many cancers the risk is even greater for those with a prior diagnosis of AIDS.

METHODS

- Examined the 9 most common cancers among MSMWH in the **HIV/AIDS Cancer Match Study (HACM),** 2001-2019 in 14 U.S. regions.
- Within Black, Hispanic/Latino, and White racial/ethnic groups we calculated **standardized incidence ratios (SIRs)** using multivariable Poisson regression.
- We calculated **incident rate ratios (IRRs)** to compare difference in risk among MSMWH by race/ethnicity and stratified by prior AIDS diagnosis.

RESULTS

- Among Hispanic/Latino and Black MSMWH, the highest **incidence rates were for KS** (115.3 and 110.0 per 100,000 py) while the highest incidence rates among White MSMWH were for **NHL** (106.4 per 100,000 py).
- Compared to White MSMWH, Black MSMWH had significantly higher rates of KS, prostate cancer, lung cancer, Hodgkin lymphoma, and liver cancer, and Latino/Hispanic MSMWH had significantly higher rates of KS, NHL, Hodgkin lymphoma, and liver cancer.
- For KS, Hispanic/Latino MSMWH had **rates 887 times** higher than expected, while Black and White MSMWH had rates **772 and 417 times higher than expected**, respectively. For NHL, these SIRs were 5.5 for Hispanic/Latino, 4.8 for Black, and 3.1 for White MSMWH.

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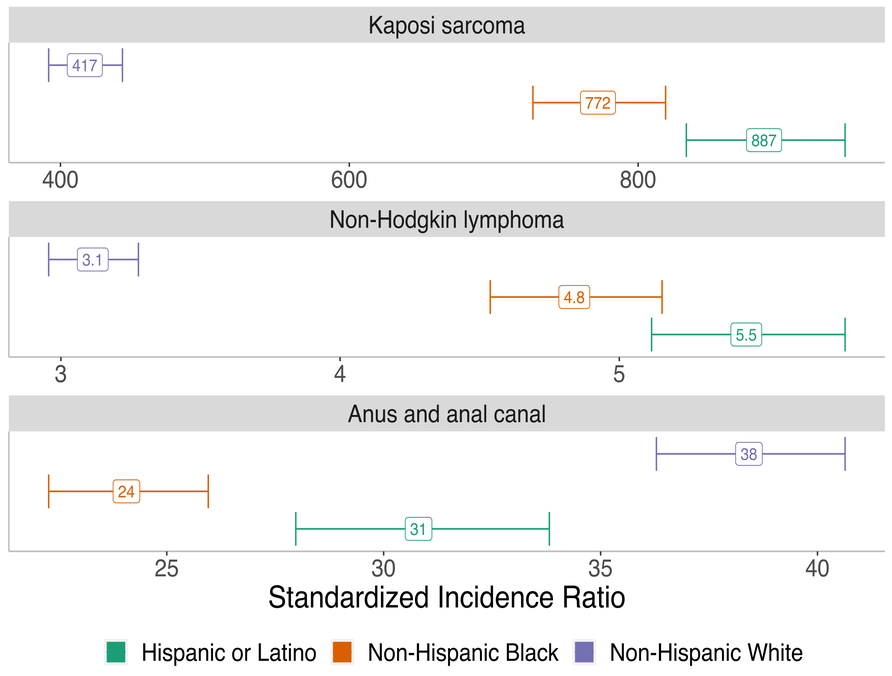
AIM

To describe how racial/ethnic disparities in HIV burden relate to observed differences in cancer risk among MSMWH.

Hispanic/Latino MSM with HIV are disproportionately burdened by *cancers* associated with a diagnosis of **AIDS.**



Benton Meldrum, MPHc, benton.meldrum@cuanschutz.edu

CONCLUSION

- **Differences in cancer risk were observed by race/ethnicity particularly for cancers associated with a diagnosis of AIDS,** suggesting differences in accessing and interacting with HIV treatment and the importance of preventing AIDS, especially for Hispanic/Latino MSMWH.
- Cancers **associated with a diagnosis of AIDS** (KS and NHL) have higher incidence in Black and Hispanic/Latino MSMWH than White.
- Compared to the general population, the rates for these cancers are more elevated in Black and Latino/Hispanic MSMWH than in White.
- Further research should examine racial differences in access and adherence to antiretroviral therapy, interpersonal interactions with providers, and linkage to and retention in care. An aging population with HIV increases the importance.

Incidence Rate Ratios of Cancer among MSM with HIV in the US by Race/Ethnicity and AIDS diagnosis, 2001-2019

Non-Hispanic White as referent

Cancer	Hispanic or Latino	Non-Hispanic Black
Kaposi Sarcoma	1.40 (1.28, 1.54)*	1.24 (1.13, 1.36)*
Non-Hodgkin lymphoma	1.22 (1.12, 1.34)*	1.04 (0.95, 1.13)
Anal	0.68 (0.60, 0.76)*	0.98 (0.89, 1.08)
Prostate	1.01 (0.89, 1.14)	2.13 (1.93, 2.34)*
Lung and Bronchus	0.68 (0.59, 0.79)*	1.20 (1.07, 1.35)*
Hodgkin lymphoma	1.79 (1.52, 2.11)*	1.44 (1.22, 1.70)*
Liver	1.42 (1.17, 1.72)*	1.54 (1.29, 1.84)*
Colon	1.21 (0.96, 1.51)	1.15 (0.92, 1.44)
Oropharynx	1.11 (0.53, 2.22)	0.90 (0.37, 1.95)

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