2237. Validity of Self-Reported HCV Status Among Justice-Involved Persons Living with HIV
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Methods. HIV-positive justice-involved persons from the Department of Epidemiology and Biostatistics, George Washington University, Washington, DC, were enrolled into a study evaluating a health intervention for improved HIV treatment adherence and linkage to community-based HIV care. Participants completed a standardized assessment at study entry and at 12 months. The primary outcome was lab-confirmed status (self-reported vs. lab-confirmed) at 12 months. Agreement was assessed using a generalized Kappa statistic.

Results. Of 110 participants, 103 were available for HCV testing and were included in analyses. Twenty participants (18%) self-reported HCV infection, of which 11 (55%) were HCV RNA(+), all of whom were HCV RNA(+). Nine participants reported being HCV RNA(-), of which 6 (67%) were HCV RNA(-) and 3 (33%) were HCV RNA(+). Among the 83 participants not reporting HCV infection, 80 were HCV RNA(-), one had an equivocal HCV Ab result (HCV RNA(-)), and two (both women) were HCV Ab(+) and HCV RNA(+). Overall, self-report and lab report results had a moderate agreement (Cohen’s Kappa = 0.60) and lab-confirmed prevalence of RNA(+) was 13%.

Conclusion. The validity of self-reported HCV status among justice-involved persons living with HIV was moderate. Only one-half of persons who reported HCV infection were confirmed to be HCV infected. In addition, two women (2.4%) who did not report HCV infection were found to be infected. These findings support the need for expanded HCV testing and counseling and education among justice-involved persons, with focused attention on justice-involved women who may be at particularly high risk for undiagnosed HCV.

Disclosures. All authors: No reported disclosures.

2238. Immunogenicity and safety of four- vs. three-standard-doses HBV vaccination in HIV-infected persons with isolated anti-HBc antibody
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Session: 239. HIV and Viral Hepatitis Co-Infection
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Background. The prevalence of hepatitis C virus (HCV) and human immunodeficiency virus (HIV)-1 co-infection is high and HCV health literacy is low. The validity of self-reported HCV status in this population has important implications for HCV testing and education programs inside correctional facilities and in the community after release, yet its assessment is limited.

Methods. HIV-positive justice-involved persons from the Department of Epidemiology and Biostatistics, George Washington University, Washington, DC, were enrolled into a study evaluating a health intervention for improved HIV treatment adherence and linkage to community-based HIV care. Participants completed a standardized assessment at study entry and at 12 months. The primary outcome was lab-confirmed status (self-reported vs. lab-confirmed) at 12 months. Agreement was assessed using a generalized Kappa statistic.

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Conclusion. The validity of self-reported HCV status among justice-involved persons living with HIV was moderate. Only one-half of persons who reported HCV infection were confirmed to be HCV infected. In addition, two women (2.4%) who did not report HCV infection were found to be infected. These findings support the need for expanded HCV testing and counseling and education among justice-involved persons, with focused attention on justice-involved women who may be at particularly high risk for undiagnosed HCV.

Disclosures. All authors: No reported disclosures.

2239. Colorectal Cancer Screening Rates and Outcomes in HIV-Infected and HIV- Uninfected Individuals
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Session: 240. HIV: Malignancy
Saturday, October 6, 2018: 12:30 PM

Background. As people with HIV live longer, age-appropriate colorectal cancer (CRC) screening will be an increasingly important component of care. However, it remains unclear whether CRC screening guidelines for the general population, which recommend screening of average-risk persons starting at age 50, are appropriate for people with HIV particularly those with advanced HIV disease.

Methods. We compared CRC screening rates and outcomes among HIV-infected and demographically-matched HIV-uninfected subjects in a large integrated health-care system. Using electronic health records, we identified subjects aged 50–75 years during 2016 with first-ever CRC screening. We evaluated time to first CRC screen (FIT, sigmoidoscopy or colonoscopy) using Kaplan–Meier estimates, and compared adenoma and CRC prevalence following first sigmoidoscopy or colonoscopy, by HIV status. Adjusted prevalence ratios (PR) accounted for age, sex, smoking status, body mass index, and diagnosis of type 2 diabetes or inflammatory bowel disease.

Results. Among HIV-infected subjects, we also evaluated whether CD4 count (<200, 200–499, 500–1,000, >1,000) was associated with screening outcome.

Conclusion. In a setting with overall high screening uptake, we found similar adenoma and CRC prevalence in individuals with and without HIV. Our findings suggest that current CRC screening guidelines for the general population are also suitable for the HIV population.

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2240. Characteristics of Lung Cancer Treatment in Recent ART-era HIV+ Patients Takaaki Kobayashi, MD1; Kimberly Stone, MPH2; Keith Sigel, MD, PhD3; Internal Medicine, Mount Sinai Beth Israel, New York, New York, 1’Medicine, Icahn School of Medicine at Mount Sinai, New York, New York, 2’Department of Medicine, Division of Infectious Disease, Icahn School of Medicine at Mount Sinai, New York, New York

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Background. Human immunodeficiency virus (HIV) infection is independently associated with lung cancer risk. Due to the aging of the U.S. HIV+ cohort, a high prevalence of smoking and lower rates of HIV-related mortality, lung cancer is now a major source of mortality in this group. Little is known about the tolerability of lung cancer treatment in HIV+ persons in the recent antiretroviral therapy (ART) era.

Methods. We identified all HIV-infected patients (ages 21–75) who underwent lung cancer treatment (surgical, radiation or chemotherapy) between 2006 and 2017 in our New York health system and collected data on treatment of HIV and treatment of lung cancer as well as adverse outcomes from electronic medical charts. We then compared characteristics, treatments and adverse treatment outcomes for HIV+ patients and controls.

Results. Subjects did not differ by HIV status in regards to age and sex (both P > 0.3) but HIV+ were more likely to be black or Hispanic and less likely to be white (P = 0.001). The prevalence of most major comorbidities did not differ by HIV status although chronic kidney disease and chronic hepatitis C infection were more common in HIV group (P = 0.001). There was no difference in histologic subtype or cancer stage of lung cancer by HIV status. Surgery was performed in 65% of HIV+ and 78% of HIV− patients. Among 97 patients screened, 97 patients that were stages I–IIIA (P = 0.04). Radiation surgery was performed in 8% of stage I HIV+ compared with no uninfected patients (P = 0.04). Chemotherapy was administered less frequently in HIV+ patients: 44% vs. 62% (P = 0.04). The most frequent chemotherapy complication for HIV+ patients was early chemotherapy termination (44%; P = 0.1) with a trend toward more frequent dehydration and fever in HIV+ patients (all P = 0.1 for comparisons to uninfected). Other chemotherapy complications were also more common in HIV+ patients (P = 0.04–0.001).

Conclusion. In conclusion, there were no differences between HIV+ and HIV− patients with regards to most clinical characteristics analyzed. However, surgery was performed less frequently in HIV+ compared with HIV− patients and complications were reported less frequently in HIV+ patients. Further research is needed to confirm these findings.
complications in HIV+ patients included nausea (23%), anemia (11%), neutropenia (11%), diarrhea (11%), and thrombocytopenia (8%); all p<0.05 for comparisons with uninfected).

Conclusion. In our cohort from the recent ART-era we found some lung cancer treatment disparities in HIV+ patients. We found no major differences in chemotherapy toxicity associated with HIV status. Future research should further evaluate barriers to optimal lung cancer care within the HIV+ population.

Disclosures. All authors: No reported disclosures.

2241. Outcomes of Program Cell Death Protein 1 (PD-1) and Programmed Death-Ligand 1 (PD-L1) Inhibitor Therapy in HIV Patients with Advanced Cancer

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Background. Due to HAART and consequent decline in mortality from infectious complications, HIV patients have an increasing burden of non-AIDS defining cancers. Immunotheapy, consisting of PD1/PDL1 inhibitors, has revolutionized the treatment of cancers but data on their safety and efficacy is unknown in HIV patients, as they were excluded from clinical trials due to concern for unforeseen side effects.

Methods. This is the largest retrospective study, involving 17 patients with HIV, treated with one of the 4 PD-1/PD-L1 inhibitors (Nivolumab, Pembrolizumab, Atezolizumab, Durvalumab or Avelumab) for cancer. The objective of our study was to evaluate the efficacy and safety profile of PD-1 and PD-L1 inhibitors in Cancer Patients with HIV and also to assess the impact of these drugs on HIV infection control, specifically CD4 count and HIV viral load.

Results. Ten out of 17 patients responded to therapy. Of the 10 patients who responded to therapy, seven were alive and four were still on therapy. Ten patients including all seven non-responders died; nine died from cancer progression and one from sepsis after discontinuing HAART. The minimum duration of response was 15 weeks with one ongoing response at 34 weeks (similar to non HIV patients). Adverse events (Grade 1 or 2) were noted in seven patients while one stopped therapy due to pneumonitis. CD4 count was stable on treatment and HIV RNA was undetectable (became undetectable in one patient with initial low HIV viremia) (Table1).

Conclusion. PD-1 and PD-L1 inhibitors have transformed cancer treatment. Our data shows that they have equal efficacy, tolerable side effects with no effect on HIV markers when used in HIV patients with cancer. We strongly advocate inclusion of HIV cancer patients in clinical trials and support the use of PD1/PDL1 inhibitors in them.

Table 1: HIV Markers While on PD-1 or PD-L1 Inhibitor Therapy

| CD4 Count at Initiation of T Weekly Therapy | Viral Load at Initiation of Therapy | Viral Load at 12 Weeks of Therapy |
|-------------------------------------------|-----------------------------------|---------------------------------|
| 1  573                                     | 0                                 | NA                              |
| 2  624                                     | 500                               | NA                              |
| 3  242                                     | <400                              | NA                              |
| 4  796                                     | <552                              | 0                               |
| 5  256                                     | 370                               | <400                            |
| 6  424                                     | 460                               | 0                               |
| 7  427                                     | 420                               | <400                            |
| 8  467                                     | <100                              | 376                             |
| 9  326                                     | 0                                 | 431                             |
| 10 626                                    | 0                                 | 517                             |
| 11 163                                    | 89                                | 285                             |
| 12 150                                    | <20                               | 120                             |
| 13 607                                    | <20                               | 597                             |
| 14 305                                    | <20                               | NA                              |
| 15 250                                    | <20                               | NA                              |
| 16 262                                    | <20                               | NA                              |
| 17 469                                    | <20                               | NA                              |

NA, data not available. * died before response could be assessed.

Viral load, copies/ml. CD4, cells/µl.

Disclosures. All authors: No reported disclosures.

Background. The detection of prostate cancer in HIV individuals has grown in recent years and it has become the second leading neoplasm in the elderly with HIV after lung cancer. Despite this notable prevalence, there is little literature about the clinical characteristics and treatment modalities in the setting of HIV.

Methods. We conducted a retrospective review of HIV patients with prostate cancer seen at the Veterans Affairs Medical Center in Miami, Florida from 2007 to 2016.

Our aim was to determine the clinical characteristics and treatment patterns of prostate cancer in HIV patients. Data were analyzed in SPSS 22, New York, USA.

Results. There were 1,752 HIV patients treated in our institution. We identified 45 (2.56%) patients with prostate cancer. The mean age was 62.09 (SD = 5.99) years. Most patients were African American (73.3%). Alcohol consumption, smoking and drug use were estimated in 53.3, 53.1 and 81.1% of patients, respectively. The most common comorbidities were hypertension (68.9%) and hyperlipidemia (51.1%). Most patients (80%) had undetectable HIV viral load. The mean CD4 count was 576.84 (SD = 241.12) cells/µl. The majority of patients (88.9%) were on antiretroviral therapy. Most patients (86.7%) were treated for prostate biopsy after an elevated PSA level. Lower urinary symptoms were reported by 51% of patients. By digital rectal examination, 60% presented prostate enlargement and 13.3% nodules or masses. The mean PSA and Gleason score were 13.96 (SD ± 4.43) and 7.07 (SD ± 1.01) respectively. Most patients were at clinical stage T1c N0 Mo (66%). They were treated with surgical prostatectomy in 37.8% of cases (radical prostatectomy in 20% and robotic prostatectomy in 17.8%) and radiation therapy in 55.6% of cases (along with androgen deprivation therapy). Androgen deprivation therapy alone or active surveillance was used in 6.7%. After a mean follow-up of 42.3 (SD ± 35.55) months, most patients were alive (88.9%). There were five deaths, four-related to other malignancies and only one due to metastatic prostate cancer.

Conclusion. Most HIV-infected veterans were diagnosed with prostate cancer at early stages. HIV status does not seem to affect the prognosis of patients with prostate cancer, which was demonstrated by the similar outcomes observed in our study.

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2243. Improving HIV Outcomes Among HIV-Infected Patients Diagnosed with Cancer and Followed in an Integrated, Multidisciplinary, Infectious Disease/Cancer Clinic

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Background. Patients dually diagnosed with HIV and cancer have poorer outcomes compared with general cancer patients. HIV management in the setting of cancer is complicated by multiple specialist involvement, drug-drug interactions, and overlapping drug toxicities. Past studies of HIV-infected patients noted improved virologic suppression, CD4 counts, and adherence with access to multidisciplinary services. A multidisciplinary clinic (HIV specialists (doctors and nurses), pharmacists, social workers, etc.) embedded in the University’s Outpatient Cancer Center starting in late 2011 sought to improve virologic suppression and care coordination for dually diagnosed patients.

Methods. HIV outcomes for patients seen in the multidisciplinary clinic (22 visits) from 2012 to 2016 (N = 51) were compared with a historical cohort seen from 2007 to 2011 (N = 565).

Results. In the pre- vs. post-integration cohorts, the median age at cancer diagnosis was 51 vs. 46 years (range 24–76, P = 0.01), 78% vs. 72% were male (P = 0.37), and 86% vs. 73% were African American (P = 0.04). 53% in the post- cohort had stage IV disease vs. 32% in the pre- cohort. In both cohorts, less than half were on HIV therapy at the time of cancer diagnosis (42% pre- and 43% post , P = 0.91). Baseline median CD4 count at cancer diagnosis in the post-cohort was lower (171, IQR 70–310) than the pre- cohort (274, IQR 120–462; P = 0.20), and baseline median HIV viral load was higher (post-16,802 vs. pre-1,985). Viral suppression at cancer diagnosis was similar (42% pre- and 43% post), but at study end, 75% of patients in the pre- cohort had viral suppression vs. 63% in the pre- cohort (P = 0.09). Patients followed in the integrated clinic were 1.41 (95 CI, 0.91, 3.53) times more likely to be virally suppressed at end of follow-up compared with patients from the pre-integration cohort.

Conclusion. HIV-infected patients who received care at the multidisciplinary, integrated HIV clinic were more likely to be virally suppressed at the end of study follow-up compared with patients who received HIV care at the medical center prior to HIV clinic incorporation. Integrating HIV care into Cancer Centers may improve HIV treatment outcomes for these dually diagnosed, medically fragile, and complicated patients.

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2244. Non-AIDS Cancers Contribute to an Increasing Proportion of Deaths in Persons Living with HIV at a Single University-Based Clinic

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Background. Mortality for people living with HIV (PLWH) has drastically decreased since the mid-1990s, and the proportion of deaths due to non-HIV-related conditions has increased.

Methods. Deceased PLWH were identified within a single academic medical center. Cause of death was determined by chart review, clinic providers, and when available autopsy and toxicology data. Chart review of comorbidities, demographics and preventable causes of cancer was conducted for deaths during the period of 2013–2017.