977. The Prevalence and Burden of Non-AIDS Co-Morbidities in Women with or At-risk for HIV Infection in the United States
Lauren E. Collins, MD, PhD; Anandi N. Sheth, MD, MS; MS4; C. Christina. Mehta. PhD, MSPH1; Elizabeth T. Golub, PhD, MPH, MEd; Phyllis C. Tien, MD, MSC2; Kathryn Anastas, MD3; Audrey L. French, MD3; Seble Kassaye, MD, MS3; Tonya Taylor, PhD4; Mirjam-Colette Kempf, PhD, MPH5; Margaret A. Fischl, MD6; Adamo Adimora, MD, MPH7; Frank J. Palella, MD8 and Igbo Obotokun, MD, MS9; Division of Infectious Diseases, Department of Medicine, Emory University School of Medicine, Atlanta, Georgia; and 1Grady Healthcare System, Infectious Diseases Program, Atlanta, Georgia; 2Emory University School of Medicine, Department of Medicine, Division of Infectious Diseases, Atlanta, Georgia; 3Atlanta Women’s Intergenecy HIV, Atlanta, Georgia; 4Atlanta Women’s Intergenecy HIV; Emory University, Rollins School of Public Health, Department of Biostatistics and Bioinformatics, Atlanta, Georgia; 5Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland; 6Division of Infectious Diseases, Department of Medicine, University of California, San Francisco, San Francisco, California; 7Medical Service, Department of Veterans Affairs, San Francisco, California; 8Department of Medicine, Albert Einstein College of Medicine, Bronx, New York; 9Rush University, Chicago, Illinois; 10Georgetown University Medical Center, Washington, DC; 11SUNY Downstate Medical Center, Brooklyn, New York; 12Schools of Nursing, Public Health and Medicine, University of Alabama at Birmingham, Birmingham, Alabama; 13Division of Infectious Diseases, University of Miami Miller School of Medicine, Miami, Florida; 14University of North Carolina at Chapel Hill, Chapel Hill, North Carolina; 15Division of Infectious Diseases, Northwestern University, Feinberg School of Medicine, Chicago, Illinois
Session: 126. Suppressed but Still at Risk: Comorbidities
Friday, October 4, 2019: 11:00 AM
Background. Age-related non-AIDS comorbidities (NACM) increasingly account for morbidity and mortality in persons living with HIV. The burden of NACM and its association with HIV is poorly described in women.
Methods. We analyzed data from HIV+ and at-risk HIV− participants who were followed in the Women’s Intergenecy HIV Study (WIHS) after 2009 (when >80% of participants used antiretroviral therapy). The prevalence of each NACM (defined by a combination of self-report, clinical measurements, and laboratory data) and the number of NACM were summarized at a most recent follow-up visit and were compared by age and HIV serostatus using unadjusted linear regression models.
Results. There were 3232 women (2309 HIV+, 923 HIV−) with a median follow-up of 15.3 years. The median age was 50 years, 65% were black, 38% currently smoked, 71% had ever used illicit drugs, 50% had annual income $<12,000, and median body mass index was 30 kg/m2. HIV+ women had a median CD4 count of 618 cells/mm3 and 66% had HIV viral suppression. Among 10 NACM evaluated, the following were more prevalent in HIV+ vs. HIV− women (all P < 0.01): psychiatric illness (57%/48%), liver disease (45%/26%), hyperlipidemia (40%/35%), bone disease (40%/33%), chronic kidney disease (15%/7%), and non-AIDS cancer (19%/7%). There was little difference in the prevalence of hypertension (66%/64%), lung disease (41%/43%), diabetes (22%/24%), and cardiovascular disease (19%/19%). Mean number of NACM was higher in HIV+ vs. HIV− women (3.6 vs. 3.0, P < 0.0001). Regardless of HIV serostatus, NACM burden significantly increased with age (P < 0.0001). Compared with women aged <40 of the same HIV serostatus, the estimated mean difference in NACM (HIV+/HIV−) was 0.30 (95% CI: 0.20, 0.40) for those 40–49, 1.10 (95% CI: 0.95, 1.26) for those 50–59, and 2.60 (95% CI: 2.33, 2.87) for those 60 or more years of age (P < 0.001). The incremental NACM burden was significantly greater for HIV+ women (3.0 vs. 2.3, P = 0.02). The prevalence of the most common NACM (diabetes, hypertension, depression) was similar in HIV+ and HIV− women across age and serostatus groups. Overall, NACM burden was higher in HIV+ vs. HIV− women aged 40–49 years (P < 0.0001) and 260 years (P = 0.0003), but not in those aged <40 or 50–59 years (HIV+ age interaction P = 0.02) (figure).
Conclusion. NACM burden was high in both HIV+ and at-risk HIV− women, but higher in HIV+ women overall and in certain age groups. Accumulation of NACM has complex implications for clinical care, medication management, and healthcare screening that must be further examined in this population.
Among those with a normal baseline BMI, the adjusted mean change in BMI at 12 months was smaller with EVG/c, bDRV, and RAL than DTG (range −0.26 to −0.27). Among overweight PLWH, the adjusted mean BMI increase was statistically smaller with bDRV than DTG (−0.32, Figure 4). Results were consistent in IPCW estimates.

**Conclusion.** The majority of PLWH on stable ART in this US-based cohort were overweight/obese at the time of switch to the regimens of interest. Small mean increases in BMI for all regimens were noted over time, for which the clinical significance is not yet known. Apparent differences in BMI changes favoring EVG/c, RAL, and bDRV vs. DTG over the short term were largely attenuated with longer follow-up, with significant differences mainly observed in those with a normal BMI at baseline.

**Disclosures.** All Authors: No reported Disclosures.

979. BMI and ASCVD Risk Score Changes in Virologically Suppressed Patients with HIV Switching from TDF to TAF Containing ART

Jason J. Schafer, PharmD, MPH; Kaitlin Sassa; Jaclyn O’Connor; Ayako Shimada; Scott Keith, PhD and Joseph DeSimone, MD; 1Jefferson College of Pharmacy, Philadelphia, Pennsylvania; 2Thomas Jefferson University, Philadelphia, Pennsylvania; 3Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, Pennsylvania

**Session:** 126. Suppressed but Still at Risk: Comorbidities

**Friday, October 4, 2019: 11:15 AM**

**Background.** Switching from tenofovir disoproxil fumarate (TDF) to tenofovir alafenamide (TAF) containing antiretroviral therapy (ART) can preserve or improve renal function as well as bone mineral density in patients living with HIV infection (PLWH). The switch can also negatively influence cholesterol, but potential changes in body mass index (BMI) and atherosclerotic cardiovascular disease (ASCVD) risk are unknown.