| Total Points | Risk Estimate (%) | Total Points | Risk Estimate (%) | Total Points | Risk Estimate (%) |
|---|---|---|---|---|---|
| 0 | 0.42 | 21 | 35.22 | 41 | 68.37 |
| 1 | 2.08 | 22 | 36.88 | 42 | 70.03 |
| 2 | 3.73 | 23 | 38.54 | 43 | 71.69 |
| 3 | 5.39 | 24 | 40.20 | 44 | 73.35 |
| 4 | 7.05 | 25 | 41.85 | 45 | 75.00 |
| 5 | 8.70 | 26 | 43.51 | 46 | 76.66 |
| 6 | 10.36 | 27 | 45.17 | 47 | 78.32 |
| 7 | 12.02 | 28 | 46.83 | 48 | 79.98 |
| 8 | 13.68 | 29 | 48.48 | 49 | 81.63 |
| 9 | 15.33 | 30 | 50.14 | 50 | 83.29 |
| 10 | 16.99 | 31 | 51.80 | 51 | 84.95 |
| 11 | 18.65 | 32 | 53.46 | 52 | 86.61 |
| 12 | 20.31 | 33 | 55.11 | 53 | 88.26 |
| 13 | 21.96 | 34 | 56.77 | 54 | 89.92 |
| 14 | 23.62 | 35 | 58.43 | 55 | 91.58 |
| 15 | 25.28 | 36 | 60.09 | 56 | 93.24 |
| 16 | 26.94 | 37 | 61.74 | 57 | 94.89 |
| 17 | 28.59 | 38 | 63.40 | 58 | 96.55 |
| 18 | 30.25 | 39 | 65.06 | 59 | 98.21 |
| 19 | 31.91 | 40 | 66.72 | 60 | 99.87 |
| 20 | 33.57 | | | | |

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

**977. The Prevalence and Burden of Non-AIDS Co-Morbidities in Women with or At-risk for HIV Infection in the United States**

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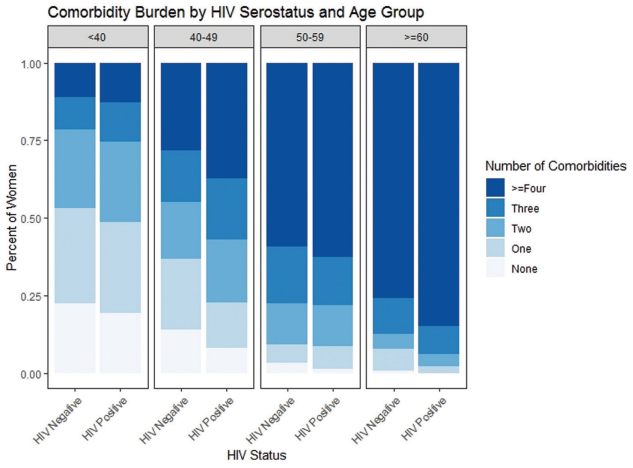
**Session:** 126. Suppressed but Still at Risk: Comorbidities
*Friday, October 4, 2019: 10:45 AM*

***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 Interagency 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 < $12,000, and median body mass index was 30 kg/m$^2$. HIV+ women had a median CD4 count of 618 cells/mm$^3$ 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 (11%/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–) for those 40–49, 50–59, ≥60 years was 1.1/0.7, 2.3/2.3, and 3.6/3.2, respectively ($P < 0.0001$ for all). Within-age-group comparisons revealed significantly greater NACM burden in HIV+ vs. HIV– women aged 40–49 years ($P < 0.0001$) and ≥60 years ($P = 0.003$), 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.




***Disclosures.*** Anandi N. Sheth, MD, MS, Gilead Sciences, Inc.: Research Grant.

**978. Changes in BMI Associated with Antiretroviral Regimens in Treatment-Experienced, Virologically Suppressed Individuals Living with HIV**

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**Session:** 126. Suppressed but Still at Risk: Comorbidities
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***Background.*** A potential association between integrase inhibitor (INSTI) use and weight gain has been reported in people living with HIV (PLWH). We examined body mass index (BMI) increases after a switch to dolutegravir (DTG), elvitegravir/cobicistat (EVG/c), raltegravir (RAL), rilpivirine (RPV), or boosted darunavir (bDRV) among virologically suppressed ART-experienced PLWH.

***Methods.*** ART-experienced, suppressed (ART-ES; baseline viral load < 200 copies/mL) PLWH ≥ 18 years of age initiating DTG, EVG/c, RAL, RPV, or bDRV for the first time were identified in the OPERA® cohort. The association between core agents and mean increases in BMI at 6, 12, and 24 months was estimated with multivariable linear regression. Inverse probability-of-censoring weights (IPCW) were used to account for censoring (regimen discontinuation, loss to follow-up, death, pregnancy, or no BMI measured). Analyses were stratified by baseline BMI categories (underweight: <18.5, normal weight: ≥18.5 to <25, overweight: ≥25 to <30, obese: ≥30).

***Results.*** At baseline, endocrine disorders were reported in >40% of PLWH receiving DTG and RAL; >60% were overweight/obese in all groups (Figure 1). Mean BMI (unadjusted) increased for all ARVs over time, with changes at 24 months ranging from 0.30 (DRV) to 0.83 (RPV, Figure 2). At 6 months, the adjusted mean BMI increase was statistically smaller with EVG/c, RAL, and bDRV (range –0.15 to –0.30) than with DTG (Figure 3); these differences only remained significantly different for bDRV at 12 (–0.29) and 24 months (–0.29, Figure 3).

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.

Figure 1. Baseline demographic and clinical characteristics

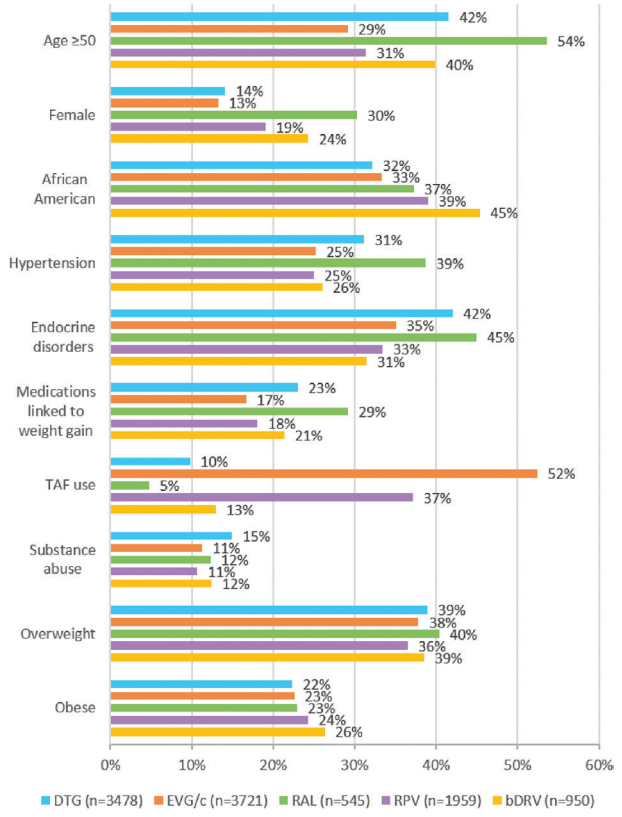



Figure 2. Unadjusted change in BMI (kg/m²) from baseline to 6, 12, or 24 month after core agent initiation, by core agent

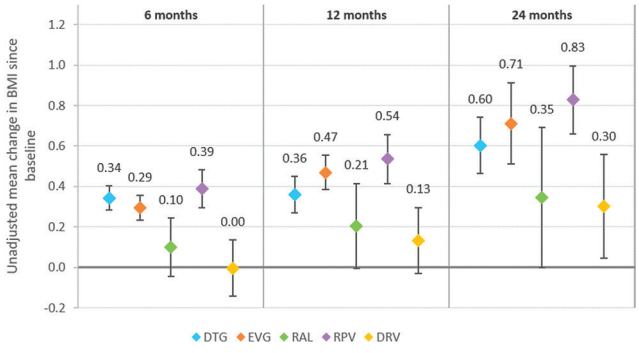
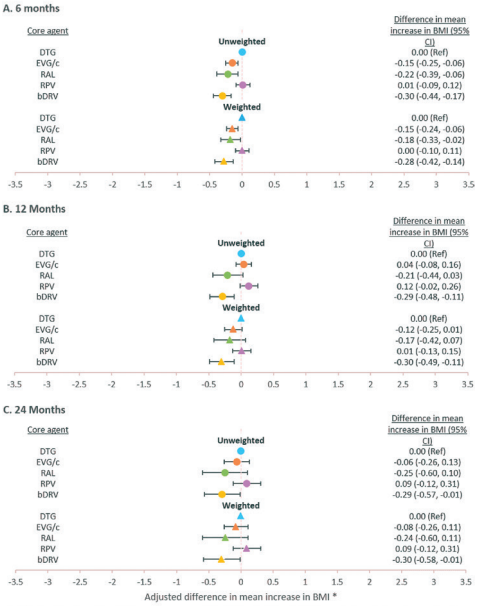
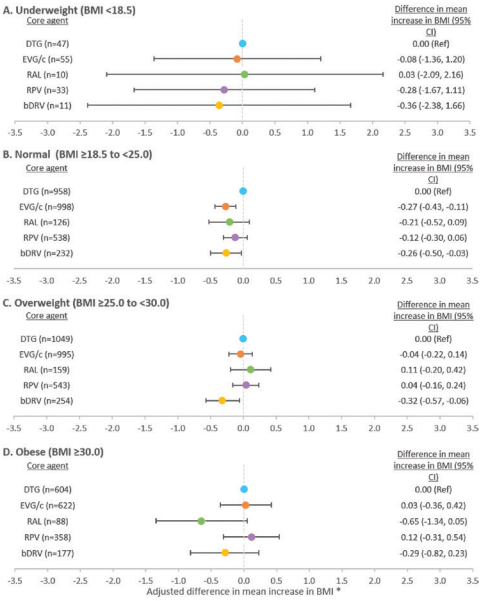



Figure 3. Adjusted difference in mean increase in BMI from baseline, stratified by time since core agent initiation




* Adjusted for baseline BMI, age, sex, race/ethnicity, viral load, CD4 count, lipodystrophy, endocrine disorders, hypertension, use of medications associated with weight gain or with weight loss, substance abuse and TAF use

Figure 4. Adjusted difference in mean increase in BMI from baseline to 12 months after core agent initiation, stratified by baseline BMI




* Adjusted for baseline BMI, age, sex, race/ethnicity, viral load, CD4 count, lipodystrophy, endocrine disorders, hypertension, use of medications associated with weight gain or with weight loss, substance abuse and TAF use

***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**

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