Dimensions: 8.5" × 11"

Comorbidity Considerations in the Management of PLWH

Select Considerations from HHS Guidelines

- As persons living with HIV (PLWH) age, they can demonstrate a greater rate of health complications and comorbidities than same-age adult individuals without HIV infection[1]
- A focus of care to reduce chronic non-AIDS morbidity and mortality should be maintaining ART-mediated viral suppression and managing chronic comorbidities, such as hypertension and hyperlipidemia[1]
- The risk of comorbidities like hypertension and hyperlipidemia can potentially be reduced through strategies, such as smoking cessation, healthy diet, and exercise[1]

Select List of Common Comorbidities

HYPERTENSION

- **Based on the literature, the prevalence of hypertension in PLWH ranged from ~34% up to 66%**[2,3]
  - In a 2024 retrospective case-control study, the **prevalence of hypertension was ~34% in PLWH** and ~32% in persons living without HIV (PLWoH) (*P*<0.001)[2]
  - In the 2022 IQVIA study, the **crude prevalence of hypertension was 66% in PLWH** and 54% in PLWoH (*P*<0.001)[3]

The 2024 retrospective case-control study compared comorbidities and comedications between PLWH (n=20,256) and PLWoH (n=40,512) in 2018 using administrative medical and pharmacy claims, enrollment, and linked socioeconomic data.[2,a]

A separate 2022 IQVIA cross-sectional study reviewed over 11 million adult patients with hypertension, defined as having ≥2 blood pressure measurements of ≥130 or ≥80 mm Hg or a prescribed antihypertensive medication.[3,b]

[a]Data was from the Optum Research Database.[2]
[b]Identified in the IQVIA Ambulatory Electronic Medical Record-US data.[3]

WEIGHT GAIN

A 2024 report of a retrospective cohort study compared BMI changes between 2005 and 2016 for adult PLWH (n=8256) compared to PLWoH (n=129,966).[4,c]

- **In the first 2 years after ART initiation, BMI increased on average >4 times as fast for adult PLWH**[4]
  - For PLWH, BMI increased 0.53 per year (95% CI, 0.47-0.59), compared to 0.12 per year (95% CI, 0.10-0.13) for PLWoH[4,d]

[c]All were members of Kaiser Permanente across several states.[4]
[d]In adjusted models, this result was the average annual change in BMI in the first 2 years after ART initiation.[4]

HYPERLIPIDEMIA

- **In a 2024 retrospective study, the prevalence of hyperlipidemia in PLWH was ~29%**[2]

  The 2024 retrospective case-control study compared comorbidities and comedications between PLWH (n=20,256) and PLWoH (n=40,512) in 2018 using administrative medical and pharmacy claims, enrollment, and linked socioeconomic data.[2,e]
- **Results from the REPRIEVE study,** a randomized, controlled trial among 7769 PLWH with a median age of 50 years who were receiving ART, and had low-to-moderate risk of atherosclerotic cardiovascular disease (ASCVD), which **showed that when compared to placebo, oral statin 4 mg daily was associated with a 35% reduction in major adverse cardiovascular events** over a median follow-up duration of 5.1 years[5]
- As supported by HHS Guidelines, coadministration of certain statins and ARV drugs may result in significant drug-drug interactions (DDIs)[1]

[e]Data was from the Optum Research Database.[2]

Dimensions: 8.5" × 11"

Make the Evaluation of Comorbidities a Priority When Managing PLWH[1]

A baseline evaluation is recommended and should include a review of medical comorbidities amongst various other factors[1]

1. **Evaluate the risks** when developing or changing treatment plans. Consider switching treatments to help prevent comorbidity issues.
2. **Discuss** patients' individual non-HIV conditions and polypharmacy when you meet with them.
3. **Monitor** potential DDIs and other risk factors.

ART, antiretroviral treatment; ARV, antiretroviral; BMI, body mass index; HHS, Health and Human Services.

References: 1. Department of Health and Human Services. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in adults and adolescents with HIV. Updated February 27, 2024. Accessed June 14, 2024. https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv **2.** Paudel M, Prajapati G, Buysman EK, et al. Comorbidity and polypharmacy among people with HIV stratified by age, sex, and race. *HIV Res Clin Pract*. 2024;25(1):2361176. doi:10.1080/25787489.2024.2361176 **3.** Weng X, Kompaniyets L, Buchacz K, et al. Hypertension prevalence and control among people with and without HIV — United States, 2022. *Am J Hypertens*. Published online April 26, 2024. doi:10.1093/ajh/hpae048 **4.** Lam JO, Leyden WA, Alexeeff S, et al. Changes in body mass index over time in people with and without HIV infection. *Open Forum Infect Dis*. 2024;11(2):ofad611. doi:10.1093/ofid/ofad611. **5.** Grinspoon SK, Fitch KV, Zanni MV, et al; REPRIEVE Investigators. Pitavastatin to prevent cardiovascular disease in HIV infection. *N Engl J Med*. 2023;389(8):687-699. doi:10.1056/NEJMoa2304146

US-DOR-01324 07/24

MERCK