

## Living with HIV: Understanding the Patient Experience and Appreciating the Science – Plot-Your-Own-Course Activity #2

### References

- ACC. ASCVD risk estimator plus. Accessed April 8, 2022. <https://tools.acc.org/ascvd-risk-estimator-plus/#!/calculate/estimate/>
- CABENUVA (cabotegravir extended-release injectable suspension; rilpivirine extended-release injectable suspension) [prescribing information]. ViiV Healthcare. Approved 2021. Revised March 2022. [https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2022/212888s005s006lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2022/212888s005s006lbl.pdf)
- CDC. NCHHSTP AtlasPlus. Updated October 1, 2021. Accessed March 3, 2022. <https://www.cdc.gov/nchhstp/atlas/index.htm>
- Centers for Disease Control and Prevention. A guide to taking a sexual history. Updated January 14, 2022. Accessed February 4, 2022. <https://www.cdc.gov/std/treatment/SexualHistory.pdf>
- Crepaz N, Hess KL, Purcell DW, Hall HI. Estimating national rates of HIV infection among MSM, persons who inject drugs, and heterosexuals in the United States. *AIDS*. 2019;33(4):701-708. doi:10.1097/QAD.0000000000002111
- Ford N, Shubber Z, Hill A, et al. Comparative efficacy of lamivudine and emtricitabine: a systematic review and meta-analysis of randomized trials. *PLoS One*. 2013;8(11):e79981. doi:10.1371/journal.pone.0079981
- Gallant JE, Daar ES, Raffi F, et al. Efficacy and safety of tenofovir alafenamide versus tenofovir disoproxil fumarate given as fixed-dose combinations containing emtricitabine as backbones for treatment of HIV-1 infection in virologically suppressed adults: a randomised, double-blind, active-controlled phase 3 trial. *The Lancet HIV*. 2016;3(4):e158-e165. doi:10.1016/s2352-3018(16)00024-2
- Giacomelli A, Conti F, Pezzati L, et al. Impact of switching to TAF/FTC/RPV, TAF/FTC/EVG/cobi and ABC/3TC/DTG on cardiovascular risk and lipid profile in people living with HIV: a retrospective cohort study. *BMC Infect Dis*. 2021;21(1):595. doi:10.1186/s12879-021-06304-3
- Gupta S, Sims J, Brinson C, et al. Lenacapavir as part of a combination regimen in treatment naïve PWH: week 54 results. Abstract 138. Presented at: Conference on Retroviruses and Opportunistic Infections (CROI); February 12-16 2022; Virtual. <https://www.croiconference.org/abstract/lenacapavir-as-part-of-a-combination-regimen-in-treatment-naive-pwh-week-54-results/>
- HIV.gov. Drug database: islatravir. Updated January 13, 2022. Accessed March 28, 2022. <https://clinicalinfo.hiv.gov/en/drugs/islatravir/patient>
- Knechten H, Stephan C, Waizmann M, et al. Patient-reported outcomes (PROs) after 1 year of routine clinical practice with bictegravir/emtricitabine/tenofovir alafenamide (B/F/TAF): The BICSTaR cohort. Abstract P053. Presented at: HIV Glasgow; October 23-26 2020; Virtual. <https://www.hivglasgow.org/wp-content/uploads/2020/11/P053-van-Welzen.pdf>

Libre JM, Brites C, Cheng CY, et al. Efficacy and safety of switching to the 2-drug regimen dolutegravir/lamivudine versus continuing a 3- or 4-drug regimen for maintaining virologic suppression in adults living with HIV-1: week 48 results from the phase 3, non-inferiority SALSA randomized trial. *Clin Infect Dis*. 2022;doi:10.1093/cid/ciac130

Libre JM, Hung CC, Brinson C, et al. Efficacy, safety, and tolerability of dolutegravir-rilpivirine for the maintenance of virological suppression in adults with HIV-1: phase 3, randomised, non-inferiority SWORD-1 and SWORD-2 studies. *Lancet*. 2018;391(10123):839-849. doi:10.1016/S0140-6736(17)33095-7

Orkin C. New antiretrovirals and the future of HIV treatment and prevention. Abstract 116. Presented at: Conference on Retroviruses and Opportunistic Infections (CROI); February 12-16 2022; Virtual. <https://www.croiconference.org/abstract/new-antiretrovirals-and-the-future-of-hiv-treatment-and-prevention/>

Orkin C, Arasteh K, Gorgolas Hernandez-Mora M, et al. Long-acting cabotegravir and rilpivirine after oral induction for HIV-1 infection. *N Engl J Med*. 2020;382(12):1124-1135. doi:10.1056/NEJMoa1909512

Overton ET, Richmond G, Rizzardini G, et al. Long-acting cabotegravir + rilpivirine every 2 months: ATLAS-2M week 152 results. Poster H03. Presented at: Conference on Retroviruses and Opportunistic Infections (CROI); February 12-16 2022; Virtual. <https://www.croiconference.org/abstract/long-acting-cabotegravir-rilpivirine-every-2-months-atlas-2m-week-152-results/>

Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in adults and adolescents with HIV. Department of Health and Human Services. Updated January 20, 2022. Accessed February 4, 2022. <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/whats-new-guidelines>

Sabin CA, Reiss P, Ryom L, et al. Is there continued evidence for an association between abacavir usage and myocardial infarction risk in individuals with HIV? A cohort collaboration. *BMC Medicine*. 2016;14(1)doi:10.1186/s12916-016-0588-4

Sax PE, Erlandson KM, Lake JE, et al. Weight gain following initiation of antiretroviral therapy: risk factors in randomized comparative clinical trials. *Clin Infect Dis*. 2020;71(6):1379-1389. doi:10.1093/cid/ciz999

Sax PE, Rockstroh JK, Luetkemeyer AF, et al. Switching to bictegravir, emtricitabine, and tenofovir alafenamide in virologically suppressed adults with human immunodeficiency virus. *Clin Infect Dis*. 2021;73(2):e485-e493. doi:10.1093/cid/ciaa988

Segal-Maurer S, DeJesus E, Stellbrink H-J, et al. Capsid inhibition with lenacapavir in multidrug-resistant HIV-1 infection. *N Engl J Med*. 2022;386(19):1793-1803. doi:10.1056/NEJMoa2115542

Swindells S, Andrade-Villanueva JF, Richmond GJ, et al. Long-acting cabotegravir and rilpivirine for maintenance of HIV-1 suppression. *N Engl J Med*. 2020;382(12):1112-1123. doi:10.1056/NEJMoa1904398

Swindells S, Lutz T, Van Zyl L, et al. Week 96 extension results of a Phase 3 study evaluating long-acting cabotegravir with rilpivirine for HIV-1 treatment. *AIDS*. 2022;36(2):185-194. doi:10.1097/QAD.0000000000003025

Triant VA, Perez J, Regan S, et al. Cardiovascular risk prediction functions underestimate risk in HIV infection. *Circulation*. 2018;137(21):2203-2214. doi:10.1161/circulationaha.117.028975

Trottier B, Lake JE, Logue K, et al. Dolutegravir/abacavir/lamivudine versus current ART in virally suppressed patients (STRIIVING): a 48-week, randomized, non-inferiority, open-label, Phase IIIb study. *Antivir Ther*. 2017;22(4):295-305. doi:10.3851/IMP3166

Wang R, George N, Ait-Khaled M, et al. Efficacy of tenofovir-lamivudine-dolutegravir for initial and first-line switch ART. Poster 0488. Presented at: Conference on Retroviruses and Opportunistic Infections (CROI); February 12-16 2022; Virtual. <https://www.croiconference.org/abstract/low-level-hiv-replication-for-dtg-3tc-vs-taf-based-regimen-in-tango-through-week-144/>

## Glossary

2DR, 2-drug regimen  
3DR, 3-drug regimen  
3TC, lamivudine  
ABC, abacavir  
AE, adverse event  
AI/AN, American Indian/Alaskan Native  
ALT, alanine aminotransferase  
ART, antiretroviral therapy  
ARV, antiretroviral  
ASCVD, atherosclerotic cardiovascular disease  
AST, aspartate aminotransferase  
AUC, area under the curve  
BIC, bictegravir  
BMD, bone mineral density  
BMI, body mass index  
bNABs, broadly neutralizing antibodies  
BUN, blood urea nitrogen  
c, cobicistat  
CAB, cabotegravir  
CBC, complete blood count  
CD, cluster of differentiation  
CrCl, creatinine clearance  
CV, cardiovascular  
DDI, drug-drug interaction  
DHHS, Department of Health and Human Services  
DOR, doravirine  
DRV, darunavir  
DTG, dolutegravir  
DXA, dual-energy x-ray absorptiometry  
EFV, efavirenz  
EHR, electronic health record  
EVG, elvitegravir  
FTC, emtricitabine  
HbA1c, glycated hemoglobin  
HBV, hepatitis B virus  
HCV, hepatitis C virus  
HDL-C, high-density lipoprotein cholesterol  
Het, heterosexual  
HIV, human immunodeficiency virus  
HIVTSQc, HIV Treatment Satisfaction Questionnaire – change  
HIVTSQs, HIV Treatment Satisfaction Questionnaire – static  
HLA-B\*5701, human leukocyte antigen B \* 5701 allele  
HPV, human papillomavirus  
HRQOL, health-related quality of life  
HTE, heavily treatment experienced  
IDU, injection-drug user

IM, intramuscular  
INSTI, integrase strand transfer inhibitor  
IQR, interquartile range  
ISR, injection-site reaction  
IV, intravenous  
LA, long-acting  
LAI, long-acting injectable  
LDL-C, low-density lipoprotein cholesterol  
LEN, lenacapavir  
MDR, multiple drug resistant  
MI, myocardial infarction  
MSM, men who have sex with men  
NAAT, nucleic acid amplification test  
NHOP, Native Hawaiian and other Pacific Islanders  
NNRTI, nonnucleoside reverse transcriptase inhibitor  
NRTI, nucleoside reverse transcriptase inhibitor  
OBR, optimized background regimen  
PI, protease inhibitor  
PK, pharmacokinetic  
PO, by mouth  
Q4W, every four weeks  
Q8W, every eight weeks  
QD, once a day  
QOL, quality of life  
r, ritonavir  
RAL, raltegravir  
RNA, ribonucleic acid  
RPR, rapid plasma reagin  
RPV, rilpivirine  
RR, relative risk  
SF-36, 36-Item Short Form Survey Instrument  
STI, sexually transmitted infection  
STR, single tablet regimen  
T2DM, type 2 diabetes mellitus  
TAF, tenofovir alafenamide  
TDF, tenofovir disoproxil fumarate  
TE, treatment experienced  
w/, with  
WBC, white blood cell  
WNL, within normal limits