

MAKING STRIDES IN HIV: OPTIMIZING TREATMENT SELECTIONS AND SWITCH STRATEGIES

REFERENCES and RESOURCES

Key References

1. Mantsios A, Murray M, Karver TS, et al. Multi-level considerations for optimal implementation of long-acting injectable antiretroviral therapy to treat people living with HIV: perspectives of health care providers participating in phase 3 trials. *BMC Health Serv Res.* 2021;21(1):255.
2. Millett GA. New pathogen, same disparities: why COVID-19 and HIV remain prevalent in U.S. communities of colour and implications for ending the HIV epidemic. *J Int AIDS Soc.* 2020;23(11):e25639.
3. Saag MS, Gandhi RT, Hoy JF, et al. Antiretroviral drugs for treatment and prevention of HIV infection in adults: 2020 recommendations of the International Antiviral Society-USA Panel. *JAMA.* 2020;324(16):1651-1669.
4. Scarsi KK, Swindells S. The promise of improved adherence with long-acting antiretroviral therapy: what are the data? *J Int Assoc Provid AIDS Care.* 2021;20:23259582211009011.
5. Waterfield KC, Shah GH, Etheredge GD, Ikhile O. Consequences of COVID-19 crisis for persons with HIV: the impact of social determinants of health. *BMC Public Health.* 2021;21(1):299.
6. Wieringa TH, Rodriguez-Gutierrez R, Spencer-Bonilla G, et al. Decision aids that facilitate elements of shared decision making in chronic illnesses: a systematic review. *Syst Rev.* 2019;8(1):121.

#

Resources

Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents Living with HIV (DHHS):

<https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/initiation-antiretroviral-therapy?view=full>

Adherence to the Continuum of Care:

<https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/adherence-continuum-care>

Primary Care Guidance for Persons With Human Immunodeficiency Virus: 2020 Update by the HIV Medicine Association of the Infectious Diseases Society of America:

<https://www.idsociety.org/practice-guideline/primary-care-management-of-people-with-hiv/>

CDC Resources for People With HIV:

<https://www.cdc.gov/hiv/basics/livingwithhiv/resources.html>

HRSA's AIDS Education and Training Center:

<https://aidsetc.org/>

MAKING STRIDES IN HIV: OPTIMIZING TREATMENT SELECTIONS AND SWITCH STRATEGIES

Endnotes-to-Slides Map

Red Line: Epidemiology of HIV in a (Post-)pandemic Era

Module 1: HIV Epidemiologic Trends in the Setting of the COVID-19 Pandemic

- 5 ¹Centers for Disease Control and Prevention (CDC). May 2020. Accessed June 1, 2021. <https://www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-31/content/diagnoses.html>
²Centers for Disease Control and Prevention (CDC). August 2008. Accessed June 1, 2021. <https://www.cdc.gov/nchhstp/newsroom/docs/fact-sheet-on-hiv-estimates.pdf>
- 6 ¹Centers for Disease Control and Prevention (CDC). November 2020. Accessed June 1, 2021. <https://www.cdc.gov/hiv/statistics/overview/ataglance.html>
²Centers for Disease Control and Prevention (CDC). May 2020. Accessed June 1, 2021. <https://www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-31/content/diagnoses.html>
- 7 ¹Centers for Disease Control and Prevention (CDC). May 2020. Accessed June 1, 2021. <https://www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-31/content/diagnoses.html>
²Centers for Disease Control and Prevention (CDC). January 2021. Accessed June 1, 2021. <https://www.cdc.gov/hiv/group/raciaethnic/africanamericans/index.html>
³Centers for Disease Control and Prevention (CDC). March 2021. Accessed June 1, 2021. <https://www.cdc.gov/hiv/group/raciaethnic/hispaniclatinos/index.html>
⁴Centers for Disease Control and Prevention (CDC). May 2020. Accessed June 1, 2021. <https://www.cdc.gov/hiv/group/raciaethnic/asians/index.html>
- 8 Delaney KP et al. Conference on Retroviruses and Opportunistic Infections (CROI). 2021. Abstract 739. <https://www.croiconference.org/abstract/impact-of-covid-19-on-commercial-laboratory-testing-for-hiv-in-the-united-states/>
- 9 Menza TW et al. Conference on Retroviruses and Opportunistic Infections (CROI). 2021. Abstract 144. <https://www2.aievolution.com/cro2101/index.cfm?do=abs.viewAbs&abs=1168>
- 10 ¹Hochstatter KR et al. AIDS Behav. 2021;25(2):354-359.
²Glick SN et al. AIDS Behav. 2020;24(9):2466-2468.
- 11 ¹Krakower D et al. AIDS 2020: 23rd International AIDS Conference Virtual. 2020. Abstract OACLB0104. <https://programme.aids2020.org/Abstract/Abstract/11755>
²Huang YLA et al. Conference on Retroviruses and Opportunistic Infections (CROI). 2021. Abstract 731. <https://www.croiconference.org/abstract/impact-of-covid-19-on-prep-prescriptions-in-the-united-states-a-time-series-analysis/>

Module 2: COVID-19 and Ongoing HIV Disparities

- 13 ¹Millett GA. J Int AIDS Soc. 2020;23(11):e25639.
²Fields EL et al. Lancet. 2021;397(10279):1040-1042.
³Centers for Disease Control and Prevention (CDC). May 2021. Accessed June 7, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>
- 14 Millett GA. J Int AIDS Soc. 2020;23(11):e25639.
- 15 ¹Waterfield KC et al. BMC Public Health. 2021;21(1):299.
²Shiau S et al. AIDS Behav. 2020;24(8):2244-2249.
³Okonkwo NE et al. BMJ Evid Based Med. 2020;bmjebm-2020-111426.
- 16 ¹Chunara R et al. J Am Med Inform Assoc. 2021 ;28(1):33-41.
²Pierce RP et al. J Telemed Telecare. 2020;1357633X20963893.
³Jacobs M et al. J Am Geriatr Soc. 2021.
⁴Rodriguez JA et al. Health Aff (Millwood). 2021;40(3):487-495.

Module 3: Common Comorbidities in HIV

- 18 ¹Centers for Disease Control and Prevention (CDC). September 2020. Accessed June 1, 2021. <https://www.cdc.gov/hiv/group/age/olderamericans/index.html>
²Back D and Marzolini C. J Int AIDS Soc. 2020;23(2):e25449.
- 19 ¹Lorenc A et al. London J Prim Care (Abingdon). 2014;6(4): 84-90.
²Centers for Disease Control and Prevention (CDC). May 2021. Accessed June 1, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>
³Nemani K et al. JAMA Psychiatry. 2021;78(4):380-386.
- 20 ¹Tesoriero JM et al. JAMA Netw Open. 2021;4(2):e2037069.
²Sun J et al. Conference on Retroviruses and Opportunistic Infections (CROI). 2021. Abstract 103. <https://www.croiconference.org/abstract/covid-19-hospitalization-among-people-with-hiv-or-solid-organ-transplant-in-the-us>

MAKING STRIDES IN HIV: OPTIMIZING TREATMENT SELECTIONS AND SWITCH STRATEGIES

Orange Line: 2-Drug Regimens vs 3-Drug Regimens

Module 1: Current Guideline Recommendations for Newly Diagnosed PLWH (DHHS, IAS-USA)

- 23 ¹Saag MS et al. JAMA. 2020;324(16):1651-1669.
²Department of Health and Human Services (DHHS). December 2019. Accessed May 28, 2021. <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/initiation-antiretroviral-therapy?view=full>
-
- 24 Coffey S et al. AIDS. 2019;33(5):825-832.
-
- 25 Colasanti J et al. Open Forum Infect Dis. 2018;5(6):ofy104.
-
- 26 Halperin J et al. Open Forum Infect Dis. 2019;6(4):ofz161.
-
- 27 ¹Department of Health and Human Services (DHHS). December 2019. Accessed May 28, 2021. <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/initiation-antiretroviral-therapy?view=full>
²Saag MS et al. JAMA. 2020;324(16):1651-1669.
-
- 28 Rolle CP et al. HIV Glasgow Virtual Meeting. 2020. Abstract P020. <https://onlinelibrary.wiley.com/doi/10.1002/jia2.25616>
-
- 29 Rolle CP et al. HIV Drug Therapy Glasgow Virtual Meeting. 2020. Abstract P020.
-
- 30 Huhn GD et al. Clin Infect Dis. 2020;71(12):3110-3117.

Module 3: Clinical Trials of Oral ZDR in Treatment-naïve PLWH

- 35 Cahn P, et al. Durable efficacy of dolutegravir (DTG) plus lamivudine (3TC) in antiretroviral treatment-naïve adults with HIV-1 infection – 3-year results from the GEMINI studies. HIV Glasgow 2020: Abstract P18.
-
- 36 Cahn P, et al. Durable efficacy of dolutegravir (DTG) plus lamivudine (3TC) in antiretroviral treatment-naïve adults with HIV-1 infection – 3-year results from the GEMINI studies. HIV Glasgow 2020: Abstract P18
-
- 37 Cahn P, et al. Durable efficacy of dolutegravir (DTG) plus lamivudine (3TC) in antiretroviral treatment-naïve adults with HIV-1 infection – 3-year results from the GEMINI studies. HIV Glasgow 2020: Abstract P18

Module 4: Current Guideline Recommendations for ART Switching in PLWH with Virologic Suppression

- 39 ¹Department of Health and Human Services (DHHS). December 2019. Accessed May 28, 2021. <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/initiation-antiretroviral-therapy?view=full>
²Anstett K et al. Retrovirology. 2017;14:36.

Module 5: Clinical Trials of Switching to ZDR in the Context of Virologic Suppression

- 41 van Wyk J et al. Clinical Infectious Diseases. 2020;71(8):1920-1929.
-
- 42 van Wyk J et al. HIV Glasgow Virtual Meeting. 2020. Abstract 0441. <https://onlinelibrary.wiley.com/doi/10.1002/jia2.25616>
-
- 43 Llibre JM et al. IAS 2021, 11th IAS Conference on HIV Science. 2021. Abstract OALB0303.
-
- 44 ¹Llibre JM et al. Lancet. 2018;391(10123):839-849.
²Aboud M et al. Lancet HIV. 2019;6(9):e576-e587.
-
- 45 ¹Llibre JM et al. Lancet. 2018;391(10123):839-849.
²Aboud M et al. Lancet HIV. 2019;6(9):e576-e587.

Module 6: Real-World Evidence Supporting Use of ZDR

- 47 Ward D et al. AIDS Res Treat. 2020:5923256.
-
- 48 Teira R et al. PLoS One. 2021;16(4):e0249515.

MAKING STRIDES IN HIV: OPTIMIZING TREATMENT SELECTIONS AND SWITCH STRATEGIES

Yellow Line: Emerging Long-Acting Injectable ART

Module 1: Introduction to Long-acting Injectable ART

- 51 ¹Food and Drug Administration (FDA). News Release. January 2021. Accessed June 8, 2021. <https://www.fda.gov/news-events/press-announcements/fda-approves-first-extended-release-injectable-drug-regimen-adults-living-hiv>
²Smith SJ et al. *Viruses*. 2021;13(2):205.
- 52 ¹Food and Drug Administration (FDA). News Release. January 2021. Accessed June 8, 2021. <https://www.fda.gov/news-events/press-announcements/fda-approves-first-extended-release-injectable-drug-regimen-adults-living-hiv>
²Dept. of Health and Human Services (DHHS). February 2021. Accessed June 8, 2021. <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/hhs-adults-and-adolescents-antiretroviral-guidelines-panel?view=full>

Module 3: Clinical Trial Evidence for Long-acting Injectable ART

- 56 Swindells S et al. *NEJM*. 2020;382:1112-1123.
- 57 Swindells S et al. *NEJM*. 2020;382:1112-1123.
- 58 Overton ET et al. *Lancet*. 2021;396(10267):1994-2005.
- 59 Overton ET et al. *Lancet*. 2021;396(10267):1994-2005.
- 60 Jaeger H et al. Conference on Retroviruses and Opportunistic Infections (CROI). Abstract 401. <https://www.croiconference.org/abstract/week-96-efficacy-and-safety-of-cabotegravir-rilpivirine-every-2-months-atlas-2m/>
- 61 ¹Orkin C et al. *NEJM*. 2020;382:1124-1135.
²D'Amico R et al. HIV Glasgow Virtual Meeting. 2020. Abstract O414. <https://onlinelibrary.wiley.com/doi/10.1002/jia2.25616>
- 62 ¹Orkin C et al. Conference on Retroviruses and Opportunistic Infections (CROI). 2020. Abstract 482. <https://www.croiconference.org/abstract/long-acting-cabotegravir-rilpivirine-for-hiv-treatment-flair-week-96-results/>
²Orkin C et al. *NEJM*. 2020;382:1124-1135.
- 63 Rizzardini G et al. *J Acquir Immune Defic Syndr*. 2020;85(4):498-506.

Module 4: Promises and Challenges of Long-acting Injectable ART

- 65 Scarsi KK and Swindells S. *J Int Assoc Provid AIDS Care*. 2021;20:23259582211009011.
- 66 Orkin C et al. Conference on Retroviruses and Opportunistic Infections (CROI). 2020. Abstract 482. <https://www.croiconference.org/abstract/long-acting-cabotegravir-rilpivirine-for-hiv-treatment-flair-week-96-results/>
- 67 ¹Saag MS et al. *JAMA*. 2020;324(16):1651-1669.
²Overton ET et al. Conference on Retroviruses and Opportunistic Infections (CROI). 2020. Abstract 3334. https://www.natap.org/2020/CROI/croi_03.htm
- 68 Food and Drug Administration (FDA). January 2021. Accessed June 7, 2021. https://www.accessdata.fda.gov/drugsatfda_docs/label/2021/212888s000lbl.pdf

Module 5: Pearls and Pitfalls: Addressing Practical Challenges to Long-acting Injectable ART

- 70 Mantsios A et al. *BMC Health Serv Res*. 2021;21(1):255.

Green Line: Optimizing Patient Outcomes: Selection of Patient-centered ART

Module 1: ART Selection: Engaging in Shared Decision Making

- 73 Yelverton V et al. *AIDS Patient Care STDS*. 2018;32(9):240-348.
- 74 Okoli C et al. *AIDS Behav*. 2021;25(5):1384-1395.
- 75 Wieringa TH et al. *Syst Rev*. 2019;8(1):121.

Module 3: Barriers to Adherence and Ways to Overcome Them

- 79 Department of Health and Human Services (DHHS). October 2017. Accessed June 8, 2021. <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/adherence-continuum-care>
- 80 Department of Health and Human Services (DHHS). October 2017. Accessed June 8, 2021. <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/adherence-continuum-care>
- 81 Department of Health and Human Services (DHHS). October 2017. Accessed June 8, 2021. <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/adherence-continuum-care>
- 82 Department of Health and Human Services (DHHS). October 2017. Accessed June 8, 2021. <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/adherence-continuum-care>
- 83 ¹Department of Health and Human Services (DHHS). December 2019. Accessed May 28, 2021. <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/initiation-antiretroviral-therapy?view=full>
²Altice F et al. *Patient Prefer Adherence*. 2019;13:475-490.
³Yager J et al. *AIDS Patient Care STDS*. 2017;31(9):370-376.

Module 4: Optimizing Access and Addressing Disparities

- 85 Department of Health and Human Services (DHHS). October 2017. Accessed June 8, 2021. <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/adherence-continuum-care>

MAKING STRIDES IN HIV: OPTIMIZING TREATMENT SELECTIONS AND SWITCH STRATEGIES

Blue Line

Module 2: Switching After Weight Gain

95 Sax P et al. *Open Forum Infectious Diseases*. 2020;7(supp 1):S846-S847.

Module 4: Managing Virologic Resistance

106 Castagna A et al. *J Infect Dis*. 2014;210(3):354-362.

107 Kozal. *NEJM*. 2020;382:1232. Pialoux. *AIDS* 2018. Abstr THPEB045.

108 Lataillade. *IAS* 2019. Abstr MOAB0102.

109 Emu. *NEJM*. 2018;379:645.

110 ¹Emu. *NEJM*. 2018;379:645.

²Emu. *IDSA* 2017. Abstr 1686.

³Emu. *HIV Glasgow* 2018. Abstr O345.

⁴Emu. *CROI* 2019. Abstr 485. 5. DeJesus. *HIV Glasgow* 2018. Abstr P064.