

UNDETECTABLE AND BEYOND

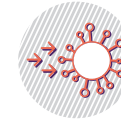
A COMPREHENSIVE THERAPY APPROACH CAN HELP SET UP YOUR PATIENTS FOR LONG-TERM TREATMENT SUCCESS

Per the US Department of Health and Human Services (DHHS) guidelines, the primary goal of HIV treatment is to reach an undetectable viral load.¹ However, advancements in HIV medicine mean it's possible for providers to look beyond undetectable and consider other factors that may impact their patients' long-term treatment successes.

Consider these key factors of a comprehensive treatment approach¹:



Achieves and maintains viral suppression¹



Has a high barrier to resistance¹



Provides a safety and tolerability profile that supports aging with HIV¹



Offers simple administration that aligns with your patients' needs¹



Rigorously evaluated in diverse patient populations (age, sex, race)^{1,11}



Empowers providers to initiate treatment ASAP¹

EXPLORE WHAT SHAPED TODAY'S APPROACH TO HIV CARE

Four decades of advances in HIV research have enabled providers to reach for goals beyond simply achieving an undetectable viral load.¹

The path to today's standard of care in HIV treatment has been long. Revisit some of the key points of clinical progress that brought us here.

1980s

AN UNCONTROLLED VIRUS

- Six years after the mysterious virus first appeared in 1981, the FDA approved the first nucleoside reverse transcriptase inhibitor (NRTI), zidovudine.²
- While single-class therapies helped suppress viral loads in some patients, their lack of durability allowed HIV drug resistance to emerge.³

1990s

TRIALS AND TRIUMPHS

- By 1994, AIDS became the leading cause of death for all Americans ages 25 to 44.²
- The advent of a highly active antiretroviral therapy (HAART) in the mid 1990s gave patients and providers hope for the future. HAART used multiple mechanisms to create a higher threshold for HIV mutations, making durable viral suppression an achievable goal for many patients.^{3,4}

2000s

INNOVATION AND SIMPLE ADMINISTRATION

- Early HAART regimens were far from perfect. Burdensome side effects and complex daily dosing made it difficult for people to adhere to regimens long term.^{4,5}
- To improve the patient experience, the FDA encouraged development of single-tablet regimens (STRs).⁶ In the following years, STRs containing 3 medicines were approved, offering patients treatment options with a lower pill burden.⁷
- Treatment regimens offered improved viral suppression, but not without potential toxicity. Department of Health and Human Services (DHHS) guidelines still recommended deferring treatment for specific patients based on viral load and CD4 count.⁸

2010s

SETTING A HIGH BAR

- Over the next 8 years, treatment regimens continued to advance. Modern antiretrovirals (ARTs) now have a reduced pill burden and more convenient dosing requirements. Many treatment options are relatively well tolerated with sustained viral suppression and a higher genetic barrier to resistance.^{1,9}
- In a regional health system cohort analysis between 2000 and 2016, overall life expectancy of people living with HIV increased from 59 years to 77 years—an 18-year improvement.^{10*}

*Calculated based on life expectancy at age 21.

NOW

WORKING TOWARD LONG-TERM TREATMENT SUCCESS

- Today, DHHS recommends initiating ART immediately after HIV diagnosis, regardless of viral load or CD4 count.¹
- As HIV medicines advance, the number of patients aging with HIV is increasing.¹ It's important to consider therapies that account for the evolving needs of patients over the course of their lifelong treatment.
- It's important to empower people living with HIV through collaborative decision-making with their providers, reducing stigma, and supporting them through different stages of their life.¹

stop the virus //

Working together to help stop HIV.

References: 1. 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 January 31, 2022. <https://clinicalinfo.hiv.gov/sites/default/files/guidelines/documents/guidelines-adult-adolescent-arv.pdf> 2. Department of Health and Human Services. A timeline of HIV and AIDS. Accessed April 13, 2020. <https://www.hiv.gov/hiv-basics/overview/history/hiv-and-aids-timeline> 3. Barré-Sinoussi F, Ross AL, Delfraissy J-F. Past, present, and future: 30 years of HIV research. *Nat Rev Microbiol.* 2013;11(12):877-883. 4. National Institute of Allergy and Infectious Diseases, US Department of Health and Human Services. Antiretroviral drug discovery and development. Accessed April 13, 2020. <https://www.niaid.nih.gov/diseases-conditions/antiretroviral-drug-development> 5. Chesney MA, Farmer P, Leandre F, Malow R, Starace F. Human immunodeficiency virus and acquired immunodeficiency syndrome. In: Sabaté E, ed. *Adherence to Long-Term Therapies: Evidence for Action.* Geneva, Switzerland: World Health Organization; 2003:95-106. 6. Food and Drug Administration Center for Drug Evaluation and Research (CDER). Guidance for industry: Fixed dose combinations, co-packaged drug products, and single-entity versions of previously approved antiretrovirals for the treatment of HIV. Published October 2006. <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/fixed-dose-combinations-co-packaged-drug-products-and-single-entity-versions-previously-approved> 7. National Institutes of Health. FDA approval of HIV medicines. Accessed January 27, 2021. <https://hivinfo.nih.gov/understanding-hiv/infographics/fda-approval-hiv-medicines> 8. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. Updated November 3, 2008. 9. Health Resources & Services Administration. Ending the HIV epidemic in the US. Updated March 2022. Accessed May 18, 2022. <https://www.hrsa.gov/ending-hiv-epidemic> 10. Marcus JL, Leyden W, Anderson AN, et al. Increased overall life expectancy but not comorbidity-free years for people with HIV. Abstract presented at: Conference on Retroviruses and Opportunistic Infections; March 8-11, 2020; Boston, MA. Abstract 151. 11. US Food and Drug Administration. Clinical trial diversity. Updated May 13, 2022. Accessed May 18, 2022. <https://www.fda.gov/consumers/minority-health-and-health-equity-resources/clinical-trial-diversity>