RESEARCH ARTICLE / ARAŞTIRMA

DOI: 10.4274/mjima.galenos.2026.26812
Mediterr J Infect Microb Antimicrob 2026;15:26812
Erişim: http://dx.doi.org/10.4274/mjima.galenos.2026.26812

# Perceptions, Attitudes, and Preferences Toward Long-acting Injectable HIV Treatments: A Cross-sectional Survey of People Living with HIV in Türkiye

## Uzun Etkili Enjekte Edilebilir HIV Tedavilerine Yönelik Algılar, Tutumlar ve Tercihler: Türkiye'de HIV ile Yaşayan Bireyler Arasında Kesitsel Bir Anket Çalışması

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## Abstract

**Introduction:** Long-acting injectable antiretroviral therapy (LAI-ART) offers an alternative to daily oral treatment and represents an important innovation in human immunodeficiency virus (HIV) care. Although LAI-ART has recently been approved in Türkiye, it has not yet been integrated into clinical practice because of the lack of reimbursement. This study explored awareness, attitudes, and preferences regarding LAI-ART among people living with HIV in Türkiye.

**Materials and Methods:** This cross-sectional survey was conducted between April and August 2025 among adults with HIV receiving ART at a university-affiliated infectious diseases outpatient clinic in Türkiye. Eligible participants (≥18 years) attending routine follow-up visits were invited to complete a structured, anonymous questionnaire assessing sociodemographic and clinical characteristics, as well as awareness, attitudes, and preferences regarding LAI-ART. The primary outcome was willingness to accept LAI-ART if recommended by a physician, whereas secondary outcomes included awareness, preferred administration setting, and perceived advantages and disadvantages.

**Results:** The mean age of the participants was 37.8 years, 91% were male, and the total sample comprised 200 participants. Most participants (92%) reported that their condition was well controlled, 66% were receiving single-tablet regimens, and a greater pill burden was associated with lower adherence ($p = 0.045$). Awareness of LAI-ART was moderate, with 30% of participants unaware of its existence; men were more informed than women. If recommended by their physicians, 79% indicated a willingness to adopt injectable therapy. The perceived advantages included freedom from daily pills (85%) and reduced concerns about forgetfulness (72%), whereas the primary concern was fear of side effects (51%). No significant association was found between recent missed doses and willingness to switch ($p = 0.57$).

**Conclusion:** Overall, the participants demonstrated strong interest in LAI-ART, highlighting the need for targeted educational initiatives, particularly for women, as well as strategies to address concerns regarding adverse effects and injection scheduling.

**Keywords:** Adherence, antiretroviral treatment, long-acting injectables, preference, questionnaire

## Öz

**Giriş:** Uzun etkili enjekte edilebilir antiretroviral tedavi (LAI-ART), günlük oral tedaviye bir alternatif sunmakta ve insan bağışıklık yetmezliği virüsü (HIV) bakımında önemli bir yeniliği temsil etmektedir. Türkiye'de yakın zamanda ruhsatlandırılmış olmasına rağmen, geri ödeme eksikliği nedeniyle henüz klinik uygulamaya entegre edilmemiştir. Bu çalışma, Türkiye'de HIV ile yaşayan bireyler arasında LAI-ART'a yönelik farkındalık, tutum ve tercihleri değerlendirmeyi amaçlamıştır.

**Gereç ve Yöntem:** Bu kesitsel anket çalışması, Nisan–Ağustos 2025 tarihleri arasında Türkiye'de üniversiteye bağlı bir enfeksiyon hastalıkları polikliniğinde antiretroviral tedavi almakta olan HIV pozitif erişkinler arasında yürütülmüştür. Rutin takip ziyaretlerine gelen uygun katılımcılar (≥18 yaş), sosyodemografik ve klinik özellikler ile LAI-ART ilişkin farkındalık, tutum ve tercihleri değerlendiren yapılandırılmış ve anonim bir anketi

**Cite this article as:** Karaismailoğlu B, Meriç Koç M, Gündüz A, Altuntaş Aydın Ö. Perceptions, attitudes, and preferences toward long-acting injectable HIV treatments: a cross-sectional survey of people living with HIV in Türkiye. Mediterr J Infect Microb Antimicrob. 2026;15:153-159

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**Received/Geliş Tarihi:** 20.03.2026 **Accepted/Kabul Tarihi:** 18.05.2026

**Published:** 17.08.2026

doldurmaya davet edilmiştir. Birincil sonlanım noktası, hekim tarafından önerilmesi durumunda LAI-ART'ı kabul etme istekliliği olup; ikincil sonlanım noktaları farkındalık düzeyi, tercih edilen uygulama ortamı ve algılanan avantajlar ile dezavantajları içermektedir.

**Bulgular:** Toplam 200 katılımcının ortalama yaşı 37,8 olup, %91'i erkekti. Katılımcıların büyük çoğunluğu (%92) hastalığının iyi kontrol altında olduğunu düşünmekteydi; %66'sı tek tablet rejim kullanmaktaydı ve daha yüksek ilaç yükü daha düşük tedavi uyumu ile ilişkiliydi (p = 0,045). LAI-ART'a yönelik farkındalık orta düzeydeydi ve katılımcıların %30'u bu tedaviden habersizdi; erkekler kadınlara göre daha fazla bilgi sahibiydi. Hekim önerisi durumunda katılımcıların %79'u enjekte edilebilir tedaviyi kabul etmeye istekli olduğunu belirtti. Algılanan başlıca avantajlar günlük ilaç alma zorunluluğundan kurtulma (%85) ve unutkanlığın ortadan kalkması (%72) iken, en önemli endişe yan etki korkusuydu (%51). Son dönemde ilaç dozunu atlama ile tedaviye geçiş istekliliği arasında anlamlı bir ilişki saptanmadı (p = 0,57).

**Sonuç:** Katılımcılar genel olarak LAI-ART'a güçlü bir ilgi göstermiştir. Bu bulgular, özellikle kadınlar arasında hedefe yönelik eğitim ihtiyacını ve yan etkiler ile enjeksiyon planlamasına ilişkin endişelerin giderilmesine yönelik stratejilerin önemini ortaya koymaktadır.

**Anahtar Kelimeler:** Uzun etkili enjekte edilebilir tedaviler, antiretroviral tedavi, tercih, tedavi uyumu, anket

## Introduction

Human immunodeficiency virus (HIV) remains a major global public health challenge despite substantial advances in diagnosis, treatment, and prevention over the past four decades. The advent of combination antiretroviral therapy (ART) has transformed HIV infection from a fatal disease into a manageable chronic condition, with life expectancy approaching that of the general population among individuals who achieve sustained viral suppression[1,2]. Nevertheless, the requirement for lifelong daily pill intake remains a major challenge. Suboptimal adherence contributes to virologic failure, drug resistance, and disease progression while also negatively affecting patients' quality of life[3]. Factors such as pill fatigue, stigma, concerns about confidentiality, and the daily reminder of illness underscore the need for simplified treatment modalities[4].

Long-acting injectable-ART (LAI-ART), most notably the combination of cabotegravir and rilpivirine, has emerged as a promising alternative to daily oral regimens. Administered intramuscularly at monthly or bimonthly intervals, these regimens have demonstrated non-inferior efficacy compared with standard oral ART in pivotal phase III trials (ATLAS, FLAIR, and ATLAS-2M), maintaining virologic suppression in appropriately selected patients[5-7]. Beyond virologic outcomes, injectable therapy may reduce treatment burden, improve adherence, and enhance patient satisfaction. However, successful implementation requires consideration of barriers such as injection-site reactions, the need for regular clinic visits, and the implications of missed doses[8].

Understanding the perceptions and preferences of people living with HIV (PLWH) is critical for the real-world adoption of LAI-ART. Studies conducted in Europe and the United States have demonstrated high levels of interest, particularly among individuals who struggle with adherence to daily oral therapy[9,10]. However, evidence from low- and middle-income countries remains limited, and cultural and health care system factors may significantly influence acceptance and uptake. In Türkiye, LAI-ART has recently been approved by the Ministry of Health but has not yet been integrated into routine clinical practice because of the lack of reimbursement coverage[11]. This situation presents both opportunities and challenges for its potential implementation.

Therefore, this study aims to evaluate the awareness, attitudes, and preferences of PLWH in Türkiye regarding LAI-ART. Specifically, it seeks to explore the perceived advantages and disadvantages, preferred administration intervals, and concerns related to transitioning from oral to injectable therapy. By identifying facilitators and barriers from the patient perspective, the findings will provide valuable insights to guide clinical decision-making, inform patient counseling, and support the future integration of LAI-ART into HIV care in Türkiye.

## Materials and Methods

### Study Design and Setting

This study was designed as a cross-sectional survey to assess awareness, attitudes, and preferences regarding LAI-ART among PLWH in Türkiye. The survey was conducted between April and August 2025 at the infectious diseases and clinical microbiology outpatient clinic of a large university-affiliated health care center providing comprehensive HIV care.

### Participants and Recruitment

Eligible participants were adults (≥18 years) with a confirmed diagnosis of HIV who were receiving ART and attending routine follow-up visits during the study period. Exclusion criteria included the inability to provide informed consent, cognitive impairment that precluded completion of the questionnaire, and refusal to participate. Informed consent was obtained from all participants before enrollment. A total of 200 individuals were included in the analysis.

We targeted a sample size of n = 200 to ensure adequate statistical power for detecting small-to-moderate associations. Based on Cohen's effect size framework for the chi-square test ($w$), a total sample of 200 provides approximately 80% power to

detect an effect size of $w \approx 0.20$ and >95% power to detect an effect size of $w \approx 0.30$. Thus, the study was powered to detect small-to-moderate associations between key binary variables (e.g., adherence-related perceptions and concerns).

### Survey Instrument

A structured, anonymous questionnaire was developed by the study team based on the existing literature[9,10,12-15] on LAI-ART and adapted to the Turkish context (Supplementary Material 1). The instrument consisted of closed-ended and multiple-choice questions covering four domains. Sociodemographic and clinical characteristics included age, gender, marital status, comorbidities, and lifestyle factors such as smoking, alcohol consumption, and recreational drug use. HIV-related variables included the duration since diagnosis, duration on the current regimen, number of tablets taken per day, treatment adherence (missed doses during the previous 30 days), and perceived treatment control. Additional domains assessed awareness of LAI-ART and sources of information, as well as attitudes and preferences, including willingness to switch if recommended by a physician and the preferred site of administration (home, physician's office, or health care facility). Finally, the questionnaire explored the perceived advantages and disadvantages of LAI-ART. The questionnaire was pilot-tested in a small group of PLWH (n = 10) to assess clarity and was revised accordingly.

### Data Collection

Participants completed the questionnaire either in paper form at the clinic or electronically through a secure online platform. No identifying information was collected. Completed questionnaires were reviewed for completeness by the study staff, and missing or inconsistent responses were excluded from the relevant analyses.

### Outcomes

The primary outcome was willingness to accept LAI-ART if recommended by a physician. Secondary outcomes included awareness of LAI-ART, preferred administration setting, and reported advantages and disadvantages. Additional exploratory outcomes included associations between sociodemographic and clinical characteristics and treatment acceptance, adherence, or awareness.

### Ethical Considerations

The study protocol was approved by the Institutional Ethics Committee of University of Health Sciences Türkiye, Başakşehir Çam and Sakura City Hospital (approval no: 11/25.06.205.230, date: 19.08.2025). Participation was voluntary, and all participants provided written informed consent. The study adhered to the principles of the Declaration of Helsinki.

### Statistical Analysis

Data were entered into SPSS (IBM SPSS Statistics, version XX) for analysis. Descriptive statistics were reported as means ± standard deviation for continuous variables and frequencies with percentages for categorical variables. Between-group comparisons were performed using the Mann-Whitney U test for continuous variables and the chi-square or Fisher's exact test for categorical variables. One-way analysis of variance was used for comparisons involving more than two groups, where appropriate. Statistical significance was defined as $p < 0.05$.

## Results

A total of 200 individuals living with HIV participated in the survey, with a mean age of 37.8 ± 10.7 years. The vast majority were male (91%), while 8% were female, and one participant each identified as transgender or chose not to disclose their gender. Sexual preference was predominantly heterosexual: 59% of male participants reported preferring women, 20% preferred men, 5% preferred both sexes, and 16% chose not to disclose their preference. Among women, 88% preferred men, while smaller proportions preferred women or declined to respond. Both the transgender participant and the participant who did not disclose gender exclusively reported a preference for men.

Family awareness and marital status varied considerably. Overall, 60% of participants reported that their families or sexual partners were aware of their HIV status, whereas 39% reported that they were not. Slightly more than half of the cohort was single, 41% was married, and 6% was divorced. Chi-square analysis demonstrated a significant association between marital status and family awareness ($p < 0.001$), indicating that married individuals were significantly more likely to have disclosed their HIV status to their families than single or divorced participants.

Chronic comorbidities were relatively uncommon, with hypertension and hypercholesterolemia (4.5% each) and diabetes (4%) being the most frequently reported conditions. Psychiatric disorders, asthma, and other rare diseases were reported less frequently. Regarding lifestyle factors, 47% of participants currently smoked, 29% consumed alcohol, and 8% reported recreational drug use.

Regarding HIV-related variables, nearly half of the respondents had been living with HIV for 1–5 years, whereas one-third had been diagnosed within the previous year. Only 16% had been living with HIV for more than 5 years. Similarly, current antiretroviral regimens had most commonly been used for less than 5 years, and only 9% of participants reported longer treatment durations. Most participants were receiving a single-tablet regimen (66%), whereas smaller proportions took two or

three tablets, and only 1.5% reported taking more than three tablets. Treatment adherence was high, with more than three-quarters of participants reporting no missed doses during the previous 30 days. Almost all participants (92%) believed that their disease was well controlled with their current therapy. Participants taking a greater number of tablets were more likely to report missed doses ($p = 0.045$). In contrast, no association was observed between daily tablet burden and willingness to initiate injectable treatment ($p = 0.78$), suggesting that pill burden influenced adherence but not acceptance of new treatment regimens. Likewise, the duration of HIV infection was not significantly associated with acceptance of injectable therapy ($p = 0.08$).

Awareness of LAI-ART was limited. Nearly half of the participants reported first hearing about it from healthcare professionals, while 30% had no prior knowledge of the therapy. The internet and social media accounted for 20% of information sources, followed by HIV support groups (14%) and television or radio (1%). Men were more likely than women to have received information from healthcare professionals, whereas more than half of the women reported having no knowledge of the therapy, highlighting a gender disparity in awareness.

Acceptance of LAI treatment, if recommended by a physician, was high. Nearly four in five participants (80%) indicated that they would accept the treatment, whereas 15% were undecided and only 5% declined (Figure 1). We explored potential associations between acceptance of LAI treatment and various demographic and clinical parameters. Acceptance of treatment, measured by the response to the question, "If your doctor offered this treatment, would you accept it?", showed no significant associations with gender, marital status,

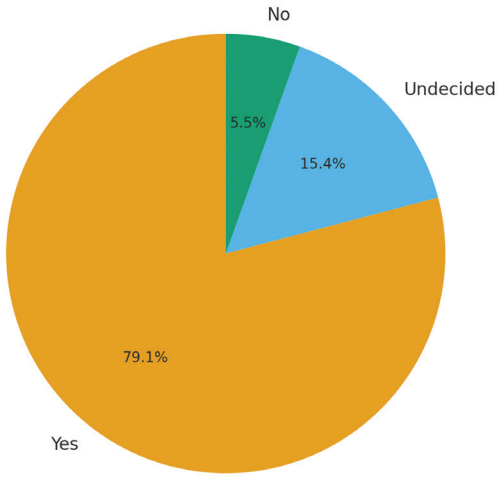


**Figure 1.** Acceptance of LAI-ART among people living with HIV in Türkiye, if recommended by a physician. LAI-ART, long-acting injectable antiretroviral therapy; HIV, human immunodeficiency virus.

family awareness of HIV status, number of daily tablets, or duration of HIV infection. There was also no statistically significant association between missing at least one dose during the previous 30 days and willingness to accept LAI HIV treatment ($p > 0.57$). In other words, adherence level (perfect vs. imperfect) did not significantly influence acceptance of the new therapy. Perceived benefits of injectable therapy centered on relief from the daily burden of pill taking (85%), reduced anxiety about forgetting medication (72%), and the opportunity to avoid thinking about HIV every day (61%) (Figure 2; Table 1). Concealment of HIV status from others was cited by nearly half of the participants, whereas fewer respondents emphasized guaranteed efficacy or freedom from side effects. The most commonly perceived disadvantages were concerns about potential side effects (51%) and missing an injection appointment (37%), followed by doubts about treatment effectiveness (21%), feeling like a test subject (20%), and fear of injections (6%) (Figure 3; Table 2). Notably, a significant association was observed between relief from

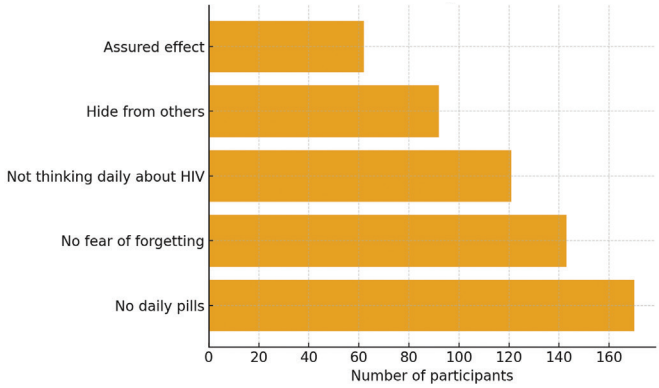


**Figure 2.** Perceived advantages of LAI-ART among people living with HIV in Türkiye. LAI-ART, long-acting injectable antiretroviral therapy; HIV, human immunodeficiency virus.

**Table 1. Top five most frequently co-selected advantages of LAI-ART.**

| Rank | Advantage pair | n (participants) |
|---|---|---|
| 1 | Not having to take medication every day × no fear of forgetting doses | 129 |
| 2 | Not having to take medication every day × not thinking about HIV daily | 105 |
| 3 | No fear of forgetting doses × not thinking about HIV daily | 101 |
| 4 | Not having to take medication every day × ability to hide medication use | 89 |
| 5 | No fear of forgetting doses × ability to hide medication use | 81 |

LAI-ART, long-acting injectable antiretroviral therapy; HIV, human immunodeficiency virus.

concerns about forgetting medication and fear of missing an injection appointment, highlighting adherence-related concerns ($p = 0.003$). When asked about their preferred site of administration, more than half of the participants favored healthcare facilities such as hospitals or primary care centers, one-third preferred a doctor's office, and only one in ten preferred self-administration at home (Figure 4).

Regarding healthcare utilization, 43% of respondents welcomed the more frequent hospital visits associated with injectable treatment, 32% were indifferent, and 28% preferred not to attend more frequently. Finally, when asked about their willingness to initiate injectable therapy, 43% reported that they would accept the treatment despite increased hospital visits, 37% were willing but expressed concerns about side effects, 22% would accept the treatment only if it could be administered at home, and 10% did not want to change their current regimen.

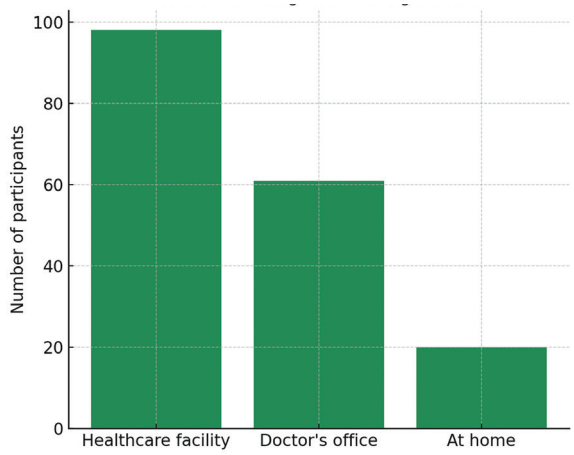


**Figure 4.** Preferred settings for receiving LAI-ART among people living with HIV in Türkiye. LAI-ART, long-acting injectable antiretroviral therapy; HIV, human immunodeficiency virus.

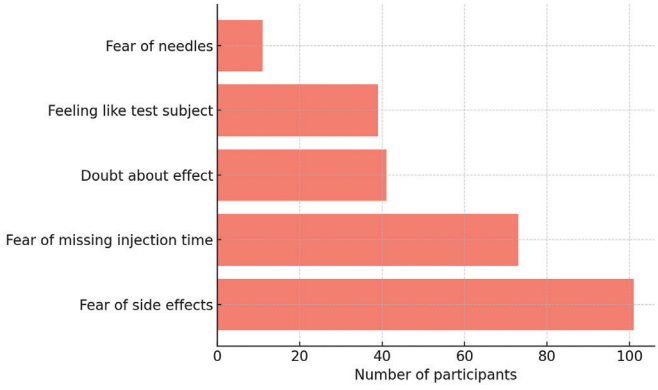


**Figure 3.** Perceived disadvantages of LAI-ART among people living with HIV in Türkiye. LAI-ART, long-acting injectable antiretroviral therapy; HIV, human immunodeficiency virus.

**Table 2. Top five most frequently co-selected disadvantages of LAI-ART.**

| Rank | Disadvantage Pair | n (participants) |
|---|---|---|
| 1 | Fear of side effects × concern about missing injection timing | 28 |
| 2 | Fear of side effects × feeling like a test subject | 27 |
| 3 | Fear of side effects × belief that illness will not change | 20 |
| 4 | Concern about missing injection timing × feeling like a test subject | 14 |
| 5 | Concern about missing injection timing × belief that illness will not change | 13 |

LAI-ART, long-acting injectable antiretroviral therapy.

## Discussion

This study provides insights from Türkiye into the awareness, attitudes, and preferences of PLWH regarding LAI-ART. Our findings demonstrate a high level of willingness to initiate injectable therapy if recommended by a physician (nearly 80%), consistent with previous international studies reporting strong acceptability across diverse populations[12,13]. The main perceived advantages were freedom from daily pill taking and reduced anxiety about forgetting medication, whereas the most prominent disadvantage was fear of side effects. These findings underscore both the promise and the challenges of implementing LAI-ART in routine clinical care.

In our cohort, willingness to initiate LAI-ART if recommended by a physician was high (80%). This level of acceptance is comparable to, although slightly lower than, that reported in the Italian survey by Celesia et al.[10], in which 88.8% of participants expressed interest in switching to long-acting options, and higher than the 56% interest reported in a U.S. Southern clinic sample by Stout et al.[9]. It also aligns with the 74% interest observed among PLWH in the French study by Slama et al.[13]. The perceived advantages identified in our study are consistent with those reported elsewhere. Stout et al.[9] highlighted convenience-related benefits, such as traveling without medications and avoiding daily dosing, which closely parallel our cohort's emphasis on pill-free routines and reduced anxiety about forgetting medication.

One of the most important observations in our study was that treatment burden, reflected by the number of daily tablets, was significantly associated with adherence. Patients receiving multi-tablet regimens were more likely to miss

doses, consistent with previous research linking greater pill burden to suboptimal adherence[14,16,17]. However, acceptance of LAI-ART was not associated with the number of tablets taken, suggesting that psychological and lifestyle benefits motivate interest even among patients receiving single-tablet regimens. By eliminating the daily reminder of illness, LAI-ART may reduce treatment fatigue, stigma, and anxiety, thereby promoting greater treatment satisfaction and engagement in care. This finding is consistent with that of Slama et al.[13], who reported no significant influence of demographic or lifestyle factors on treatment acceptance. The benefits of convenience and privacy appear to be relevant across different settings. Compared with findings from the United States, the higher acceptance rates observed in our study may reflect differences in patient expectations and the influence of physicians' recommendations[9].

The predominant concern in our sample was fear of side effects (51%), followed by anxiety about missing injection appointments (37%), indicating that LAI-ART may shift—rather than eliminate—adherence concerns from daily pill taking to adherence to scheduled clinic visits. This pattern differs from that reported by Stout et al.[9], in which cost and insurance coverage were the primary concerns, likely reflecting system-level differences, such as the more fragmented, privately financed healthcare system in the United States compared with the predominantly social insurance–based model in Türkiye. These differences may influence the relative importance of out-of-pocket costs compared with concerns about safety and treatment logistics. Preferences regarding treatment delivery also differed. Whereas most participants in the Italian survey preferred receiving injections at home (57.9%), and many remained interested even if injections were available only in hospitals (64.4%)[10], more than half of our participants preferred administration in healthcare facilities, with only approximately 10% favoring home administration. This finding suggests greater reliance on institutional healthcare settings during the early stages of LAI-ART implementation. Taken together, international evidence indicates that the primary barriers to LAI-ART adoption are context specific, with cost and insurance coverage predominating in some healthcare systems[9] and concerns about logistics and safety in others[10]. These findings suggest that tailored patient education on safety and tolerability, flexible treatment delivery models, and clear reimbursement pathways will be essential for the successful implementation of LAI-ART. Additional concerns, including doubts about treatment effectiveness and perceptions of being "test subjects," further highlight the need for transparent patient education and trust building. Addressing these concerns through counseling, clear communication of efficacy and safety data, and flexible service delivery models will be critical to maximizing the uptake and sustained use of LAI-ART.

Awareness of LAI-ART was limited, with one-third of the participants reporting no prior knowledge of the therapy. Notably, women were less informed than men and often lacked access to information beyond that provided by healthcare professionals. This gender disparity in awareness is consistent with previous studies highlighting inequalities in HIV-related health literacy and the importance of equitable patient education[15]. Ensuring access to accurate and accessible information will be essential to support informed decision-making and reduce inequities in treatment uptake.

The sample size of 200 participants was selected to provide adequate statistical power while remaining feasible within the constraints of a single-center survey. Previous studies evaluating perceptions of LAI-ART have generally included between 100 and 250 participants, suggesting that this range is sufficient to capture representative attitudes while allowing subgroup analyses based on gender, marital status, and treatment characteristics[9,10,13]. A cohort of 200 participants provided an appropriate balance between statistical robustness and practical feasibility, enabling the detection of significant associations (e.g., between pill burden and adherence or between perceived advantages and disadvantages) while minimizing the risk of a type II error.

### Study Limitations

This study has several limitations, including its single-center design and reliance on self-reported data, which may be subject to social desirability and recall bias. In addition, its cross-sectional design precludes causal inference, and the relatively small proportion of female and transgender participants may limit the generalizability of the findings. Nevertheless, this study provides valuable baseline data to inform future implementation strategies for LAI-ART in Türkiye.

## Conclusion

Turkish PLWH demonstrated a strong willingness to adopt LAI-ART, primarily motivated by the desire to reduce the daily pill burden and improve quality of life. Addressing concerns about side effects, expanding education regarding injectable treatment options, and ensuring equitable access across gender groups will be essential for the successful integration of this novel treatment modality.

### Ethics

**Ethics Committee Approval:** The study protocol was approved by the Institutional Ethics Committee of University of Health Sciences Türkiye, Başakşehir Çam and Sakura City Hospital (approval no: 11/25.06.205.230, date: 19.08.2025).

**Informed Consent:** Participation was voluntary, and all participants provided written informed consent.

## Footnotes

### Authorship Contributions

Concept: B.K., M.M.K., A.G., Ö.A.A., Design: B.K., M.M.K., A.G., Ö.A.A., Data Collection or Processing: B.K., Analysis or Interpretation: B.K., M.M.K., A.G., Ö.A.A., Literature Search: B.K., M.M.K., A.G., Ö.A.A., Writing: B.K., M.M.K., A.G., Ö.A.A.

**Conflict of Interest:** No conflict of interest was declared by the author(s).

**Financial Disclosure:** The author(s) declared that this study received no financial support.

**Supplementary Material:** https://d2v96fxpocvxx.cloudfront.net/a7b689d1-7b5b-481e-8a29-9bd45e97266c/content-images/39f429c7-a100-4d9e-a620-fe4df26587b2.pdf

## References

1. Antiretroviral Therapy Cohort Collaboration. Survival of HIV-positive patients starting antiretroviral therapy between 1996 and 2013: a collaborative analysis of cohort studies. Lancet HIV. 2017;4(8):e349-56.
2. Kooij KW, Zhang W, Trigg J, Cunningham N, Budu MO, Marziali ME, Dias Lima V, Salters KA, Barrios R, Montaner JSG, Hogg RS. Life expectancy and mortality among males and females with HIV in British Columbia in 1996-2020: a population-based cohort study. Lancet Public Health. 2025;10(3):e228-36.
3. Bezabhe WM, Chalmers L, Bereznicki LR, Peterson GM. Adherence to antiretroviral therapy and virologic failure: a meta-analysis. Medicine (Baltimore). 2016;95(15):e3361.
4. Muhammed OS, Hassen M, Taye M, Beyene E, Bedru B, Tileku M. Treatment burden and regimen fatigue among patients with HIV and diabetes attending clinics of Tikur Anbessa specialized hospital. Sci Rep. 2024;14(1):5221.
5. Swindells S, Andrade-Villanueva JF, Richmond GJ, Rizzardini G, Baumgarten A, Masiá M, Latiff G, Pokrovsky V, Bredeek F, Smith G, Cahn P, Kim YS, Ford SL, Talarico CL, Patel P, Chounta V, Crauwels H, Parys W, Vanveggel S, Mrus J, Huang J, Harrington CM, Hudson KJ, Margolis DA, Smith KY, Williams PE, Spreen WR. Long-acting cabotegravir and rilpivirine for maintenance of HIV-1 suppression. N Engl J Med. 2020;382(12):1112-23.
6. Orkin C, Arasteh K, Górgolas Hernández-Mora M, Pokrovsky V, Overton ET, Girard PM, Oka S, Walmsley S, Bettacchi C, Brinson C, Philibert P, Lombaard J, St Clair M, Crauwels H, Ford SL, Patel P, Chounta V, D'Amico R, Vanveggel S, Dorey D, Cutrell A, Griffith S, Margolis DA, Williams PE, Parys W, Smith KY, Spreen WR. Long-acting cabotegravir and rilpivirine after oral induction for HIV-1 infection. N Engl J Med. 2020;382(12):1124-35.
7. Jaeger H, Overton ET, Richmond G, Rizzardini G, Andrade-Villanueva JF, Mngqibisa R, Hermida AO, Thalme A, Belonosova E, Ajana F, Benn PD, Wang Y, Hudson KJ, Español CM, Ford SL, Crauwels H, Margolis DA, Talarico CL, Smith KY, van Eygen V, Van Solingen-Ristea R, Vanveggel S, Spreen WR. Long-acting cabotegravir and rilpivirine dosed every 2 months in adults with HIV-1 infection (ATLAS-2M), 96-week results: a randomised, multicentre, open-label, phase 3b, non-inferiority study. Lancet HIV. 2021;8(11):e679-89.
8. Kerrigan D, Mantsios A, Gorgolas M, Montes ML, Pulido F, Brinson C, deVente J, Richmond GJ, Beckham SW, Hammond P, Margolis D, Murray M. Experiences with long acting injectable ART: a qualitative study among PLHIV participating in a Phase II study of cabotegravir + rilpivirine (LATTE-2) in the United States and Spain. PLoS One. 2018;13(1):e0190487.
9. Stout JA, Allamong M, Hung F, Link K, Chan C, Muiruri C, Sauceda J, McKellar MS. Engagement in care, awareness, and interest in long-acting injectable anti-retroviral therapy. AIDS Behav. 2024;28(10):3315-25.
10. Celesia M, Moscatt V, Tzannis A, Trezzi M, Focà E, Errico M, Cinque P, Nozza S, Cingolani A, Ceccarelli M, Celesia BM; LAI Italian Survey Research Group. Long-acting drugs: people's expectations and physicians' preparedness. Are we readying to manage it? An Italian survey. Medicine (Baltimore). 2022;101(42):e30052.
11. Turkish Ministry of Health. Türkiye İlaç ve Tıbbi Cihaz Kurumu (TİTCK) ruhsatlı ürün listesi. Date accessed: 09/05/2026. https://www.titck.gov.tr/dinamikmodul/85
12. Simoni JM, Beima-Sofie K, Mohamed ZH, Christodoulou J, Tapia K, Graham SM, Ho R, Collier AC. Long-acting injectable antiretroviral treatment acceptability and preferences: a qualitative study among US providers, adults living with HIV, and parents of youth living with HIV. AIDS Patient Care STDS. 2019;33(3):104-11.
13. Slama L, Porcher R, Linard F, Chakvetadze C, Cros A, Carillon S, Gallardo L, Viard JP, Molina JM. Injectable long acting antiretroviral for HIV treatment and prevention: perspectives of potential users. BMC Infect Dis. 2023;23(1):98.
14. Altice F, Evuarherhe O, Shina S, Carter G, Beaubrun AC. Adherence to HIV treatment regimens: systematic literature review and meta-analysis. Patient Prefer Adherence. 2019;13:475-90.
15. McCrimmon T, Collins LF, Pereyra M, Platamone C, Perez-Brumer A, Shaffer VA, Kerrigan D, Sheth AN, Cohen MH, Hanna DB, Ramirez C, Gange SJ, Rana A, Tamraz B, Goparaju L, Wilson TE, Alcaide M, Philbin MM. Likelihood of trying long-acting injectable antiretroviral therapy among women with HIV in nine sites across the United States. J Acquir Immune Defic Syndr. 2024;96(3):e23-7.
16. Clay PG, Nag S, Graham CM, Narayanan S. Meta-analysis of studies comparing single and multi-tablet fixed dose combination HIV treatment regimens. Medicine (Baltimore). 2015;94(42):e1677.
17. Mussini C, Cazanave C, Adachi E, Eu B, Alonso MM, Crofoot G, Chounta V, Kolobova I, Sutton K, Sutherland-Phillips D, Urbaityte R, Ehmann A, Scherzer J, de Los Rios P, D'Amico R, Spreen W, van Wyk J. Improvements in patient-reported outcomes after 12 months of maintenance therapy with cabotegravir + rilpivirine long-acting compared with bictegravir/emtricitabine/tenofovir alafenamide in the phase 3b SOLAR study. AIDS Behav. 2025;29(1):64-76.