Strategie di mantenimento long acting

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Disclosures

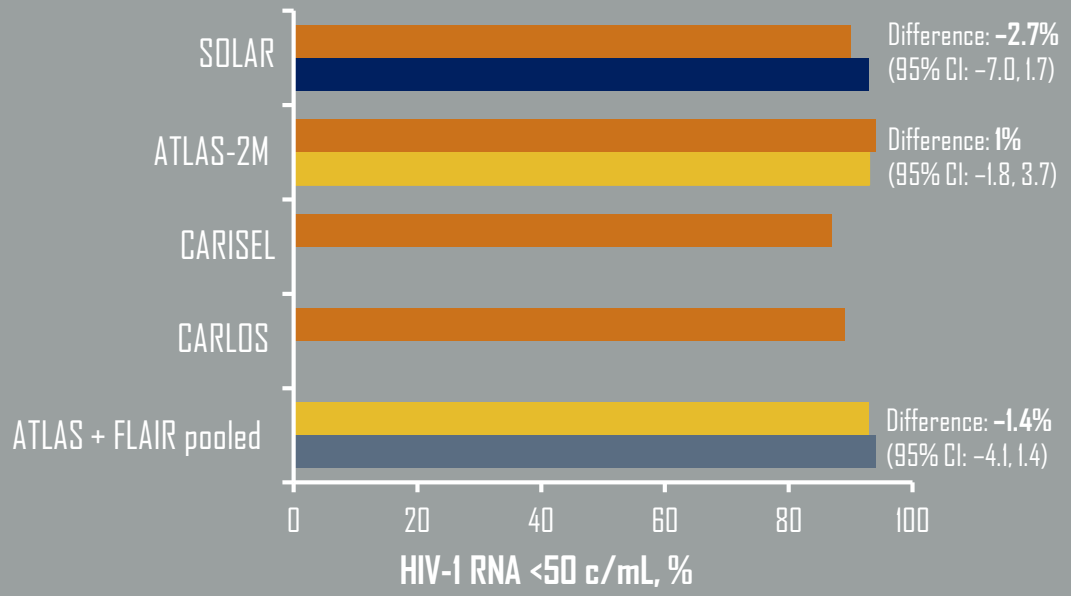
Dr. Antinori has served as a paid consultant to Astra Zeneca, Gilead Sciences, GSK, Janssen-Cilag, Merck, Moderna, Pfizer, and ViiV Healthcare and received research funding through National Institute for Infectious Diseases Lazzaro Spallanzani IRCCS from Astra Zeneca, Gilead Sciences and ViiV Healthcare.

Efficacy of, and preference for, CAB + RPV LA demonstrated across a full Treatment programme

CAB + RPV LA Q2M
CAB + RPV LA Q1M
Daily oral ART
Daily oral BIC/FTC/TAF

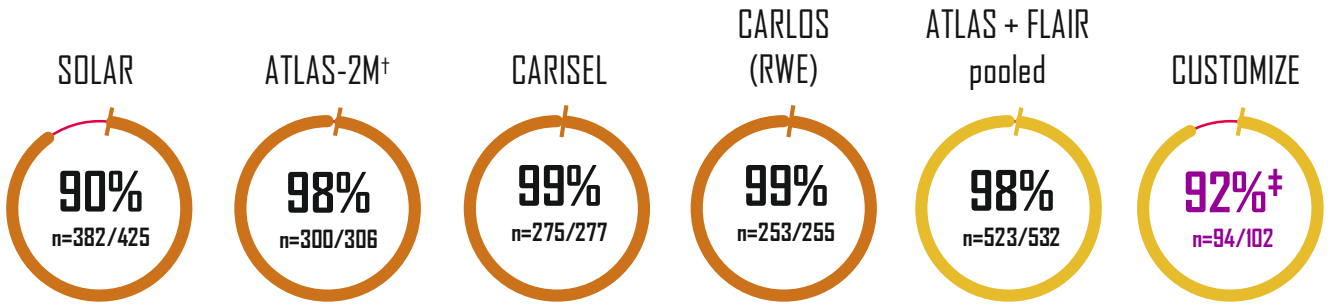
Efficacy

Virological Snapshot outcomes after up to 1 year of treatment (primary endpoints)*[1,2,4,6–9]



Preference

Participant preference for CAB + RPV LA versus daily oral ART after 6 months to 1 year of treatment*[1–6]



Safety and tolerability

CAB + RPV LA is well tolerated with few serious AEs and a comparable safety profile to daily oral ART[1,2,4]

ISRs were common, but typically mild or moderate **and rarely led to withdrawal**[1,2]

*Outcomes reported at Month 12 in SOLAR, CARISEL and CUSTOMIZE, at Week 48 in ATLAS, FLAIR and ATLAS-2M, and at Month 6 in CARLOS; †Participants on CAB + RPV LA Q2M transitioning from oral ART (no prior Q4W experience); ‡Data based on patient reason for switching to CAB + RPV LA from the HCP perspective being "patient wish"

AE, adverse event; **BIC,** bictegravir; **CI,** confidence interval; **FTC,** emtricitabine; **HCP,** healthcare professional **ISR,** injection-site reaction; **Q4W,** every 4 weeks; **RWE,** real-world evidence; **TAF,** tenofovir alafenamide

1. Ramgopal MN, et al. Lancet HIV 2023;10:e566–e577;ePub ahead of print; **2.** Overton ET, et al. Lancet 2020;396:1994–2005
3. Lutz T, et al. HIV Glasgow 2022. Poster P123; **4.** Rizzardini G, et al. J Acquir Immune Defic Syndr 2020;85:498–506
5. Czarnogorski M, et al. IAS 2021. Poster 881; **6.** Scherzer J, et al. IAS 2023. Poster EPE0863; **7.** De Wit S, et al. IDWeek 2022. Presentation 1584; **8.** Sinclair G, et al. IAS 2021. Poster PED416; **9.** Borch J, et al. HIV Glasgow 2022. Oral 043

SOLAR

Phase IIIb, randomised, open-label, active-controlled, multicentre, parallel-group, non-inferiority study

Inclusion criteria

- Adults (≥18 years of age)
- **Receiving BIC/FTC/TAF***
- HIV-1 RNA <50 c/mL for ≥6 months prior to, and at screening
- No HBV coinfection
- No resistance to BIC/FTC/TAF, RPV or CAB†

CAB + RPV LA
Q2M

versus

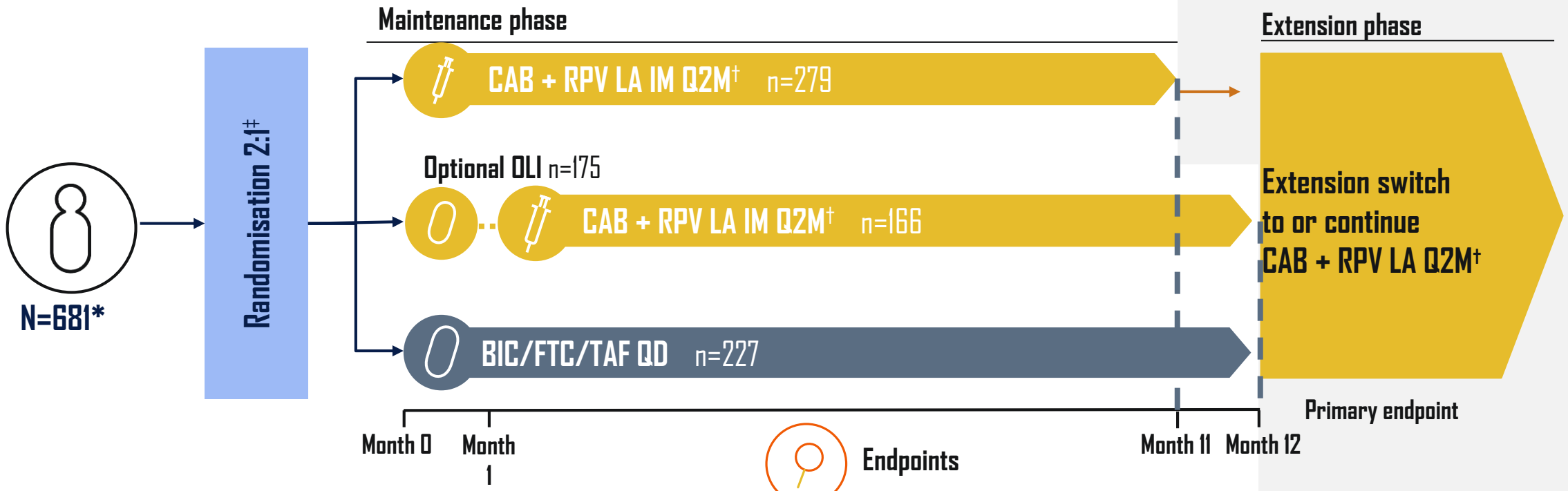
BIC/FTC/TAF
Daily oral

*A single prior INI regimen was permitted if BIC/FTC/TAF was a second line regimen 6 months prior to screening. Any prior change in regimen, defined as a change of a single drug or multiple drugs simultaneously, must have occurred due to tolerability/safety, access to medications or convenience/simplification, and must not have been due treatment failure (HIV-1 RNA ≥400 c/mL)

†Known or suspected presence of resistance mutations, as defined by the International Antiviral Society–USA resistance guidelines

Ramgopal MN, et al. Lancet HIV 2023;10:e566–e577;

SOLAR: Study Design



The primary analysis was based on the mITT-E population;
11 participants were excluded from the ITT-E population (n=681) due to critical findings related to significant and persistent non-compliance to protocol entry criteria at one site

Endpoints

Primary endpoint: HIV-1 RNA ≥50 c/mL at Month 11 (SWI)/12 (OLI and BIC/FTC/TAF), hereafter referred to as Month 12

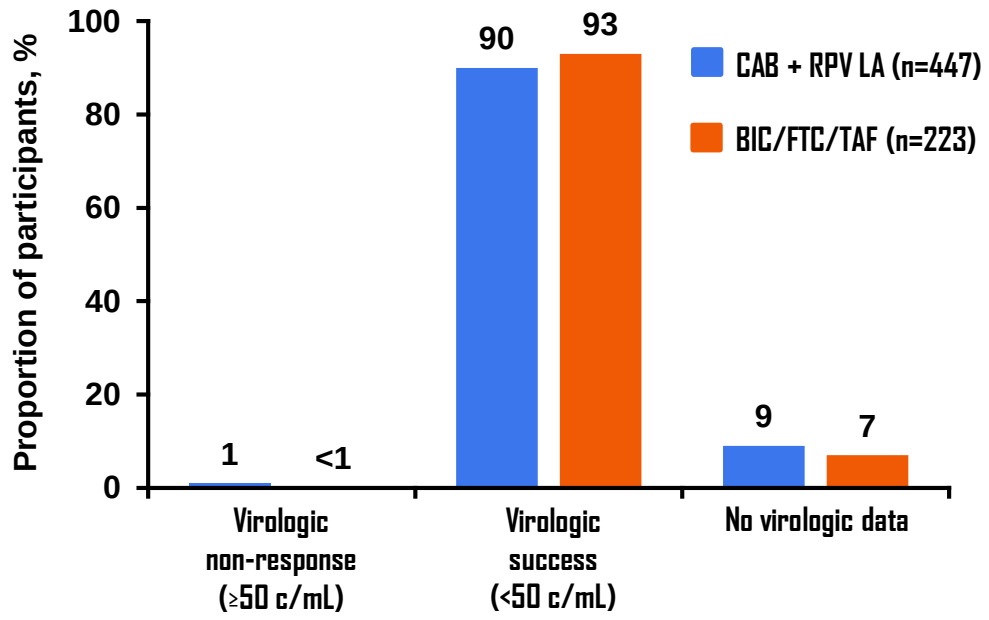
Secondary endpoints:
HIV-1 RNA <50 c/mL, incidence of CVF, safety and tolerability, $CD4^+$ T-cell count, treatment satisfaction and preference

*After consultation with a blinded external expert, 11 participants were excluded from the ITT-E population (n=681) due to critical findings related to significant and persistent non-compliance to protocol entry criteria at one study site; †CAB LA 600 mg, RPV LA 900 mg; ‡2:1 to either switch to CAB + RPV LA (including optional OLI) or continue BIC/FTC/TAF
CVF, confirmed virologic failure; **IM,** intramuscular; **ITT-E**, intention-to-treat exposed; **mITT-E**, modified ITT-E; **SWI**, start with injections

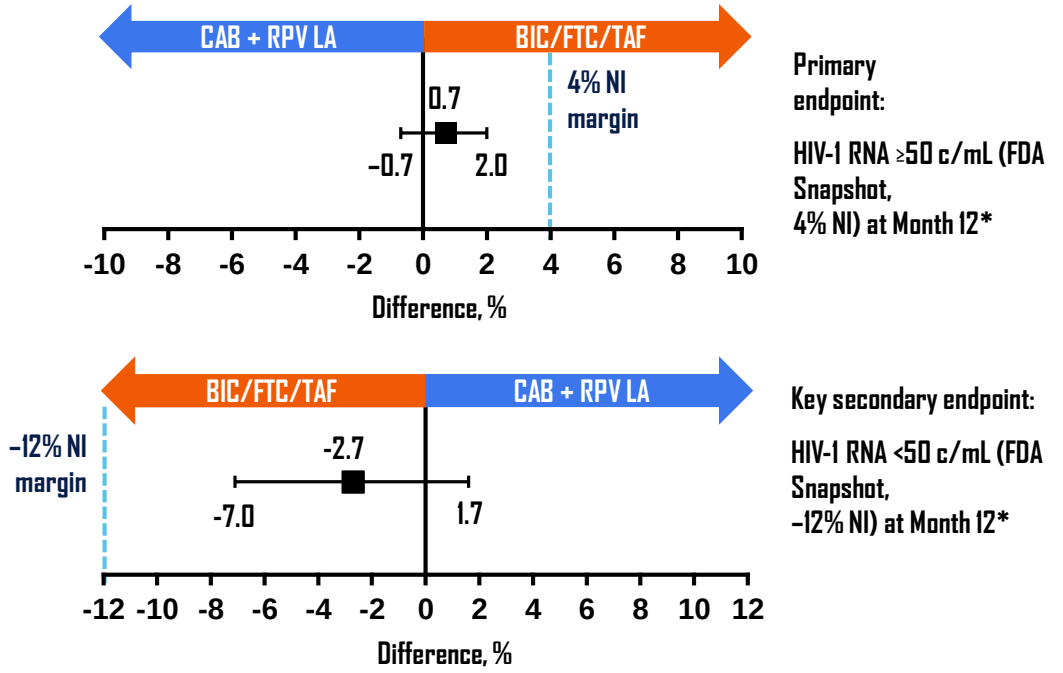
Ramgopal MN, et al. Lancet HIV 2023;10:e566–e577.

SOLAR: Virologic outcomes at Month 12 (mITT-E)

Virologic outcome



Treatment differences (95% CI)*



CAB + RPV LA demonstrated non-inferior efficacy compared with daily oral BIC/FTC/TAF

*Month 11 for CAB + RPV LA SWI and Month 12 for CAB + RPV LA with OLI and BIC/FTC/TAF

CI, confidence interval; **FDA,** US Food and Drug Administration; **NI,** non-inferiority; **SWI,** start with injection

Ramgopal MN, et al. Lancet HIV 2023;10:e566–77

SOLAR: Participants who experienced CVF while on CAB + RPV LA

Participants with CVF in the mITT-E population

Italy Male

BL factors
- BMI: 21.5 kg/m^2
- HIV-1 subtype B
- RPV RAMs: None*
  (INI RAMs: None*)

Resistance at failure
- RPV RAMs: M230L†
- INI RAMs: Q148R†

SVF timepoint
- Month 6

Spain Male

BL factors
- BMI: 22.9 kg/m^2
- HIV-1 subtype AE
- RPV RAMs: None*
  (INI RAMs: G140G/R*)

Resistance at failure
- RPV RAMs: K101E†
- INI RAMs: G118R†

SVF timepoint
- Month 11

Participant excluded due to persistent protocol non-compliance at study site (ITT-E)

USA Male

BL factors
- BMI: 30.5 kg/m^2
- HIV-1 subtype C
- RPV RAMs: N/A ‡
  (INI RAMs: N/A ‡)

Resistance at failure
- RPV RAMs: E138E/K + Y181Y/C†
- INI RAMs: None†

SVF timepoint
- Month 3

- The rate of CVF in the CAB + RPV LA group was <1% (n=3) at Month 12§
- No CVFs were reported in the BIC/FTC/TAF arm

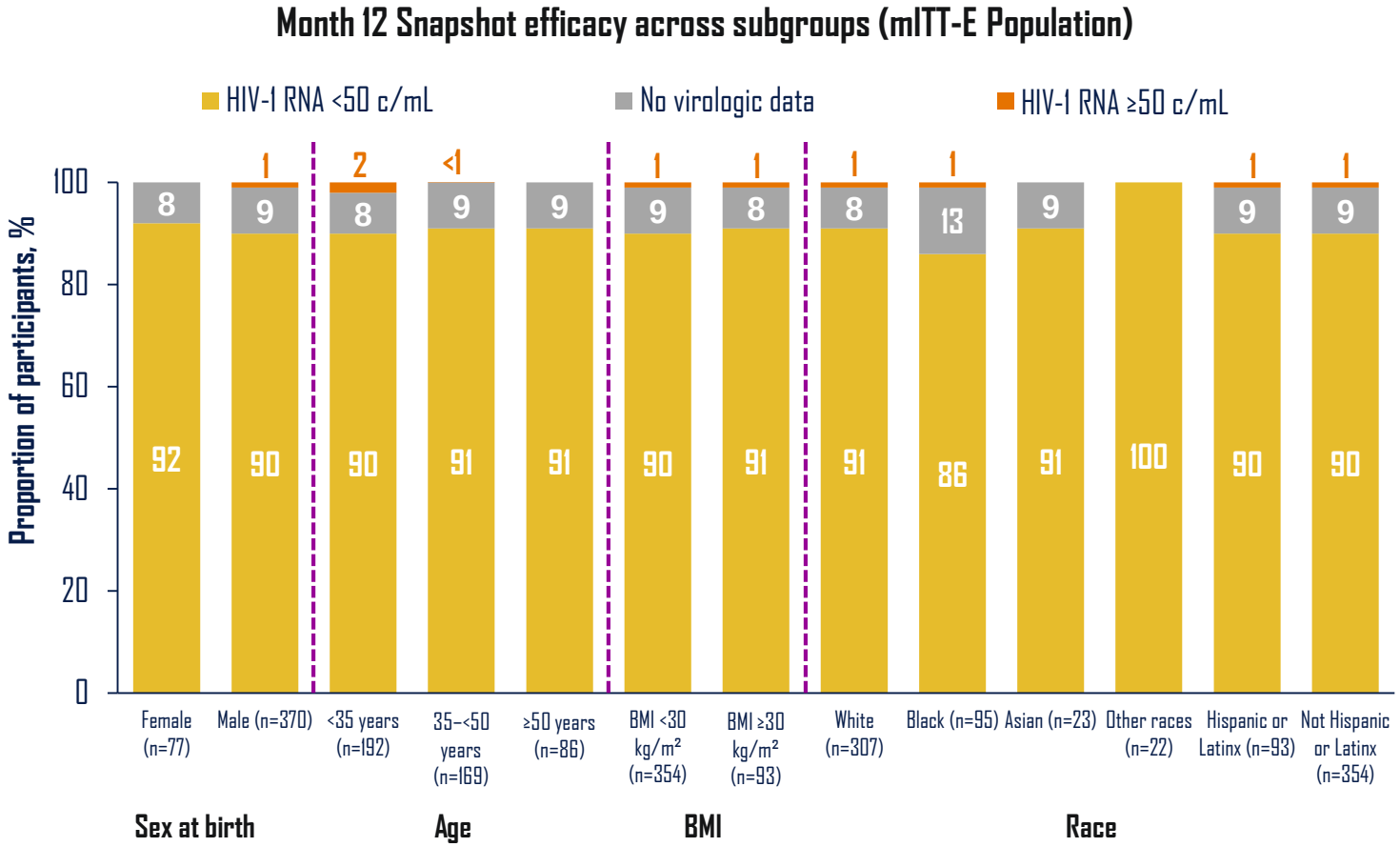
All three participants with CVF subsequently resuppressed on alternative daily oral ART

*Detected from samples retrospectively using proviral DNA; †Detected from samples using viral RNA; ‡Assay failed
§Two participants in the mITT-E population and one in the ITT-E population met the CVF criterion
SVF, suspected virologic failure

Ramgopal MN, et al. Lancet HIV 2023;10:e566–77

SOLAR: CAB + RPV LA was efficacious and well tolerated At month 12, irrespective of Baseline SUBGROUP (*post hoc* analysis)

- Switching to CAB + RPV LA Q2M from BIC/FTC/TAF maintained virologic suppression **across all subgroups evaluated(sex, age, BMI, race) ***



*Data from participants receiving CAB + RPV LA were stratified by sex at birth, age, BMI, race and ethnicity in a *post hoc* analysis

Eu B, et al. IAS 2023. Poster EPB022

SOLAR
Similar Frequency of Blips, TND and VL <40 c/mL for CAB+RPV LA and BIC/FTC/TAF, and No Association With CVF

- **Study Design:** SOLAR is a Phase 3b, randomized (2:1), open-label, multicenter, noninferiority study assessing switching virologically suppressed adults to CAB + RPV LA Q2M vs continuing BIC/FTC/TAF

- **The proportion of participants with HIV-1 viral blips* through Month 12 was 4% (n=19/447) in the CAB + RPV LA arm (OLI and SWI) and 4% (n=9/223) in the BIC/FTC/TAF arm**
  - Two (<1%) participants in the CAB + RPV LA arm (OLI, n=1; SWI, n=1) had CVF** through Month 12, neither of whom experienced a viral blip at any previous study visit
  - **Of participants with viral blips, 5% (n=1/19) in the CAB + RPV LA arm (OLI and SWI) and 11% (n=1/9) in the BIC/FTC/TAF arm had HIV-1 RNA ≥50 copies/mL at Month 12**

Participants with HIV-RNA blips and/or CVF

Outcome at Month 12 (mITT-E), n (%)	CAB + RPV LA Q2M (OLI)	CAB + RPV LA Q2M (SWI)	BIC/FTC/TAF
Participants with HIV-1 blip* at any study visit	6/173 (3)	13/274 (5)	9/223 (4)
Participants with CVF†	1/173 (<1)	1/274 (<1)	0/223
With HIV-1 blip*	0/6	0/13	0/9
Without HIV-1 blip*	1/167 (<1)	1/261 (<1)	0/214

*A single HIV-1 RNA value between 50 and <200 copies/mL with adjacent values <50 copies/mL.
†Two consecutive HIV-1 RNA values ≥200 copies/mL.
BIC/FTC/TAF, bictegravir/emtricitabine/tenofovir alafenamide; CAB, cabotegravir; CVF, confirmed virologic failure; LA, long-acting; mITT-E, modified intention-to-treat exposed; OLI, oral lead-in; Q2M, every 2 months; RPV, rilpivirine; SWI, starting with injection.

- **The proportions of participants with viral blips by visit were comparable between treatment arms through Month 12**
- **TND outcomes at individual study visits were similar between study arms** (CAB + RPV LA OLI, **84–89%**; CAB + RPV LA SWI, **85–88%**; BIC/FTC/TAF, **80–86%**) through Month 12

SOLAR data shows blips are not associated with CVF, and no difference in frequency of blips or TND between treatment groups, consistent with previous findings

*HIV-1 RNA viral blips were defined as a single HIV-1 RNA value between 50 and <200 copies/mL with adjacent values <50 copies/mL
**CVF was defined as two consecutive HIV-1 RNA values ≥200 copies/mL

Latham et al. CROI 2024; Denver, CO. Poster 627.

CAB + RPV LA: CVF cases in ATLAS, FLAIR and ATLAS-2M

Participant data pooled from ATLAS (Week 96), FLAIR (Week 124) and ATLAS-2M (Week 152):[1]

1,651 participants
treated with CAB + RPV LA

23 CVFs* (1.4%)
Q1M: 11 (1.0%) CVFs
Q2M: 12 (2.3%) CVFs

0.54 per 100 PYs
Overall unadjusted incidence rate of CVF

***20/23 CVFs with resistance:**
INI mutation pattern Q148R/Q, G140R, N155H, E138E/K
NNRTI mutation pattern E138E/A/K/T/G, K101E, K103N, Y188L, V108I, M230L

All participants who experienced CVF retained options for a fully active oral regimen[2–7]

1. Orkin C, et al. Clin Infect Dis 2023 (online ahead of print); **2.** Rizzardini G, et al. J Acquir Immune Defic Syndr 2020;85:498–506
3. Swindells S, et al. AIDS 2022;36:185–94; **4.** Overton ET, et al. Lancet 2021;396:1994–2005; **5.** Jaeger H, et al. Lancet HIV 2021;8:e679–89
6. Orkin C, et al. Lancet HIV 2021;8:e185–96 (and suppl. appendix); **7.** Overton ET, et al. Clin Infect Dis 2023;76:1646–54

CAB + RPV LA: Baseline factors analysis (BFA)

Baseline factor analysis (BFA) using Poisson regression model for risk of CVF in participants receiving CAB + RPV LA (excludes factors not evaluable at BL)

Covariate	Expanded BFA adjusted IRR (95% CI) n=1,363
Archived RPV RAMs*	21.7 (5.80, 80.8), p<0.0001
HIV-1 subtype A6/A1	12.9 (4.42, 37.5), p<0.0001
BL BMI kg/m^2†	1.09 (1.00, 1.19), p=0.0447
Regimen (Q8W/Q4W)	Eliminated from model
Integrase L74I polymorphism‡	
Sex at birth	
Other NNRTI RAMs	
Archived CAB RAMs	
Other INI RAMs	

- Dosing regimen and integrase L74I were not predictive of CVF risk

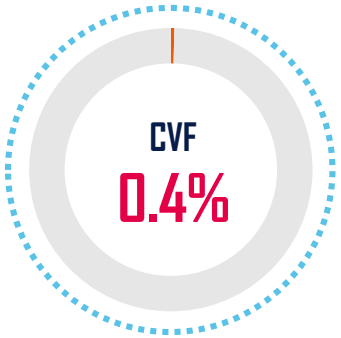
Archived RPV RAMs, HIV-1 subtype A6/A1 and BMI ≥30 kg/m^2 are predictive BL factors for the risk of CVF

*Assessed retrospectively using proviral DNA testing on stored samples from BL
†BMI was evaluated on a continuous scale; IRR is per one unit increase in kg/m^2. The IRR for BMI ≥30 kg/m^2 was 3.97, p=0.01
‡Including mixtures except L74I/M
BFA, baseline factors analysis; **IRR,** incidence rate ratio

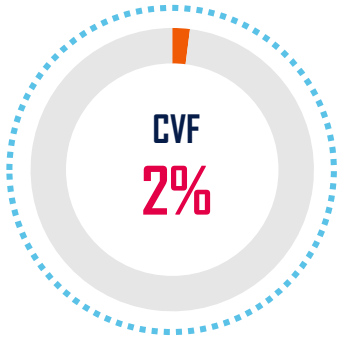
Orkin C, et al. Clin Infect Dis 2023

CAB + RPV LA: Predictive value of baseline factors

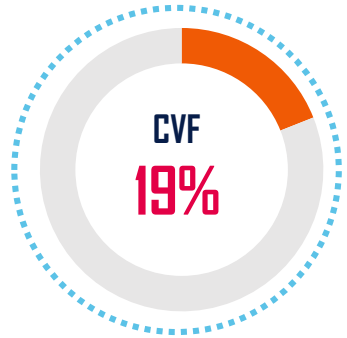
Percentage of participants with CVF according to number of BL factors*
Archived RPV RAMs, HIV-1 subtype A6/A1 and BMI ≥30 kg/m^2:



No BL factors
n=4/970



Any one BL factor†
n=8/404



≥2 BL factors
n=11/57

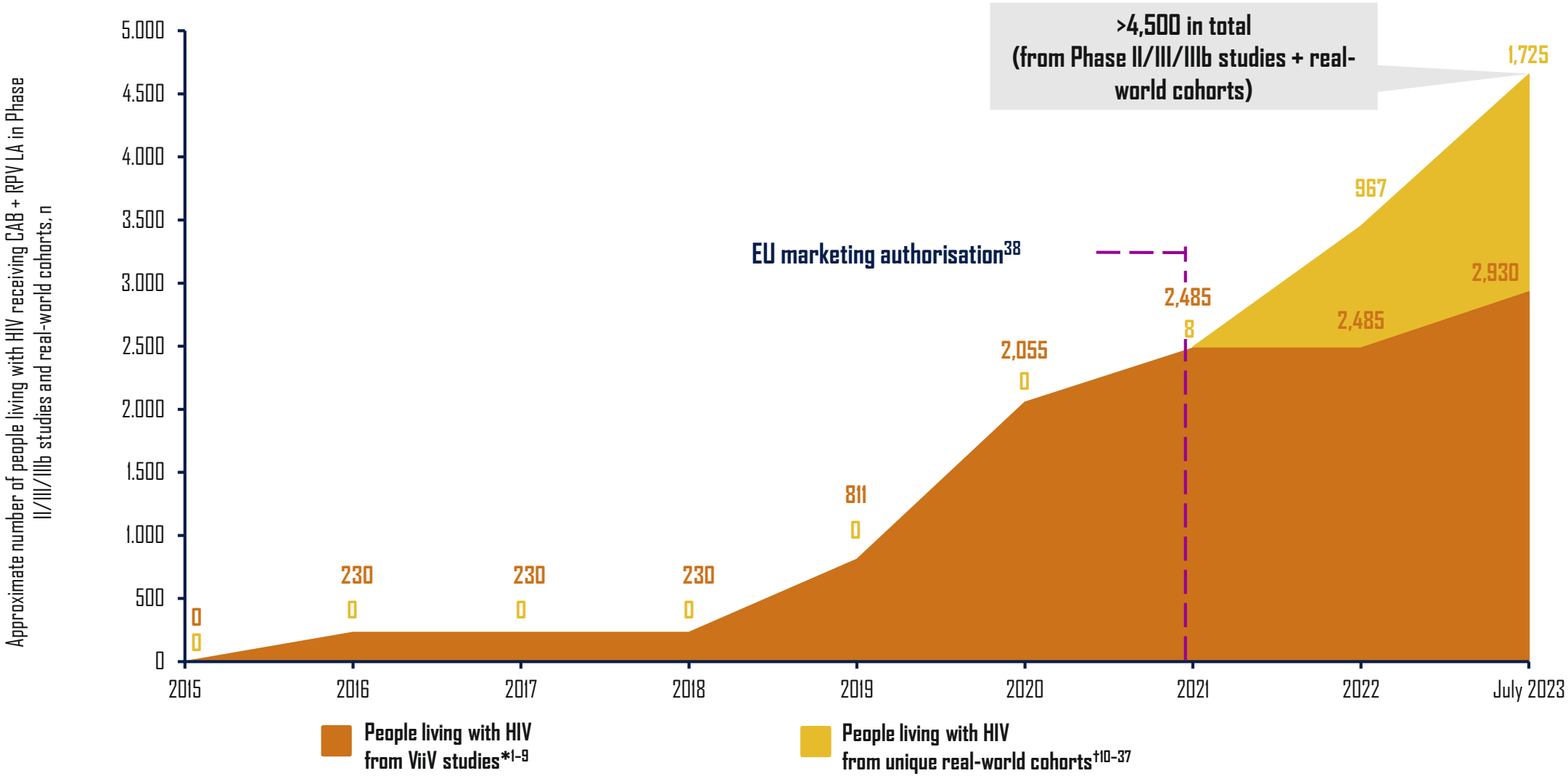
NOTE: Prevalence of ≥2 BL factors in Phase III study participants was low (4.0%)

<1% of participants experienced CVF when no risk factors were present or when BMI ≥30 kg/m^2 was the only risk factor

*CVFs identified by Week 48 for ATLAS, Week 124 for FLAIR and Week 152 for ATLAS-2M
†Driven primarily by RPV RAMs and HIV-1 subtype A6/A1, not BMI. CVF occurred in 3.2% (n=1/31) of those with RPV RAMs only, 3.8% (n=6/157) of those with HIV-1 subtype A6/A1 only and 0.5% (n=1/216) of those with BMI ≥30 kg/m^2 only

Orkin C, et al. Clin Infect Dis 2023

More than 4,500 people have been treated with CAB + RPV LA in clinical studies and real-world cohorts



Potential overlap between real-world cohorts cannot be ruled out. N values represent people living with HIV who received injectable therapy

*Clinical trial data reported at date of first published results, with 31st December cut-off point per year (except for 2023 which used 26th July, as per real-world studies)

†Data reported based on real-world studies (both on and off-label), as identified through literature searches; data reported per year using 31st December cut-off, except for 2023, which uses 26th July

RWE reports high efficacy and low CVF rates, consistent with RCTs

RWE studies including **>5,000 patients on CAB + RPV LA** were presented at ID Week and EACS 2023.
Ten patients who failed with resistance were reported

Study	N	Follow up	VS, % (n)	VF*, % (n)	RAMs at VF (n)	D/C, % (n)
OPERA[1]	1,543[a]	Median 7.4 months	94%[b] (n=1237/1323)	1% (n=16/1323)	NR	15.9% (n=246/1543)
Dat'AIDS[2]	1,134	Median 196 days	NR	1.1% (n=14), leading to discontinuation in 0.7% (n=8)	n=4/6[k]	7.1% (n=80)
ATHENA[3]	588[c]	Median 0.7 years	NR	0.9% (n=5); 3/5 resuppressed	2[l]	9% (n=58)
SHARE LAI-net[4]	327	Median 140 days	NR	1.5% (n=5) had 2 predictors of VF 0.3% (n=1) discontinued due to VF	NR	4% (n=13)
SWISS HIV Cohort[5]	264	Median 14 months	NR	0.4% (n=1)	NR	3.0% (n=8)
BEYOND[6]	248[d]	6 months	96%[e] (n=181/189)	2% (n=4/189)	2[m]	10% (n=25/248)
Seang[7]	141	11 (8–13) months	NR	1.4% (n=2)	1[n]	19% (n=27)
PSOMAS[8]	142	17 months	98.5%	0.7% (n=1)	NR	9.8% (n=14)
COMBINE-2[9]	120[f]	Median 5.2 months	97.8% (n=87/89)[b]	1.1% (n=1/89)	1[o]	2.5% (n=3/120)
Fernández-Hinojal[10]	139[g]	Median 126 days	97.7% (n=129/132)	NR	NR	2.2% (n=3/139)
Bana[11]	163	94.5 PY	94.5%[h]	NR	NR	9.3% (n=15)
Ferre[12]	126	Median 12.7 months	96.0%	4.0% (n=5)[i]	0	21.4% (n=27)
Nasser[13]	83[j]	48 weeks	91% (n=53/58)	0	0	4% (n=3)

Studies from EACS and ID Week 2023 including over 100 patients reporting relevant efficacy and/or VF outcomes; *Definition of VF/CVF varies between studies, as detailed on next slide
[a]1843 received CAB + RPV LA injections but only 1,543 has dose information and 1,323 had ≥1 follow-up VL; [b]VL <50 c/mL at last VL; [c]619 patients started CAB + RPV LA but only 588 had >1 clinic visit; [d]308 initiated CAB + RPV LA, but only 248 reached the Month 6 timepoint, and 189 had virologic data available at both baseline and Month 6; [e]Includes both participants who were virologically suppressed at BL and those who were not, but who maintained or achieved VL<50 c/mL throughout/by M6, respectively; [f]120 received CAB + RPV LA but only 89 had ≥1 follow-up VL; [g]139 included in the study but only 132 with available VL at the time of the analysis; [h]Kaplan Meier estimation; [i]No evidence of emergence of RAMs and all five achieved virological suppression after switching to a new oral treatment. 7 (5.6%) patients in the study had previous treatment failure; 102 patients in total, but only 83 in the study group and 58 at Week 48 analysis; [j]Emergence of RAMs observed in 4/6 with genotypes available. Q148H/R/K (n=1), E138K (n=1), E138K + Q148R (n=1), Q148R + R263K + N155H + Y181C + E138K (n=1). History of reported VF on ART was 12.9% overall; [k]2 failed with INI and NNRTI mutations, 1 with a blip of 215 c/mL, resuppressed, and 2 with VL >50 and subsequent spontaneous viral suppression. Patients included in the study had no previous VF; [l]≥NNRTI and INI drug resistance mutations were reported in 2 participants at the time of or following discontinuation (CWL, n=1; IWL, n=1). CWL participant (no BL resistance): NNRTI (L100I, K103NS), and INI (E138KA, G140SAC, Q148HRK). IWL participant (documented resistance mutations at BL: K103NS and PI resistance "other"): NNRTI (K103NS, E138KAGQ, Y181CIV), and INI (R263K). 75 patients in the study were classed as IWL, which included patients who had prior VF(s) reported. 2/4 of the CVFs were in IWL patients; [m]One patient classified as a superinfection with a new HIV subtype B resistance to four ART classes; [n]One patient with RT and PR resistance mutations at failure. Baseline resistance was not available. Resistance mutations at failure include RT: E138A (low-level resistance to RPV). Protease: M46I, M36I, L63P, I64L, V77I, I93L (potential low-level resistance to lopinavir and atazanavir). INI: None. Nine (7.5%) individuals in the study had a prior history of VF. Four (3.3%) had history of NNRTI or INI mutation.
CWL, consistent with label; **D/C**, discontinuation; **IWL**, inconsistent with label; **NR**, not reported; **PR**, protease; **PY**, person-years; **RT**, reverse transcriptase; **RCT**, randomised control trial

1. Sension M, et al. IDWeek 2023. Poster 1608
2. Deschanvres A, et al. EACS 2023. Poster MeP.T2.01; **3.** Jongen V, et al. EACS 2023. Oral PS8.03
4. Ring K, et al. EACS 2023. Poster eP.A.056; **5.** Ramirez JD, et al. EACS 2023. Oral and Abstract PS8.02
6. Sinclair G, et al. IDWeek 2023. Poster 1607; **7.** Seang S, et al. EACS 2023. Poster eP.A.074
8. Psomas KC, et al. EACS 2023. Poster eP.A.016; **9.** Vannappagari V, et al. EACS 2-23. Poster eP.A.039
10. Fernández-Hinojal F, et al. EACS 2023. Poster eP.A.026; **11.** Bana N, et al. EACS 2023. Poster eP.A.047
12. Ferré VM, et al. EACS 2023. Poster eP.A.042; **13.** Nasser K, et al. EACS 2023. Poster MeP.T2.03

CROI 2024 - RW Data Reports High Effectiveness and Low CVF Rates, Consistent With Randomized Clinical Trials

RWD studies **on CAB + RPV LA** were presented at CROI 2024 **(n=38 VF, 6 VF with RAM reported)**

Study	N	Follow-up	Virologic suppression	Virologic Failure	CVF definitions	Participants with RAMs at VF, n	D/C
OPERA[1]	1,362[a]	NR	95% (n=1,229/1,293)	2% (n=25/1,293), 15/19 with VL available post-CVF resuppressed	2 consecutive VL ≥200 c/mL or 1 VL ≥200 c/mL followed by **discontinuation**	NR	NR
Maguire et al[2]	374	Median 255 days	NR	1.1% (n=4/374)	2 consecutive VL ≥200 c/mL	2[b]	NR
Hill et al[3]	287	Median 450 days	NR	1% (n=3/287)	NR	NR	NR
Trio HIV Health[4]	278[c]	Median 10 months	89% (n=196/221)	0.9% (n=2/221), 1/2 resuppressed	2 consecutive VL ≥200 c/mL or 1 VL ≥200 c/mL followed by discontinuation within 4 months of the last recorded injection	NR	12% (n=32/278)
University of Florida[5]	233	NR	NR	1.9% (n not reported)	1 VL >200 c/mL	NR	NR
Whitman Walker Health[6]	184[d]	NR	97% (n=166/172)[e]	NR	NR	NR	NR
UChicago Medicine[7]	78[f]	Median 8 months	86% (n=67/78)	1.3% (n=1/78)	NR	1[g]	14% (n=11/78)
RUSH[8]	75[h]	NR	NR	4% (n=3)[i], 2/3 raised concerns about irregular injection techniques, and 3/3 resuppressed	2 consecutive VL >200 c/mL	3[j]	NR

Studies from CROI 2024 reporting relevant efficacy and/or VF outcomes

[a]1,362 received CAB + RPV LA injections but only 1,293 had follow-up VL; [b]Pt1 had resistance history (K103E, K103Q, V179I, M50I) and unable to get genotype at failure, Pt 2 had Y188L and Q148R at failure, Pt 3 had no RAMS at failure, and Pt4 had K101E, N155H, R263K and I178M at failure; [c]278 initiated CAB+RPV LA but only 221 individuals had ≥1 recorded follow-up VL; [d]Of the 184 individuals, 31 initiated CAB+RPV LA with VL >50 c/mL; [e]Of the 172 individuals currently receiving CAB-RPV LAI, 97% (166/172) had a VL <200 c/mL. Of the 31 individuals who started CAB+RPV LA with VL >50 c/mL, 94% (29/31) have achieved VL ≤50 c/mL on their most recent VL assay, and the other two have VL=60 c/mL; [f]77 initiated CAB+RPV LA after being virally suppressed at referral and 1 not virally suppressed at referral; [g]Emergence of RAM to INSTI (E138A, G140S, Q148S) and NNRTI (K101E, N348I); [h]10 received their injections at an independent infusion center (IC) with trained injectors and 65 received injections at the clinic; [i]Two of ten patients at IC and 1 of 65 patients at our clinic developed VF; [j]Genotypes at the time of VF revealed INI mutations in all three patients with pt1 also demonstrating NNRTI mutations. At the time of HIV diagnosis, pt1 had M184V, pt2 had NNRTI resistance (K103N), and genotype failed for pt3

RAM, resistance-associated mutation; **VF,** virologic failure; **VS,** virologic suppression

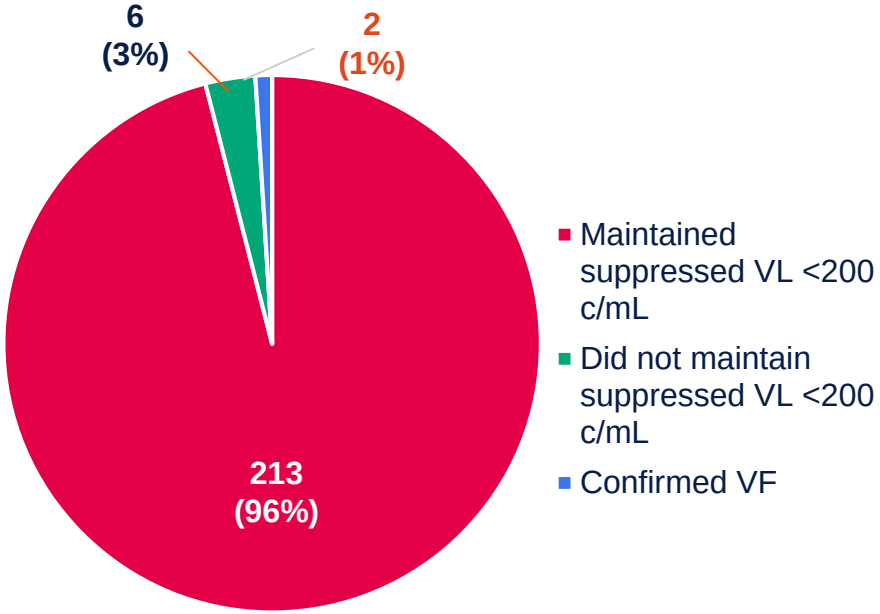
1. Hsu et al. CROI 2024; Denver, CO. Poster 623.
2. Maguire et al. CROI 2024; Denver, CO. Poster 626.
3. Hill et al. CROI 2024; Denver, CO. Poster 624.
4. Eron et al. CROI 2024; Denver, CO. Poster 625.
5. Liu et al. CROI 2024; Denver, CO. Poster 1238.
6. Fessler et al. CROI 2024; Denver, CO. Poster 1235.
7. Liegeon et al. CROI 2024; Denver, CO. Poster 1236.
8. Shankaran et al. CROI 2024; Denver, CO. Poster 685.

TRIO
2-Year Data Shows High Effectiveness of CAB+RPV LA in the US

- **Study Design: Observational cohort** study utilizing prospectively collected longitudinal EMR data from Trio Health HIV Network
- **278 ART-experienced virologically su**ppressed individuals initiated CAB+RPV LA (82% Q2M)
  - 17% Female, 36% Black/African American, 35% with BMI ≥30 kg/m^2
- **246 (88%) of those who started CAB+RPV remained on the regimen**
  - Among those who discontinued CAB+RPV, none had reported ISR
- Among the 221 (80%) individuals with ≥1 recorded follow-up VL, **213 (96%) had all follow-up VLs <200 c/mL, and 196 (89%) had <50 c/mL at last recorded VL**
  - **2 (0.9%) individuals discontinued CAB+RPV LA after one unsuppressed VL, meeting criteria for CVF***
- **71% of initiators received all injections on-time** (within the -/+7-day window), and 89% of injections were administered on time

PLWH on CAB+RPV LA at last VL, n=221

Median follow-up time: 10 months (IQR, 5-13)



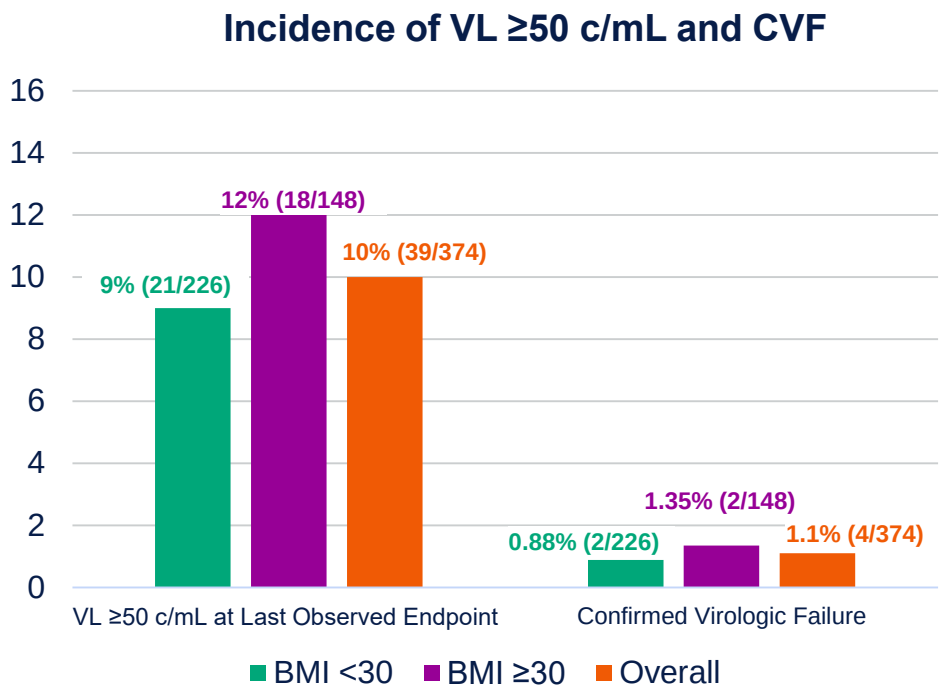
CAB+RPV LA shows high effectiveness in virologically suppressed PLWH

*CVF was defined as 2 consecutive VLs ≥200 copies/mL or 1 VL ≥200 copies/mL with discontinuation within 4 months of the last recorded injection
EMR, electronic medica record; **ISR**, Injection site reaction

Eron et al. CROI 2024; Denver, CO. Poster 625.

Real World Virologic Outcomes of CAB+RPV LA in Patients With Elevated BMI (40% ≥30 kg/m^2)

- **Study Design:** Multi-center, retrospective cohort study
  - Aims to provide additional data on the use of CAB+RPV LA in PLWH with elevated BMIs and provide context for its use in a real-world setting
- **374 virologically suppressed adults initiated CAB+RPV LA**
  - **148 (40%) had BMI ≥30 kg/m^2, of which 29 had BMI ≥40 and 5 had BMI ≥50**
  - 25% female at birth, median age 41 years (range 21-75), 68% on Q2M dosing
  - Median follow-up was 255 days (IQR 147-362)
  - **5% of individuals had a history of CVF, and 47% had NNRTI exposure before CAB+RPV LA initiation.**
- **No difference in the incidence of HIV RNA ≥50 c/mL at the last observed endpoint for those with BMI ≥30 kg/m^2 (12%) versus those with BMI <30 kg/m^2 (9%) (IRR 1.31; 95% CI 0.69-2.46)**
- CVF* rates on CAB+RPV LA were low in both groups
  - 4 (1.1%) participants experienced CVF, and 2 had a BMI of 30-35 kg/m^2
  - **Of the 34 individuals with BMI ≥40 kg/m^2, none experienced CVF**



High effectiveness and low virologic failure rates observed in those with BMI <30 and ≥30 kg/m^2, including in the subset of PLWH with very high BMI ≥40 kg/m^2

*CVF was defined as 2 consecutive VLs ≥200 copies/mL

Maguire C et al. CROI 2024; Denver, CO. Poster 626.

Real-world PK data for CAB + RPV LA indicate that low plasma drug concentrations do not correlate with VF or successful Tx

Real-life CAB and RPV PKs among people living with HIV treated with CAB RPV LA IM
Seang S, et al. EACS 2023[1]

Single-centre, observational study of people living with HIV who switched to CAB + RPV LA, with VL and CAB/RPV C_{min} assessed at Months 1 and 3

At Months 1 and 3:
- **12%** and **14%** of participants had **CAB C_{min} below threshold***, respectively
- **34%** and **27%** of participants had **RPV C_{min} below threshold***, respectively

Two CVFs were observed

At Month 3 **all participants with a subtherapeutic dose** (CAB, n=11; RPV, n=22) **remained virologically suppressed**

Further data from EACS 2023 investigating the PK profile of CAB + RPV LA confirm that people who have low plasma concentration of CAB and RPV can still maintain virologic suppression[2,3]

*Low concentration threshold: CAB, 1,120 ng/mL; RPV, 32 ng/mL
C_{min}, minimum concentration

1. Seang S, et al. EACS 2023. Poster eP.BI.035
2. Ehret R, et al. EACS 2023. Poster eP.BI.037
3. Rubenstein M, et al. EACS 2023. Poster eP.BI.036

CROI 2024
CAB+RPV LA: CVF Cases in the Real-World

OPERA

N=1,362[1]
Median follow-up not reported

2%
(n=25) participants had CVF
40% remained on CAB+RPV LA, 40% switched to INI-based oral ART
CVF defined as 2 consecutive VL ≥200 c/mL or 1 VL ≥200 c/mL and D/C

18/19 among those with VL available post CVF resuppressed

Hill et. al

N=287[2]
Median follow-up 450 days

1%
(n=3) participants had CVF
VF definition not reported

Resuppression not reported

TRIO

N=278[3]
Median follow-up 10 months

0.9%
(n=2) participants had CVF¥
1/2 had high-level NNRTI and NRTI resistance at BL; no resistance data available at failure
CVF defined as 2 consecutive VL ≥200 c/mL or 1 VL ≥200 c/mL and D/C

1/2 resuppressed on oral ART

Maguire et. al

N=374[4]
Median follow-up 255 days

1.1%
(n=4) participants had CVF§
1/4 had NNRTI and INI RAMs at BL, 2/4 with NNRTI and INI RAMs at failure
CVF defined as 2 consecutive VL ≥200 c/mL

Resuppression not reported

University of Florida

N=233[5]
Median follow-up not reported

1.9%
participants had VF£
VF defined as VL >200 c/mL

Resuppression not reported

UChicago Medicine

N=78[6‖]
Median follow-up 8 months

1.3%
(n=1) participants had VF
1/1 with NNRTI and INI RAMs at failure¶
VF definition not reported

1/1 resuppressed on oral ART

¥These 2 participants discontinued after one unsuppressed VL
§Of the 4 participants who experienced CVF, 2 had BMI <30 kg/m^2 and 2 had BMI ≥30 kg/m^2
£Number of participants not reported
‖177 initiated CAB+RPV LA with VL ≤50 c/mL and 1 initiated with VL >50 c/mL
¶Prior treatment with TAF/FTC/DRV/COBI, no prior RAM on plasma RNA genotype, HIV subtype B, BMI 22 kg/m^2

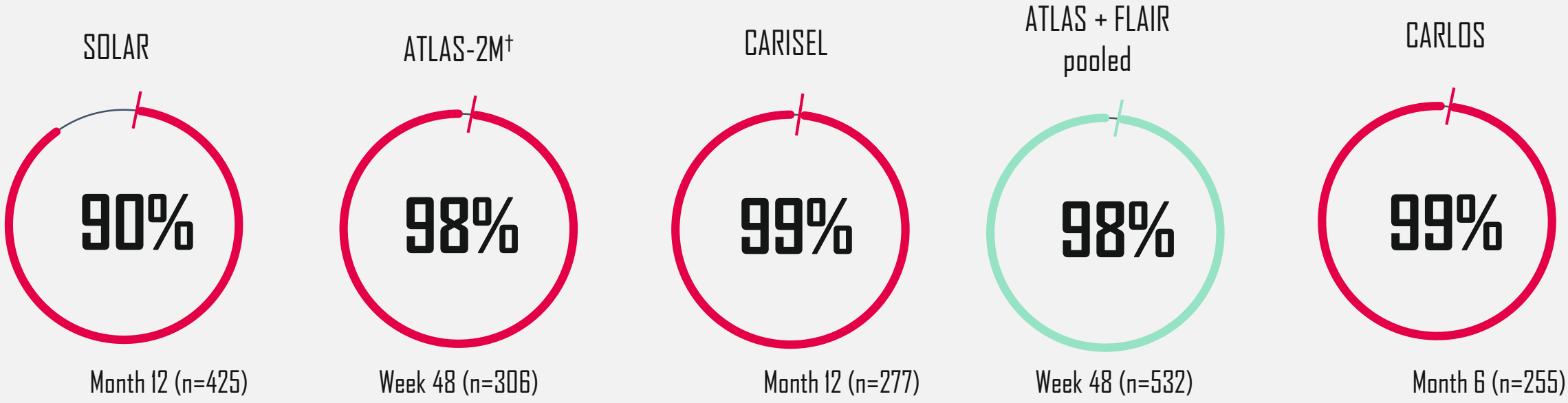
1. Hsu et al. CROI 2024; Denver, CO. Poster 623.
2. Hill et al. CROI 2024; Denver, CO. Poster 624.
3. Eron et al. CROI 2024; Denver, CO. Poster 625.
4. Maguire et al. CROI 2024; Denver, CO. Poster 626.
5. Liu et al. CROI 2024; Denver, CO. Poster 1238.
6. Liegeon et al. CROI 2024; Denver, CO. Poster 1236.

Participants in LA therapy studies prefer CAB + RPV LA to daily oral ART

Preference for CAB + RPV LA versus daily oral ART after up to 1 year of treatment*[1–5]

CAB + RPV LA Q2M

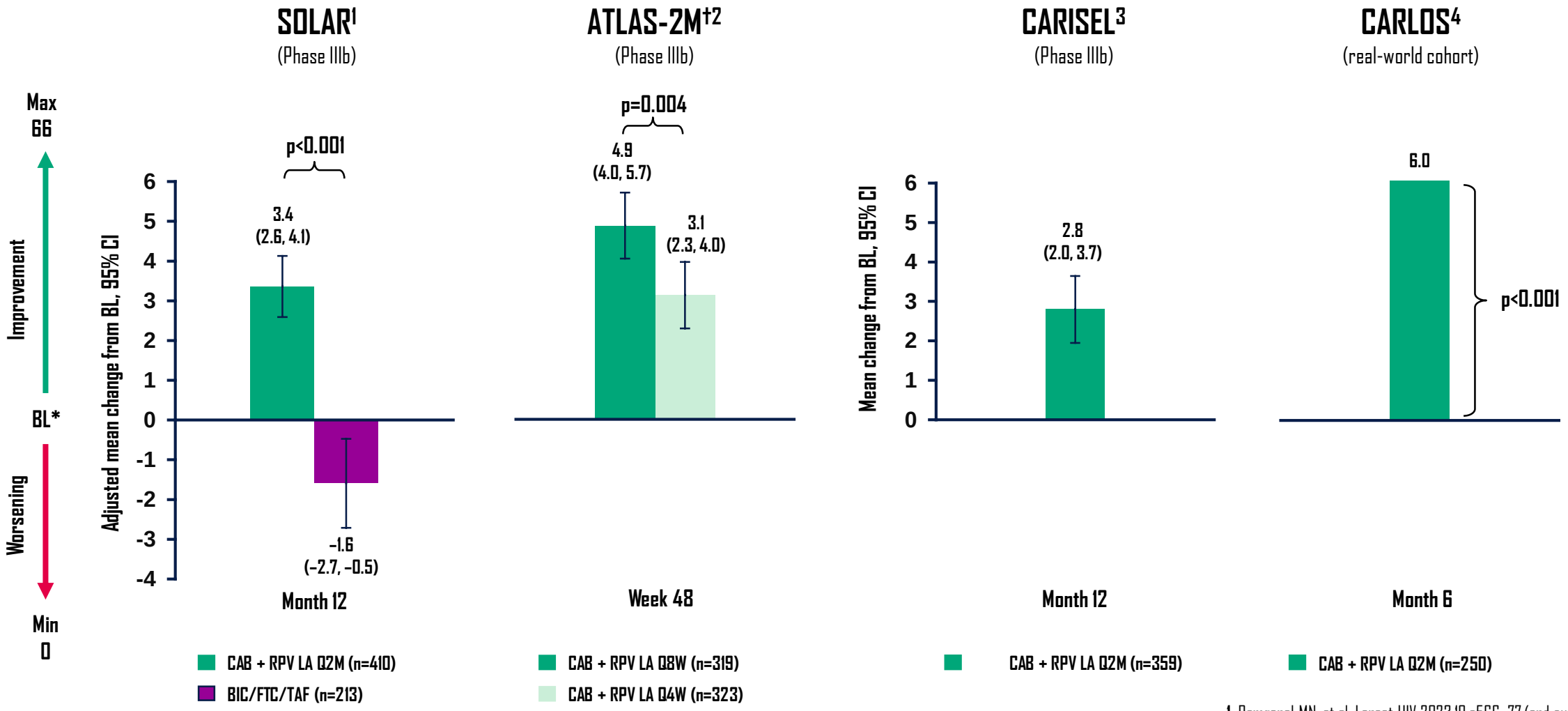
CAB + RPV LA monthly



*Outcomes reported at Month 12 in SOLAR and CARISEL, Month 6 in CARLOS and Week 48 in ATLAS, FLAIR and ATLAS-2M
†Participants on CAB + RPV LA Q2M transitioning from oral ART (no prior Q4W experience)

1. Ramgopal MN, et al. Lancet HIV 2023;10:e566–77 (and suppl. appendix)
2. Overton ET, et al. Lancet 2021;396:1994–2005; **3.** Lutz T, et al. HIV Glasgow 2022. Poster P123
4. Rizzardini G, et al. J Acquir Immune Defic Syndr 2020;85:498–506; **5.** Scherzer J, et al. IAS 2023. Poster EPE0863

Treatment satisfaction improved significantly for PLWH who switched to CAB + RPV LA from oral ART (HIVTSQs)



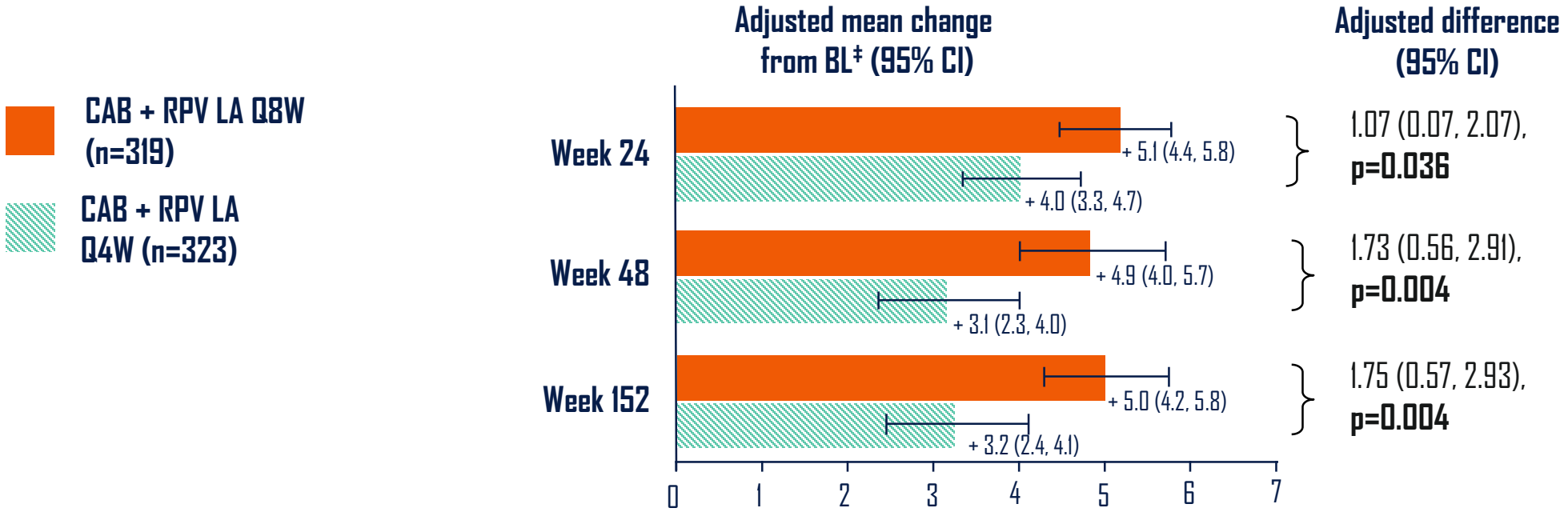
*BL HIVTSQs scores were: SOLAR 58 for both groups; ATLAS-2M 58 for Q8W, 57 for Q4W; CARISEL 59 (Day 1) and CARLOS 55
†Participants without prior CAB + RPV exposure

1. Ramgopal MN, et al. Lancet HIV 2023;10:e566–77 (and suppl. appendix)
2. Chounta V, et al. Patient 2021;14:849–62
3. Lutz T, et al. HIV Glasgow 2022. Poster P123
4. Scherzer J, et al. IAS 2023. Poster EPE0863

ATLAS-2M: Treatment satisfaction
HIVTSQs:* Change from baseline in total score[1]

- Mean (SD) BL HIVTSQs score: **Q8W**: 57.7 (9.2); **Q4W**: 56.7 (9.34)

HIVTSQs total score† — BL → Improvement → 66 (maximum)



Significantly greater increase in treatment satisfaction from BL was observed with Q8W dosing compared with Q4W dosing at Weeks 48 and 152

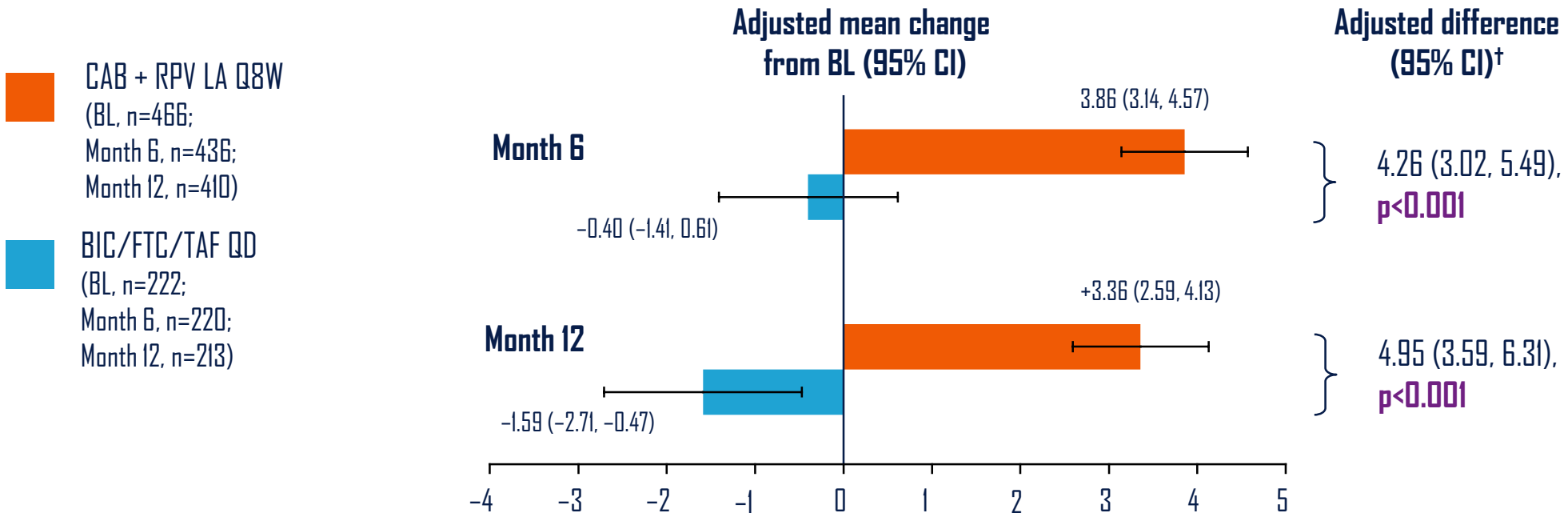
Purple text indicates significance; *HIVTSQs: HIV Treatment Satisfaction Questionnaire, status version; 12 items; range of total score 0–66 (0–6 per item for items 1–11); higher scores indicate greater satisfaction/positive changes indicate improvement[2]
†For participants without prior CAB + RPV LA exposures; ‡Adjusted mean change from BL is calculated from an ANCOVA model including the covariates: BL score, sex at birth (female versus male), age (<50 versus ≥50 years) and race (white versus non-white)

1. Chounta V, et al. HIV Glasgow 2022. Poster P070
2. Woodcock A and Bradley C. Value Health 2006;9:320–333

SOLAR: Treatment satisfaction
HIVTSQs:* Change from baseline in total score[1]

- Mean BL HIVTSQs scores: **CAB + RPV LA**: 57.88; **BIC/FTC/TAF**: 58.38

HIVTSQs total score — **58 (BL)** → Improvement → **66 (maximum)**



Significantly greater increase in treatment satisfaction from BL after switching to CAB + RPV LA Q8W compared with continuing current daily oral ART at Months 6 and 12

Purple text indicates significance; *HIVTSQs: HIV Treatment Satisfaction Questionnaire, status version; 12 items; range of total score 0–66 (0–6 per item for items 1–11); higher scores indicate greater satisfaction/positive changes indicate improvement[2]; †Based on a mixed model for repeated measures with visit as the repeated factor, including the following variables: treatment, visit, treatment x visit, maintenance BL score, sex at birth (male, female), BL body mass index (<30, ≥30 kg/m^2), age (<50, ≥50 years) and race (white, non-white). **QD,** once daily

1. Ramgopal MN, et al. Lancet HIV 2023;10:e566–77 (and suppl. appendix)
2. Woodcock A and Bradley C. Value Health 2006;9:320–333

Rothstein CORE Center
High acceptability of CAB+RPV LA in the real-world

- **Study Design:** Cross-sectional survey administered to patients to capture sociodemographic and clinical characteristics
- 150 PLWH receiving CAB+RPV LA
  - 36% Cis Female, 67% non-Hispanic Black, 24% Hispanic, 37% ≥50 years old
  - Most (88.7%) switched to CAB+RPV LA because they no longer wanted to take pills. Additionally, 87 (58.0%) reported trouble taking medication everyday and 53 (35.3%) noted concerns about long-term side effects.
- Among the 98% reporting pain, 63 (47.0%) reported pain decreased since first injection appointment
  - 54 (40.3%) reported pain remained the same since the first injection appointment

HIV Treatment Satisfaction

1 = Not at all satisfied to 7 = Very satisfied

Question	Mean score (SD)
1: "How satisfied are you with your injectable treatment?"	6.6 (0.8)
2: "How satisfied are you with the extent to which the treatment fits in with your lifestyle"	6.8 (0.5)
3: "How likely are you to continue with your treatment?"	6.9 (0.5)
4: "How easy have you been finding your treatment to be?"	6.5 (0.8)
Total score (questions 1-4)	**6.7 (0.5)**

- Treatment satisfaction was high (mean score: 6.7/7)
- 92 participants (61.3%) reported an aspect of their life got better that they did not expect after initiating CAB+RPV LA
  - 15 participants (10.0%) reported an aspect of their life unexpectedly got worse

High treatment satisfaction observed, even among those with injection-site pain, shows high patient acceptability of CAB+RPV LA across diverse populations

Luc et al. CROI 2024; Denver, CO. Poster 622.

CAB + RPV LA is recommended by DHHS, EACS, BHIVA and IAS guidelines[1–4]

	EACS*[1] (October 2023)	US DHHS*[2] (March 2023)
Recommended patients	/ **Suppressed** (VL <50 c/mL for past 6 months) / **No historical resistance** / **HBV** immunity or concomitant HBV vaccination if non-immune	/ **Suppressed** (documented viral suppression for ≥3 to 6 months) on daily oral therapy / **No BL resistance** to CAB or RPV, no prior **VF** / No active or occult **HBV** infection (unless also receiving an oral HBV-active regimen) / Not **pregnant** and not planning to become pregnant / No significant **DDIs** with CAB or RPV
Dosing	/ Q2M	/ Q1M or Q2M
Other comments	/ The following **BL factors**, when combined, are associated with **risk of VF and resistance**: / Archived RPV-associated mutations / HIV subtype A6/A1 / BMI ≥30 kg/m^2	/ Can be used as an **optimisation** strategy for people on oral ART / Can be **advantageous** for reasons including but not limited to: / **Reducing pill fatigue**† / **Disclosure concerns** or stigma associated with taking daily oral medications† / To improve **quality of life**

*Bolding/text emphasis are not part of the original guidelines
†CAB + RPV LA has not been studied as an alternative for patients who cannot take oral medication
ART, antiretroviral therapy; **BHIVA,** British HIV Association; **BL,** baseline; **BMI,** body mass index **DHHS,** Department of Health and Human Services; **c/mL,** copies/mL; **DDI,** drug–drug interaction **EACS,** European AIDS Clinical Society; **HBV,** hepatitis B virus; **IAS,** International Antiviral Society **Q1M,** every month; **Q2M,** every 2 months; **US,** United States; **VF,** virologic failure; **VL,** viral load

1. EACS Guidelines Version 12.0, October 2023
2. DHHS Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents living with HIV, March 2023
3. BHIVA Guidelines on antiretroviral treatment for adults living with HIV-1, 2022 (2023 interim update)
4. Gandhi RT, et al. JAMA 2023;329:63–84

CAB + RPV LA: EU clinical considerations

Indication

- Virologically suppressed adult patients on a stable ARV regimen[1,2]
- No present or past evidence of viral resistance to, and no prior VF with agents of, the NNRTI and INI class[1,2]

BL factors and CVF

- CVF was identified in 6/24 (25%) participants who had ≥2 of these BL risk factors[1,2]
  - Archived RPV RAMs (in cases of incomplete resistance testing or treatment history)*
  - HIV-1 subtype A6/A1 (predominately observed in communities from former Soviet Union regions)[3]
  - BMI ≥30 kg/m^2
- Prevalence of ≥2 BL factors in ATLAS, FLAIR and ATLAS-2M was low among participants in Europe (0.3%)[4]
- <1% of participants experienced CVF when no BL risk factors were present or when BMI ≥30 kg/m^2 was the only risk factor[4]

*Assessed retrospectively using proviral DNA testing on stored samples from BL
EU, European Union

1. Vocabria EU SmPC. Jan 2023; **2.** Rekambys EU SmPC. Jun 2023
3. Hemelaar J, et al. Lancet Infect Dis 2019;19:143–55 (and suppl. appendix)
4. Orkin C, et al. Clin Infect Dis 2023 (online ahead of print) (and suppl. appendix)

Retrospective, long-term follow-up of UCSF Ward 86 cohort study (US)

PWH With Viremia Starting CAB + RPV IM

N=59 PWH who initiated CAB + RPV IM; baseline VL ≥50 c/mL; started treatment prior to December 5, 2022, with at least 56 weeks of treatment[1], plus wraparound services[2]

Outcome

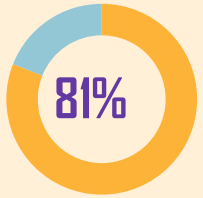
Primary endpoint: Virologic suppression (VL <50 c/mL) and persistence on CAB + RPV (not discontinued or late by >14 days at 48 weeks)

Dec. 2022–
Jan. 2024

Treatment Discontinuations

- **5 (8%)** participants discontinued CAB + RPV IM and resumed oral ART[a]
- **3 (5%)** participants had VF with resistance
- **2 (3%)** participants were lost to follow-up

VS at Week 48



remained on CAB + RPV IM and were VS (48/59)

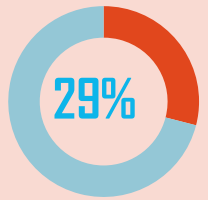
VF With Resistance[b] (n=3)

Participant 1
- VF <8 weeks of initiation despite on-time injections
- **RAMs: E138K (NNRTI) and R263K (INSTI)**

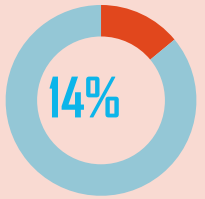
Participant 2
- VF <8 weeks of initiation despite on-time injections
- **RAMs:** New **L100I, Y181I (NNRTI)**

Participant 3
- VF following discontinuation of CAB + RPV IM
- **RAMs** 18 weeks after discontinuation: New **K101E, E138K, Y181F/I/N, M230L** (extensive NNRTI mutations)

Late Injections



received ≥1 injection **>7 days late** (17/59)



received ≥1 injection **>14 days late** (8/59)

Among 59 PWH with viremia, 81% (48/59) remained on CAB + RPV IM and were VS at Week 48, while some developed INSTI and/or NNRTI RAMs

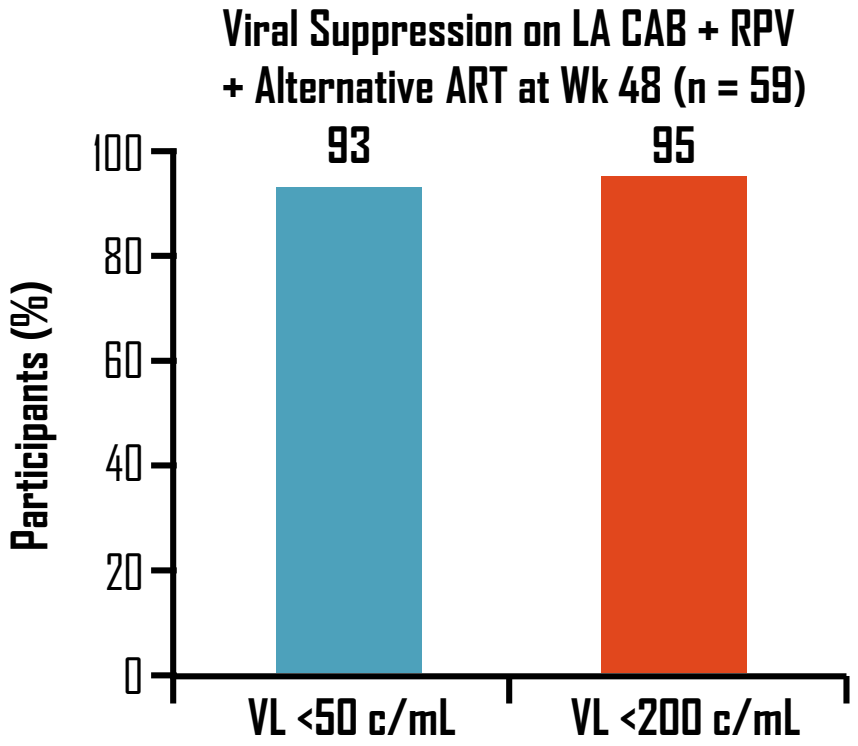
[a]Reasons: Side effects (n=3), provider-initiated switch due to viremia associated with incorrect needle length in an individual with a BMI ≥30 kg/m^2 (no resistance; n=1), transfer to a clinic where CAB + RPV IM was not available (n=1); [b]VF, virologic failure; VL, viral load; VS, virologically suppressed

1. Hickey MD, et al. CROI 2024, Poster 628;
2. Christopoulos KA, et al. *Clin Infect Dis* 2023;76(3):e645-e651

Retrospective, long-term follow-up of UCSF Ward 86 cohort study (US)

LA CAB + RPV in People Without Viral Suppression at Baseline: 48 Wk Results

- **81%** (48/59) remained on LA CAB + RPV with **VL <50 c/mL** at Wk 48



Status at Wk 48, n (%)	VL <50 c/mL (n = 55)	VL ≥50 c/mL (n = 4)	Overall (n = 59)
Remained on LA CAB + RPV	48	1*	49 (83)
Discontinued LA CAB + RPV and resumed oral ART	5	–	5 (8)
Failure with resistance ▪ **On-time injections** ▪ **Lost to f/u and not receiving oral ART, resistance found**	**2** **–**	**–** **1**	**3 (5)**
Lost to f/u and off oral ART	–	2	2 (3)

*Intensified to LA CAB + RPV with LEN for low-level viremia.

Hickey. CROI 2024. Abstr 628.

Case series (US)

Real-World Use of LEN SC + CAB IM Injections in PWH Experiencing Challenges With Oral ART

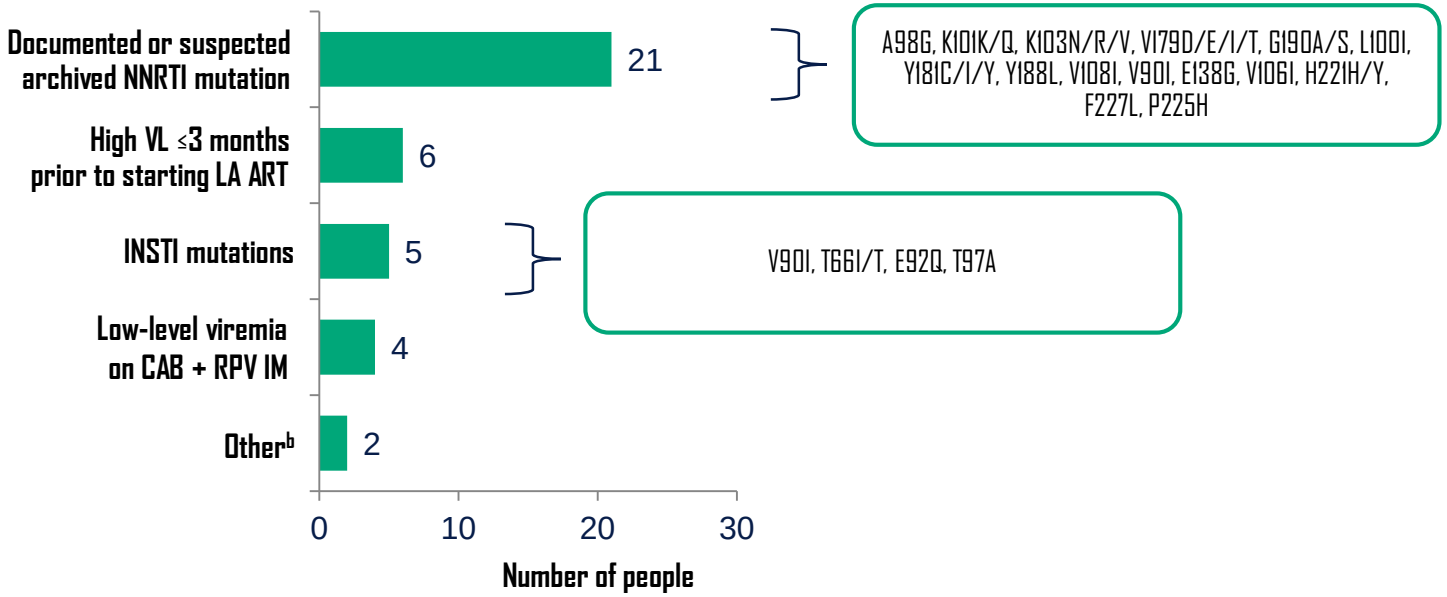
N=34

PWH from 4 academic medical centers, receiving LEN SC Q6M + CAB IM Q4W or Q8W (+/- RPV)

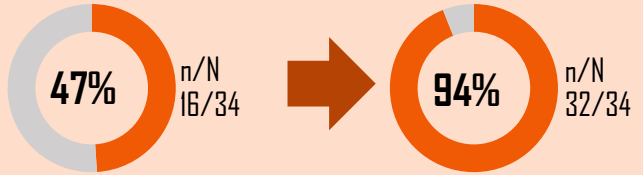
Outcomes

VS (defined as VL ≤75 c/mL), ISRs

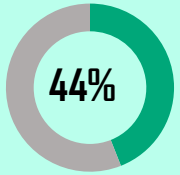
Reasons for Receiving LEN + CAB[a]



% with VS doubled from baseline after a median (range) follow up of 8 (4–16) weeks



All with documented or suspected NNRTI mutations achieved VS



experienced Grade ≤2 ISRs after receiving LEN

Grade 1: 32%

Grade 2: 12%

This single case series in PWH with adherence challenges to oral ART and NNRTI resistance has shown high rates of VS when receiving LEN Q6M with CAB Q4W or Q8W (+/- RPV). Due to asynchronous dosing and the chance of LEN resistance in the setting of monotherapy, routine adherence counseling and monitoring are recommended

[a]Investigators may have noted more than one reason for receiving CAB IM + LEN; [b]BMI >40 kg/m^2 and intolerance to LA RPV

ISR, injection-site reaction; LA, long-acting; Q4W, every 4 weeks; Q6M, every 6 months; Q8W, every 8 weeks; VL, viral load; VS, virologic suppression

Gandhi M, et al., CROI 2024, Poster 629

ACTG A5359 LATITUDE: LA CAB + RPV in People With Adherence Challenges to Oral ART

- **Prospective, randomized, open-label phase III trial**

People living with HIV with poor viral response after ≥6 mo ART or loss to f/u with ≥6 mo nonadherence, no HBV, no INSTI or RPV RAM historically or by screening (N = 434)

Step 1: Up to 24 Wk

SoC Oral ART + Conditional economic incentives

Eligible for randomization to Step 2 with HIV-1 RNA <200 c/mL starting at Wk 4 (originally after Wk 24)

Step 2: 52 Wk

LA CAB + RPV Q4W (n = 146)

SoC Oral ART (n = 148)

Step 3: 52 Wk

LA CAB + RPV Q4W

Step 4 (Observational Phase): participants who received ≥1 dose of LA CAB + RPV and are no longer eligible for injections switch to receiving 52 wk of oral ART

- **Primary endpoint:** treatment regimen failure defined as earliest confirmed virologic failure or discontinuation during step 2
- **Key secondary endpoints:** virologic failure, treatment-related failure, permanent treatment discontinuation

Rana. CROI 2024. Abstr 212.

ACTG A5359 LATITUDE
Study Population (Step 1 and Step 2)

Characteristic		Total (N=434)
Age, years	Median (Q1, Q3)	40 (32, 51)
	≤30	88(20%)
	31-50	232(53%)
	51+	114 (26%)
Sex at birth	Female	129 (30%)
Gender Identity	Transgender Spectrum	21 (5%)
Race	Black/African American	277 (64%)
	White	117 (27%)
	Other/multiple/unknown	40 (9%)
Ethnicity	Hispanic/Latino	75 (17%)
History of IDU	Currently + Previous	61 (14%)
Non-Adherence criteria	Lost to follow-up	87 (20%)
	Poor response	283 (65%)
	Both	64 (15%)
Time since HIV Dx, years	Median (Q1, Q3)	13 (7, 21)

Characteristic		Step 1 Total (N=434)
Baseline HIV-1 RNA (c/mL)	<200	141 (32%)
	201-10,000	110 (25%)
	10,001-100,000	121 (28%)
	>100,000	62 (14%)
Baseline CD4⁺ T (cells/mm³)	Median (Q1, Q3)	270 (116, 498)

		Step 2 Treatment Arm	
Characteristic		CAB/RPV-LA (n=146)	SOC (n=148)
Step 2 Baseline HIV-1 RNA (c/ml)	>200*	24 (17%)	10 (7%)
Baseline CD4+ T (cells/mm3)	Median (Q1, Q3)	417 (198, 688)	374 (198, 605)

* including 8 participants with HIV-1 RNA >10,000 c/ml

Rana et al. CROI 2024; Denver, CO. Oral presentation 212.

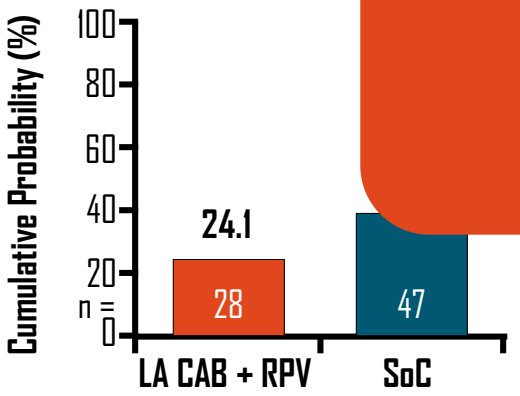
ACTG A5359 LATITUDE: Efficacy Outcomes

Primary Outcome

Regimen Failure

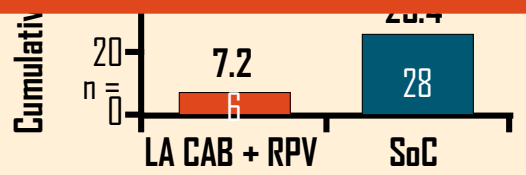
Difference
-14.5%

Nominal
(-29.8%

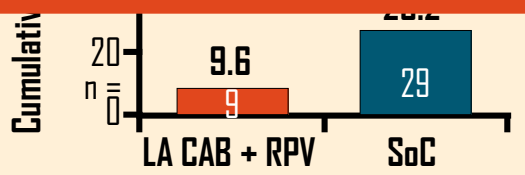


Secondary Outcomes

Virologic Failure

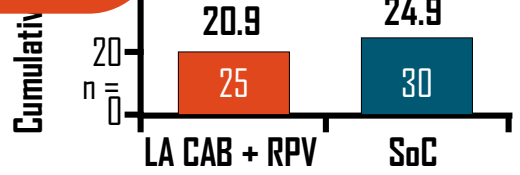


Treatment-Related Failure



Permanent Treatment Discontinuation

Nominal 98.75% CI
(-18.0% to 9.8%)



DSMB stopped study randomization due to superior efficacy of LA CAB + RPV in secondary endpoints

1 additional virologic failure after Wk 24 included in secondary endpoints, but not primary

Rana. CROI 2024. Abstr 212.

LATITUDE/ACTG A5359: Phase 3, randomized, prospective, open-label study (US)

Resistance in Participants With Confirmed VF in Step 2

RAM evaluation	CAB + RPV IM QM n=6	SOC ART[a] n=28
With new RAM, n (%)	**2[b] (33)**	**2 (7)**
INSTI, NNRTI, PI, NRTI RAMs		
Week 18	G140G/S, Q148K, E138E/K, K103R	–
Week 37	–	A71V, V77I, V106I
Week 48	–	M184I
Week 49	Q148K, E138K, K20K/R, M230M/L	–
Without new RAM, n (%)	3 (50)	19 (68)
Other	1 (16)[c]	7 (25)[d]

Among participants with confirmed VF, the proportion of emergent RAMs with CAB + RPV IM QM was higher than with SOC ART, and included INSTI RAMs

[a]≥3 drugs with ≥2 drugs predicted to be fully active, including a boosted PI and/or INSTI; [b]Both participants developed ≥2 new INSTI RAMs; [c]HIV-1 RNA <400 c/mL; [d]2 discontinued without a confirmation sample, 3 had HIV-1 RNA <400 c/mL and samples were not collected for 2 participants. QM, every month; SOC, standard of care; VF, virologic failure

Rana AI, et al. CROI 2024, Oral 212

Updated IAS-USA Recommendations for LA CAB + RPV: March 1, 2024

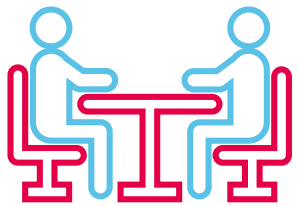
- *When supported by **intensive follow-up** and **case management services**, injectable LA CAB + RPV may be **considered for people with viremia** who meet the criteria below when **no other treatment options are effective** due to a patient's persistent inability to take oral ART:*
  - ***Unable to take oral ART** consistently despite extensive efforts and clinical support*
  - ***High risk of HIV disease progression** (CD4 cell count <200/μL or history of AIDS-defining complications)*
  - ***Virus susceptible to both CAB and RPV***
- *If applicable, patients should also be referred for treatment of substance use disorder and/or mental illness.*

Sax. JAMA. 2024;[Epub].

CARISEL: Randomisation of clinical sites

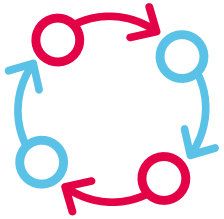
	Arm-E Enhanced implementation	Arm-S Standard implementation
Study treatment injection training (prior to first injection)	Face-to-face*	Virtual
Toolkits (PLWH/staff participant)	✓	✓
SWAT meeting(s)	✓	
CQI calls (monthly)	✓	

Skilled wrap-around team (SWAT) meetings:



Introduce CAB + RPV LA to staff and discuss what might make implementation easier and/or more difficult

Continuous quality improvement (CQI):



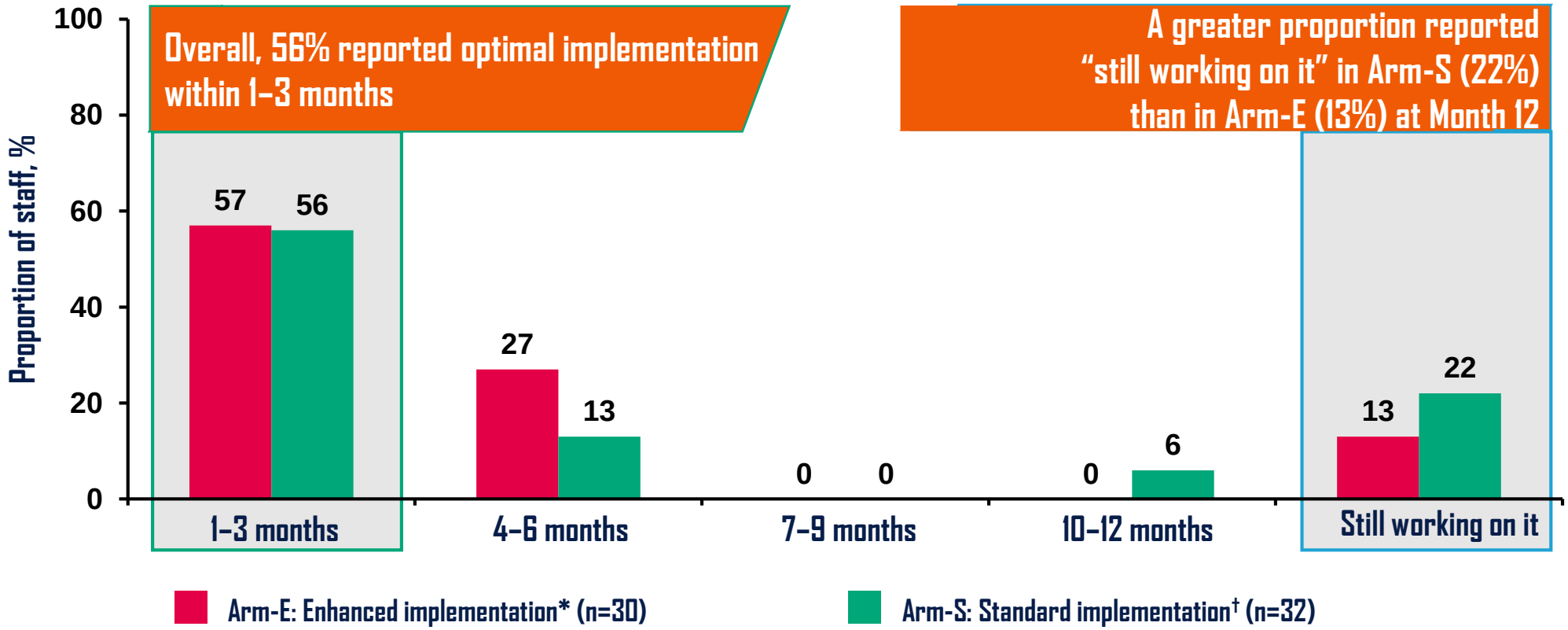
Support improving routine care by identifying problems, planning a solution, studying the results and acting accordingly (Plan, Do, Study and Act cycles)

*Four staff study participants in Arm-E received their injection training remotely rather then face-to-face due to COVID-19 restrictions

De Wit S, et al. IDWeek 2022. Oral 1584

CARISEL: Time to optimal implementation of CAB + RPV LA

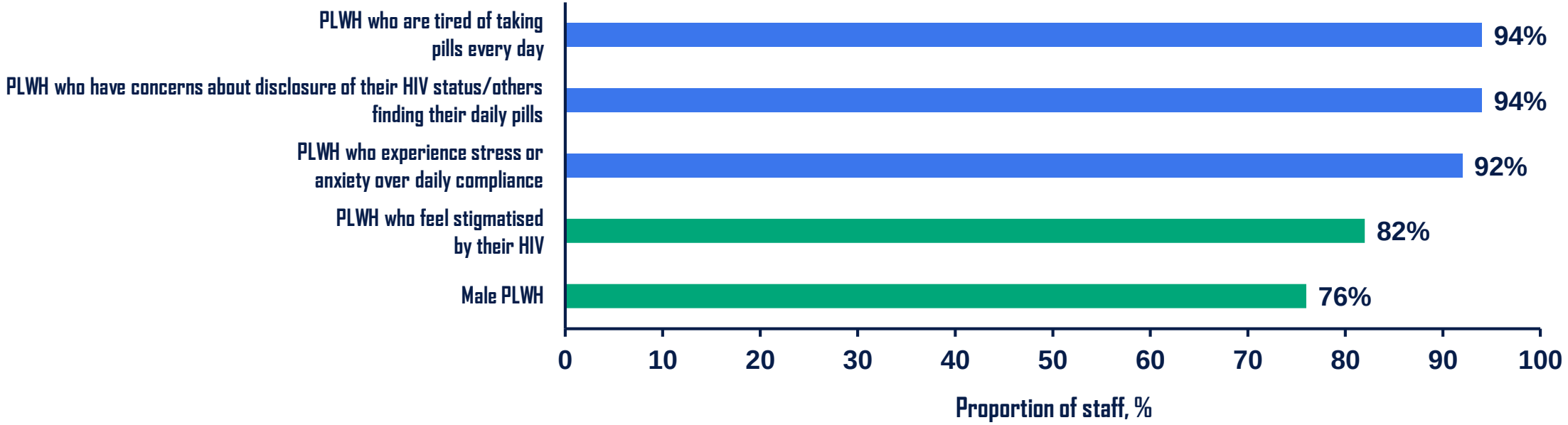
"Overall, how many months did it take to optimally implement the CAB + RPV injection treatment in your clinic/practice?"



*Face-to-face injection training and CQI, and educational resources
†Education resources, virtual injection training and regular support

van Welzen BJ, et al. HIV Glasgow 2022. Poster P069

CARISEL: Characteristics of PLWH perceived by staff as appropriate for CAB + RPV LA treatment at Month 12



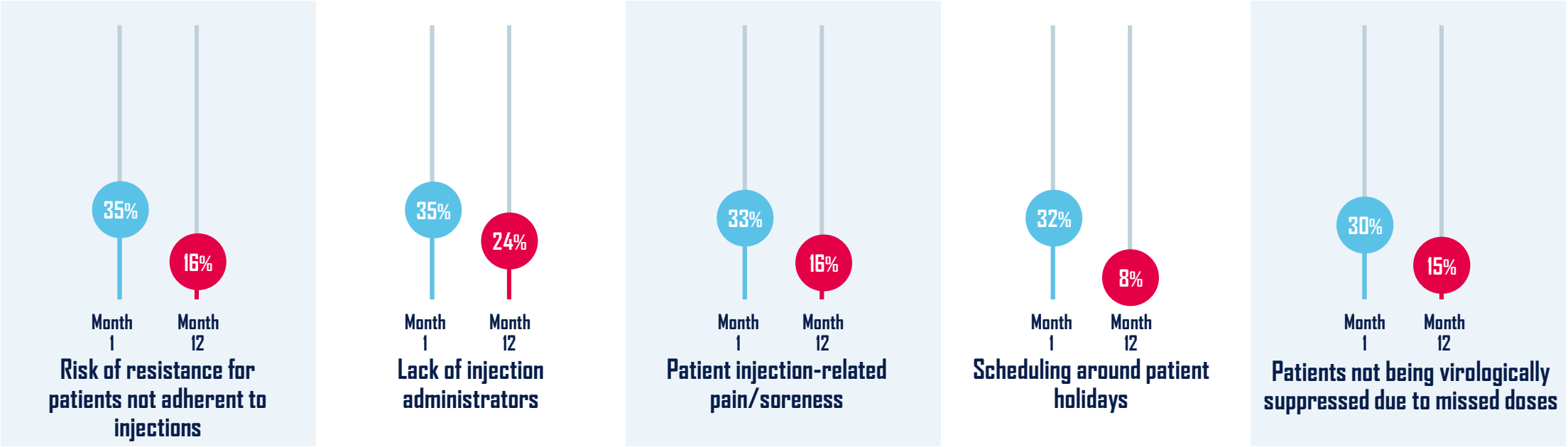
- Feeling burdened by daily pills and fear of inadvertent disclosure of HIV status were the characteristics of PLWH most frequently identified by staff as appropriate for CAB + RPV LA

Staff participants recognised that a wide range of PLWH may be appropriate for CAB + RPV LA

Slama L, et al. HIV Glasgow 2022. Poster P116

CARISEL: Perceived barriers to implementation

Top five barriers to implementation reported at Month 1 compared to Month 12



Staff participants reported barriers to implementation of CAB + RPV LA decreased from Months 1 to 12

Slama L, et al. HIV Glasgow 2022. Poster P116

ILANA
Implementing CAB+RPV LA in six UK clinics and the community

- **Study Design:** 1 year UK-based implementation study to evaluate feasibility of implementation **in 6 clinics and in the community**
  - M4 analysis evaluated PLWH perspectives on feasibility and acceptability of CAB+RPV LA and on potential community delivery through validated implementation questionnaires* at BL and 4 months

- **114 virologically suppressed PLWH initiated CAB+RPV LA**
  - **55% female, 51% Black, 30% White, 40% >50 years**
  - 57% had received NNRTIs, 84% had comorbidities, and 80% polypharmacy
- **99% of injections were given within the 7-day window**
- ***Regarding injectable treatment, FIM, IAM, and HIVTSQ scores improved significantly***. FIM, IAM and AIM scores regarding perceptions of the future prospect of receiving ART in the community setting (at M6) did not improve from BL
  - **At M4, IAM mean scores were significantly less favorable in Black participants than in White participants** with respect to the injection (4.44 vs. 4.67; p=0.029) and the community setting (3 vs . 3.75; p=0.003)
- **96% preferred injectable to oral ART at M4**

Change from baseline to 4 months for FIM, AIM, IAM outcomes in relation to injection and community setting

Mean difference* (SD) in scores	Total N=106	p-value for change from BL
FIM change from BL: injection	**+0.12 (0.52)**	**0.023**
FIM change from BL: community-based location	-0.10 (1.12)	0.359
AIM change from BL: injection	+0.08 (0.57)	0.175
AIM change from BL: community-based location	+0.02 (1.19)	0.855
IAM change from BL: injection	**+0.13 (0.55)**	**0.013**
IAM change from BL: community-based location	+0.03 (1.15)	0.775
HIV-TSQ12 change from BL	**+6.48 (10.35)**	**<0.001**

PLWH considered CAB+RPV LA to be increasingly feasible and appropriate, treatment satisfaction improved and a high patient preference for LA was observed

***Feasibility of Intervention Measure (FIM), Acceptability of Implementation Measure (AIM), Intervention Appropriateness Measure (IAM) and HIV Treatment Satisfaction Questionnaire (HIVTSQ-12)**

Orkin C et al. CROI 2024; Denver, CO. Poster 621.

Thanks for your attention