CROI 2024
Conference on Retroviruses and Opportunistic Infections
March 3-6 | Denver, Colorado

21ª edición
POSTCROI
Una actualización de la "31st Conference on Retroviruses and Opportunistic Infections"

Vall d'Hebron
Barcelona Campus Hospitalari

Top 10 CROI 2024 Denver

Adrià Curran

Servei Malalties Infeccioses

Hospital Universitari Vall d'Hebron

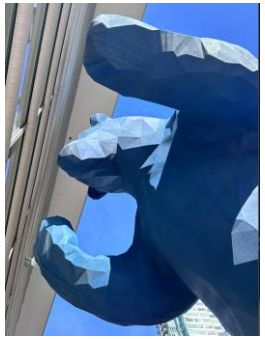
Homenaje Dr. Llibre

- 2023: 18º Top Ten (TT)

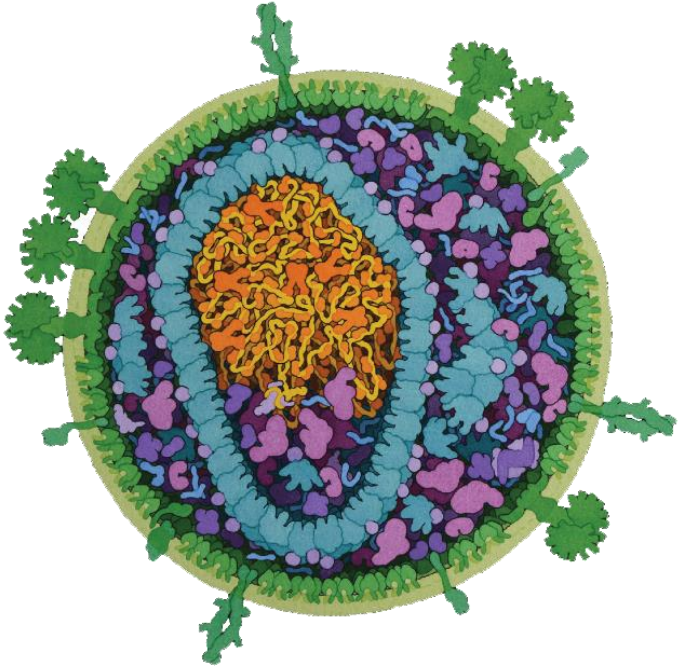
https://forbes.es/actualidad/154602/quien-es-quien-en-la-investigacion-contra-el-vih/

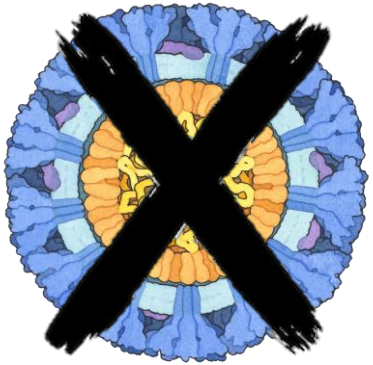
Denver, Colorado

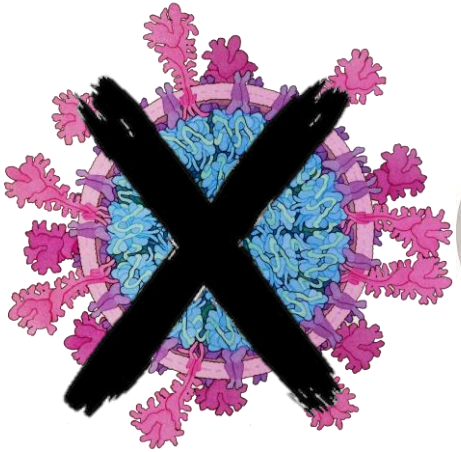
- 2º CROI, previo en 2006



Disclaimer







Watercolors by Dr David Goodsell Scripps Research Institute
https://www.croiconference.org/illustrations-viruses/

Plenary-03 | Wednesday Plenary Session

8:30 AM - 9:30 AM • Bellco Theatre

CME

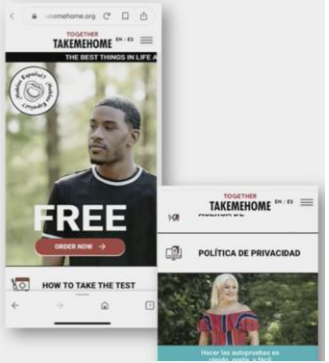
40 | Diagnostics 4.0: The Future of Diagnostics for HIV and Related Infections

Nitika P. Pai, *McGill University, Montreal, Canada*

#1. Together Take Me Home (#200LB)

Together Take Me Home (TTMH)

- In March 2023, CDC's *Let's Stop HIV Together* campaign, partnered with Emory, BHOC, NASTAD, Orasure and Signal
- The initial goal was a web-based platform to distribute at least 200K free HIV self-tests each year for 5 years
- Eligibility
  - ✓ 17 years or older
  - ✓ Living in the US including Puerto Rico
- Individuals can order up to 2 kits every 90 days
- People who are taking PrEP or ART encouraged to share the test instead of using it themselves



TTMH: Campaign Strategies

- CDC developed a marketing plan to reach priority audiences in jurisdictions that are the focus of the Ending the HIV Epidemic (EHE) initiative
- Priority audiences for the first year of the program
  - Black and Latino gay, bisexual and other men who have sex with men
  - Transgender women of all races/ethnicities
  - Cisgender Black women
- Paid and organic outreach strategies on social and digital platforms, as well as on the ground activities with partners
  - BHOC partnered with apps to promote the program including direct links to the program from within apps as well as free ad placements

Together TakeMeHome: User Experience

Observes Promotional Materials
- Dating apps
- CDC marketing – (Google, Facebook, etc.)
- AIDS Vu
- Other partner promotions

Landing page
- Arrive Together TakeMeHome website
- Eligibility (US address &≥17 years old)
- Orders 1 or 2 HIVSTs
- Customer service

Optional Surveys
- Post-Order
- 10 & 60 day

HIV self-test orders & surveys initiated by 1/22/2024

Total Orders = 210,235

Total individuals (first orders) = 195, 584

Total who completed at least one post-order survey item = 151,926

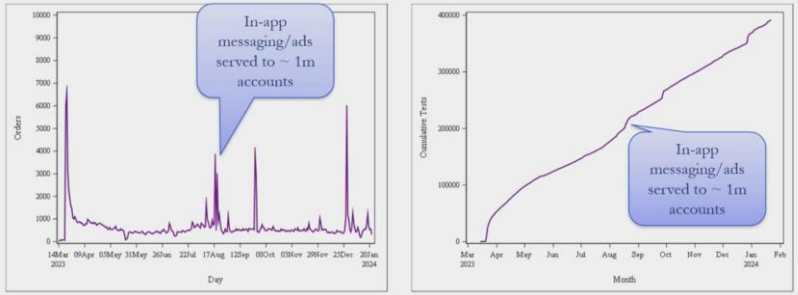
Total who completed key variables on post-order survey* = 117,156

Total who completed at least one follow-up survey** = 7,319

*Race, Ethnicity, Current Gender, sex of sex partners

**Surveys are sent at 10 days and 60 days after the order is placed

Together TakeMeHome Daily and Cumulative HIVST orders since Launch



Demographics – 151,926 unique individuals*

- **52% <35 years old**
  - 7% over 55 years old
- **80% Male, 19% Female, <1% intersex**
- **35% White NH, 31% Hispanic/Latino (any race), 24% Black NH**
- **Current Gender Identities were diverse**
  - 74% man
  - 18% Woman
  - 2.6% Transgender Woman, Transfeminine
  - 1.4% Transgender man, Transmasculine
  - 5.3% Other non-binary, genderqueer, or gender fluid

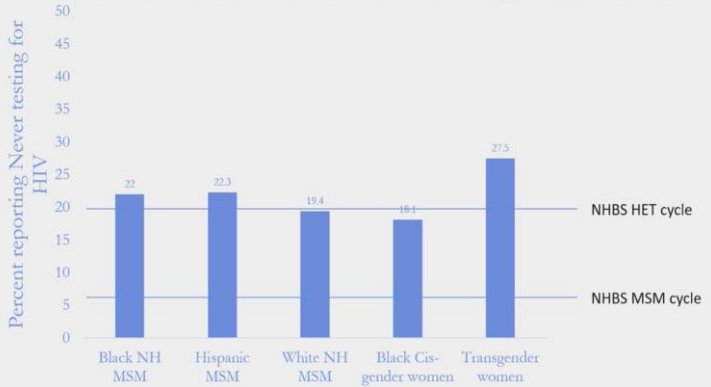
Populations served by TTMH, N=195,584*

Population	Overall N (%)	Of those with sufficient information N (%)
Key Populations (MSM, BW, TGW)	84,452 (43.2%)	84,452 (72.1%)
Other Populations	32,704 (16.7%)	32,704 (27.9%)
Insufficient information to categorize**	34,770 (17.1%)	
No Information***	43,658 (22.3%)	

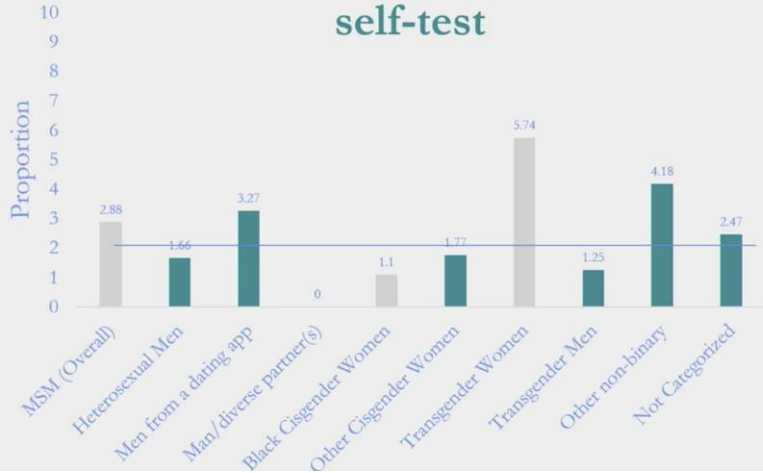
Among those who completed a follow-up survey (N=7,319*)

- 90.4% had used at least one of their tests (by time of survey)
- 27.7% had shared at least one test with someone else
- 630 (8.6%) reported STI testing after receiving their test
- 396 (5.4%) reported starting PrEP after receiving their test
- 176 (2.8%) reported at least one reactive self-test

Proportion of Priority populations reporting never testing for HIV before ordering a self-test



Proportion* reporting at least one positive HIV self-test

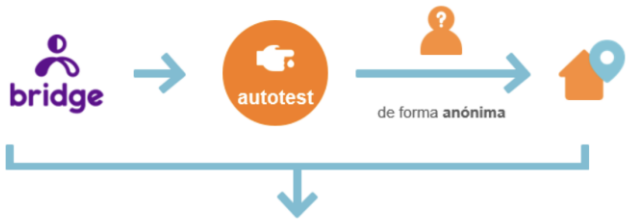


testate

Proves online
de VIH i altres ITS

www.testate.org

bridge



Videos para realizar el test correctamente

Información y seguimiento con la asistente virtual **Bridget** mediante IA

Información pre, durante y post test

Contacto con los profesionales sanitarios

#2. bNAbs

Oral Abstract Session-03 | Clinical Trials of Novel Antiretroviral Therapies

10:00 AM - 12:00 PM • Mile High Ballroom 1-2-3

Introductions (Part 1)

115 10:05 AM
Single Dose Administration of MK-8527, a Novel nRTTI, in Adults With HIV-1
Russ P. Carstens, Yash Kapoor, Ryan Vargo, Arinjita Bhattacharyya, Graigory Garrett, Jean-Francois Denef, Kemira Naidoo, Liliana Preotescu, Richard Kaplan, Mohammed Rassool, Johannes Lombaard, Randolph P. Matthews, S. Aubrey Stoch, Marian Iwamoto, Gillian Gillespie

116 10:13 AM
Antiviral Activity, Safety, and Pharmacokinetics of GS-1720: A Novel Weekly Oral InSTI
Carl J. Fichtenbaum, Mezgebe Berhe, Jose Bordon, Jacob P. Lalezari, Godson Oguchi, Gary Sinclair, Furong Wang, Brie Falkard, Haeyoung Zhang, Eva Mortensen, Jared Baeten, Moti Ramgopal

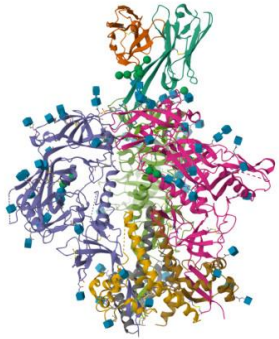
117 10:21 AM
VH3810109 (N6LS) in Adults With HIV-1 Who Are ART-Naive: Phase IIa BANNER Efficacy Data
Peter Leone, Alejandro Ferro, Sergio Lupo, Joseph McGowan, Paul Benson, Marisa Sanchez, Stefan Schneider, Paul Wannamaker, Beta Win, Judah Abberbock, Viviana Wilches, Margaret Gartland, Max Lataillade, **Jan Losos**

118 10:29 AM
A First-in-Human Study of the Trispecific HIV-1 Broadly Neutralizing Antibody, SAR441236
Athe Tsibris, Yu E. Zheng, Edmund Capparelli, Katherine Rodriguez, Randall Tressler, Antoine Deslandes, Katherine Shin, Philip Marzinek, Lucio Gama, Baiba Berzins, Chanelle Wimbish, Chih-Jen Wei, Gary Nabel, Daniel R. Kuritzkes, Pablo Tebas

Questions and Answers (Part 1)
Introductions (Part 2)

119 11:00 AM
Safety and Efficacy of VRC07-523LS Plus Long-Acting Cabotegravir in the Phase II ACTG A5357 Trial
Babafemi Taiwo, Yu E. Zheng, Katherine Rodriguez, Leah Burke, Jackie Reeves, Paul Wannamaker, Lucio Gama, Christos Petropoulos, Kimberly K. Scarsi, Pablo Belaunzaran-Zamudio, Ronald D'Amico, Katharine J. Bar, Pablo Tebas, for the ACTG A5357 Team

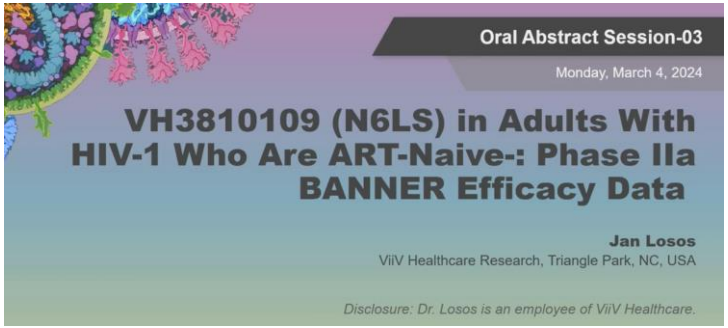
120 11:08 AM
Lenacapavir Plus bNAbs for People With HIV and Sensitivity to Either Teropavimab or Zinlirvimab
Joseph J. Eron, Paul P. Cook, Megha Mehrotra, Hailin Huang, Marina Caskey, Gordon Crofoot, Edwin DeJesus, Linda Gorgos, Laurie VanderVeen, Olayemi O. Osiyemi, Cynthia Brinson, Sean E. Collins

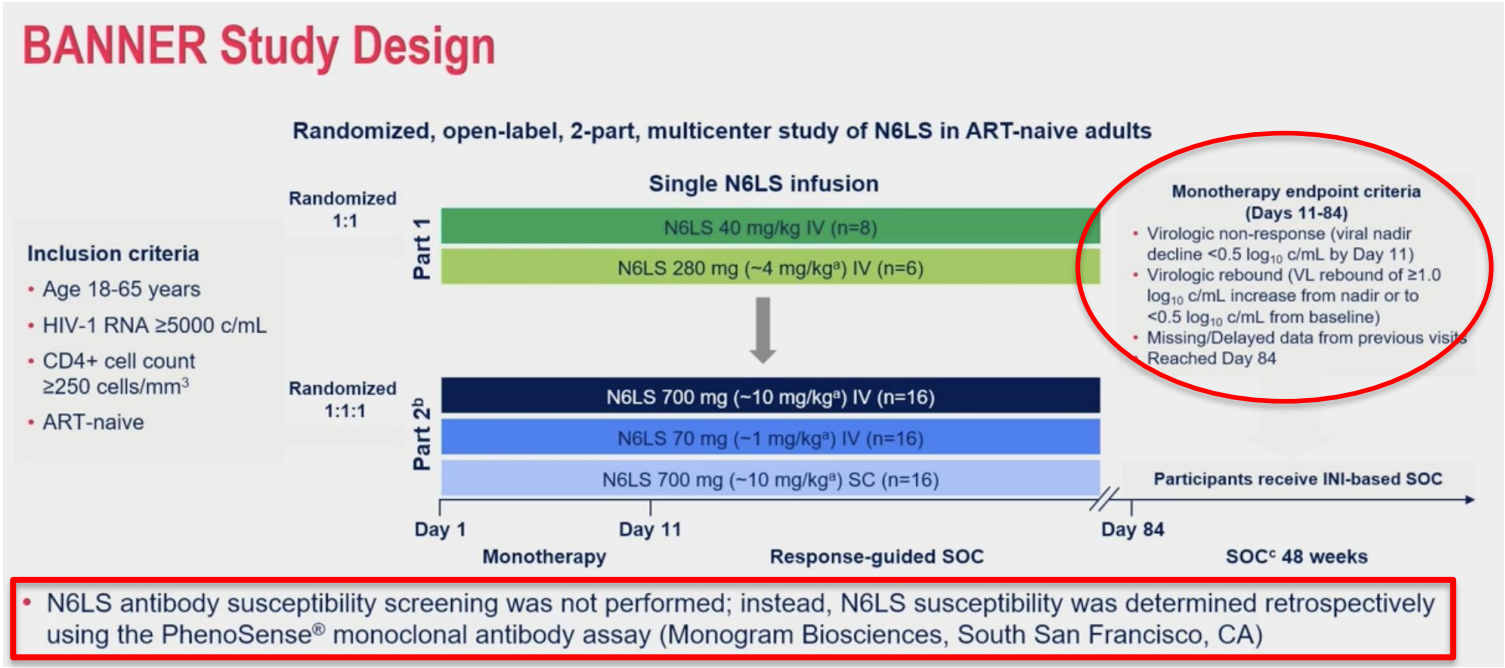


121 11:16 AM LB
Therapeutic Efficacy of a Triple Combination of HIV-1 Broadly Neutralizing Antibodies
Boris D. Juelg, Victoria E. Walker-Sperling, Kshitij Wagh, Kathryn Stephenson, Jinyan Liu, Malika A. Boudries, Roberto C. Arduino, Lucio Gama, Elena Giorgi, Richard A. Koup, Michael S. Seaman, Charlotte-Paige M. Rolle, Edwin DeJesus, Bette Korber, Dan H. Barouch

122 11:24 AM LB
Randomized Trial of Cabotegravir and Rilpivirine Long-Acting in Africa (CARES): Week 48 Results
Cissy M. Kityo, Ivan K. Mambule, Simiso Sokhela, Reena Shah, Caroline Otike, Joseph Musaazi, Kimton Opiyo, Fiona Cresswell, Charity Wambui, Gilbert Ategeka, Josphat Kosgei, Logashvari Naidoo, Fafa A. Boateng, Nicholas Paton

#2. bNAbs: Banner (#117)



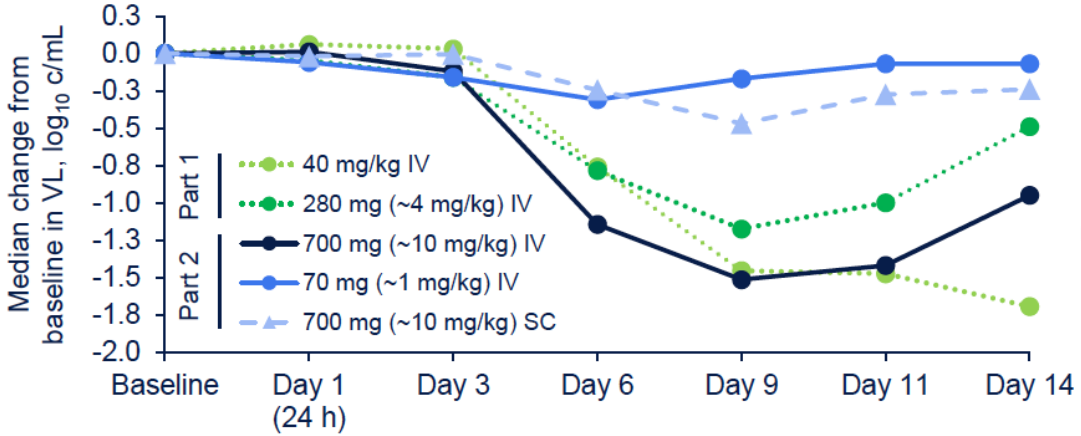


!!!

- N6LS antibody susceptibility screening was not performed; instead, N6LS susceptibility was determined retrospectively using the PhenoSense® monoclonal antibody assay (Monogram Biosciences, South San Francisco, CA)

BANNER Part 2: SC Antiviral Activity

N6LS antiviral activity correlated with drug exposure!!



- Lower exposures were observed with SC vs IV administration using the same N6LS dose
- Lower SC exposure due to first-pass lymphatic elimination
- The SC response was as expected when considering N6LS exposures achieved

Viral dynamic measures, median (range)	Part 1				Part 2
	N6LS 40 mg/kg IV (N=8)	N6LS 280 mg IV (~4 mg/kg[a]) (N=6)	N6LS 700 mg IV (~10 mg/kg[a]) (N=16)	N6LS 70 mg IV (~1 mg/kg[a]) (N=16)	N6LS 700 mg SC (~10 mg/kg[a]) (N=16)
Viral nadir from baseline, log_{10} c/mL	−1.72 (−2.60, −0.60)	−1.18 (−2.18, −0.30)	−1.54 (−2.22, −0.41)	−0.43 (−1.29, −0.12)	−0.50 (−2.13, −0.09)
Time to viral nadir, days	16 (5-21)	9 (7-16)	9 (6-27)	7 (2-23)	9 (1-50)
Time to viral rebound among responders, days	35 (12-78) [n=8]	18 (14-29) [n=5]	22 (14-43) [n=14]	13 (10-22) [n=7]	17 (11-63) [n=8]

IV, intravenous; N6LS, VH3810109; SC, subcutaneous; VL, viral load.

[a]For a 70-kg individual.

Conclusions

- Robust antiviral response was observed with N6LS and was correlated with N6LS exposure[1]; this exposure-dependent antiviral activity was consistent with reports for other bNAbs[2]
  - Baseline viral sensitivity to N6LS was an important predictor of N6LS concentrations required to achieve antiviral effect[1]
  - Lower SC viral response was as expected when considering N6LS exposures achieved
- The SPAN study explores the safety and tolerability of higher doses of N6LS, including SC with rHuPH20 in HIV-negative adults and is presented in Poster 639[3] 40 mg/Kg: 30 ml (3000 mg)!!
- Results from BANNER and SPAN support the ongoing clinical development of N6LS as an ultra-long dosing strategy into phase 2b (EMBRACE, NCT05996471)

bNAb, broadly neutralizing antibody; Cmax, maximum plasma concentration; IV, intravenous; N6LS, VH3810109; SC, subcutaneous.

1. Edwards et al. EACS 2023; Warsaw, Poland. Poster eP.A.099. **2.** Caskey et al. *Nature*. 2015;522:487-491. **3.** Win et al. CROI 2024; Denver, CO. Poster 639.

Plenary-03 | Wednesday Plenary Session
8:30 AM - 9:30 AM • Bellco Theatre

CME

39 | The End of Oral? How Long-Acting Formulations Are Changing the Management of Infectious Diseases

Charles W. Flexner, *The Johns Hopkins University, Baltimore, MD, USA*

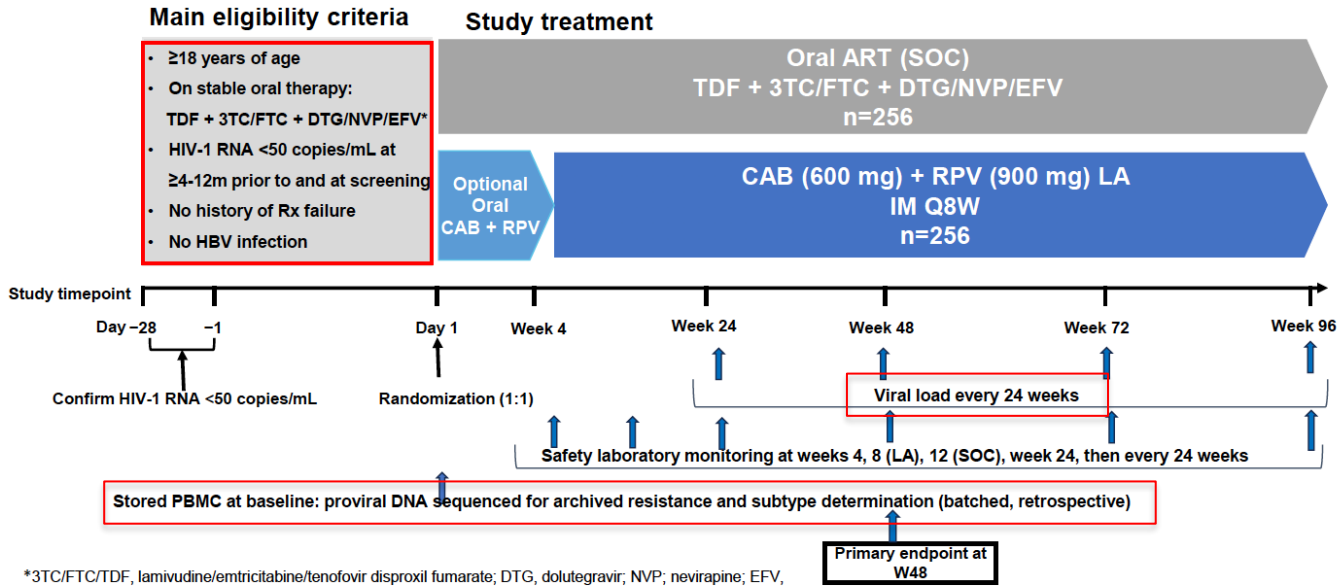
#3. CARES (#122)

Randomized trial of Cabotegravir and Rilpivirine Long-acting in Africa (CARES):Week 48 Results

Cissy Kityo Mutuluuza, Ivan K. Mambule, Simiso Sokhela, Henry Mugerwa, Reena Shah, Caroline Otike, Joseph Musaazi, Kimton Opiyo, Fiona Cresswell, Gilbert Ategeka, Charity Wambui, Josphat Kosgei, Logashvari Naidoo, Fafa A. Boateng, **Nicholas Paton**
on behalf of the CARES Study Team

Study Design

Phase 3b, Randomized (1:1), Open-Label, Active-Controlled, Multi-Centre, Parallel-Group, Noninferiority Study



*3TC/FTC/TDF, lamivudine/emtricitabine/tenofovir disproxil fumarate; DTG, dolutegravir; NVP; nevirapine; EFV, efavirenz; CAB, cabotegravir; LA, long-acting; Q8W, every 8 weeks; RPV, rilpivirine; SOC, standard of care

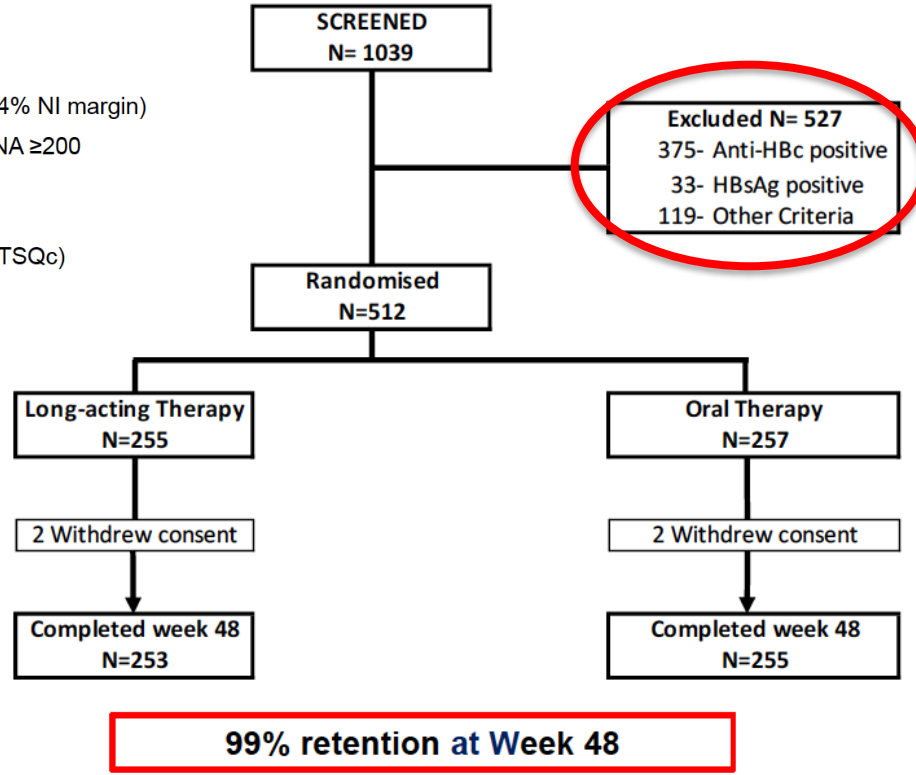
Outcomes & Analysis

Primary outcome:

- Proportion of participants with plasma HIV-1 RNA <50 copies/mL at week 48 (FDA snapshot)
- Non-inferiority assessed in the intention-to-treat (ITT) population, 10% NI margin
- Sensitivity analysis done in per-protocol population

Secondary / other outcomes:

- Proportion of participants with plasma HIV-1 RNA ≥50 copies/mL (FDA Snapshot; ITT, 4% NI margin)
- Proportion of participants with confirmed virologic failure (CVF; 2 consecutive HIV-1 RNA ≥200 copies/mL taken 4-6 weeks apart)
- Safety and tolerability
- Treatment satisfaction (HIV Treatment Satisfaction Questionnaire change version; HIVTSQc)

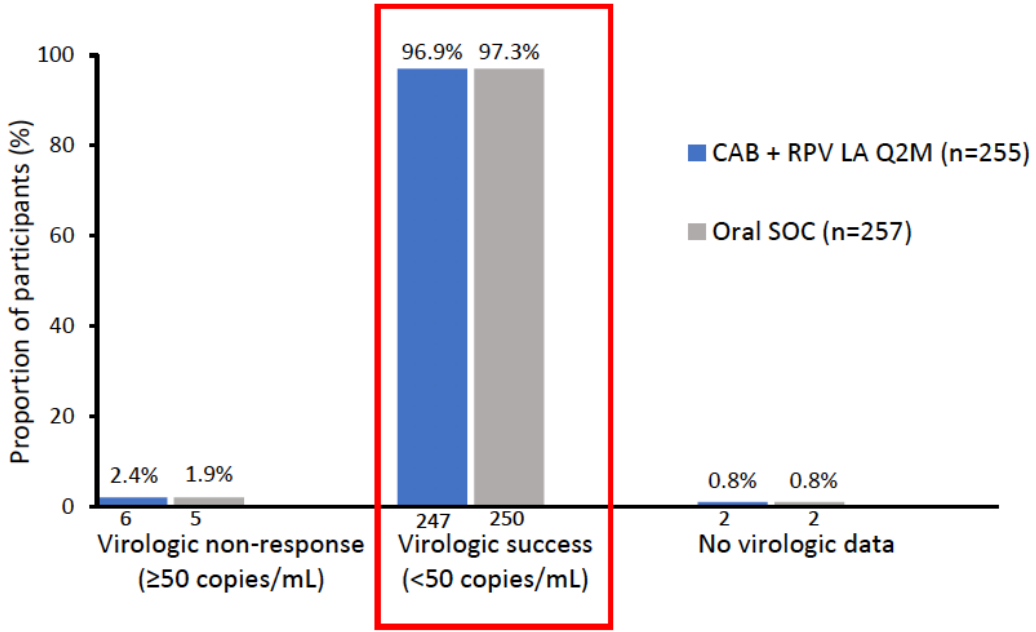


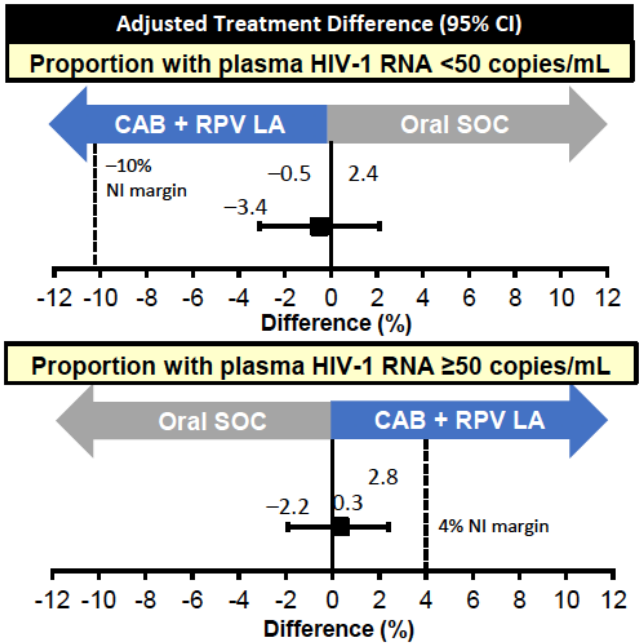
Baseline Characteristics

Characteristic	CAB + RPV LA (n=255)	Oral ART (SOC) (n=257)	Overall (N=512)
Female sex, n (%)	146 (57.2)	149 (58.0)	295 (57.6)
Age, median (IQR), years	43 (36-51)	42 (35-49)	42 (35-51)
BMI≥30 kg/m^2, n (%)	57 (22.4)	51 (19.8)	108 (21.1)
Black race, n (%)	254 (99.6)	256 (99.6)	510 (99.6)
Time on first-line ART, median (IQR), years	8 (4-13)	7 (4-13)	8 (4-13)
Prior exposure to NNRTI, n (%)	189 (73.7)	191 (74.3)	380 (74.2)
INSTI regimen at screening	231 (90.6)	240 (93.4)	471 (92.0)
NNRTI regimen at screening	24 (9.4)	17 (6.6)	41 (8.0)
Archived DNA analysis * †			
Viral subtype A1, n/n (%)	119/213 (55.9)	115/201 (57.2)	234/414 (56.5)
RPV resistance mutations, n/n (%)	25/200 (12.5)	26/177 (14.7)	51/377 (13.5)
RPV intermediate/high-level resistance, n/n (%)	17/200 (8.5)	21/177 (11.9)	38/377 (10.1)
CAB resistance mutations, n/n (%)	15/95 (15.8)	14/85 (16.5)	29/180 (16.1)
CAB intermediate/high-level resistance, n/n (%)	10/95 (10.5)	5/85 (5.9)	15/180 (8.3)

- * Retrospective, batched sequencing performed on archived viral DNA extracted from PBMCs stored at baseline
- † Viral subtype, resistance mutations and drug susceptibility were determined using the Los Alamos National Laboratory Panel, and Stanford algorithm respectively

Virologic Outcomes at Week 48 (ITT)





Primary outcome - proportion with plasma HIV-1 RNA <50 copies/ml:

- Main analysis (ITT): adjusted difference -0.5% (95% CI, −3.4 to 2.4), **meeting the non-inferiority criterion**
- Sensitivity analysis (per-protocol): adjusted difference -0.3% (95% CI, -3.0 to 2.3) **confirming non-inferiority**

Note: minor changes in numbers from abstract

Kityo et al. CROI 2024; Virtual and Denver, CO.

Participants with virological failure

	CAB + RPV LA	Oral ART	Difference (95% CI)
Confirmed virological failure (VL ≥ 200 copies/ml x 2)	1 (0.4%)	0	0.4 (-0.4 to 1.2)

+ One additional virological failure (unconfirmed) in CAB + RPV LA arm (died before retest; HIV-unrelated cause)

Participant with confirmed virological failure

- Failure at week 48 (VL = 8,608 copies/ml)
- No delayed injections
- Female, Uganda
- Baseline BMI: 25.9 kg/m^2
- Subtype A1
- Resistance mutations [Stanford resistance level]:
  Baseline*: No NNRTI or INSTI mutations
  Failure:
  V108I, E138K, V179L [RPV high]
  E92E/V, N155H, L74M [CAB intermediate; DTG nil]
- Re-suppressed on TDF/3TC/DTG once daily

Participant with virological failure (unconfirmed)

- Failure at week 48 (VL = 44,984 copies/ml)
- No delayed injections
- Male, Uganda
- Baseline BMI: 22.0 kg/m^2
- Subtype D
- Resistance mutations [Stanford resistance level]:
  Baseline*: K103N/S, E138A [RPV low]; no INSTI mutations
  Failure:
  K103N/S, V106V/A, E138A [RPV low]
  G118R [CAB high; DTG intermediate]

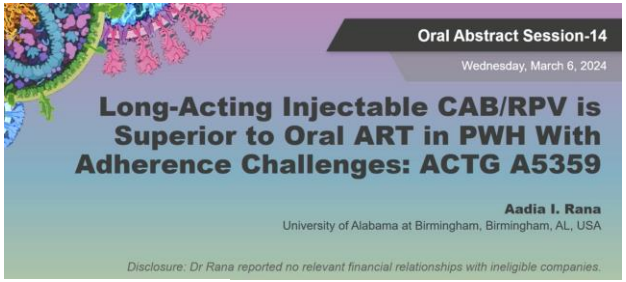
* Retrospective, batched sequencing performed on archived viral DNA extracted from PBMCs stored at baseline

Injection Site Reactions (Week 48)

	Grade 1	Grade 2	Grade 3
Any ISR, n (%)	161 (63.1)	26 (10.2)	1 (0.4)
Pain	161 (63.1)	23 (8.6)	0 (0)
Swelling	17 (6.7)	3 (1.2)	0
Nodule	13 (5.1)	0	1 (0.4)
Erythema	3 (1.2)	1 (0.4)	0
Induration	1 (0.4)	1 (0.4)	0
Rash	1 (0.4)	0	0
Pruritus	1 (0.4)	0	0
Discharge	0	1 (0.4)	0
Abscess	0	2 (0.8)	0

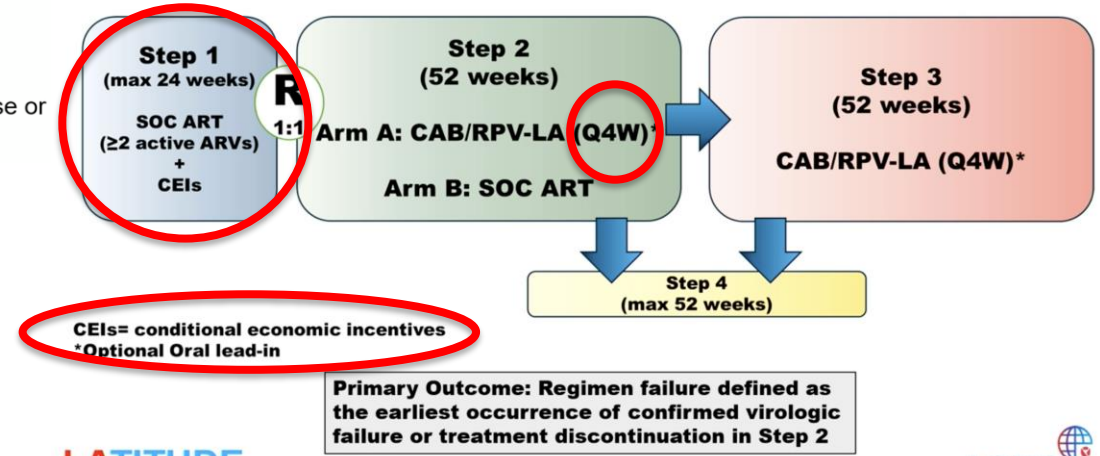
- Most ISRs were grade 1 or 2; only 1 grade 3; none were grade 4;
- Only 1 (injection-site sterile abscess) led to treatment discontinuation

#3. LATITUDE (#212LB)



- A5359-**L**ong-**A**cting **T**herapy to **I**mprove **T**reatment success in **D**aily lif**E**
- Phase III prospective, randomized, open-label trial
- Monthly IM CAB/RPV-LA vs. oral Standard of Care (SOC) ART
- PWH who have barriers to adherence:
  a) Poor viral response despite oral ART for ≥6 months.
  b) Loss to clinical follow-up with ART non-adherence ≥6 months.
- No Hepatitis B
- No INSTI or RPV RAM historically or by screening.
- No exclusion based on CD4⁺ T-cell, HIV VL, active substance/alcohol use or unstable housing.

Study design



Step 1: Adherence support
+ economic incentives!!

LATITUDE

ACTG

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)

LATITUDE

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)

Characteristic		Step 2 Treatment Arm 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 in the CAB/RPV-LA arm

ACTG

Safety/tolerability/timing of injections for participants initiating CAB/RPV-LA in Step 2

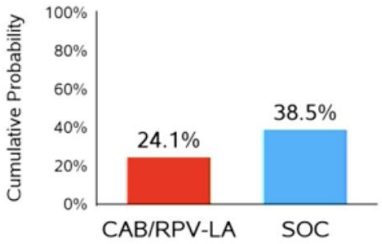
Characteristic	Total (n=135)
Participants with at least 1 ISR, n (%)	
(Pain, tenderness, nodule)	77 (57%)
Grade ≥ 3	3 (2.2%)
Injection Timing Categories, n (%)	
Early injection (<21 days)	6 (1%)
On Time (21-<36 days)	1,092 (93%)
Delayed injection (≥36 days)	40 (3%)
Missed Injection	36 (3%)

Results-All Outcomes

Primary Outcome

Regimen Failure

Difference	Nominal 98.75% CI
-14.5%	(-29.8%, 0.8%)



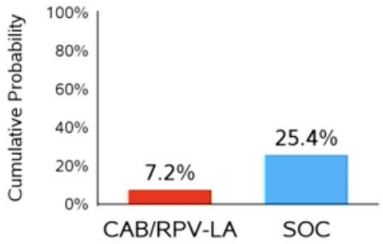
Number of participants

	CAB/RPV-LA	SOC
Regimen Failure	28	47
VF	5	28
TRT-DISC	23	19

Secondary Outcomes

Virologic Failure

Difference	Nominal 98.75% CI
-18.2%	**(-31.1%, -5.4%)**

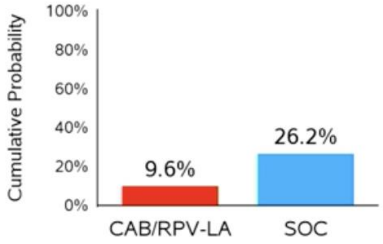


Number of participants

	CAB/RPV-LA	SOC
Virologic Failure	6	28

Treatment-related Failure

Difference	Nominal 98.75% CI
-16.6%	**(-29.9%, -3.3%)**

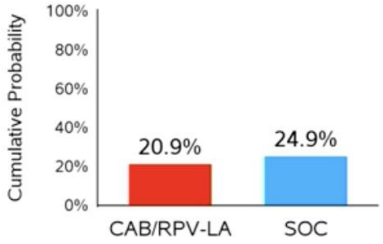


Number of participants

	CAB/RPV-LA	SOC
Treatment-related Failure	9	29
VF	6	28
TRT-DISC (AE)	3	1

Permanent Treatment Discontinuation

Difference	Nominal 98.75% CI
-4.1%	(-18.0%, 9.8%)



Number of participants

	CAB/RPV-LA	SOC
Permanent TRT-DISC	25	30

LATITUDE

ACTG

Participants with confirmed VF in Step 2

RAM Evaluation	CAB/RPV-LA (n=6)	Oral SOC ART (n=28)	Total (n=34)
With new RAM, n	2 Week 18 E138EK; G140GS; Q148K; K103R Week 49 E138K; Q148K; K20KR; M230ML	2 Week 37 A71V; V77I; V106I Week 48 M184I	4
Without new RAM, n	3	19	22
D/c without confirmation sample, n	0	2	2
HIV-1 RNA <400 c/mL, n	1	3	4
Sample not collected, n	0	2	2

LATITUDE

ACTG

Conclusions

- Considering all endpoints together, CAB/RPV-LA demonstrated superiority when compared to daily oral SOC ART in PWH in the US who face barriers to adherence and have a prior history of virologic non-response or loss to follow-up.
- Clinical trials in this important population are feasible.
- These data support the use of LAI in this population. Future clinical trials should assess use of CAB/RPV in actively viremic patients.

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March 1, 2024

Updated Treatment Recommendation on Use of Cabotegravir and Rilpivirine for People With HIV From the IAS-USA Guidelines Panel

Paul E. Sax, MD[1]; Melanie A. Thompson, MD[2]; Michael S. Saag, MD[3]; et al

Author Affiliations | Article Information

JAMA. Published online March 1, 2024. doi:10.1001/jama.2024.2985

When supported by intensive follow-up and case management services, injectable cabotegravir and rilpivirine (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 (rating AIIa under the conditions described).

- 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

above. However, no randomized clinical studies exist to support this recommendation, and available data are limited by small numbers with variable follow-up, variation in dosing regimens, and insufficient information regarding the types and intensity of clinical support deployed. To generate more robust

24-Week Viral Suppression in Patients Starting Long-Acting CAB/RPV Without HIV Viral Suppression

628

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BACKGROUND

- LA-CAB/RPV is FDA-approved in the United States as a switch strategy for people with HIV (PWH) who are virally suppressed on oral antiretroviral therapy (ART).
- Early data from clinical cohorts suggest that HIV viral suppression can be obtained in most patients initiating LA-CAB/RPV with an unsuppressed viral load, but there is no data on whether initial viral suppression is sustained.
- We sought to evaluate longer-term viral suppression outcomes following initiation of LA-CAB/RPV among people who were not virally suppressed at baseline.

METHODS

Viral suppression outcomes now updated to 48 weeks

- We conducted a retrospective cohort study of PWH who initiated LA-CAB/RPV at Ward 86, a teaching hospital-affiliated, publicly-funded HIV clinic in San Francisco
- We have 286 PWH who initiated LA-CAB/RPV; this analysis included those who initiated LA-CAB/RPV (without other injectable ART, e.g. lenacapavir) and with a baseline HIV viral load (VL) ≥50 copies/mL and who started prior to 5-Dec-2022 (thus having ≥56 weeks prior to database closure for outcome ascertainment)
- Our clinic protocol was to start all unsuppressed patients on every 4 week dosing, with optional change to every 8 week dosing after 3-6 months suppression
- We conducted retrospective chart review of demographics, LA-CAB/RPV injection dates, and HIV viral load measurements
- **Primary outcome:** HIV viral suppression (<50 copies/mL) and LA-CAB/RPV persistence (not discontinued or late by >14 days at 48 weeks), using closest VL to 48+/-8 weeks
- **Secondary outcomes:**
  - Any HIV viral suppression <50 copies/mL at 48 weeks (on LA-CAB/RPV or alternative ART)
  - Any HIV viral suppression <200 copies/mL at 48 weeks (on LA-CAB/RPV or alternative ART)
  - Virologic failure, defined as <2-log VL decline at 4 weeks or VL ≥200 copies/mL after initial viral suppression with emergent CAB- or RPV-associated resistance mutations
  - Proportion transitioning to every 8 week dosing
  - Proportion of patients with any injection >7 and >14 days late

Among 59 people with HIV initiating LA-CAB/RPV with HIV RNA ≥50 copies/ml, 93% were virally suppressed (<50 copies/mL) at 48 weeks (95% <200 copies/mL)

RESULTS

- 286 PWH have received ≥1 dose of LA-ART as of 31-Jan-2024 (101 with baseline VL ≥50 copies/mL and 185 with baseline VL <50); Ward 86 administers ~18 injectable medications/day in total
- 59 PWH started LA-CAB/RPV with VL ≥50 copies/mL by 5-Dec-2022 & included in analysis
- **48-week Viral Suppression:**
  - **81% (48/59) remained on LA-CAB/RPV and were virally suppressed (<50 copies/mL)**
  - **93% (55/59) were virally suppressed <50 copies/mL (LA-CAB/RPV + alternative ART)**
  - 95% (56/59) were virally suppressed <200 copies/mL (LA-CAB/RPV + alternative ART)
- **Virologic failure:** 3 patients (5%) had virologic failure with emergent resistance (see Table 3)
  - 2 within 8 weeks of initiation despite on-time injections; re-suppressed on alternative ART
  - 1 following self-discontinuation of LA-CAB/RPV, did not resume oral ART
- **Dosing interval:** 19 (32%) transitioned to every 8 week dosing by week 48
- **Late injections:** 17 (29%) had at least one injection >7 days late and 8 (14%) >14 days late
  - 3 were lost to follow-up; remainder persisted on LA-CAB/RPV and were suppressed at week 48

Figure 1. HIV Viral Suppression at 48 weeks following initiation of LA-CAB/RPV
with baseline HIV RNA ≥50 copies/mL (n=59)

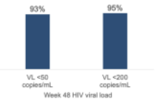

Table 2. Status at week 48*	VL <50 (N=55)	VL ≥50 (N=4)	Overall (N=59)
Remained on LA-CAB/RPV	48	1†	49 (83%)
Discontinued LA-CAB/RPV and resumed oral ART	5	-	5 (8%)
Failure with resistance			3 (5%)
• On-time injections	2	-	
• Lost to follow-up and off oral ART, later determined to have resistance	-	1	
Lost to follow up and off oral ART	-	2	2 (3%)

* Four VLs missing at week 48. Three categorized as VL ≥50 due to VL ≥50 before/after window and/or evidence off ART. One categorized as VL <50 due to VL <50 before & after window and on ART throughout.

† Intensified to LA-CAB/RPV + Lenacapavir for low-level viremia. Week 48 VL <200 copies/mL.

Reasons for discontinuation and switching to oral ART: side effects (n=3), provider-initiated switch due to viremia associated with incorrect needle length in patient with BMI ≥30 kg/m² (no resistance; n=1), transfer to another clinic that did not have LA-CAB/RPV available (n=1).

Reasons for discontinuation/loss to follow-up and not taking oral ART: fixed belief that cured from HIV (n=1), psychosis (n=1), depression (n=1)

Table 1. Baseline characteristics (n=59)

Gender	Female	5 (8.5%)
	Male	53 (89.8%)
	Gender minority	1 (1.7%)
Age	18-29	2 (3.4%)
	30-49	29 (49.2%)
	50+	28 (47.5%)
Race/ Ethnicity	White	24 (40.7%)
	Black/AA	14 (23.7%)
	Latino	17 (28.8%)
	Other	4 (6.8%)
Housing status	Stable	28 (47.5%)
	Unstable	26 (44.1%)
	Homeless	5 (8.5%)
Substance use	Methamphetamine/cocaine	36 (61.0%)
	Opioids	6 (10.2%)
CD4 count	<50	9 (15.3%)
	50-199	20 (33.9%)
	200-349	13 (22.0%)
	350-499	7 (11.9%)
	>=500	10 (16.9%)
HIV viral load	50 to <200	3 (5.1%)
	200 to <1,000	5 (8.5%)
	1,000 to <10,000	10 (16.9%)
	10,000 to <100,000	22 (37.3%)
	>=100,000	19 (32.2%)

Table 3. Adverse virologic outcomes (n=6)

Patient	Baseline	Follow-up	Week 48 status
Patient 1 (Failure despite on-time injections)	VL: 137,000 CD4: 15 Mutations: T97A (minor INSTI)	VL 4,400 at week 4 (<2 log decline), genotype with E138K (NNRTI) and R263K (INSTI). Disengaged from care, but later returned and re-suppressed on BIC/TAF/FTC + LEN	Suppressed on BIC/TAF/FTC + LEN
Patient 2 (Failure despite on-time injections)	VL: 215,000 CD4: 71 Mutations: N348I (minor NNRTI)	VL 39,000 at week 4 (<2 log decline). Genotype new L100I, Y181I (NNRTI). Disengaged from care but later returned and re-suppressed on CAB+LEN.	Suppressed on CAB + LEN
Patient 3 (Failure after discontinuation)	VL: 67,000 CD4: 20 Mutations: none	Received 10 on-time injections, VL <200 by week 4 and <50 by week 24. Discontinued due to severe depression. Genotype 18 weeks after discontinuation with new K101E, E138K, Y181F/I/N, M230L (extensive NNRTI mutations)	Emergent resistance after discontinuation, presumed viremic
Patient 4 (discontinued, lost)	VL: 19,000 CD4: 20 Mutations: none	Received 2 injections, suppressed by week 4. Discontinued LA-CAB/RPV due to psychosis. At week 36, VL from the emergency department 32,000 (no genotype).	Lost to follow-up, presumed viremic
Patient 5 (discontinued, lost)	VL: 801,000 CD4: 27 Mutations: none	Received 6 on-time injections, then discontinued all ART due to patient's belief they were cured of HIV. Declined all subsequent laboratory testing or care engagement.	Lost to follow-up, presumed viremic
Patient 6 (on LA-CAB/RPV + LEN, VL ≥50)	VL: 284,000 CD4: 118 Mutations: none	VL 418 after 8 weeks. Persistent low-level viremia (range 94-614). VL 614 at 6th injection prompted addition of lenacapavir. Continued low-level viremia (VL 126 at wk 48)	Low-level viremia on LA-CAB/RPV+LEN

SUMMARY AND CONCLUSION

- Ward 86 started a LA-ART program for those without & with adherence challenges in 2021, now with 286 PWH
- Among those initiating LA-CAB/RPV with HIV RNA ≥50 copies/ml, 48-week viral suppression to <50 copies/ml was 93%, with 81% persisting on LA-CAB/RPV
- In population facing significant psychosocial challenges, loss to follow-up was low following LA-CAB/RPV initiation
- LA-ART can be an important tool for improving viral suppression among patients facing adherence challenges

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Case Series Examining the Long-Acting Combination of Lenacapavir and Cabotegravir: Call for a Trial

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629

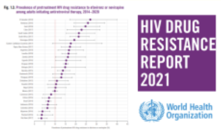
Background

- Injectable cabotegravir (CAB)/rilpivirine (RPV) is the only combination long-acting (LA) antiretroviral treatment (ART) regimen approved for HIV
- RPV is not effective among individuals with nonnucleoside reverse transcriptase inhibitor (NNRTI) resistance (when the mutations are RPV resistance associated mutations, RAMs), which has >10% prevalence in many countries (Figure)
- Lenacapavir (LEN) is a LA capsid inhibitor given every six months but has not been studied in combination with other LA agents

Methods

- Four clinics where providers are using either LA CAB/RPV or LA CAB paired with LA LEN for selected patients with adherence challenges off-label were identified (UCSF Ward 86, UCSD Owen Clinic, MetroHealth's HIV Clinic, UPenn Clinic) and a case series assembled
- All patients in this series experienced challenges to taking oral ART which is why LA ART was prescribed
- Variables, including sex; gender; age; race; ethnicity; current housing status; substance use; viral load (VL) prior to starting LEN/CAB; duration between CAB doses (every 4 or 8 weeks); whether injectable RPV was also given; viral mutations in the NNRTI or INSTI class; BMI; time on the regimen; and LEN injection site reaction garnered from medical record
- IRB approval in clinics to present data if no patient identifiers

Figure: Rates of NNRTI resistance across countries as of WHO report 2021 (RPV 2.7-18.7%)



In this case series of 34 patients on LEN/CAB from four U.S. academic medical centers, high rates of virologic suppression (94%) were seen (up from 47% at baseline). Clinicians used LEN/CAB for adherence challenges and NNRTI resistance. These data support a clinical trial of LEN/CAB as CAB/RPV cannot be used in LMICs with high rates of NNRTI resistance

Table: Details of patients (n=34) of LEN/CAB in this case series

Reason for LEN	Patient number	Age/Sex/ Gender/ Race-ethnicity/ substance use and/or housing insecurity/BMI (kg/m²)/ viral subtype	VL prior to LEN/CAB, copies/mL	NNRTI or minor INSTI mutations for patients 28-32	Regimen prior to LEN/CAB	Weeks between CAB doses/ RPV included/ ISR*	VS <75 after LEN/CAB start/ time to VS
NNRTI mutations-virologically suppressed when started LEN	1	55/M/M/Latino/yes/29.1	UD	A98G, K103N, V179E, G190A	DRV/c/FTC/TAF	4 weeks/ no/ no	Yes/ NA
	2	32/M/M/Latino/no/33.8	UD	K103N, G190A	DRV/c/FTC/TAF + DTG	8 weeks/ yes/ no	Yes/ NA
	3	28/M/M/Latino/no	UD	K103R, V179D	DRV/c + DTG	4 weeks/ yes/ grade 1	Yes/ NA
	4	47/F/F/Latina/no/28.1	UD	L100I, K103N	DRV/c + DTG	8 weeks/ no/ no	Yes/ NA
	5	75/F/F/Black/no/23.1/B	UD	L100I, K103N, V179I, Y181C	DTG + 3TC + DRV/r	8 weeks/ no/ no	Yes/ NA
	6	41/M/M/Black/yes/23.57/B	UD	V108I, V179D	EVG/c/FTC/TAF + DRV	8 weeks/ no/ grade 1	Yes/ NA
	7	55/M/M/White/no/21.7/B	UD	V90I, E138G	BIC/TAF/FTC	8 weeks/ yes/ no	Yes/ NA
	8	29/F/F/Black/no/30.9/AG	UD	Y181C	DTG/ABC/3TC	8 weeks/ yes/ grade 1	Yes/ NA
NNRTI mutations - viremic when started LEN	9	58/F/F/Latina/yes/29.2/B	329	K101K/Q, K103R, V179I	BIC/TAF/FTC+ DOR	4 weeks/ yes/ grade 2	Yes/ 4 wks
	10	48/M/F/Black/yes/26.7/B	815	V90I, V106I, Y181C, H221Y	DTG + TAF/FTC	4 weeks/ no/ grade 1	Yes/ 12 wks
	11	41/M/M/Black/no/46.22/B	5,280	Y181C, Y188L K103V	DRV/c/FTC/TAF + DTG	8 weeks/ yes/ grade 1	Yes/ 4 wks
	12	54/M/M/Black/yes/22.1/B	9,760	L100I, K103N, Y181Y/C, H221H/Y	EVG/c/FTC/TAF + DRV	8 weeks/ yes/ grade 1	Yes/ 16 wks
	13	50/M/M/Latino/yes/23/B	36,342	L100I, V179I, Y181I	DRV/c/FTC/TAF	4 weeks/ no/ grade 2	Yes/ 4 wks
	14	51/M/M/White/yes/28.2/B	239,000	L100I, K103N	DRV/c/FTC/TAF+DTG	4 weeks/ no/ grade 1	Yes/ 4 wks
	15	58/M/M/Latino/no/19.9/B	1,271,051	V106I, G190S, V179T, F227L	DRV/c/FTC/TAF + DTG	4 weeks/ no/ no	Yes/ 8 wks
Suspected archived NNRTI mutations	16	31/M/M/Black/no/25.18/B	7,740	None	BIC/TAF/FTC + DRV/c	8 weeks/ yes/ no	Yes/ 8 wks
	17	54/M/M/Black/yes/21.8/B	229,000	None	DRV/r/TAF/FTC	8 weeks/ yes/ no	Yes/ 16 wks
High VL within 3 months prior to starting LA ART (+/- NNRTI mutations)	18	57/M/M/Black/yes/22.0	UD	K103N, V108I, P225H	LA CAB/RPV	8 weeks/ yes/ no	Yes/ NA
	19	43/M/M/Black/no/24.9/B	UD	K103N, V108I, P225H	DRV/c/FTC/ TAF+DTG	8 weeks/ yes/ no	Yes/ NA
	20	42/M/M/White/yes/19.4/B	UD	None	LA CAB/RPV	8 weeks/ no/ grade 2	Yes/ NA
	21	28/M/M/Latino/no/30.5	UD	None	LA CAB/RPV	8 weeks/ no/ no	Yes/ NA
	22	60/M/M/White/yes/28.2/B	190	None	BIC/TAF/FTC	8 weeks/ yes/ no	Yes/ 12 wks
	23	39/M/M/Latino/yes/21.2/B	194,000	None	BIC/TAF/FTC	8 weeks/ yes/ no	Yes/ 5 wks
Low level viremia on CAB/RPV (+/- NNRTI mutations)	24	39/M/M/Latino/no/36.0/B	UD	K103R	LA CAB/RPV	8 weeks/ yes/ no	Yes/ NA
	25	35/M/M/Black/yes/34.7/B	95	None	LA CAB/RPV	8 weeks/ yes/ no	Yes/ 3 wks
	26	38/M/M/Latino/yes/23/B	145	None	LA CAB/RPV	4 weeks/ yes/ grade 2	No/ no VS
	27	42/M/M/White/yes/26.5/B	165	K103N, V106I	LA CAB/RPV	8 weeks/ yes/ no	Yes/ 16 wks
INSTI mutations	28	34/M/M/Latino/yes/22/B	UD	V90I, T66T/I	BIC/TAF/FTC	4 weeks/ yes/ grade 1	Yes/ NA
	29	52/M/M/White/yes/22.2/B	105	E92Q	DTG/RPV + DRV/c	8 weeks/ yes/ no	Yes/ 16 wks
	30	44/F/F/Black/no/25.5/B	228	T97A	BIC/TAF/FTC	8 weeks/ yes/ no	No/ no VS
	31	40/F/F/Latina/no/24.8/B	290	E92Q	DRV/c/FTC/TAF + DOR	8 weeks/ yes/ grade 1	Yes/ 9 wks
	32	72/M/M/Black/yes/17.7/B	50,900	T97A	BIC/TAF/FTC + DRV/c	8 weeks/ yes/ no	Yes/5 wks
Other	33[1]	47/F/F/Black/no/41.2/B	UD	None	BIC/TAF/FTC	8 weeks/ yes/ grade 1	Yes/ NA
	34[2]	57/M/M/White/yes/22.7/B	UD	None	LA CAB/RPV	4 weeks/ no/ grade 1	Yes/ NA

M-male; F-female; UD-undetectable; DRV/c-darunavir/cobicistat; BIC-bictegravir; TAF-tenofovir alafenamide; FTC-emtricitabine; DTG-dolutegravir; 3TC-lamivudine; EVG-elvitegravir; DOR-doravirine; [1]High BMI > 40 kg/m²; [2]Intolerance to LA-RPV; *ISR injection site reaction; K103[X] mutations not counted as RPV associated mutations

Results

- All patients (n=34: 76% male; 24% cis/trans female; 41% Black; 38% Latino/a; median age 47 [range 28-75] years; 29% and 71% on CAB every 4 or 8 weeks) reported challenges adhering to oral ART (**Table**)
- Reason(s) for using LEN/CAB with or without RPV were: either documented or suspected NNRTI mutations (n= 21, 59%), integrase mutations (n=5, 15%), high VL (n=6, 18%), or continued viremia on CAB/RPV alone (n=4, 12%)
- Injection site reactions on LA-LEN were reported in 44% (32% grade I, 12% grade 2).
- All patients but two (32/34; 94%) suppressed (VL< 75 copies/mL) after starting LEN at a median of 8 (4-16) weeks, with 16/34 (47%) suppressed at baseline.

Conclusion

- First case series of patients on a novel combination of long-acting ART with LEN (subcutaneous every 6 months) and CAB (intramuscular every 4-8 weeks) with or without RPV
- All experienced adherence challenges with oral ART
- Most common reason for use of this off-label combination was NNRTI mutations
- Overall, viral suppression doubled from 47% at baseline to 94% on LEN/CAB
- Patients with documented or suspected NNRTI mutations all achieved suppression on LEN/CAB
- Due to prevalence of NNRTI mutations worldwide (**Figure**), CAB/RPV not approved as LA ART by WHO in low-and-middle-income countries (LMICs)
- Therefore, in 2024, disparities exist in availability of LA ART between high and LMICs
- Trial needed to study LEN/CAB in patients with NNRTI resistance worldwide given this disparity; this case series serves as a call for this trial

Acknowledgements: Funded by NIAID/NIH 5R37AI098472

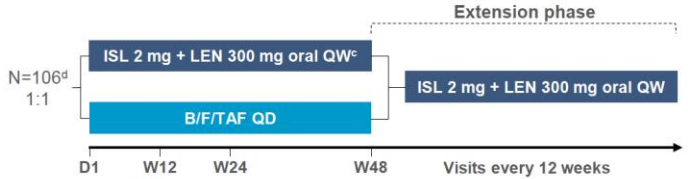
UCSF Penn CASE WESTERN RESERVE UNIVERSITY UC San Diego MetroHealth

#5. ISL-LEN QW oral switch (#208LB)

Methods

A Phase 2, open-label, active-controlled study in virologically suppressed PWH[a]

Inclusion criteria
- Aged ≥18 years
- Viral load <50 c/mL on B/F/TAF[b]
- No history of virologic failure
- CD4 count ≥350 cells/µl
- Lymphocytes ≥900 cells/µl
- No HBV infection



- **Primary endpoint:** Proportion with HIV-1 RNA ≥50 c/mL at Week 24 per FDA Snapshot algorithm
- **Secondary endpoints:**
  - Proportion with HIV-1 RNA ≥50 c/mL at Weeks 12 and 48
  - Proportion with HIV-1 RNA <50 c/mL at Weeks 12, 24, and 48
  - Change from Day 1 in CD4
  - Adverse events (AE) leading to study drug discontinuation
  - PK parameters[e]
- **Exploratory endpoints[e]:**
  - Treatment-emergent resistance to ISL and LEN
  - Participant-reported outcomes

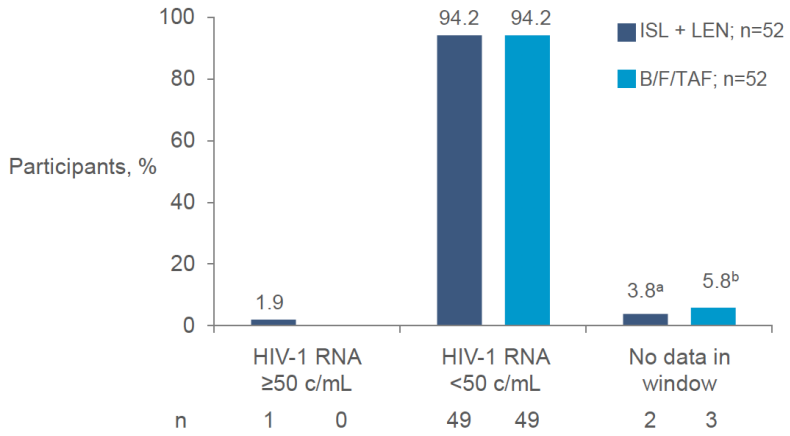
[a]NCT05052996. [b]For at least the previous 24 weeks. [c]600 mg of LEN was given on Day 1 and Day 2 for pharmacologic loading. [d]Randomized, N=106; dosed, N=104. [e]Will be presented in future presentation. **B/F/TAF**, bictegravir/emtricitabine/tenofovir alafenamide; **D**, day; **HBV**, hepatitis B virus; **ISL**, islatravir; **LEN**, lenacapavir; **PK**, pharmacokinetic; **PWH**, people with HIV-1; **QD**, daily; **QW**, weekly; **W**, week.

Baseline Demographic and Disease Characteristics

	Total (N=104)	ISL + LEN (n=52)	B/F/TAF (n=52)
Median (range) age, years	40 (26–76)	40 (28–67)	40 (26–76)
Female at birth, n (%)	19 (18.3)	10 (19.2)	9 (17.3)
Gender Identity, n (%)			
Transgender female	1 (1.0)	1 (1.9)	0
Non-binary/third gender	1 (1.0)	0	1 (1.9)
Race, n (%)			
White	52 (50.0)	25 (48.1)	27 (51.9)
Black	37 (35.6)	21 (40.4)	16 (30.8)
Asian	3 (2.9)	2 (3.8)	1 (1.9)
American Indian or Alaska Native	3 (2.9)	1 (1.9)	2 (3.8)
Native Hawaiian or Pacific Islander	1 (1.0)	0 (0)	1 (1.9)
Other	8 (7.7)	3 (5.8)	5 (9.6)
Ethnicity, Hispanic, or Latinx, n (%)	30 (28.8)	13 (25.0)	17 (32.7)
Mean (SD) CD4, cells/µL	786 (249.5)	755 (223.6)	818 (271.3)
≥500 cells/µl, n (%)	96 (92.3)	46 (88.5)	50 (96.2)
Mean (SD) absolute lymphocytes x 10^3/µL	1.94 (0.556)	1.94 (0.445)	1.95 (0.652)

B/F/TAF, bictegravir/emtricitabine/tenofovir alafenamide; **c/mL**, copies/mL; **ISL**, islatravir; **LEN**, lenacapavir; **SD**, standard deviation

Efficacy at Week 24



Participants in both treatment groups maintained high rates of virologic suppression

[a]Discontinued due to non-drug related adverse event with HIV-1 RNA <50 c/mL at time of discontinuation, n=2. [b]Discontinued for other reason with HIV-1 RNA <50 c/mL at time of discontinuation, n=3.
B/F/TAF, bictegravir/emtricitabine/tenofovir alafenamide; **c/mL**, copies/mL; **ISL**, islatravir; **LEN**, lenacapavir

Participant on ISL + LEN with HIV-1 RNA ≥50 c/mL at Week 24

Visit	HIV-1 RNA (c/mL)
Screening	<50
Day 1	251
Week 24	64
Week 30	<50

- Resuppressed at Week 30 without change in regimen
- Adequate levels of plasma ISL and LEN
- No emergent resistance detected
- Participant remains on study drug

Safety Summary

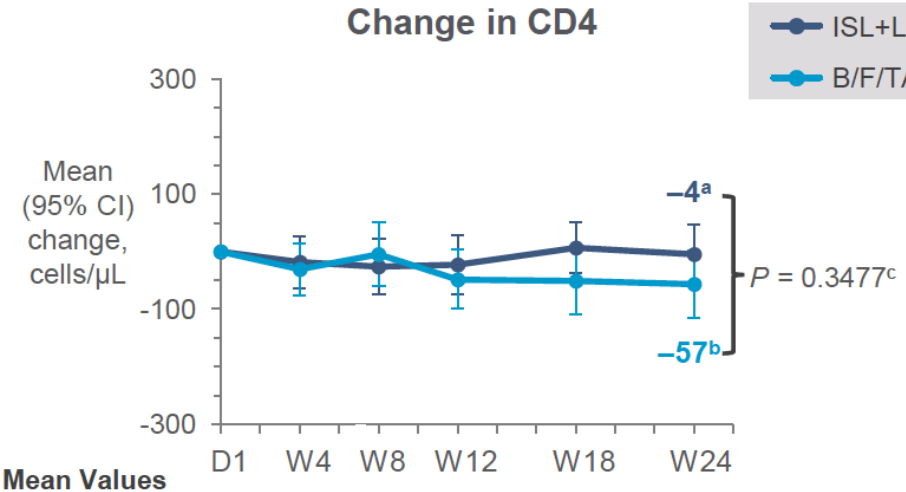
Participants with AEs, n (%)	ISL + LEN (n=52)	B/F/TAF (n=52)
Any AE	40 (76.9)	38 (73.1)
Treatment-related AEs (TRAE)	9 (17.3)	3 (5.8)
Grade 1 and 2 TRAEs	9 (17.3)	3 (5.8)
Occurring in ≥2 ISL + LEN participants		
Dry mouth	2 (3.8)	0
Nausea	2 (3.8)	0
Grade 3 and 4 TRAEs	0	0
Serious AE	3 (5.8)[a]	0
Serious TRAE	0	0
AE leading to study drug discontinuation	2 (3.8)[b]	0
TRAE leading to discontinuation	0	0

[a]Serious AEs included large intestine perforation and renal colic (in the same participant), pneumonia, and neurologic anesthetic complication.
[b]Large intestine perforation and renal colic, n=1; acute hepatitis B infection, n=1.
AE, adverse event; **B/F/TAF**, bictegravir/emtricitabine/tenofovir alafenamide; **ISL**, islatravir; **LEN**, lenacapavir; **TRAE**, treatment-related adverse event

No Grade 3 and 4 laboratory abnormalities were clinically significant, except ALT elevation seen in a participant with acute hepatitis B

CD4 and Absolute Lymphocyte Count Changes Through Week 24

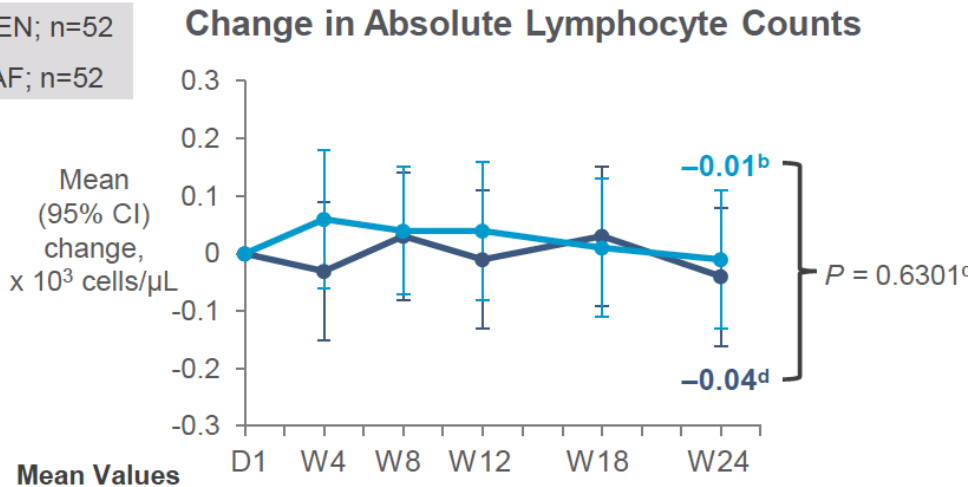
Change in CD4



Mean Values

	D1	W4	W8	W12	W18	W24
ISL + LEN	755	738	729	732	766	755
B/F/TAF	818	787	813	758	767	761

Change in Absolute Lymphocyte Counts



Mean Values

	D1	W4	W8	W12	W18	W24
ISL + LEN	1.94	1.93	1.97	1.94	1.98	1.92
B/F/TAF	1.95	1.97	1.99	1.99	1.97	1.96

- No between-group differences in CD4 and absolute lymphocyte count changes at Week 24
- No participants discontinued due to CD4 or absolute lymphocyte count decreases

[a]n=50. [b]n=50. [c]Least square mean difference. [d]n=49.
B/F/TAF, bictegravir/emtricitabine/tenofovir alafenamide; **CI**, confidence interval; **D**, day; **ISL**, islatravir; **LEN**, lenacapavir; **SD**, standard deviation **W**, Week

Interactive Symposium-09 | Follow Your Heart: Managing Cardiovascular Disease Risk in HIV
4:00 PM - 5:30 PM • Mile High Ballroom 4 CME

Objectives: At the completion of the session, participants will be able to:

- Summarize the findings from the REPRIEVE (Randomized Trial to Prevent Vascular Events in HIV) Trial and the implications for clinical practice
- Identify the potential mechanisms underlying excess cardiovascular risk in people with HIV
- Discuss challenges to the implementation of cardiovascular risk reduction in different clinical settings globally

Target Audience: This session is directed to clinicians and researchers involved in cardiovascular disease prevention and treatment for people with HIV.

Level of Knowledge: It is assumed that the participants are familiar with research on cardiovascular and metabolic complications of HIV infection.

Conveners

Matthew J. Feinstein, *Northwestern University, Chicago, IL, USA*

Franck Boccara, *Sorbonne Universite, Paris, France*


4:00 PM | **Overview of the REPRIEVE Trial**
Steven K. Grinspoon, *Massachusetts General Hospital, Boston, MA, USA*

45 | 4:05 PM | **Sex Differences in Atherosclerotic CVD Risks and Mechanisms: Insights From REPRIEVE**
Markella V. Zanni, *Massachusetts General Hospital, Boston, MA, USA*

46 | 4:25 PM | **Immunomodulation and Cardiovascular Disease: Lessons Learned From HIV**
Priscilla Y. Hsue, *University of California San Francisco, San Francisco, CA, USA*

47 | 4:45 PM | **Implications for Implementing CVD Risk Prevention Strategies for Low- and Middle-Income Countries**
Mpiko Ntsekhe, *University of Cape Town, Cape Town, South Africa*

5:05 PM | **Panel Discussion**

Wednesday

What's New in the Guidelines

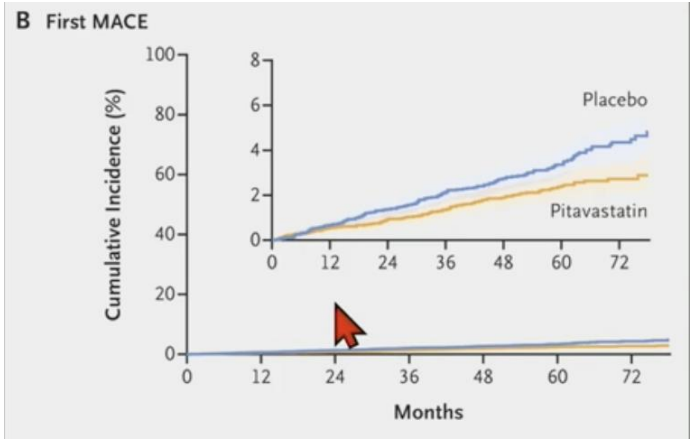
Updated: February 27, 2024
Reviewed: February 27, 2024

For people with HIV who have low-to-intermediate (<20%) 10-year ASCVD risk estimates:

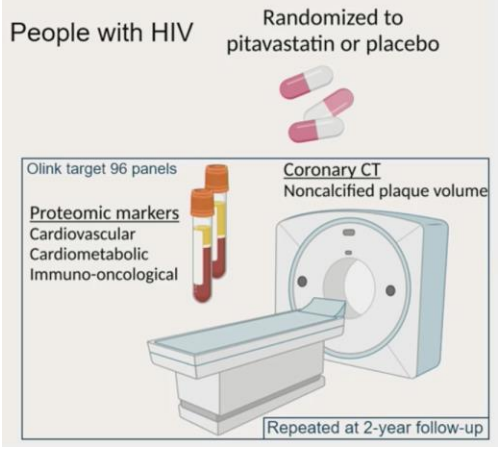
- Age 40–75 years
  - When 10-year ASCVD risk estimates are 5 to <20%, the Panel recommends initiating at least moderate intensity statin therapy **(AI)**.
    - Recommended options for moderate intensity statin therapy[1] include:
      - Pitavastatin 4mg once daily **(AI)**
      - Atorvastatin 20mg once daily **(AII)**
      - Rosuvastatin 10mg once daily **(AII)**
  - When 10-year ASCVD risk estimates are <5%, the Panel favors initiating at least moderate intensity statin therapy **(CI)**. The absolute benefit from statin therapy is modest in this population, therefore the decision to initiate a statin should take into account the presence or absence of HIV-related factors that can increase ASCVD risk.
    - Same options for moderate intensity statin therapy as recommended for 10-year ASCVD risk estimates of 5 to <20% (see above)
- Age <40 years
  - Data are insufficient to recommend for or against statin therapy as primary prevention of ASCVD in people with HIV. In the general population, lifestyle modifications are recommended for people age <40 years, with statin therapy considered only in select populations (see AHA/ACC/Multisociety Guidelines).

https://clinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-arv/whats-new

#6. REPRIEVE PCOLCE (#151)

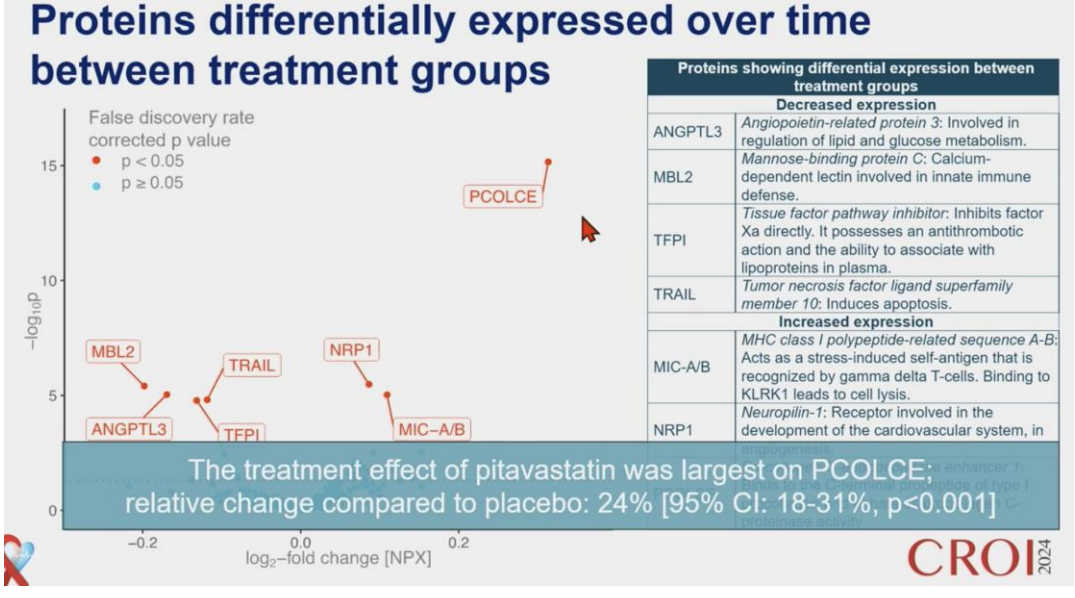


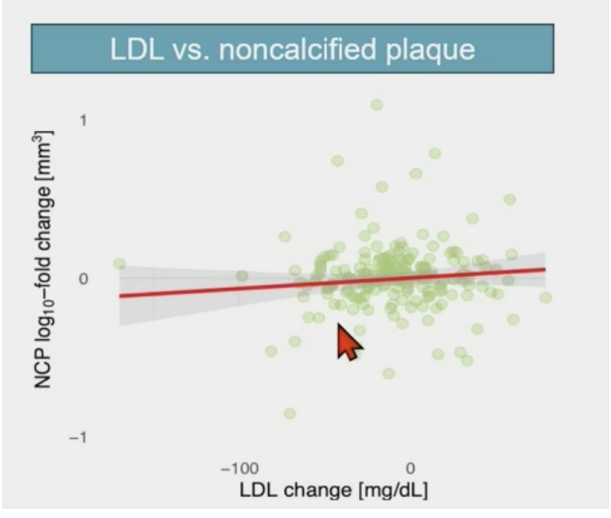
Changes in LDL and biomarkers were not significantly associated with changes in noncalcified plaque volume

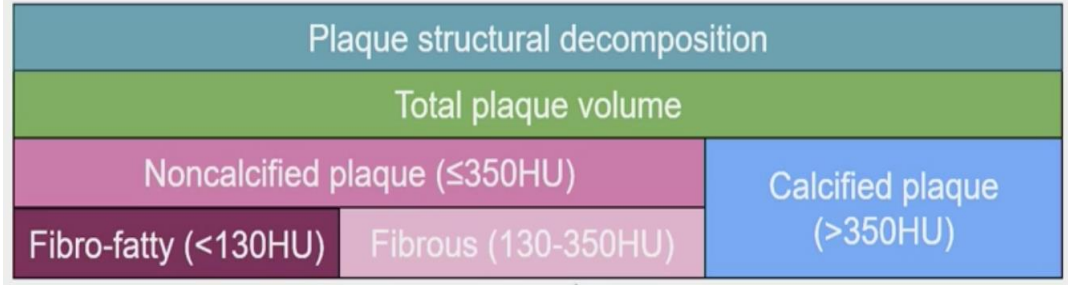


558 individuals passed all criteria for proteomic analysis
272 received Pitavastatin
286 received Placebo

#6. REPRIEVE PCOLCE (#151)







PCOLCE: procollagen C-endopeptidase enhancer 1

Acelera maduración procolágeno, con agregación de calcio en la pared vascular. Estabiliza la placa!

Protein changes vs. noncalcified plaque change

Variable	Univariable regression			Multivariable regression		
	% change in NCP	95% Confidence interval	p	% change in NCP	95% Confidence interval	p
LDL	1.5	[-1.2; 4.3]	0.26	-0.1	[-3.0; 2.9]	0.95
ANGPTL3	-19.8	[-34.0; -2.6]	0.026	2.3	[-20.3; 31.3]	0.86
MBL2	-18.7	[-31.5; -3.5]	0.018	-11.0	[-26.9; 8.4]	0.25
MIC-A/B	-11.1	[-36.2; 23.7]	0.48	-	-	-
NRP1	-30.0	[-53.0; 4.3]	0.08	-	-	-
PCOLCE	-31.9	[-42.9; -18.7]	<0.001	-31.2	[-45.3; -13.4]	0.00
TFPI						
TRAIL						

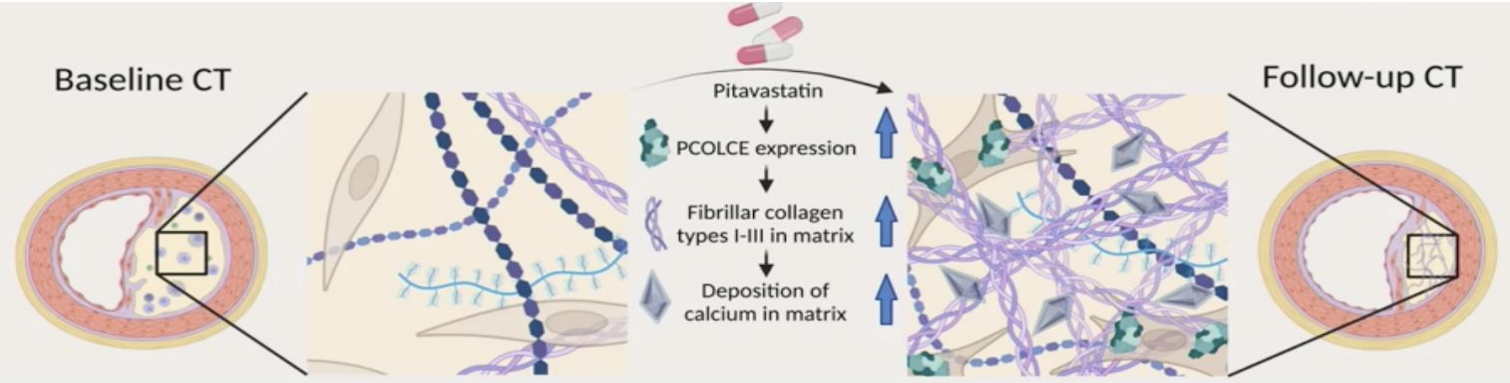
Doubling in PCOLCE expression was associated with a decrease in noncalcified plaque by -31%, [95%CI: -45%; -13%, p=0.002]

Protein changes vs. plaque components changes

Variable	Calcified plaque			Noncalcified plaque					
	Calcified plaque volume (>350HU)			Fibro-fatty plaque volume (<130HU)			Fibrous plaque volume (130-350HU)		
	% change	95% Confidence interval	p	% change	95% Confidence interval	p	% change	95% Confidence interval	p
LDL	-3.7	[-9.5; 2.3]	0.22	6.1	[0.5; 11.8]	0.032	0.4	[-1.9; 2.6]	0.74
ANGPTL3	-1.2	[-33.8; 47.5]	0.95	-28.0	[-52.3; 8.9]	0.12	-20.7	[-32.3; -7.0]	0.004
MBL2	7.3	[-25.1; 53.6]	0.70	-25.9	[-48.5; 6.8]	0.11	-13.5	[-25.0; -0.4]	0.044
MIC-A/B	6.7	[-46.4; 112.3]	0.85	-25.7	[-63.0; 49.4]	0.40	-3.3	[-26.4; 27.1]	0.81
NRP1	13.8	[-50.1; 159.5]	0.76	-46.6	[-77.0; 24.1]	0.14	-13.9	[-38.1; 19.8]	0.37
PCOLCE	34.4	[-7.9; 96.2]	0.12	-38.5	[-58.1; -9.7]	0.013	-22.2	[-32.9; -9.7]	0.001
TFPI	77.3	[-0.4; 215.4]	0.051	-0.6	[-43.8; 75.8]	0.98	-8.1	[-26.4; 14.9]	0.46
TRAIL	9.6	[-40.2; 100.7]	0.77	18.2	[-37.7; 124.1]	0.61	-9.9	[-29.8; 15.6]	0.41

Increased PCOLCE expression was associated with a shift in plaque components promoting plaque stabilization

84% of the total effect of statins on NCP volume change was mediated through PCOLCE, independent of LDL change or achieved LDL




REPRIEVE

Themed Discussion-02 | Is the Weight Over: GLP-1 Receptor Agonists Are Here

1:30 PM - 2:30 PM • **Mile High Ballroom 1-2-3**

Themed Discussion Leader

Todd T. Brown, *The Johns Hopkins University, Baltimore, MD, USA*

Session Overview

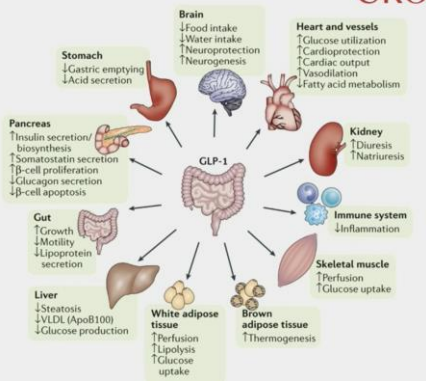
797
1:35 PM
Impact of Semaglutide on Weight Change Among People With HIV: A Stratified Analysis by Baseline BMI
Lara Haidar, **Heidi M. Crane**, Robin M. Nance, Allison R. Webel, Geetanjali Chander, Bridget Whitney, Amanda Willig, Lyndsey S. Mixson, Alekhya Lavu, Laila Aboulatta, Mindy Dai, Andrew Hahn, Edward Cachay, Lydia N. Drumright, Sherif Eltonsy

798
1:40 PM
Effects of Semaglutide on Inflammation and Immune Activation in HIV-Associated Lipohypertrophy
Allison Ross Eckard, Qian Wu, Abdus Sattar, Nicholas Funderburg, Kate Ailstock, Danielle Labbato, Grace A. McComsey

799
1:45 PM
NIS
Effects of Semaglutide on Muscle Structure and Function in the SLIM Liver Study
Grace L. Ditzenberger, Jordan E. Lake, Douglas W. Kitch, Amy Kantor, Raja Muthupillai, Pablo Belaunzaran-Zamudio, Todd T. Brown, Kathleen Corey, Alan Landay, Anchalee Avihingsanon, Fred R. Sattler, Kristine M. Erlandson

The Reign of Metformin as THE First Line Drug 2007-2023

Multiple Sites of Action of GLP-1 RA



Muskiet, NatureReviewsNephrology, 2017

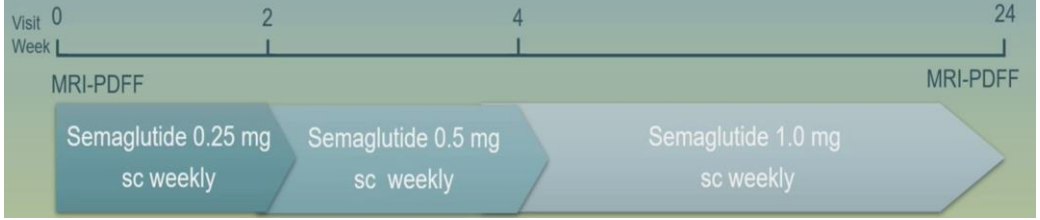
#7. SLIM LIVER (#159)

MASLD: Metabolic Dysfunction-Associated Steatotic Liver Disease
ACTG A5371: SLIM LIVER Study. Fase IIb, single arm, open label
Semaglutide: GLP-1 (glucagon-like peptide-1) receptor agonist
MRI-PDFF: MRI proton density fat fraction
IHTG: IntraHepatic TriGlyceride content

Inclusion Criteria

- Adult PWH on suppressive ART
- Elevated minimum waist circumference
  -WC≥95 cm ♂ / WC 94≥cm ♀
- Insulin resistance or pre-diabetes
- ≥5% IHTG on MRI-PDFF

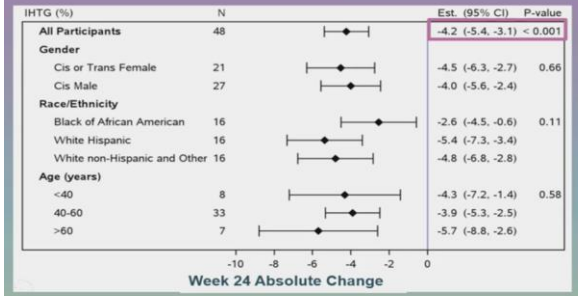
- **51 enrolled, 49 completed per-protocol**
- **Reasons for exclusion from analysis:**
  -Nausea Grade 3 (n=1)
  -Withdrawal of Informed Consent (n=1)

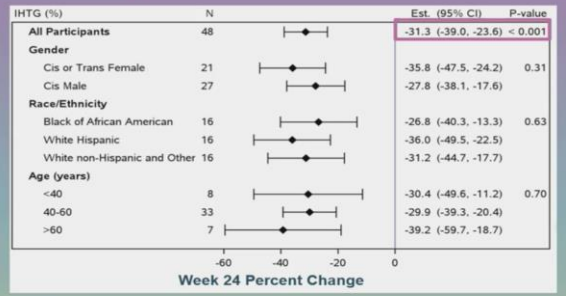


Baseline Characteristics*

	N=49
Age	52 (42, 58)
Gender	
Cis woman	18 (37%)
Trans woman	3 (6%)
Cis man	28 (57%)
Race/ethnicity	
White non-Hispanic	13 (27%)
Black or African American*	16 (33%)
Hispanic	19 (39%)
American Indian or Alaskan Native	1 (2%)
BMI (kg/m^2)	35 (31, 39)
Waist circumference (cm)	114 (107, 124)
$CD4^+$ T lymphocyte count ($cells/mm^3$)	701 (586, 869)
ART regimen	
PI	2 (4%)
NNRTI	10 (22%)
INSTI	40 (82%)
History of hepatitis C virus	4 (8%)

Primary Outcome: Changes in IHTG





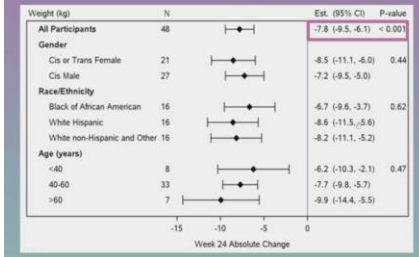
- Overall clinically significant reductions in IHTG
- 58% of participants had a ≥30% relative reduction in IHTG
- 29% of participants had complete MASLD resolution (absolute IHTG <5%)
- Greater reductions in IHTG were observed among*:
  - Women
  - Hispanic and non-Hispanic white participants
  - Participants with age >60 years

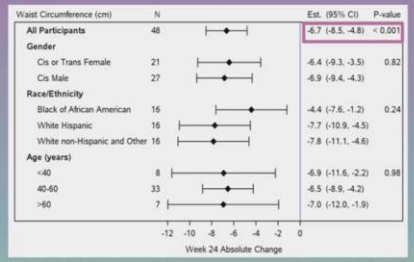
CROI 2024

	24-week Change*	P value
Glucose (mg/dL)	-9.9 (-14.7, -5.1)	<0.001
HOMA-IR	-1.5 (-2.3, -0.8)	<0.001
Hemoglobin A1c (%)	-0.3 (-0.3, -0.2)	<0.001
Total Cholesterol (mg/dL)	-4.0 (-10.8, 2.9)	0.25
LDL Cholesterol (mg/dL)	-1.0 (-7.1, 5.1)	0.73
HDL Cholesterol (mg/dL)	2.0 (-0.02, 4.1)	0.053
Triglycerides (mg/dL)	-26.8 (-46.0, -7.5)	0.007

*Mean (95% confidence interval)

Anthropometric Changes



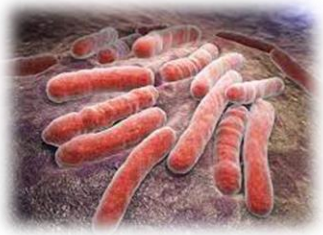


- Mean weight loss was 7.8 kg (17 lbs) over 24 weeks, with greater losses among*
  - Women
  - Hispanic and non-Hispanic white participants
  - Persons ≥40 years of age
- IHTG improvements correlated with weight loss (r=0.54, p<0.0001)
- Amongst persons who lost >2.27 kg (5 lbs) on semaglutide (n=38), the mean absolute and relative changes in IHTG were -5.1% and -39.0%, respectively

CROI 2024

Plenary-02 | Tuesday Plenary Session
8:30 AM - 9:30 AM • Bellco Theatre

CME



28 | Accelerating Tuberculosis Elimination: Short-Course Prevention and Treatment

Vidya Mave, *Center for Infectious Diseases in India, Pune, India*

#8. INSIGHT Study (#211LB)

INSTI's FOR THE MANAGEMENT OF HIV-ASSOCIATED TB (INSIGHT STUDY)

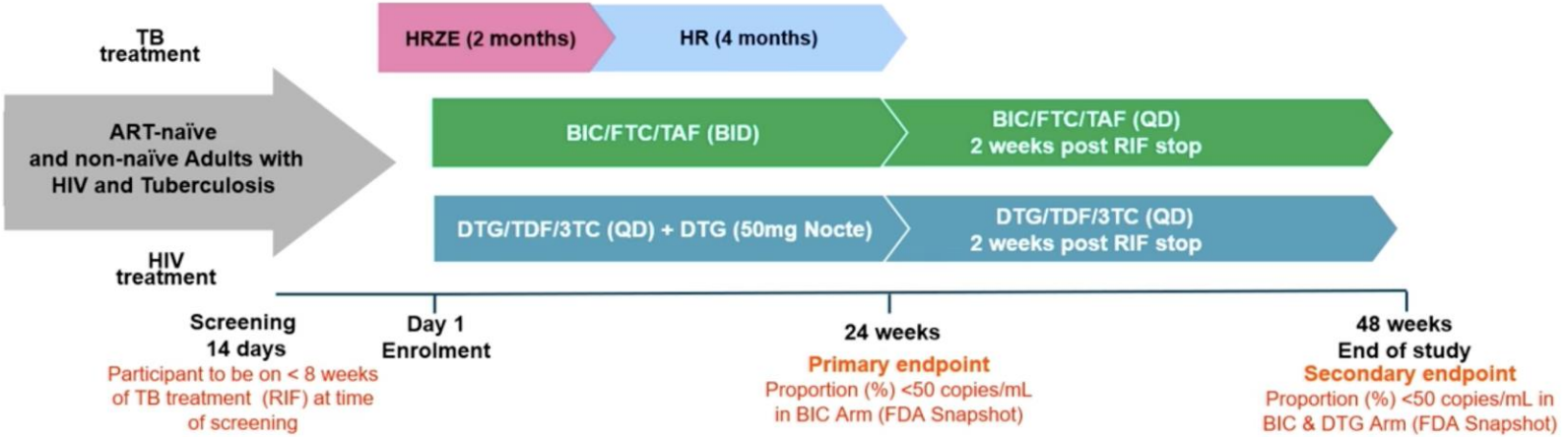
EFFICACY, SAFETY, AND PK OF BIC/FTC/TAF IN ADULTS WITH HIV AND TUBERCULOSIS ON RIFAMPICIN AT WEEK 24

- ***CAPRISA 093 INSIGHT study is being conducted to assess the efficacy, safety & PK of twice daily, BIC/FTC/TAF in adults with HIV and TB receiving a rifampicin-based TB regimen***

- In a healthy volunteer study*, rifampicin (RIF) reduced BIC drug concentrations (AUC/C_{trough}) by ~ 60%/80%, however,
  - the C_{trough} remained ~ 3-fold above inhibitory quotient IQ1 of 0.162 mg/L
  - the long dissociation half-life of BIC from HIV-1 integrase enzyme (163hrs ~7 days)***
    - may mitigate against potential breakthrough viraemia in any small minority of participants who have low drug exposures (below IQ1) for short periods of time

INSIGHT Study Design

Phase IIb open-label, non-comparative, randomized-controlled trial



Inclusion criteria

- ART-naïve OR ART non-naïve Adults with HIV (no exposure to ART at least ≥ 3 months at the time of enrolment)
- CD4+ ≥ 50 cells/µl; Females on contraception, HBsAg -ve
- Confirmed RIF-susceptible TB and/or on first-line RIF-based TB treatment (not > 8 weeks at the time of enrolment)
- eGFR ≥ 60 mL/min/1.73m^2, ALT ≤3 ULN, Total bilirubin ≤2.5 ULN
- Hb ≥ 7.0 g/dL/ ♀ ≥6.5g/dL, Platelet ≥ 50,000/mm^3, ANC ≥650/mm^3

Total Enrolled = 122
2:1 ratio
BIC (n=80) : DTG (n=42)

Demographic and Baseline Characteristics

	BIC (n=80)	DTG (n=42)	Total (N=122)
Age, median (range), years	35 (19-56)	35 (22-60)	35 (19-60)
Female, n (%)	25 (31)	18 (43)	43 (35)
Black, n (%)	80 (100)	42 (100)	122 (100)
HIV-1 RNA, median (Q1, Q3) copies/mL*	75649 (22784, 391299)	73735 (21242, 544830)	74692 (21475, 393703)
HIV-1 RNA ≥ 100000, n (%)	32 (42)	17 (41)	49 (42)
CD4+ cell count, median (Q1, Q3), cells/mm^3	172 (108, 352)	139 (97, 237)	161 (101, 311)
50 - 100 cells/mm^3, n (%)	18 (23)	13 (31)	31 (25)
101 - 199 cells/mm^3, n (%)	26 (33)	16 (38)	42 (34)
≥ 200 cells/mm^3, n (%)	36 (45)	13 (31)	49 (40)
Previous ART exposure, n (%)			
ART non-naïve	23 (29)	16 (38)	39 (32)
Time from start of TB treatment (RIF) to randomization day, median (range), days	15 (7-48)	16 (0-35)	15 (0-48)
Karnofsky score, n (%)			
70	21 (26)	10 (24)	31 (25)
80 - 100	59 (74)	32 (76)	91 (75)
WHO Stage 4, n (%)	7 (9)	0 (0)	7 (6)

Primary Endpoint: Viral Suppression at Week 24

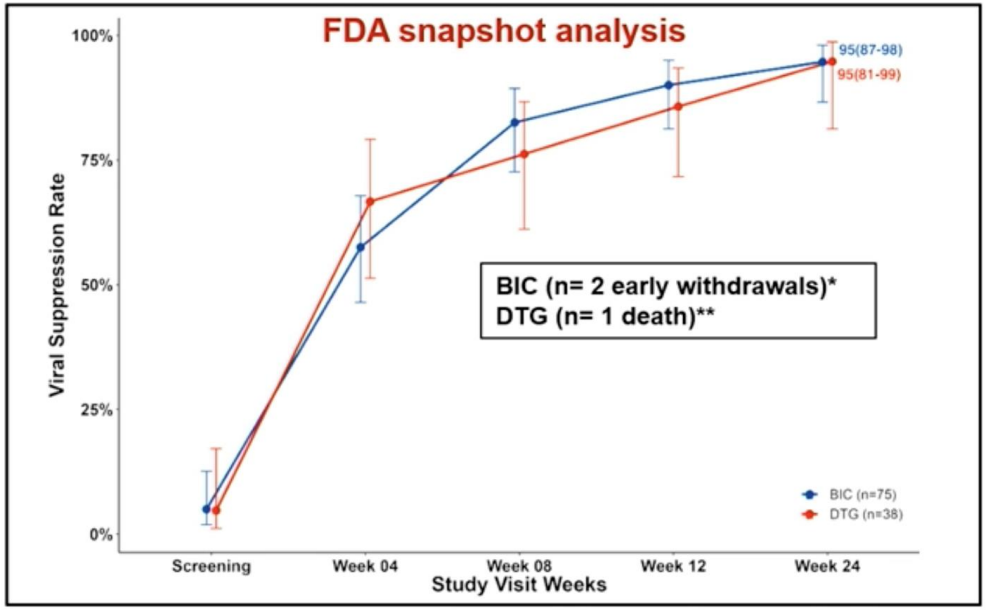


Figure 1: Viral Suppression Rate (FDA snapshot analysis) over study visits by Arm with two-sided 95% Confidence Interval

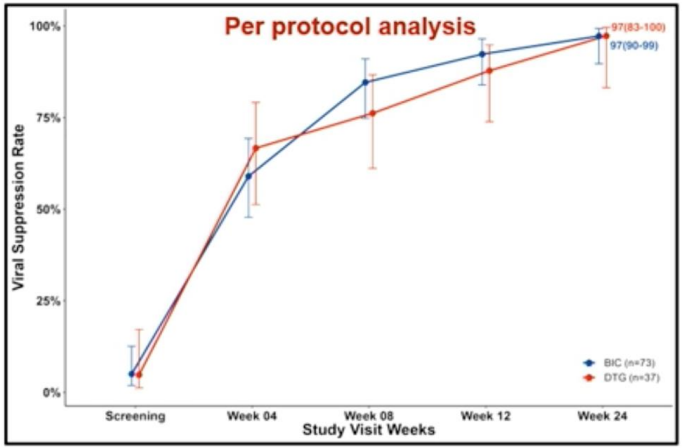


Figure 2: Viral Suppression Rate (per protocol analysis) over study visits by Arm with two-sided 95% Confidence Interval

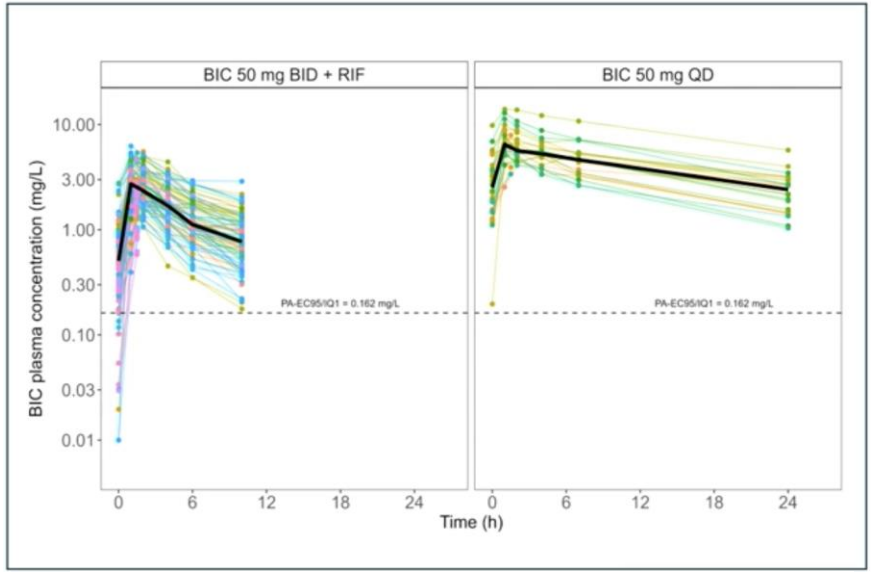
- **Median CD4+ cell count** (Q1, Q3) cells/mm^3 at Week 24
  - BIC: 259 (213, 505)
  - DTG: 231 (170, 311)
- **Median change in CD4+ cell count** (Q1, Q3) cells/mm^3 at Week 24
  - BIC: 96 (35, 137)
  - DTG: 69 (27, 122)

Viral suppression rates were high and similar in participants receiving BIC/FTC/TAF vs DTG/3TC/TDF

Summary of Adverse Events

n (%)	BIC (n=80)	DTG (n=42)
Any AE	80 (100)	42 (100)
Most frequently occurring AEs in either group		
Increased Amylase	44 (55)	23 (55)
Arthralgia	31 (39)	18 (43)
Peripheral neuropathy	21 (26)	21 (50)
Hyperglycaemia	28 (35)	14 (33)
Proteinuria	26 (33)	13 (31)
Anaemia	23 (29)	14 (33)
Decreased creatinine clearance	22 (28)	13 (31)
Any serious AE (SAE)	**9 (11)**	**3 (7)**
Any Grade 3 and 4 AEs		
Grade 3	30 (38)	15 (36)
Grade 4	6 (8)	6 (14)
Grade 3 and 4 Liver Chemistry Abnormalities		
Grade 3	3 (4)	3 (7)
Grade 4	1 (1)	0 (0)

NO AE's leading to treatment discontinuations, withdrawals or drug switches



***BIC Trough Concentration & AUC during and post-TB treatment**

Trough concentration (Ctau) and AUC 0-24:
BIC 50 mg BID **with RIF**

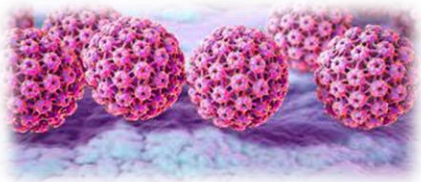
Time	n	BIC C_{tau} (mg/L) Geometric mean (CV%)	AUC 0-24 (mg*h/L) Geometric mean (CV%)
Weeks 4 and 12	75	0.397 (73.4%)	30.9 (42.2%)

Trough concentration (Ctau) and AUC 0-24:
BIC 50 mg QD **without RIF**

Time	n	BIC C_{tau} (mg/L) Geometric mean (CV%)	AUC 0-24 (mg*h/L) Geometric mean (CV%)
Week 32	22	2.29 (45.1%)	94.9 (35.9%)

Themed Discussion-07 | Anal Cancer Screening and Pathogenesis

1:30 PM - 2:30 PM • Four Seasons Ballroom 2-3



Themed Discussion Leader

Timothy J. Wilkin, *Weill Cornell Medicine, New York, NY, USA*

Session Overview

760 1:35 PM
Evaluation of the Performance of Different High-Resolution Anoscopy Triage Strategies in MSM LWH
Eugenio Nelson Cavallari, Federica Alessi, Chiara Eberspacher, Marco Ridolfi, Ilyass El Abboubi, Alessandra Latini, Angelina Pernazza, Daniela Bosco, Domenico Mascagni, Claudio Maria Mastroianni, Gabriella D'Ettorre

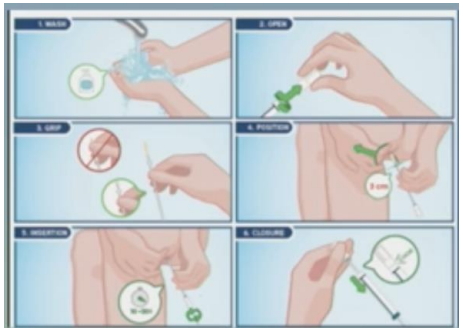
761 1:40 PM
Anal Self-Sampling Is Suitable for Anal Cancer Screening Among Men Who Have Sex With Men in Togo
Valentine M. Ferré, Arnold Sadio, Romane Guilbaud, Meryem Zaidi, Mawussé K. Attiso, Mounerou Salou, Laurent Abramowitz, Mélanie Bertine, Amivi P. Amenyah-Ehlan, Ephram Mensah, Claver Anoumou Dagnra, Jade Ghosn, Diane Descamps, Didier Koumavi Ekouevi, **Charlotte Charpentier**

759 1:45 PM
Clinical Predictors and Outcomes of Anal Cancer for People With HIV in an Inception Cohort
Edward Cachay, Tari Gilbert, Huifang Qin, Christopher Mathews

762 1:50 PM
NIS
Long-Term ART Is Not Associated With Reduced Anogenital Cancer Risk: A Case-Cohort Study
Maanasa Mendu, Taolo Ntloedibe, Memory Bvochora-Nsingo, Sebathu Chiyapo, Kutlo Manyake, Isaac Nkele, Rebecca Luckett, Tendani Gaolathe, Joseph M. Makhema, Peter Vuylsteke, Shahin Lockman, Scott Dryden-Peterson

#9. ASS (Anal Self Sampling) Study (#761)

ANRS-MIE 12400 DEPIST-H cohort
Togo. MSM VIH +/-
ASS: Dacron
ASP: cytobrush



- **188 MSM** came to the M12 visit (107 living with HIV, median age = 23 y)
- All participants (**99%**) **found the ASS procedure easy** to carry out and **60% would prefer ASS to ASP** at next visit while 19% would have no preference
- **6% of ASS samples were uninterpretable** compared to 4% for ASP
- Albumin quantification reports a higher cellularity in ASS than ASP (p<0.0001), related to a lower volume of discharge

CONCORDANCE IN HPV TYPING BETWEEN ASS AND ASP

- At least one hrHPV was detected in 83% and 77% of ASS and ASP
- HPV16 was detected in 28% and 26% of ASS and ASP (all discordant samples had low HPV16 VL)

testate
Proves online
de VIH i altres ITS
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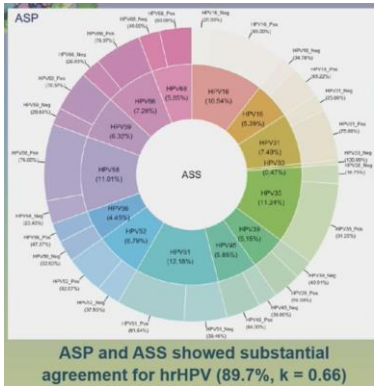
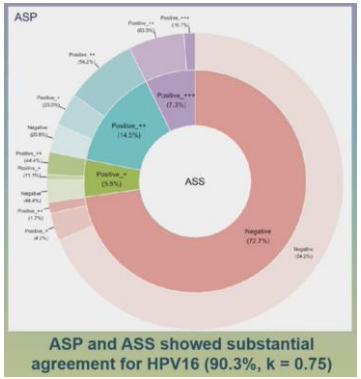
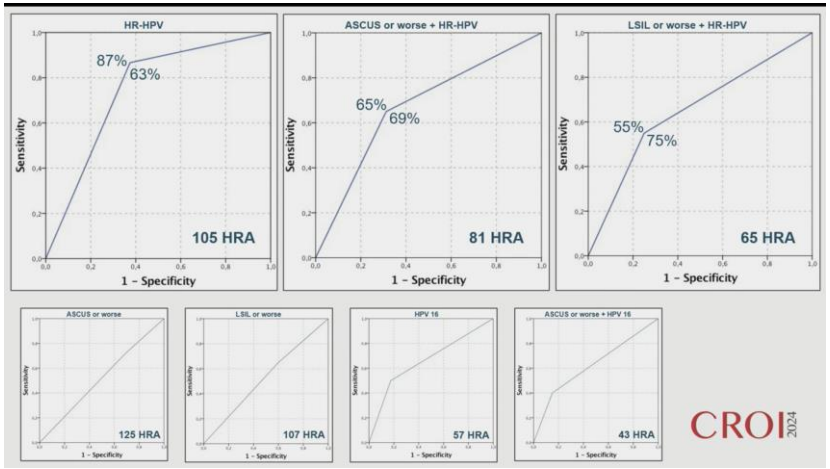


ASP and ASS showed substantial agreement for hrHPV (89.7%, k = 0.66)



ASP and ASS showed substantial agreement for HPV16 (90.3%, k = 0.75)

#9. ASS (Anal Self Sampling) Study (#761)



Cavallari N #761

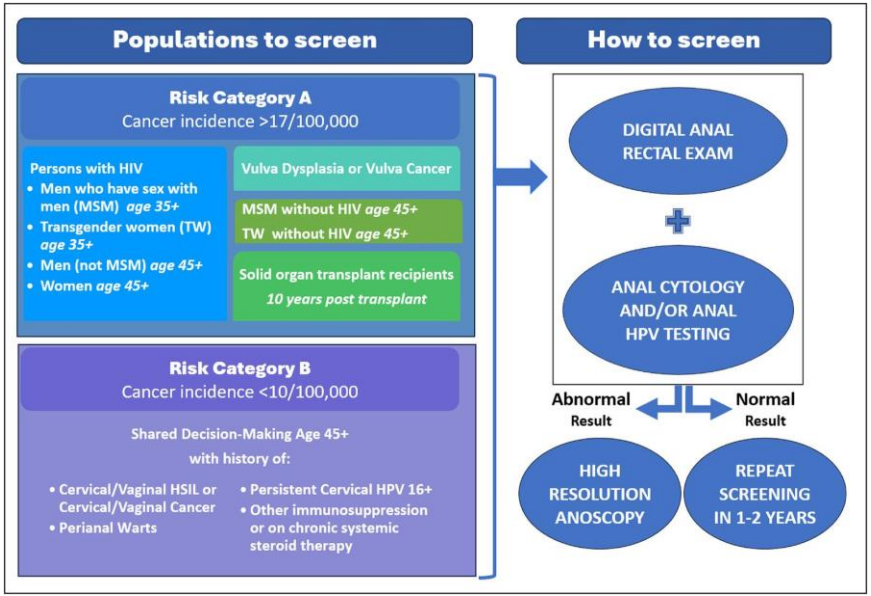
DOI: 10.1002/ijc.34850

SPECIAL REPORT

IJC INTERNATIONAL JOURNAL of CANCER

International Anal Neoplasia Society's consensus guidelines for anal cancer screening

Stier E et al. Int J Cancer. 2024; 1–9.



Recomendaciones de vacunación frente a VPH. Revisión de la estrategia de una dosis.

Ponencia de Programa y Registro de Vacunaciones 2023

15 febrero 2024

Por lo tanto, las recomendaciones de vacunación frente a VPH quedarían como sigue:

- Vacunación sistemática de niñas y niños a los 12 años. Pauta de 2 dosis separadas al menos 6 meses.
- Captación de las mujeres no vacunadas hasta los 18 años y de varones no vacunados a partir de la fecha de introducción en el calendario de vacunación. Pauta de 2 dosis separadas al menos 6 meses.
- Personas no vacunadas con determinadas situaciones de riesgo. Pauta de 2 dosis separadas al menos 6 meses:
    - Hombres que tienen relaciones sexuales con hombres, hasta los 25 años (incluidos).
    - Situación de prostitución, hasta los 25 años (incluidos).
- En personas con inmunosupresión y hasta los 45 años (incluidos), se recomienda siempre una pauta de 3 dosis (0, 1-2 y 6 meses), independientemente de la edad de comienzo de la vacunación incluyendo:
    - Síndrome WHIM (IDP): vacuna que cubra tipos 6 y 11.
    - Infección por VIH.
    - Trasplante de órgano sólido o de progenitores hematopoyéticos.
- Mujeres, independientemente de la edad, que hayan recibido cualquier tratamiento de lesión intraepitelial de alto grado en cérvix (CIN2+). Pauta de 3 dosis (0, 1-2 y 6 meses).

Interactive Symposium-06 | Roundtable on DoxyPEP: Ready or Not…

4:00 PM - 5:30 PM • Mile High Ballroom 1-2-3

CME

35 | 4:00 PM | **Introduction to DoxyPEP: Understanding the Issues**
Chase A. Cannon, *University of Washington, Seattle, WA, USA*

36 | 4:20 PM | **DoxyPEP: Should We Worry About Antimicrobial Resistance?**
Beatrice B. S. L. Bercot, *St Louis Hospital, Paris, France*

37 | 4:40 PM | **Implementation of DoxyPEP: Challenges and Opportunities**
Stephanie E. Cohen, *San Francisco Department of Public Health, San Francisco, CA, USA*

Oral Abstract Session-04 | Game Changers in Prevention of HIV and Sexually Transmitted Infections

10:00 AM - 12:00 PM • Mile High Ballroom 4

Moderators

Ken Ho, *University of Pittsburgh, Pittsburgh, PA, USA*

Sharon Mannheimer, *Harlem Hospital Center, New York, NY, USA*

Introductions (Part 1)

123 10:05 AM **Phase I Safety, Tolerability, and Pharmacokinetics of Tenofovir Alafenamide Implants in African Women**
Tanuja N. Gengiah, Quarraisha Abdool Karim, Lara Lewis, Ishana Harkoo, Leila E. Mansoor, Johara Khan, Zainab Kharva, Nqobile Myeni, Natasha Samsunder, Marc M. Baum, John A. Moss, Catherine Hankins, Bruno Pozzetto, James F. Rooney, Salim S. Abdool Karim

124 10:13 AM **Final Results of ANRS 174 DOXYVAC: A Randomized Trial to Prevent STI in MSM on PrEP**
Jean-Michel G. Molina, Béatrice Berçot, Lambert Assoumou, Michele Algarte-Genin, Emma Rubenstein, Gilles Pialoux, Christine Katlama, Laure Surgers, Cecile Bebear, Nicolas Dupin, Jean-Paul Viard, Juliette Pavie, Claudine Duvivier, Jade Ghosn, Dominique Costagliola

125 10:21 AM **Sustained Reduction of Bacterial STIs During the DoxyPEP Study Open-Label Extension**
Annie Luetkemeyer, Deborah Donnell, Stephanie Cohen, Julia C. Dombrowski, Cole Grabow, Clare E. Brown, Chase Cannon, Eric Vittinghoff, Hyman Scott, Edwin Charlebois, Susan P. Buchbinder, Diane Havlir, Olusegun Soge, Connie Celum, for DoxyPEP Study Team

126 10:29 AM LB **Doxycycline PEP: High Uptake and Significant Decline in STIs After Clinical Implementation**
Hyman Scott, Jorge Roman, Matthew A. Spinelli, Jason Bena, Thiago S. Torres, Susan P. Buchbinder

127 11:00 AM **Doxy-PEP Associated With Declines in Chlamydia and Syphilis in MSM and Trans Women in San Francisco**
Madeline Sankaran, David V. Glidden, Robert P. Kohn, Courtney Liebi, Thiago S. Torres, Susan P. Buchbinder, Annie Luetkemeyer, Monica Gandhi, Diane Havlir, Janet Q. Nguyen, Hyman Scott, Jorge Roman, Oliver Bacon, Trang Q. Nguyen, Stephanie E. Cohen

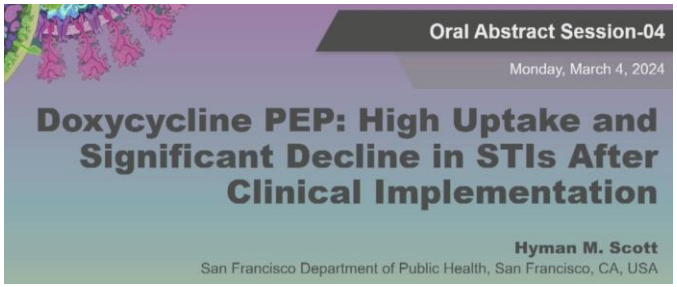
128 11:08 AM **Site-Based HIV Testing Assay Performance for Cabotegravir and TDF-FTC PrEP Failure in HPTN 083**
Raphael J. Landovitz, Emily Voldal, Brett Hanscom, Susan H. Eshleman, Estelle Piwowar-Manning, Philip Sullivan, Marybeth McCauley, Lydia Soto-Torres, James F. Rooney, Alex R. Rinehart, Myron S. Cohen, Mina Hosseinipour, Sinead Delany-Moretlwe, Beatriz Grinsztejn, for the HPTN 083 study team

129 11:16 AM **Safety and Pharmacokinetics of MK-8527, a Novel nRTTI, in Adults Without HIV**
Gillian Gillespie, Russ P. Carstens, Xiaowei Zang, Ryan Vargo, Yash Kapoor, Arinjita Bhattacharyya, Jean-Francois Denef, Tom Reynders, Frédéric Vanhoutte, Sylvie Rottey, Randolph P. Matthews, S. Aubrey . Stoch, Marian Iwamoto

130 11:24 AM **Phase I Study of Cabotegravir Long-Acting Injectable Formulations Supports ≥4-Monthly Dose Interval**
Kelong Han, Ronald D'Amico, Jörg Sievers, Darin Brimhall, Brian Spears, Dale Taylor, David Dorey, Paul Benn, Lisa Morgan, Randa Hareedy, Gilda Bontempo, Max Lataillade, William Spreen

131 11:32 AM LB **Cabotegravir Maintains Protective Efficacy in the Setting of Bacterial STIs: HPTN 083**
Meredith Clement, Brett Hanscom, Daniel Haines, Jose A. Bazan, Nuntisa Chotirosniramit, Sharon Mannheimer, Kenneth H. Mayer, Mayara Secco Torres da Silva, Lydia Soto-Torres, Alex R. Rinehart, James F. Rooney, Marybeth McCauley, Beatriz Grinsztejn, Raphael J. Landovitz, for the HPTN 083 Study Team

#10. DOXY-PEP IMPLEMENTACIÓN FRISCO (#126LB)



SFDPH Recommended DoxyPEP in 10/2022

POPULATION HEALTH DIVISION
SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH

Health Update

Doxycycline Post-Exposure Prophylaxis Reduces Incidence of Sexually Transmitted Infections

October 20, 2022

Magnet Clinic @ Strut

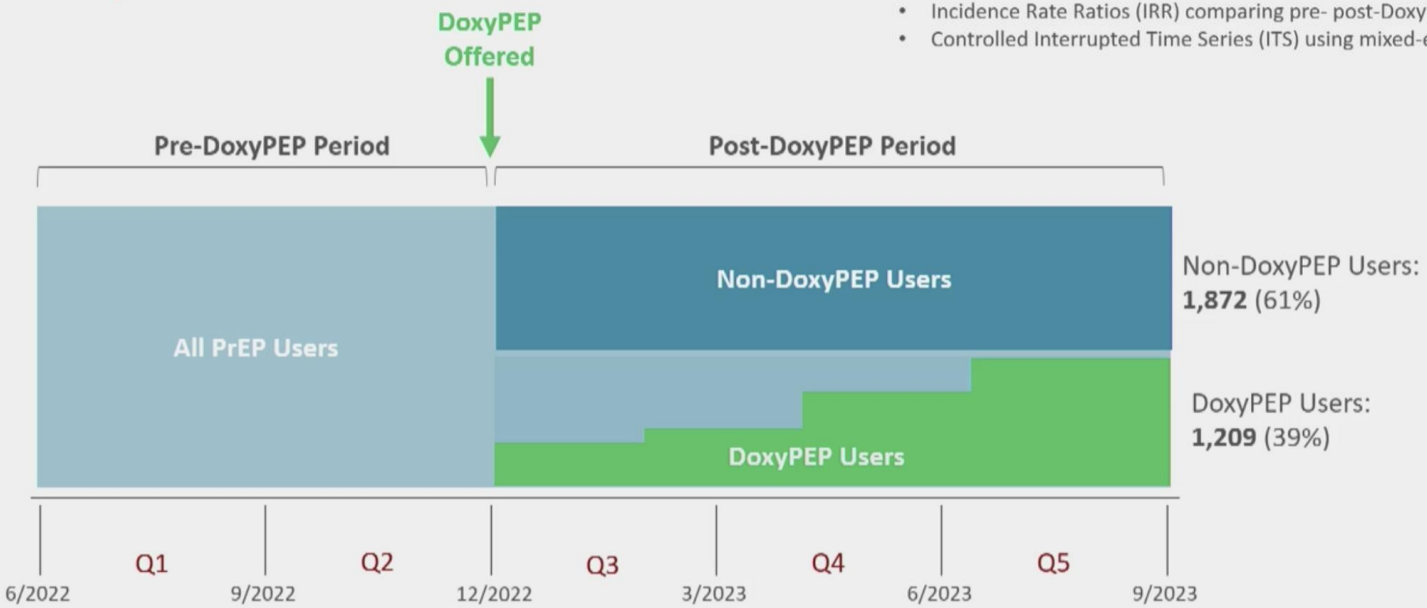
- Large sexual health clinic located in the Castro Neighborhood.
  - >8,000 clients seen annually for sexual health services
  - ~3,000 active PrEP users
- DoxyPEP rollout started in November 2022.

- **Planned evaluation of STI incidence among PrEP users following DoxyPEP implementation.**

Population and Methods

- Study Population: All active PrEP clients from 6/2022 through 9/2023 were included in this analysis.
  - DoxyPEP was offered to all PrEP clients at routine visits starting on 11/30/2022
- Two exclusive cohorts:
  - DoxyPEP: Clients who started DoxyPEP at any time after 11/30/2022
  - Non-DoxyPEP: Clients who never started DoxyPEP during the study period
- STI Incidence was evaluated per quarter:
  - Pre-DoxyPEP Period: 6/2022 through 11/29/2022
  - Post-DoxyPEP Period: 30 days after DoxyPEP initiation (among DoxyPEP users).
- Analysis:
  - Incidence Rate Ratios (IRR) comparing pre- post-DoxyPEP among DoxyPEP users, and
  - Controlled Interrupted Time Series (ITS) using mixed-effects Poisson regression

DoxyPEP Timeline

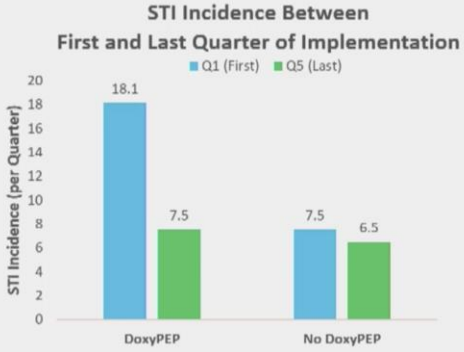


Race /Ethnicity	Total PrEP Clients N=3,081 n	DoxyPEP Uptake n=1,209 %
American Indian or Alaska Native	9	56%
Asian	509	37%
Black or African American	126	37%
Hispanic or Latinx	723	43%
Multi-Racial	408	41%
Native Hawaiian or Pacific Islander	16	25%
White	1,095	37%
Declined/Other/Unknown	195	45%

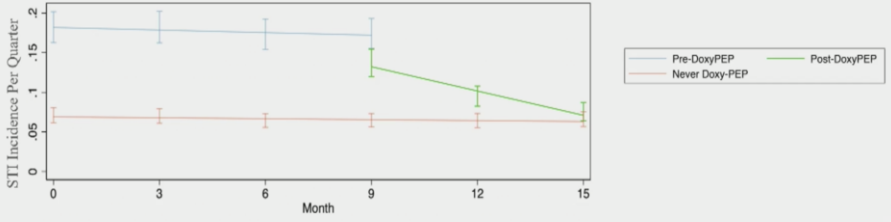
Age (years)	Total PrEP Clients N=3,081 n	DoxyPEP Uptake n=1,209 %
18-24	223	38%
25-29	636	40%
30-39	1,299	43%
40-49	535	36%
50-59	256	34%
60+	132	27%

Gender Identity	Total PrEP Clients N=3,081 n	DoxyPEP Uptake n=1,209 %
Cisgender man	2,763	39%
Cisgender woman	14	0%
Transgender woman	77	42%
Transgender man	32	25%
Non-binary	188	44%
Declined/Other/Unknown	7	57%

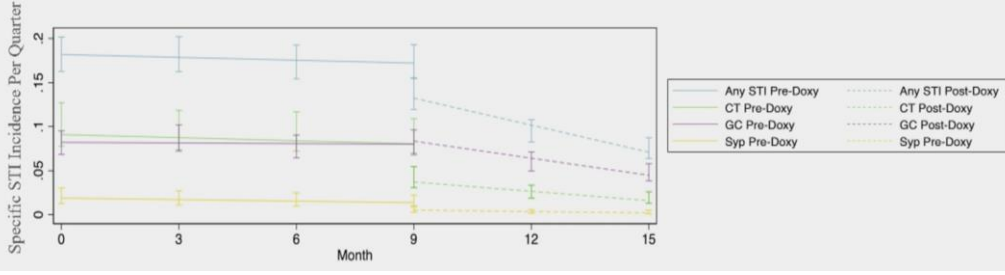
STI Incidence among DoxyPEP Users (Pre-Post Analysis)



	IRR	95% CI	p-value
Any STI	0.42	0.24 - 0.74	0.003
Chlamydia	0.33	0.23 - 0.46	<0.001
Syphilis	0.22	0.09 - 0.54	0.001
Gonorrhea	0.89	0.69 - 1.15	0.383



ITS: Any STI among DoxyPEP Users: 0.67, 95% CI: 0.46-0.96; p=0.032



GEITS: Borrador "Documento de Posicionamiento sobre el uso profiláctico de doxiciclina para prevenir las ITS (DOXI-PEP) de la SEIMC a través de los Grupos de Estudio GEITS, GeSIDA y GEMARA", revisión y envío de comentarios

S noticias-seimc <noticias-seimc-bounces@seimc.org> en nom de: SEIMC <listacorreo@

Per a: listacorreo@seimc.org Dj. 14/3/2024 12:05

DOCUMENTO DE POSICIONAMIENTO
SOBRE EL USO PROFILÁCTICO DE DOXICICLINA PARA PREVENIR LAS ITS (DOXI-PEP)
DE LA SOCIEDAD ESPAÑOLA DE ENFERMEDADES INFECCIOSAS Y MICROBIOLOGÍA CLÍNICA (SEIMC)
A TRAVÉS DEL GRUPO DE ESTUDIO EN INFECCIONES DE TRANSMISIÓN SEXUAL (GEITS), DEL GRUPO DE ESTUDIO DEL SIDA (GESIDA) Y DEL GRUPO DE ESTUDIO DE LOS MECANISMOS DE ACCIÓN Y DE LA RESISTENCIA A LOS ANTIMICROBIANOS (GEMARA)

Marzo, 2024

Así, en base a los resultados publicados hasta la fecha, los grupos de estudio de SEIMC firmantes de este documento de posicionamiento (GEITS, GeSIDA y GEMARA) consideramos que:

1. Hasta el momento, la doxiciclina no está aprobada para su uso en la prevención de las ITS; por lo tanto, su uso en este contexto se considera fuera de indicación.

2. La prescripción de Doxi-PEP debe ser considerada de forma individualizada y no generalizada.

3. La prescripción de la Doxi-PEP se debe considerar únicamente en HSH o MTG que tienen sexo con hombres y que han presentado ITS bacterianas en el último año.

4. La toma de Doxi-PEP (200mg/día) debe hacerse lo antes posible tras un contacto sexual oral, anal o vaginal sin preservativo, idealmente en las primeras 24 horas, y nunca después de las 72 horas.

5. La decisión sobre la prescripción de la Doxi-PEP debe ser compartida con el paciente tras informarle de que su uso para la prevención de ITS está fuera de indicación y exponiéndole la efectividad, beneficios y riesgos que conlleva su administración.

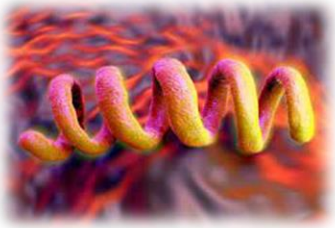
6. La prevención de las ITS mediante la Doxi-PEP no debe realizarse a expensas de las medidas preventivas establecidas, por lo cual es fundamental informar al paciente sobre la importancia y necesidad de mantener relaciones sexuales con protección.

7. No se ha demostrado hasta el momento la eficacia de la Doxi-PEP en mujeres cisgénero ni en hombres transexuales, por lo que no deber ser considerada en este grupo de sujetos.

8. Es necesario generar evidencia sobre el impacto a medio y largo plazo que el uso de la Doxi-PEP puede tener en la selección y diseminación de resistencia a tetraciclinas u otras familias de antimicrobianos en microorganismos productores de ITS u otras patologías, así como en las alteraciones de la microbiota, por lo que consideramos necesario desarrollar estudios longitudinales que evalúen estos riesgos.

9. Es fundamental revisar periódicamente las evidencias que se generen en cuanto a los beneficios y riesgos que conllevan el uso de la Doxi-PEP con el fin de que los profesionales sanitarios puedan tomar las decisiones más oportunas para su prescripción.

Hablando de ITS y sífilis...



Interactive Symposium-03 | The Return of Syphilis
4:00 PM - 5:30 PM • Mile High Ballroom 1-2-3
CME

Objectives: At the completion of the session, participants will be able to:

- List the current limitations, challenges, and prospects for syphilis testing
- Describe the current global epidemic of syphilis in pregnant people and the challenges with eradicating congenital syphilis
- Describe diagnostic and treatment challenges in the management of syphilis

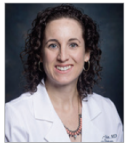
Target Audience: This session is directed to physicians, laboratory scientists, and epidemiologists who have an interest in sexually-transmitted infections and syphilis in particular.

Level of Knowledge: It is assumed that the participants are familiar with syphilis etiology and the current epidemic of syphilis.

Conveners

Jodie A. Dionne, *University of Alabama at Birmingham, Birmingham, AL, USA*

Alex de Voux, *University of Cape Town, Cape Town, South Africa*



24 | 4:00 PM | **Why Can't We Do Better at Diagnosing Syphilis?**
Ina Park, *University of California San Francisco, San Francisco, CA, USA*

25 | 4:20 PM | **The Burgeoning Epidemic of Congenital Syphilis**
Angelica Espinosa Miranda, *Ministry of Health, Brasilia, Brazil*

26 | 4:40 PM | **Syphilis Management Conundrums**
Khalil G. Ghanem, *The Johns Hopkins University School of Medicine, Baltimore, MD, USA*

5:00 PM | **Audience Questions and Answers**

Final de viaje distinto...

CROI Denver 2006

CROI Denver 2024

Top Ten CROI 2024:

1) Together Take Me Home (#200LB)
2) bNAbs (#117)
3) CARES: CAB-RPV LA África (#122)
4) LATITUDE: CAB-RPV LA en problemas de adherencia (#212LB)
5) ISL-LEN QW oral (#208LB)
6) REPRIEVE PCOLCE (#151)
7) SLIM LIVER semaglutide (#159)
8) INSIGHT Study (#211LB)
9) ASS Study (#761)
10) DOXY-PEP IMPLEMENTACIÓN FRISCO (#126LB)

GRÀCIES!

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