Service des Maladies Infectieuses et Tropicales
CHNU Fann-Dakar

BEST OF CROI 2024

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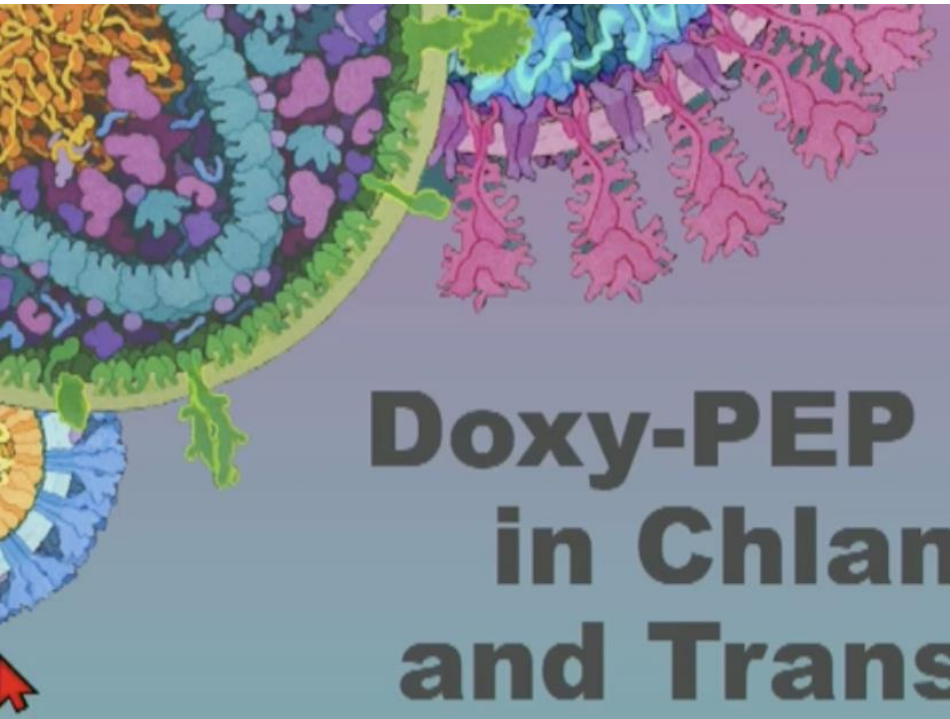

Oral Abstract Session-04

Monday, March 4, 2024

Doxy-PEP Associated With Declines in Chlamydia and Syphilis in MSM and Trans Women in San Francisco

Madeline Sankaran

San Francisco Department of Public Health, San Francisco, CA, USA

Disclosure: Ms Sankaran reported no relevant financial relationships with ineligible companies.

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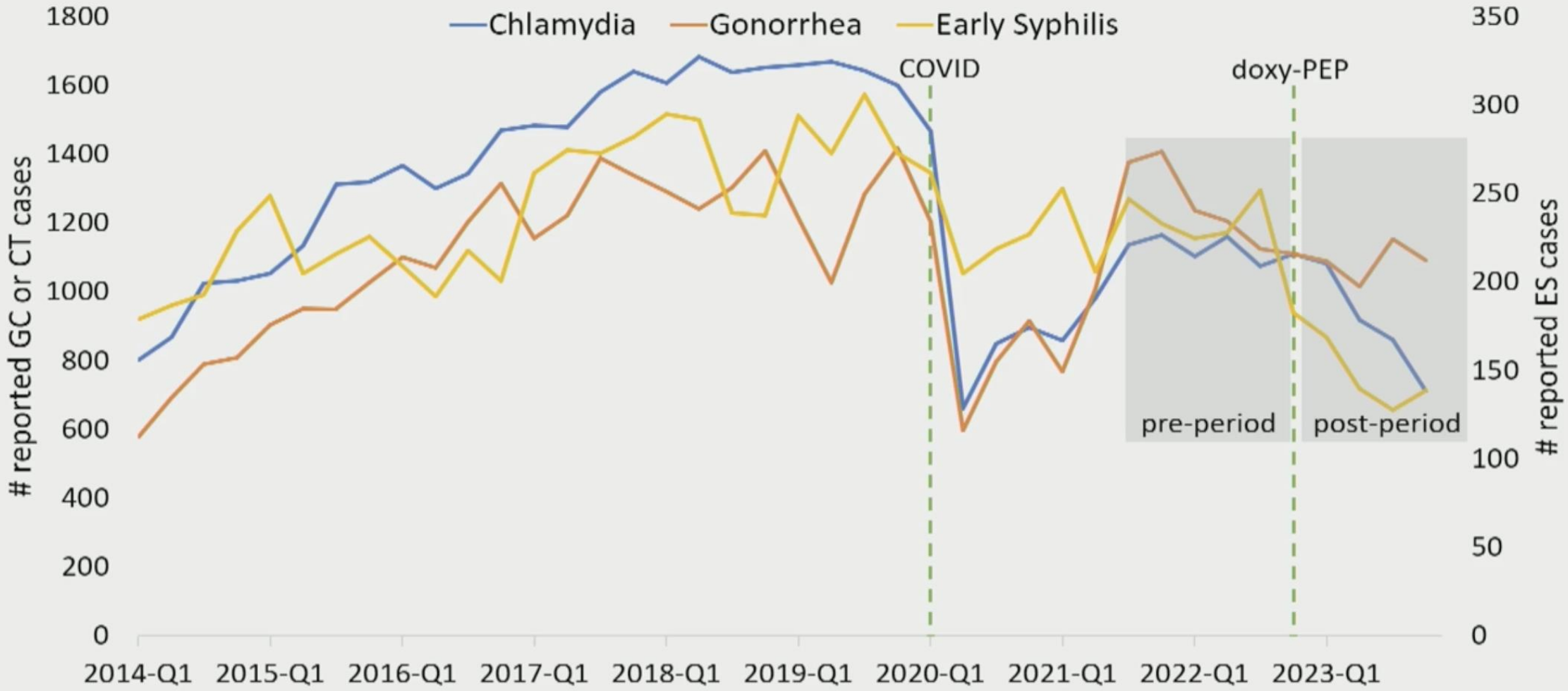
Background: STI Trends in San Francisco

MSM and TGW, 2014-2023



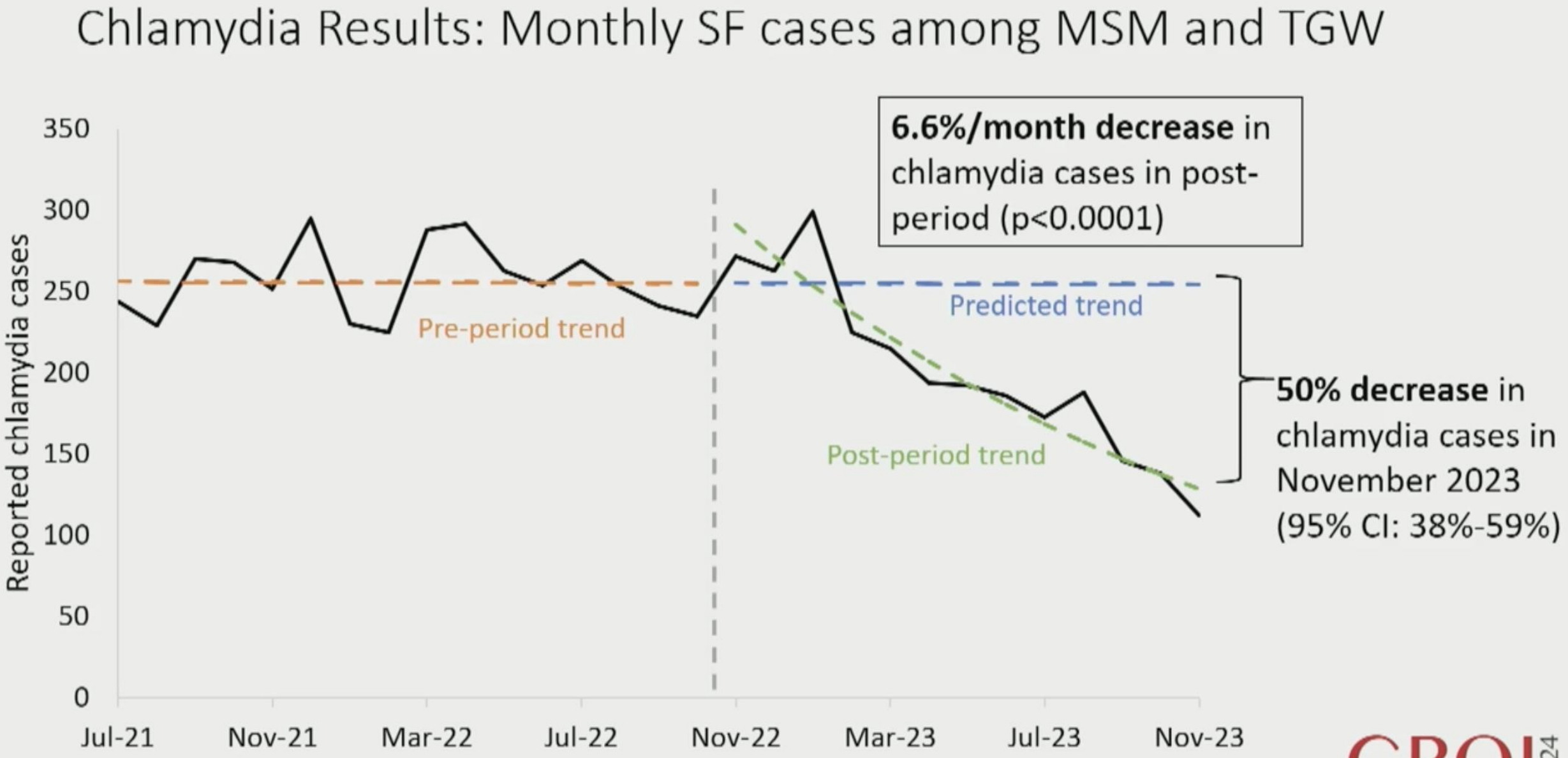
Objective

- To assess the ecological association between doxy-PEP program implementation and citywide STI incidence,
- Doxypep : doxycycline in post exposure to prevent getting an STI

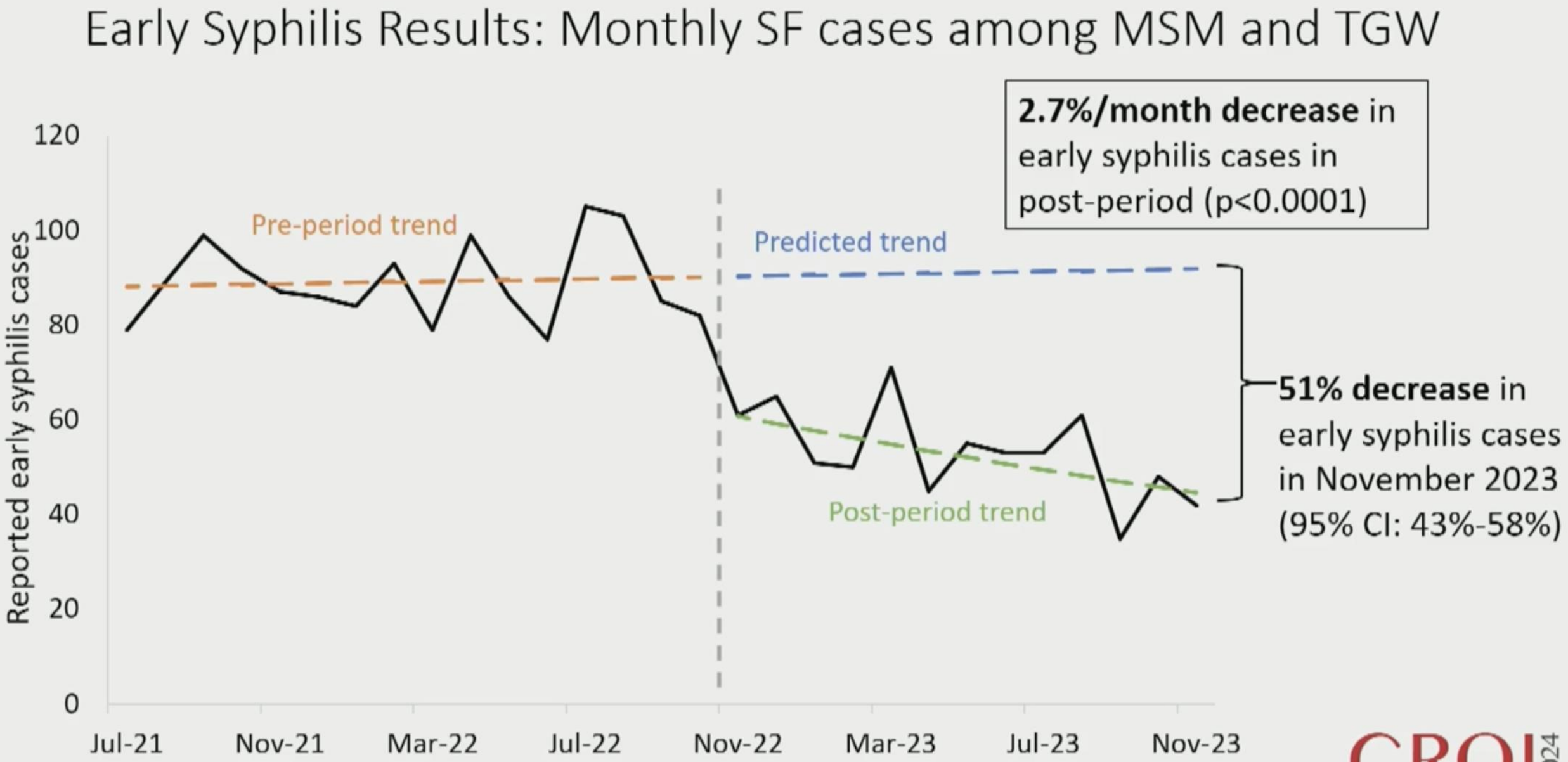
Methods

- Interrupted time series analysis – **ecologic test of association**
  - Monthly case counts among MSM and TGW from citywide surveillance data
  - Chlamydia, gonorrhea, and early syphilis
  - Pre-period: Jul 1, 2021 - Oct 31, 2022
  - Post-period: Nov 1, 2022 – Nov 30, 2023
  - Supplemental analysis of chlamydia among cis women
- Autoregressive integrated moving average (ARIMA) models to predict post-period incidence in the absence of doxy-PEP
- Compared model predictions to observed trends in the post-period

Results


Chlamydia Results: Monthly SF cases among MSM and TGW
Reported chlamydia cases
350
300
250
200
150
100
50
0
Jul-21
Nov-21
Mar-22
Jul-22
Nov-22
Mar-23
Jul-23
Nov-23
Pre-period trend
Predicted trend
Post-period trend
6.6%/month decrease in chlamydia cases in post-period (p<0.0001)
50% decrease in chlamydia cases in November 2023 (95% CI: 38%-59%)

Results



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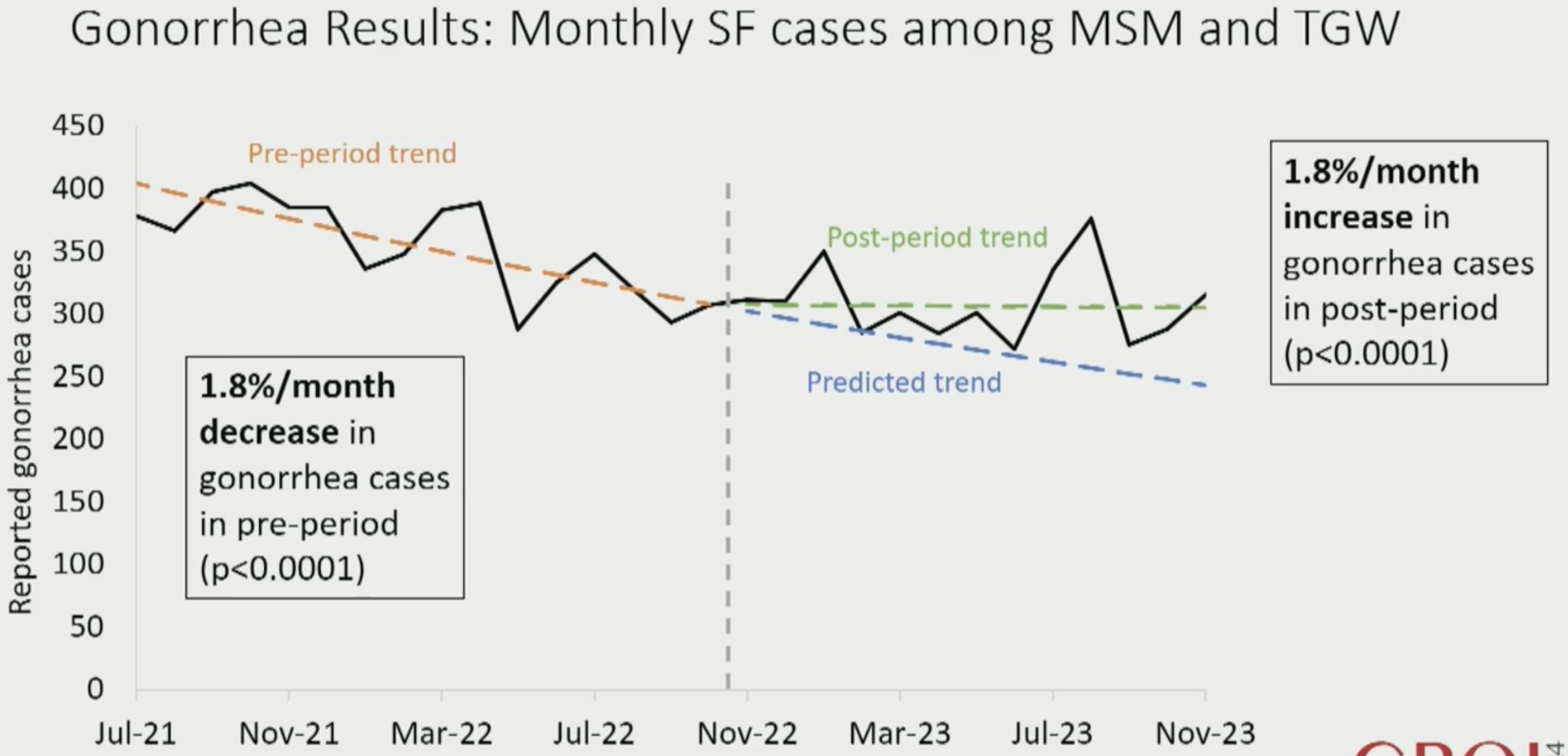
Results


Gonorrhea Results: Monthly SF cases among MSM and TGW
Reported gonorrhea cases
450
400
350
300
250
200
150
100
50
0
Pre-period trend
Post-period trend
Predicted trend
1.8%/month decrease in gonorrhea cases in pre-period (p<0.0001)
1.8%/month increase in gonorrhea cases in post-period (p<0.0001)
Jul-21
Nov-21
Mar-22
Jul-22
Nov-22
Mar-23
Jul-23
Nov-23

Conclusion

- Implementation of doxy-PEP guidelines was associated with significant decrease in CT and cases, but not GC cases , among MSM/TGW.

Oral Abstract Session-14

Wednesday, March 6, 2024

Long-Acting Injectable CAB/RPV is Superior to Oral ART in PWH With Adherence Challenges: ACTG A5359

Aadia I. Rana

University of Alabama at Birmingham, Birmingham, AL, USA

Disclosure: Dr Rana reported no relevant financial relationships with ineligible companies.

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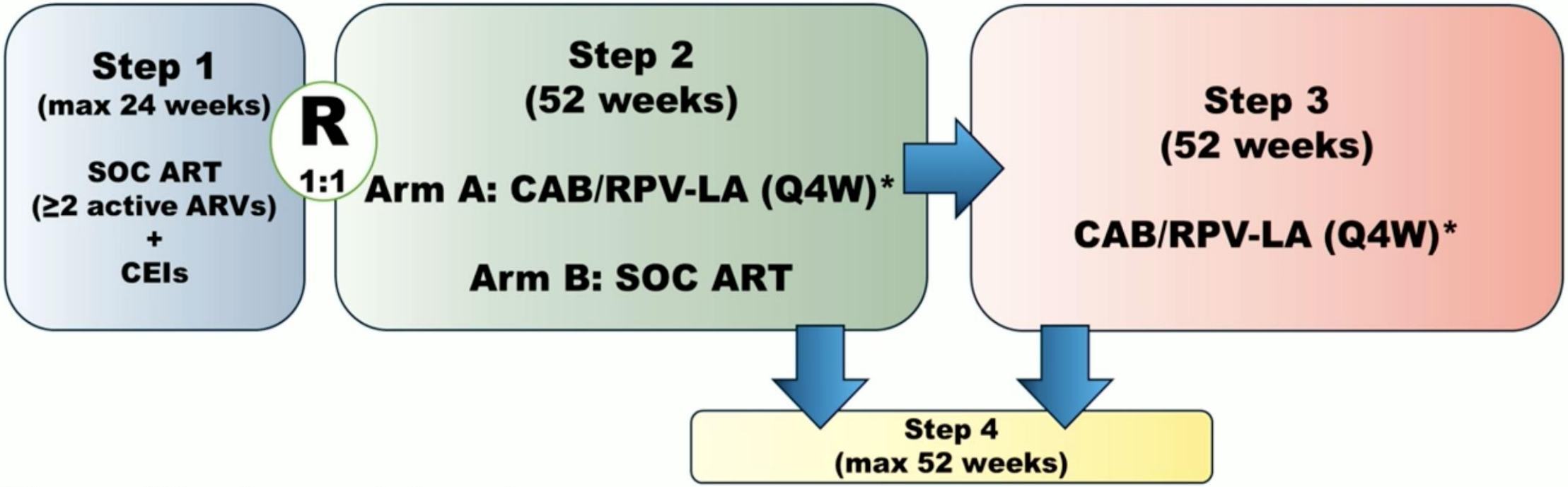
Background

- PLWH with adherence challenges were not include in previous Phase III clinical trials of CAB/RPV-LA
- CAB/RPV-LA (**injectable**) could offer a directly-observed in this population and facilitate treatment success

Objective

To demonstrate the superior efficacy of CAB/RPV-LA monthly compared to daily oral SOC in PWH with adherence challenges.

Study design



CEIs= conditional economic incentives
*Optional Oral lead-in

Primary Outcome: Regimen failure defined as the earliest occurrence of confirmed virologic failure or treatment discontinuation in Step 2

LATITUDE

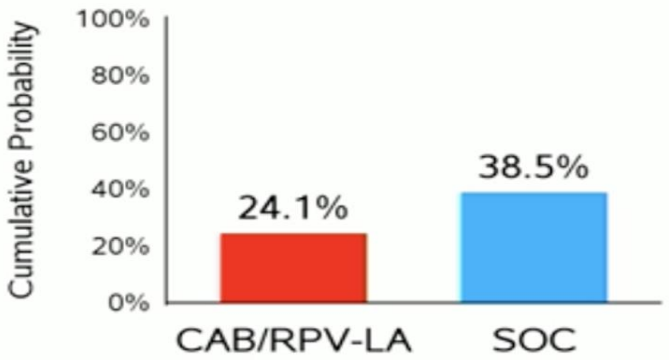
ACTG

Results-All Outcomes

Primary Outcome

Regimen Failure

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



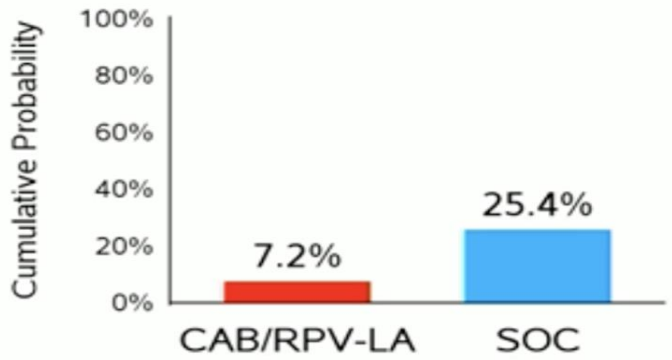
Number of participants

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%)**

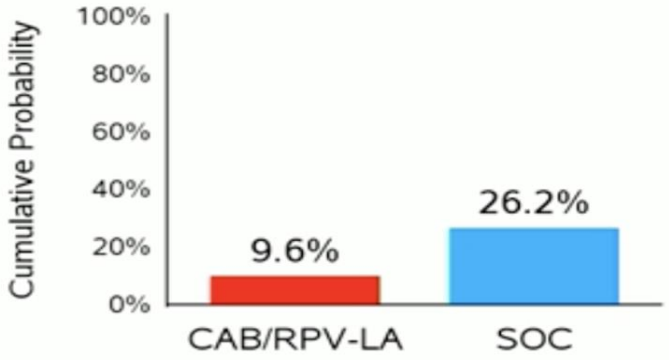


Number of participants

Virologic Failure	6	28

Treatment-related Failure

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

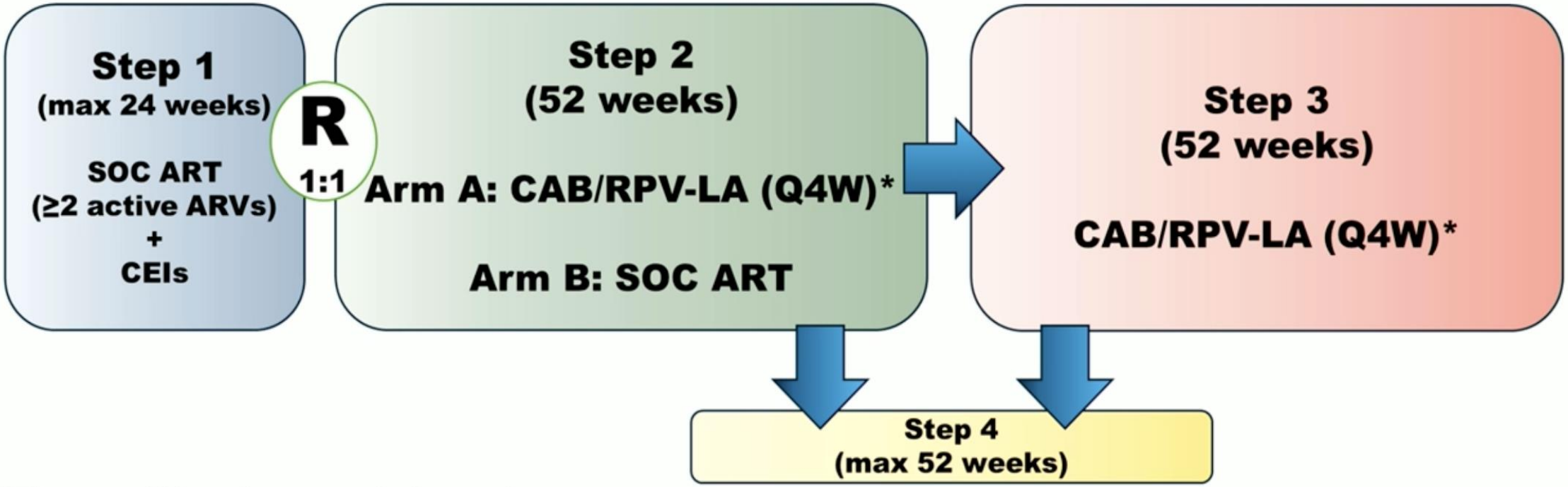


Number of participants

Treatment-related Failure	9	29
VF	6	28
TRT-DISC (AE)	3	1

LATITUDE

Study design



CEIs= conditional economic incentives
*Optional Oral lead-in

Primary Outcome: Regimen failure defined as the earliest occurrence of confirmed virologic failure or treatment discontinuation in Step 2

LATITUDE

ACTG

Conclusion

When considering evaluation of all endpoints together, CAB/

RPV LA **monthly** demonstrated superior efficacy compared to

daily oral in PWH with **adherence** challenges.

Oral Abstract Session-03

Monday, March 4, 2024

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

Nicholas Paton

London School of Hygiene & Tropical Medicine, London, UK

Disclosure: Nicholas Paton received research funding from Janssen

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Background

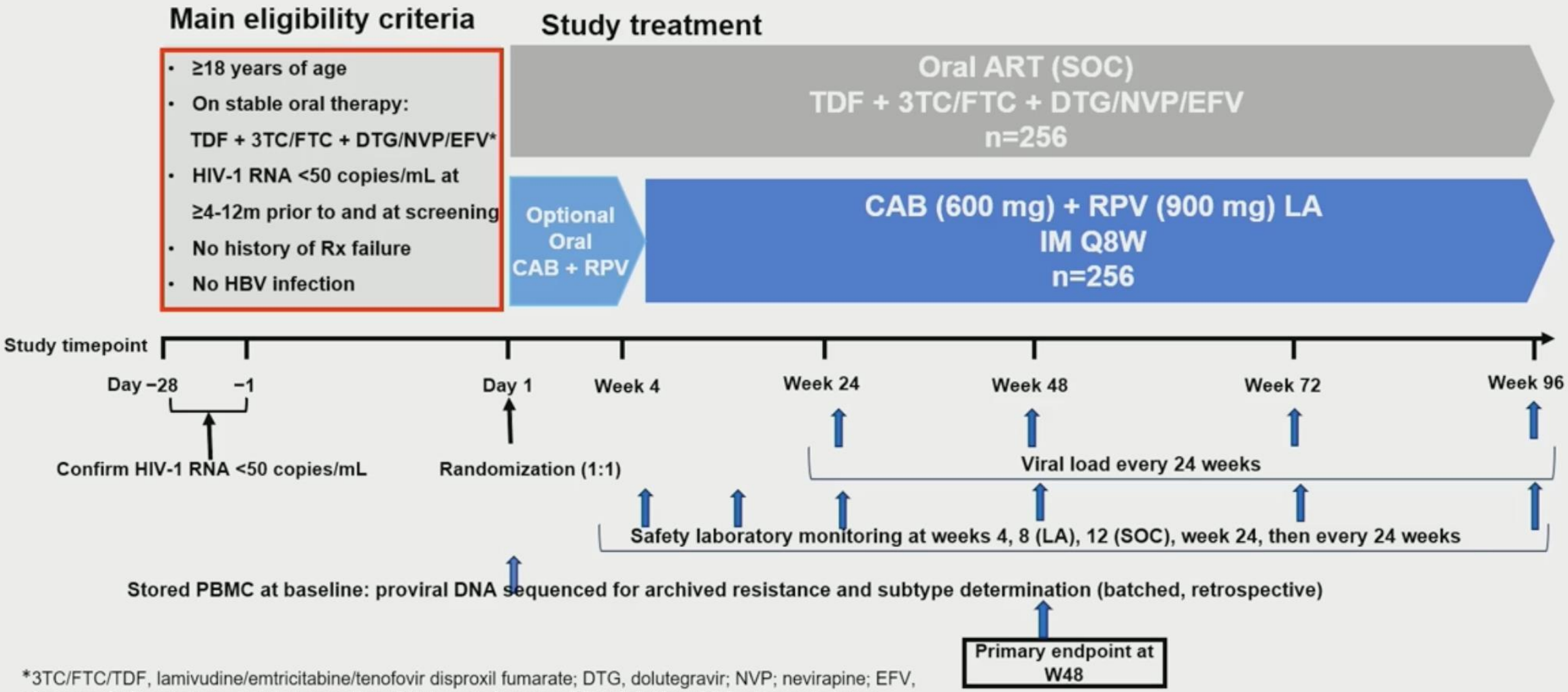
- Additional evidences is required to confirm CAB R LA effectiveness in public health approach in Africa. This requirement is due to differences observed between Africa and Northern countries where these LA were studied.
- Contrary to US an Europe, In Africa
  - People are **mostly** black,
  - VIH-1 subtypes are **usually** non B subtypes ,
  - Prior treatment exposure on INNRT is more **frequent**
  - Prevalence of pre-existing INNRT resistance is **higher**
  - Treatments and monitoring strategies plus limited more .

Objective

- To determine the non inferiority of the switching from **daily** SOC to CAB + RP LA (**injectable**) every **8 weeks to continuing daily** oral (SOC) as maintenance therapy in a public health approach in subsaharan Africa

Study Design

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



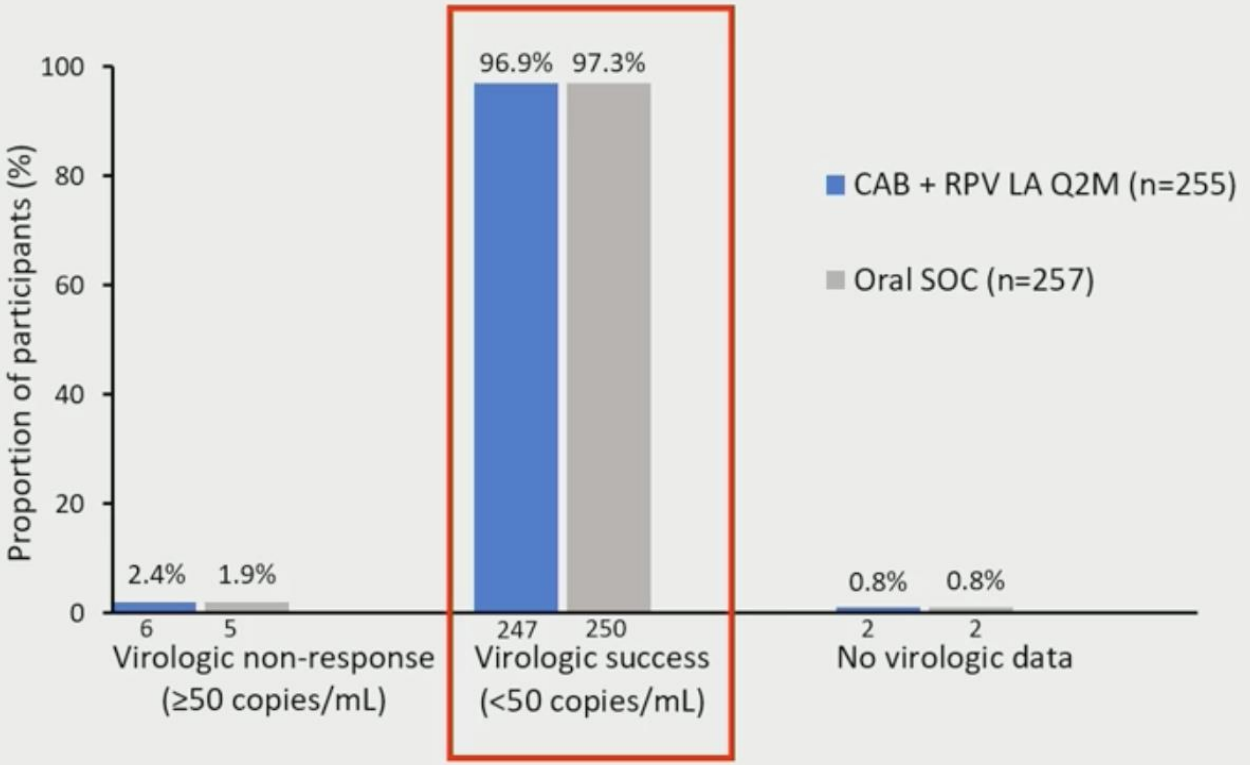
*3TC/FTC/TDF, lamivudine/emtricitabine/tenofovir disproxil fumarate; DTG, dolutegravir; NVP; nevirapine; EFV, efavirenz; CAB, cabotegravir; LA, long-acting; Q8W, every 8 weeks; RPV, rilpivirine; SOC, standard of care

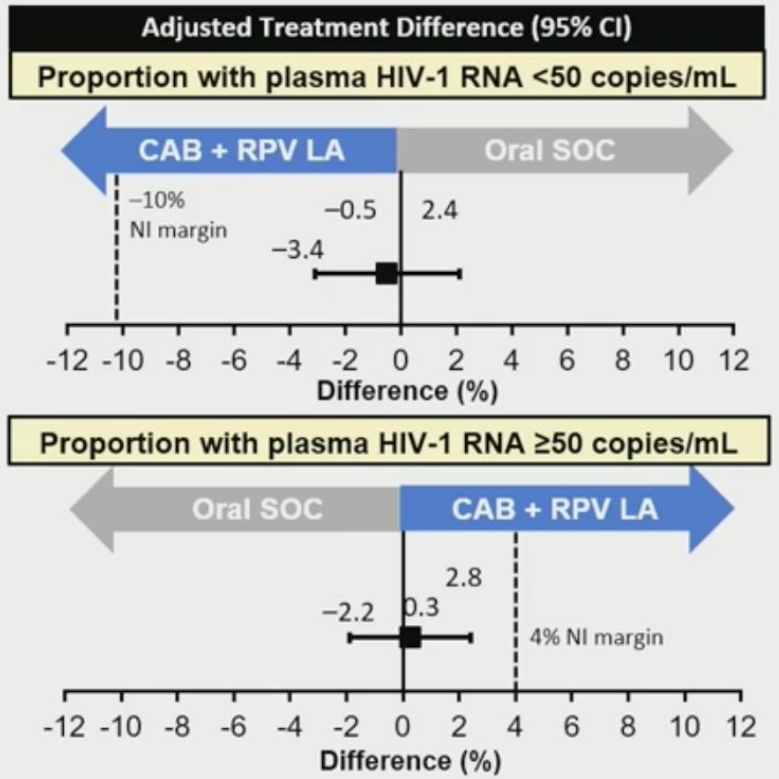
Kityo et al. CROI 2024; Virtual and Denver, CO.

Outcomes & Analysis

- **Primary outcome**
  - Proportion of participants with plasma HIV-1 RNA < 50 copies/ml at week 48 (FDA snapchot algorithm)
  - Non inferiority assessed in the intention to treat (ITT) population, 10%NI margin
- **Secondary outcomes**
  - Proportion of participants with plasma HIV-1 RNA ≥ 50 copies/ml at week 48 (FDA snapchot, ITT, 4% NI Margin)
  - Safety and tolerability
  - Treatment satisfaction (HIV Treatment Satisfaction Questionnaire change version; HIVTSQc)

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.

Safety: Adverse events

Participants with at least 1 AE, n (%)	**CAB + RPV LA (n=255)**	**Oral ART (SOC) (n=257)**	**Difference (95% CI)**
Grade ≥3 AE	24 (9.4)	10 (3.9)	5.5 (1.2 to 9.8)
Related to study drug *	3 (1.2)	2 (0.8)	0.4 (-1.3 to 2.1)
Serious adverse event	3 (1.2)	5 (1.9)	-0.8 (-2.9 to 1.4)
Any (grade 1-4) AE	220 (86.3)	161 (62.6)	23.7 (16.4 to 30.0)
Excluding injection-site reactions	181 (71.0)	161 (62.6)	8.4 (-0.3 to 16.5)
Leading to study drug discontinuation **	1 (0.4)	3 (1.2)	-0.8 (-2.3 to 0.7)

* Grade ≥3 AEs considered to be drug-related AEs were:
- injection-site nodule, increased LDL cholesterol, and proteinuria in the CAB + RPV LA arm
- decreased estimated glomerular filtration rate (eGFR) and increased blood glucose in the oral ART SOC arm

** Grade 1-4 AEs leading to study drug discontinuation were:
- injection-site sterile abscess in the CAB + RPV LA arm
- decreased eGFR, increased blood glucose and osteoporosis in the oral ART SOC arm

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

Treatment Satisfaction

	CAB + RPV LA (n=253)	Oral ART (SOC) (n=255)	Adjusted mean difference (95% CI)	P value
Baseline (HIVTSQs)	53.6 ± 10.5	52.0 ± 12.5	-	-
Change at week 48 (HIVTSQc)	28.0 ± 0.65	17.6 ± 0.64	10.4 (8.7 to 12.2)	<0.001

- Treatment satisfaction score increased from baseline to week 48 to a greater extent in participants who switched to CAB + RPV LA vs. those who continued oral SOC

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

Conclusion

- CAB and RPV LA every **8 weeks** showed non-inferior efficacy to **daily** SOC for the maintenance of virologic suppression HIV-1 and must be taken into account in a public health approach in subsaharan Africa

Changes in Liver Fibrosis Stage Among People Living With Untreated Hepatitis B in Senegal Tenofovir-Containing Therapy

Adrià Ramírez Mena, Bruce Wembulua Shinga, Aboubakar S. Badiane, Kiné Ndiaye, Judicaël Tine, Alassane Ndiaye, Ndeye Maguette Fall, Hubert Akotia, Melissa S. Pandi, Daye Ka, Louise Fortes, Ousseynou Ndiaye, Ndeye Fatou Ngom, Moussa Seydi, Gilles Wandeler. **CROI 2024 Abstract eBook. 2024; 215**

Background

- Persons with HBV (pwHBV) who are ineligible for antiviral therapy represented 80% of patients in our Cohort and must be follow up.
- Nevertheless, it is unclear how stable liver **fibrosis stages** remain over time.

Objective

- We assessed changes in liver **fibrosis stage** in persons infected with **hepatitis B virus f**ollowed in a SEN-B cohort in SMIT and CTA , Dakar, Senegal

Methods

- We included HBsAg-positive individuals who had not received antiviral treatment during the establishment of the SEN-B cohort from 2019 to 2023
- Liver stiffness was evaluated 6-monthly using transient elastography and was categorized as normal (<7.0 kPa; equivalent to Metavir stage F0-1), significant fibrosis (7.1-11.0 kPa; Metavir F2-3), or cirrhosis (>11.0 kPa; Metavir F4)
- We used multivariable logistic regression to explore potential risk factors of fibrosis progression, including sex, age, body mass index (BMI), ALT and HBV DNA levels, HBeAg, HDV co-infection and alcohol consumption

Results

Characteristics of the population

- N : 556
- Men : 51.1%
- Median age : 31 years (IQR : 25-39)
- BMI sup ou = 25/Kg/m2 : 29.3%
- HBV DNA > 2000 IU/mL : 23.6%
- ALT > 40 UI : 5.2 %
- Progression Liver fibrosis : 4.5% (25/556)
  - and 96% (24/25) had F0-F1 fibrosis stage at inclusion

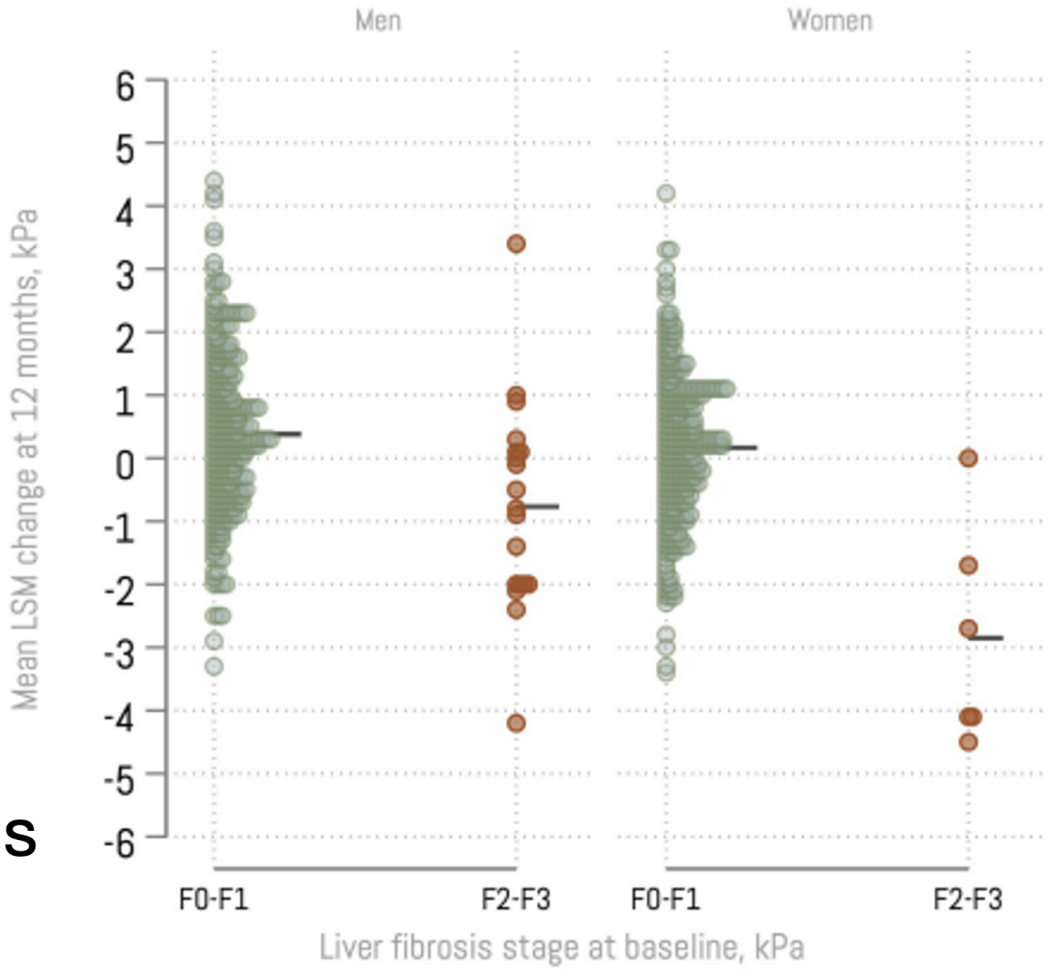
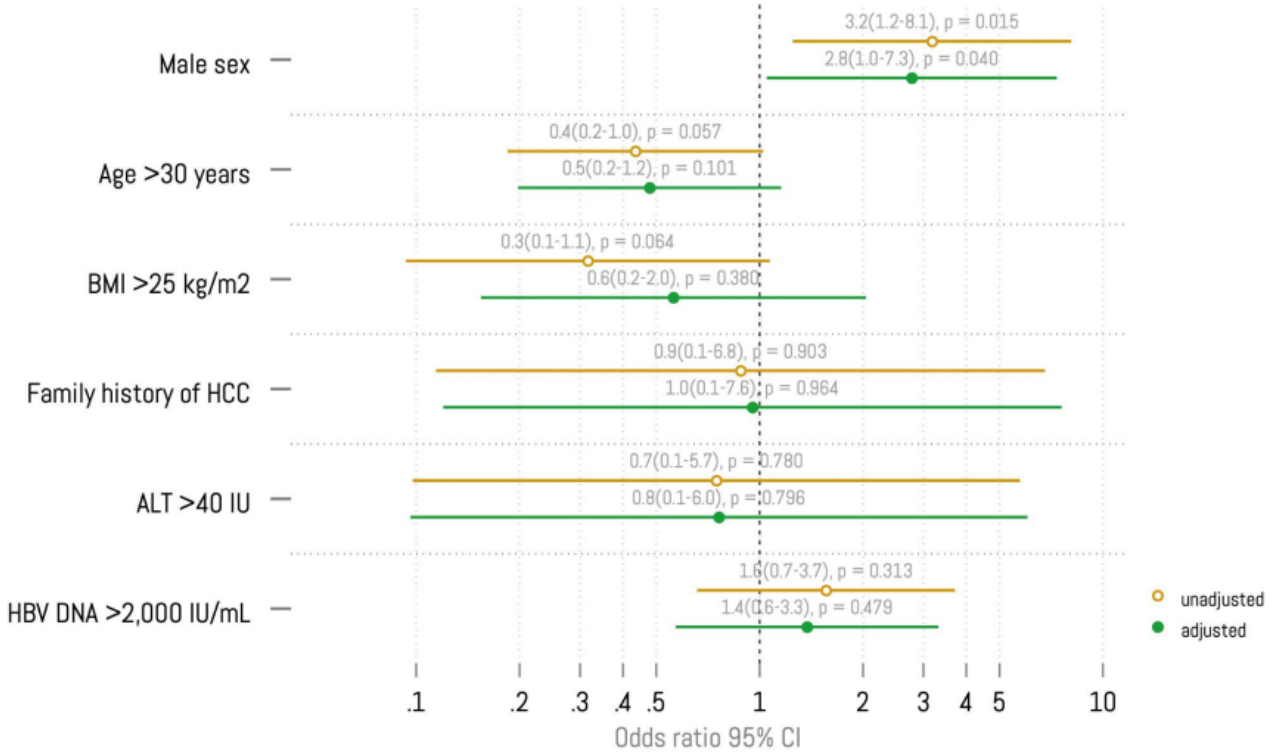


Figure 1: Mean LSM change at 12 months, by sex

Results

Predictors of liver fibrosis progression

- In multivariable analyses, male sex (adjusted odds ratio 2.77, 95% confidence interval 1.05–7.33) was the only factor associated with fibrosis progression (**Figure 3**).



Footnote: The variables [HBeAg-positivity] and [Hazardous drinking] were removed from the model due to collinearity.

Figure 3: Predictors of liver fibrosis progression at 12 months of follow-up

Conclusion

- Five percent of People Living With Hepatitis B virus and untreated with TDF in Senegal experienced a progression of liver fibrosis stage during the first year of follow-up and this outcome was more likely in men than women
- Long-term data is urgently needed to understand the determinants of liver fibrosis **changes** in Africa