

UPDATED EFFICACY, SAFETY, AND CASE STUDIES IN HPTN 083: CAB-LA VS. TDF/FTC FOR PREP

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Presenting Author

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Disclosure: Raphael J. Landovitz has served on scientific advisory boards for Gilead Sciences and Merck Inc, and has received honoraria from Janssen and Cepheid.



Background

HPTN 083: Phase 2b/3 randomized controlled trial of increased-risk, HIV-uninfected MSM + TGW at 43 sites in 7 countries

HPTN 083 and 084 demonstrated that long-acting injectable cabotegravir (CAB-LA) is superior to daily oral TDF/FTC for HIV PrEP across populations and regions

4566 participants were enrolled, 37.2% from the US, 43% from Latin America, 16.5% from Asia, and 3.3% from Africa

12.5% transgender women

49.8% of US enrollment is Black

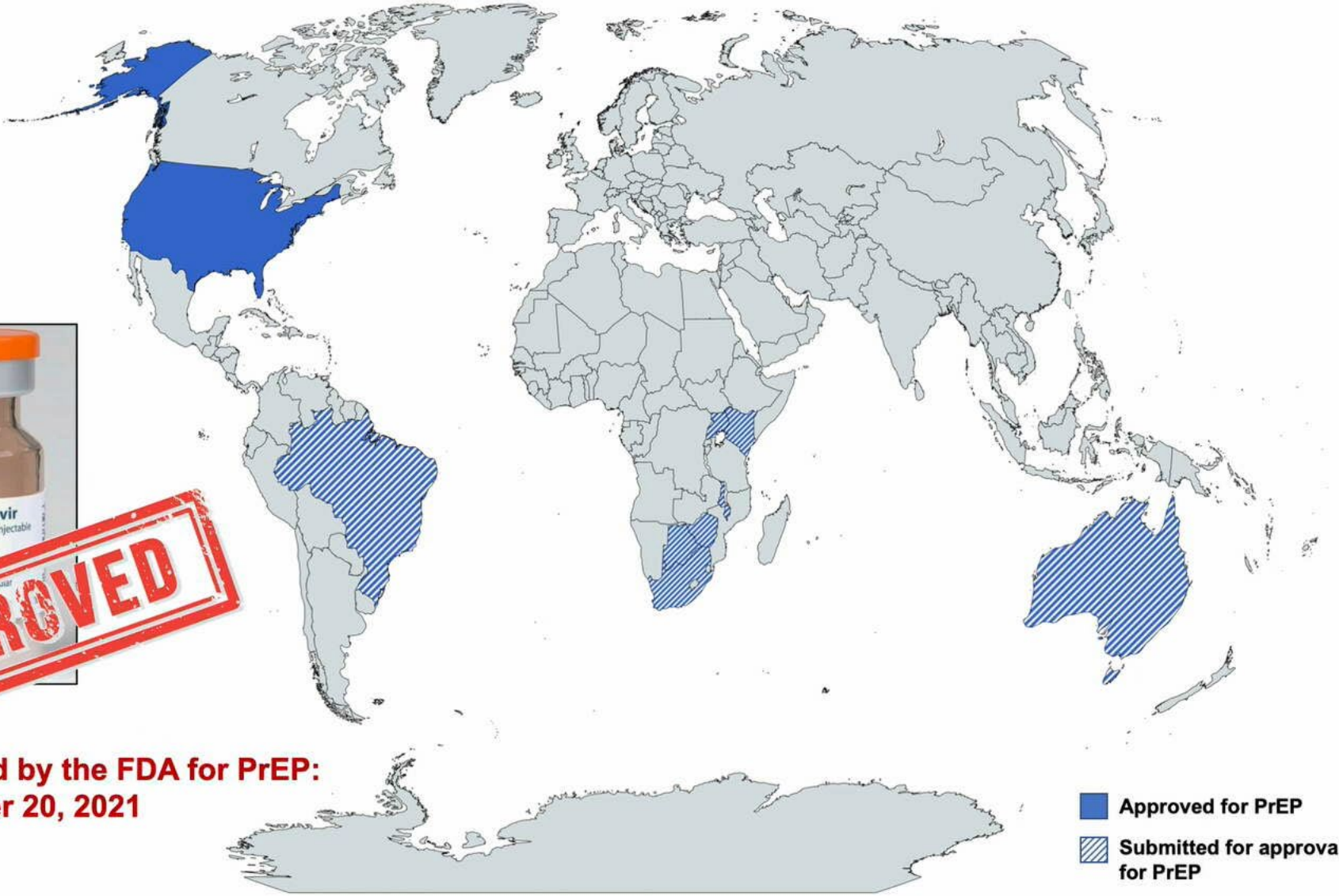
67.4% < 30 yo





APPROVED

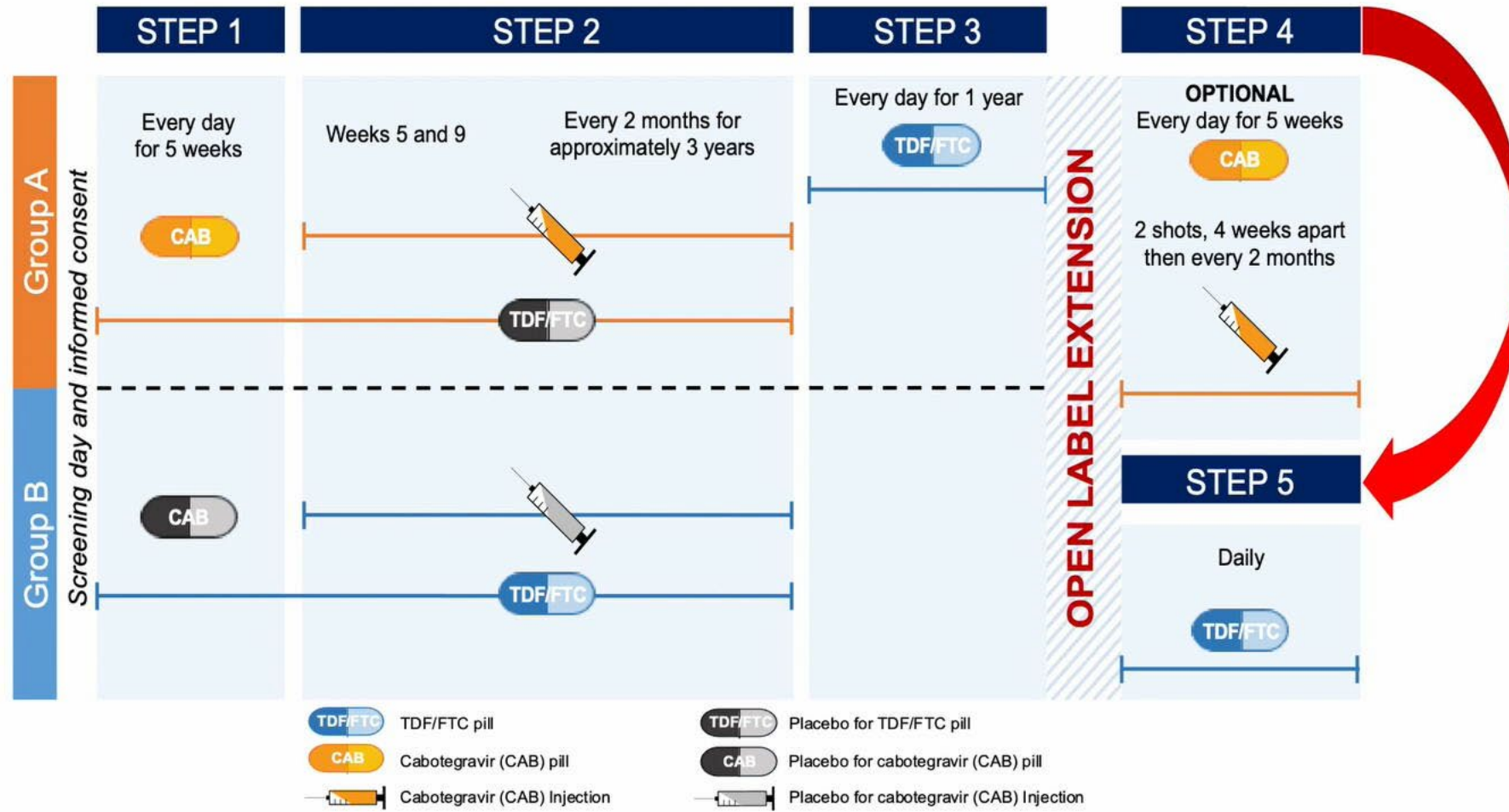
**Approved by the FDA for PrEP:
December 20, 2021**



■ Approved for PrEP
▨ Submitted for approval for PrEP



HPTN 083 Study Design



Methods

We previously reported efficacy and safety from HPTN 083

Prespecified analysis of the blinded study period (through May 14, 2020)^{1,3}

Post-hoc analysis of the blinded study period (through May 14, 2020)^{2,3,4}

We now present efficacy and safety data for an additional year of follow-up, the “Year 1 Unblinded” period

New HIV infections detected at sites through August 15, 2021 for which first evidence of HIV infection was before May 15, 2021

HIV infections occurring after 3 years of follow-up (the blinded study period) were pre-specified to be censored from this analysis, described separately

¹Landovitz RJ et al, AIDS 2020, Abstract OAXLB0101

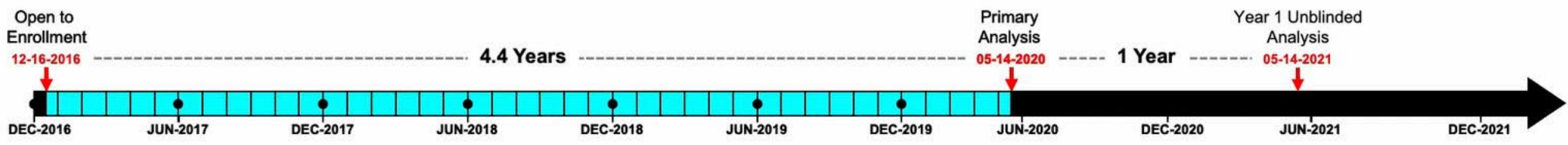
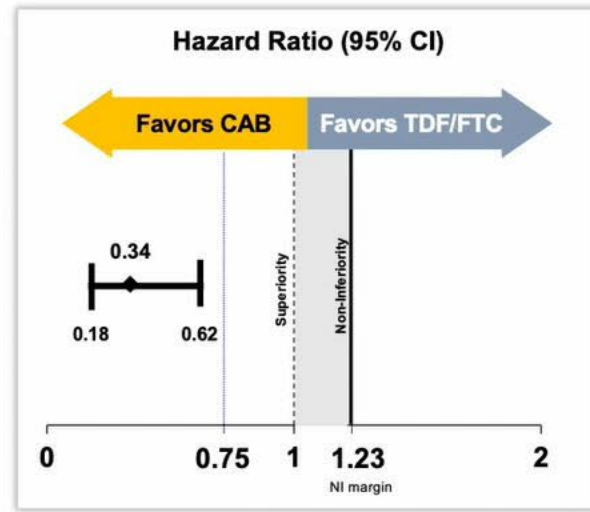
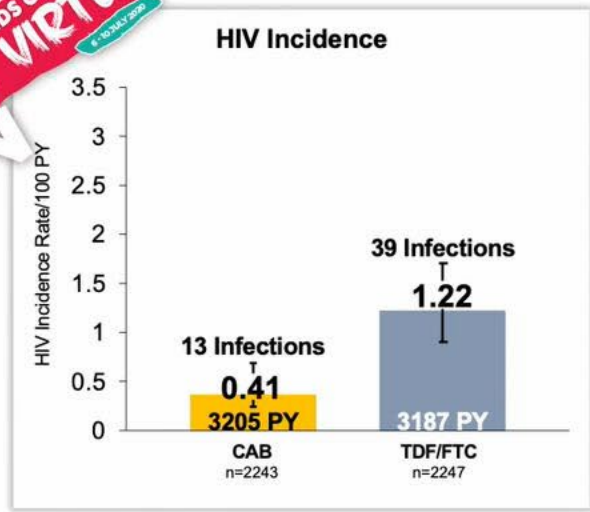
²Marzinke M et al, CROI 2021, Abstract 153

³Landovitz, RJ et al, NEJM 2021.

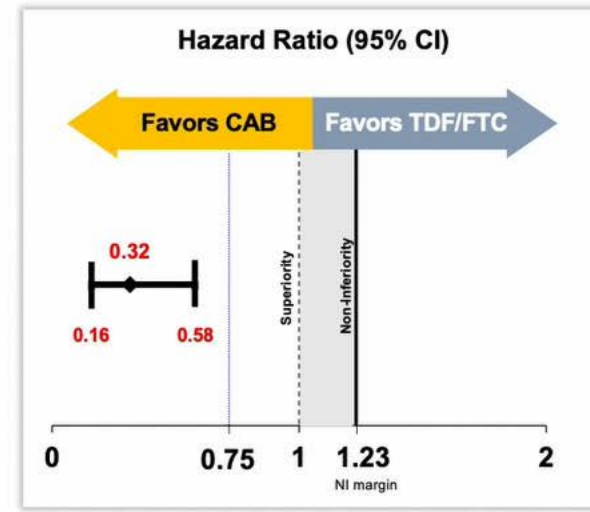
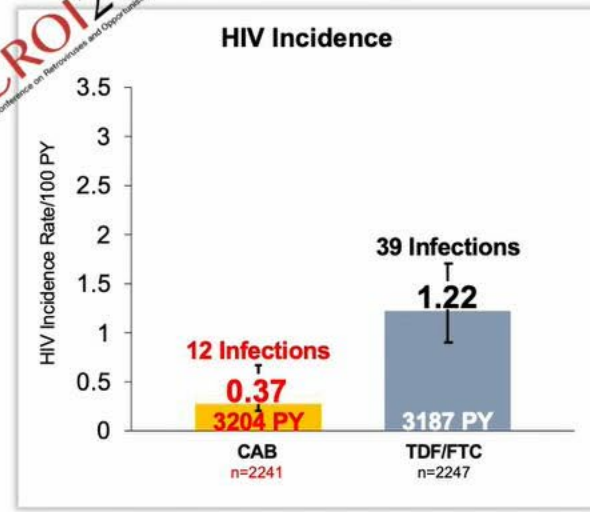
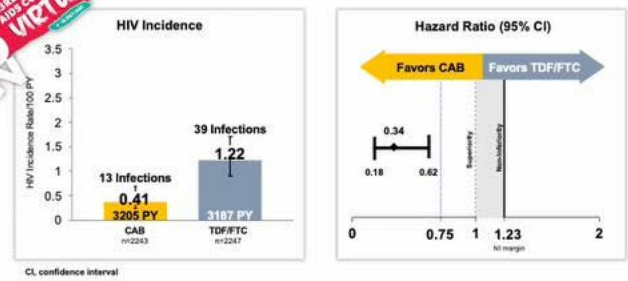
⁴Marzinke M et al, JID 2021.



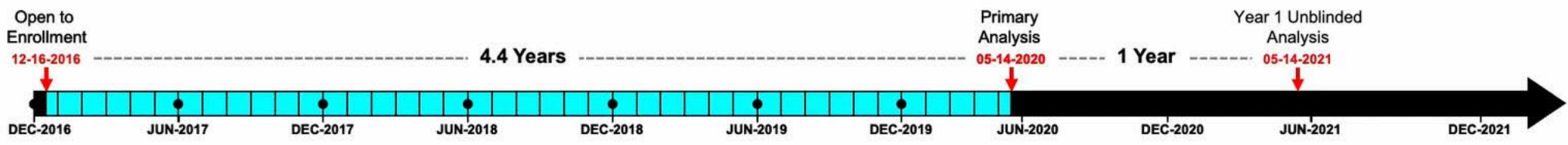
HIV Incidence: CAB vs. TDF/FTC



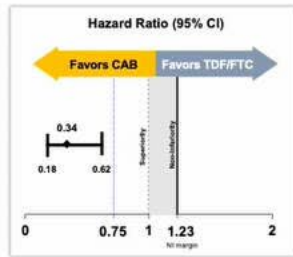
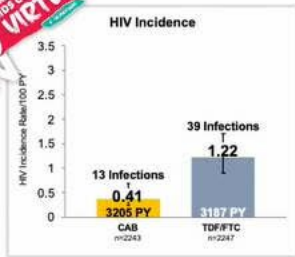
HIV Incidence: CAB vs. TDF/FTC



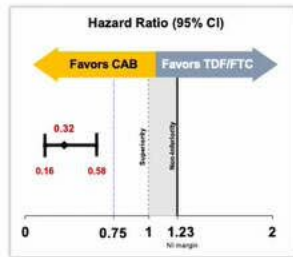
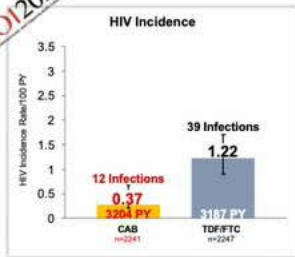
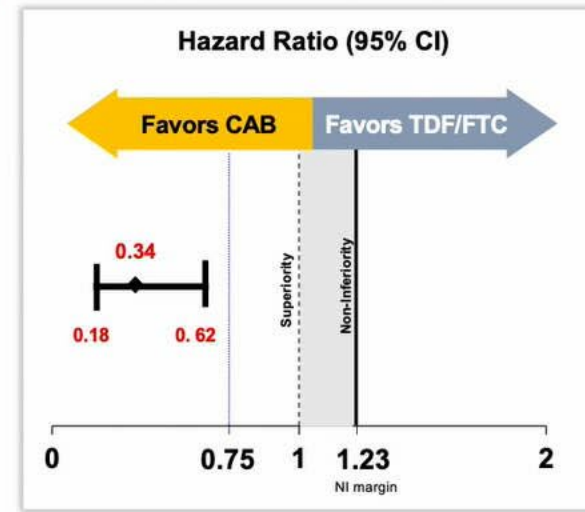
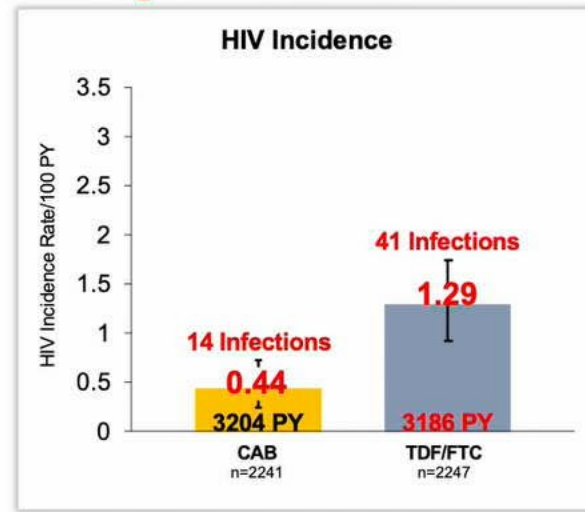
Marzinke M, et al. CROI 2021. Abstract #153



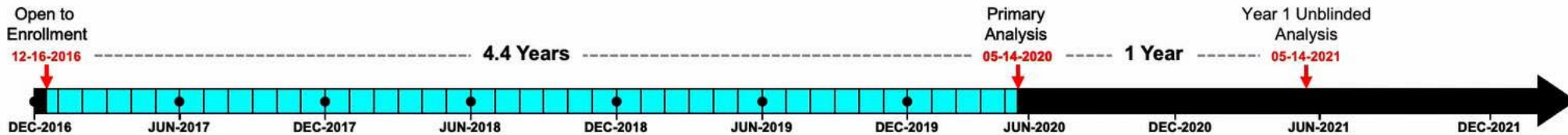
HIV Incidence: CAB vs. TDF/FTC



Updated Primary Blinded Period



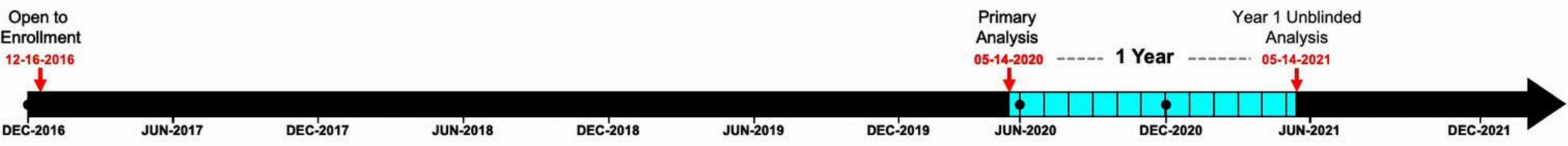
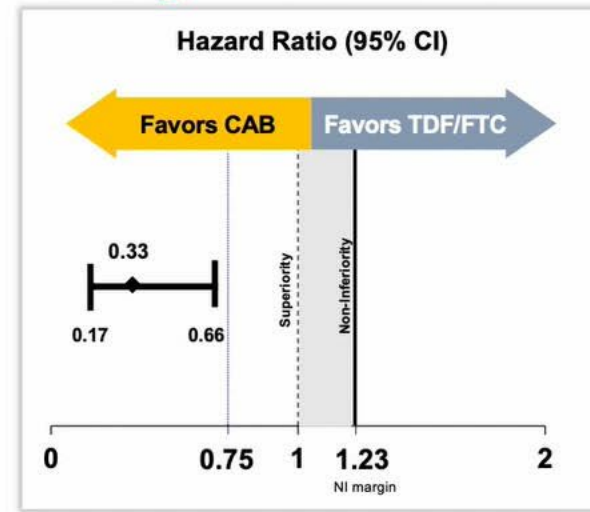
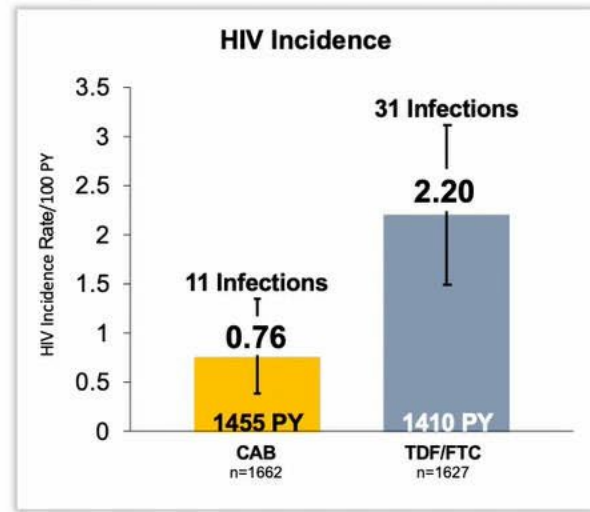
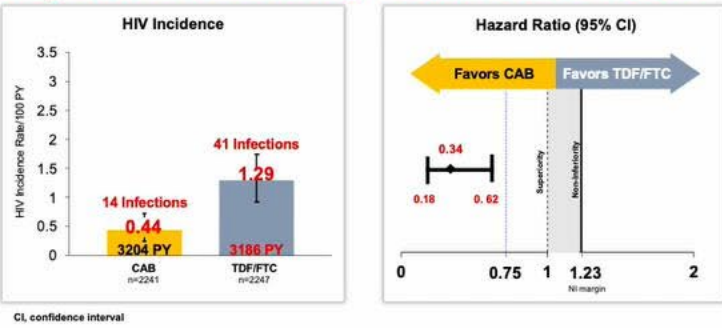
CI, confidence interval



HIV Incidence: CAB vs. TDF/FTC

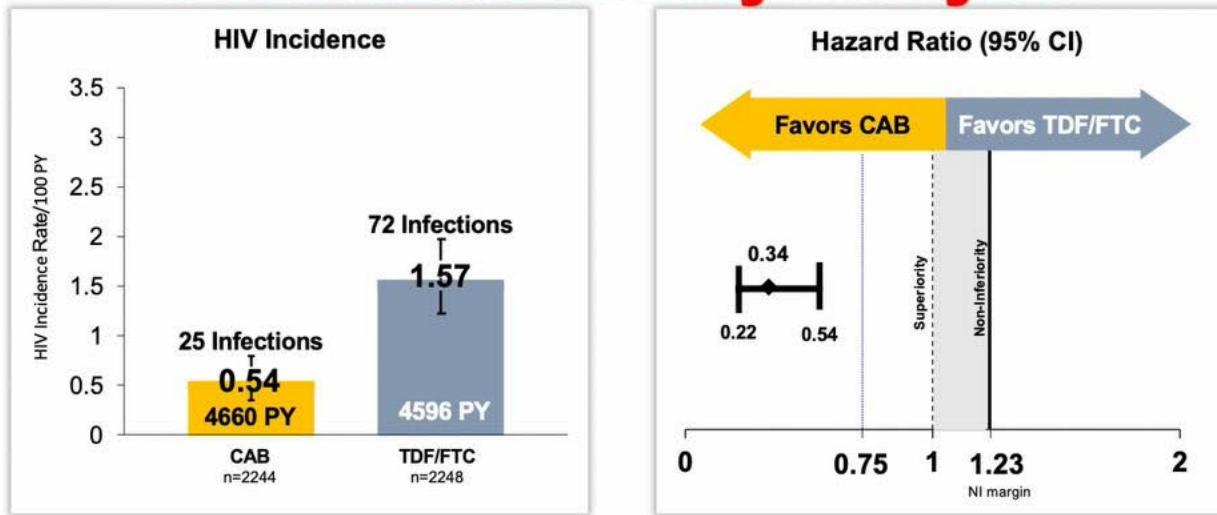
Year 1 Unblinded Analysis Period

Updated Primary Blinded Period

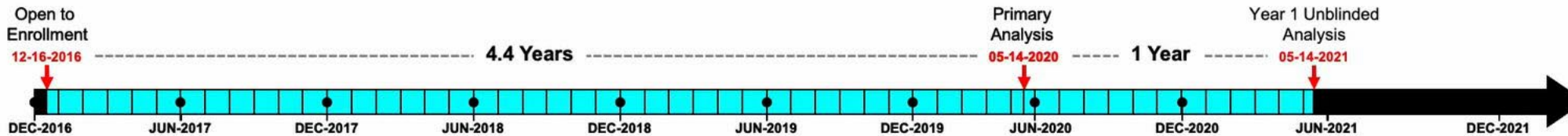


HIV Incidence: CAB vs. TDF/FTC

Combined Efficacy Analysis

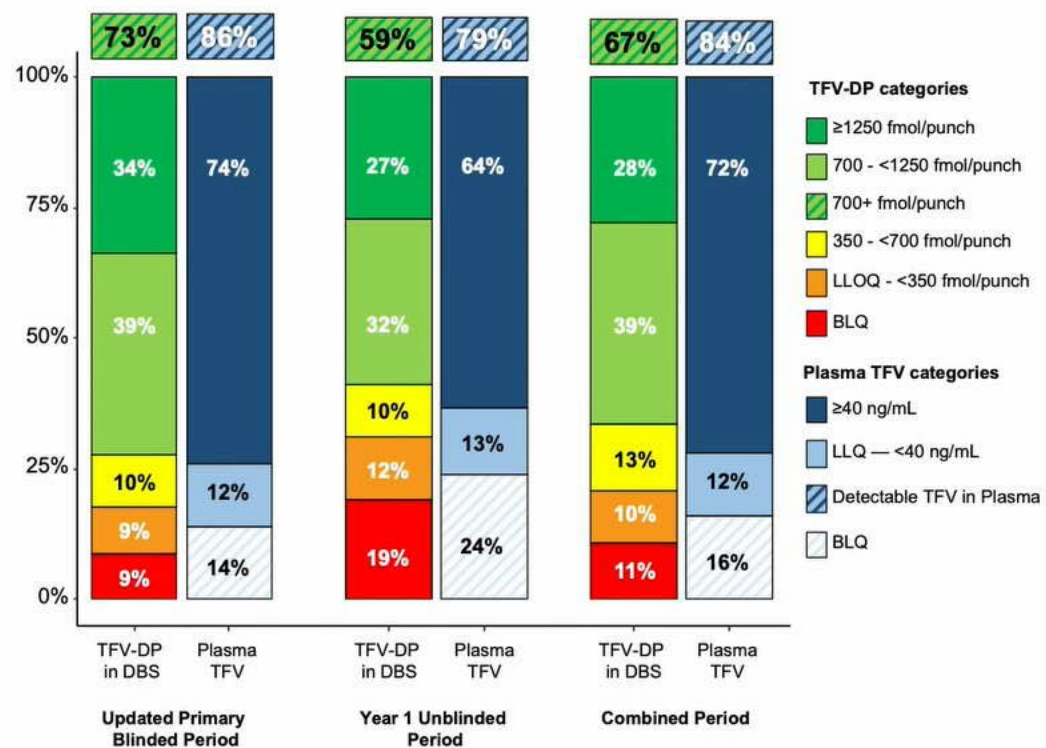


CI, confidence interval

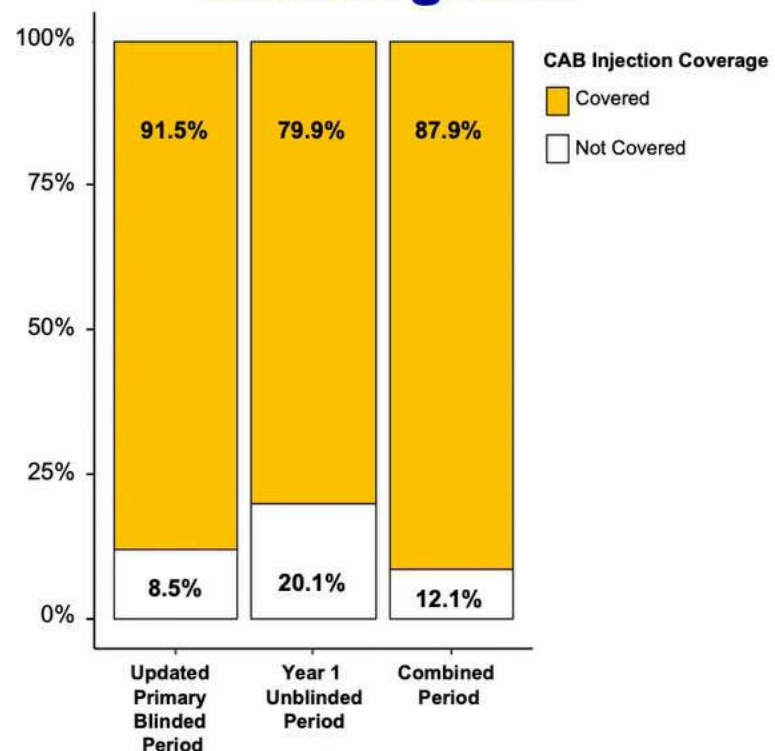


Study Product Adherence

TDF/FTC



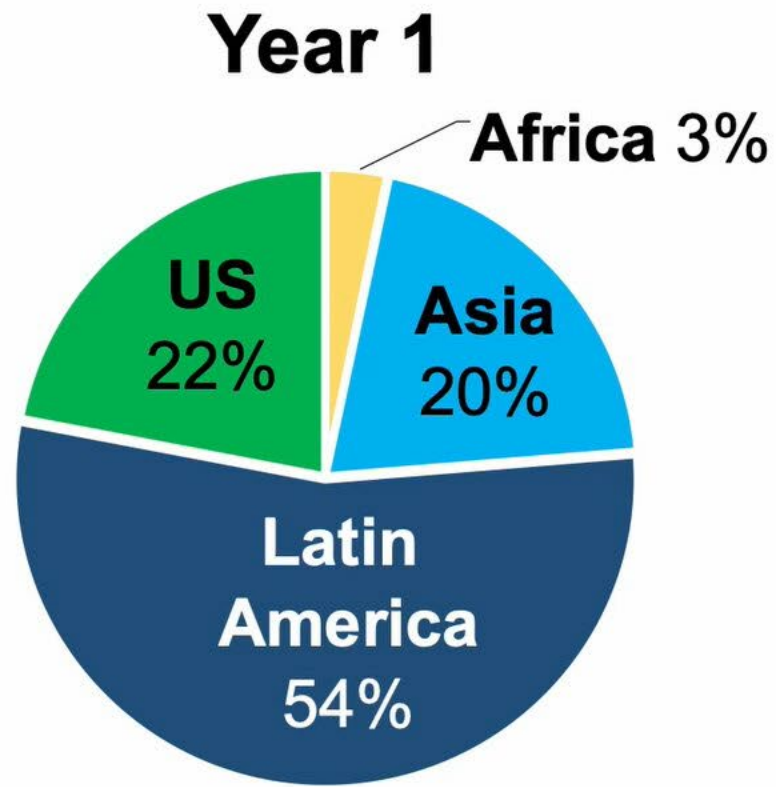
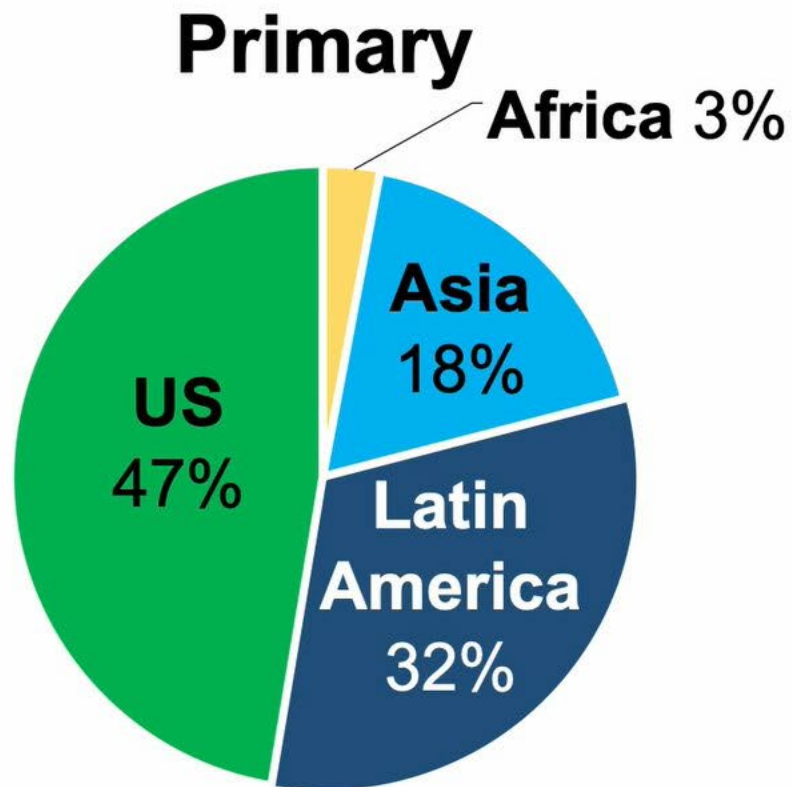
Cabotegravir



Initial injection = 6 weeks of coverage
 Subsequent injections = 10 weeks of coverage
 Injection given >16 weeks after the prior = 6 weeks of coverage

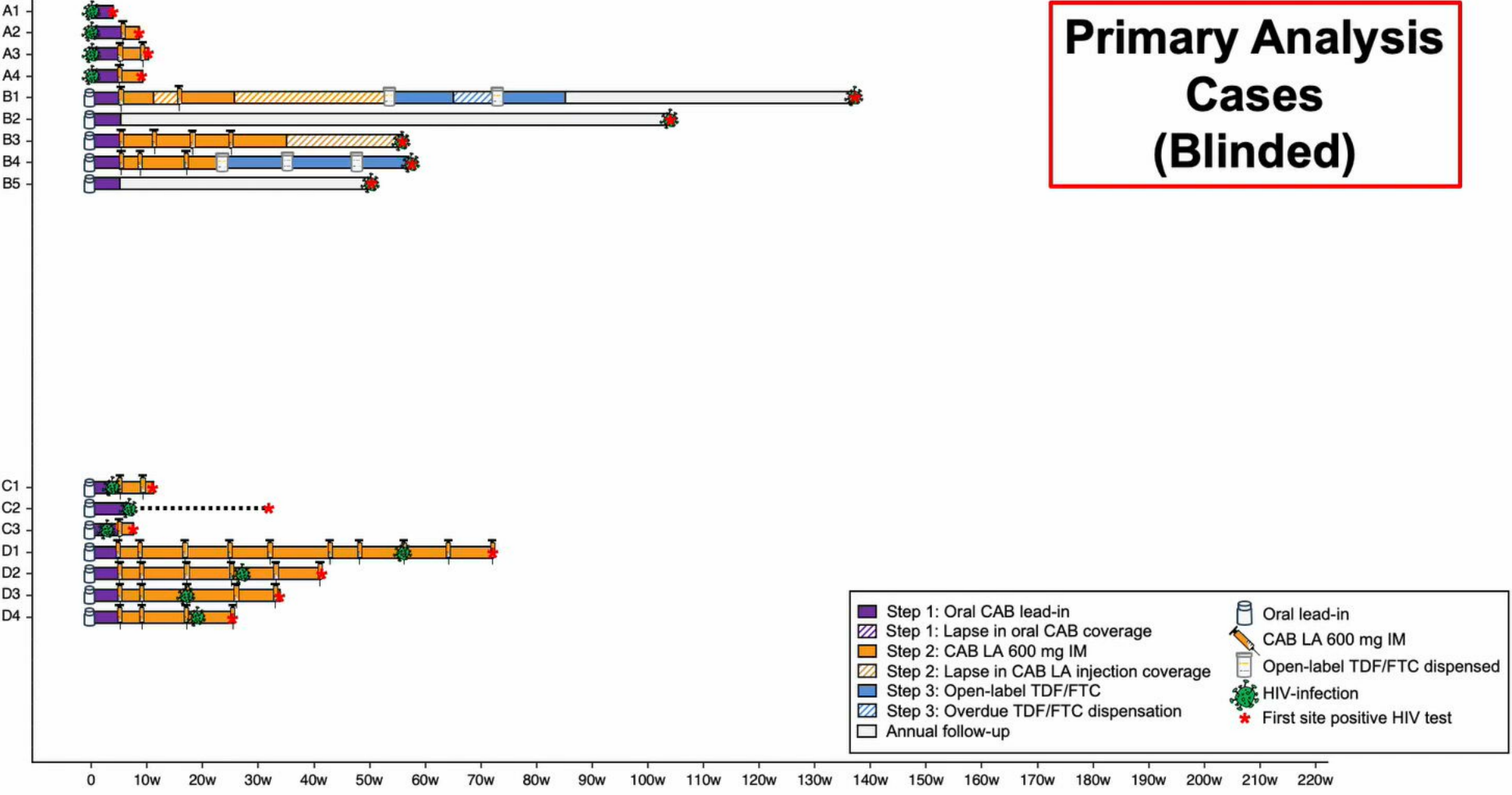


Person-time by Region



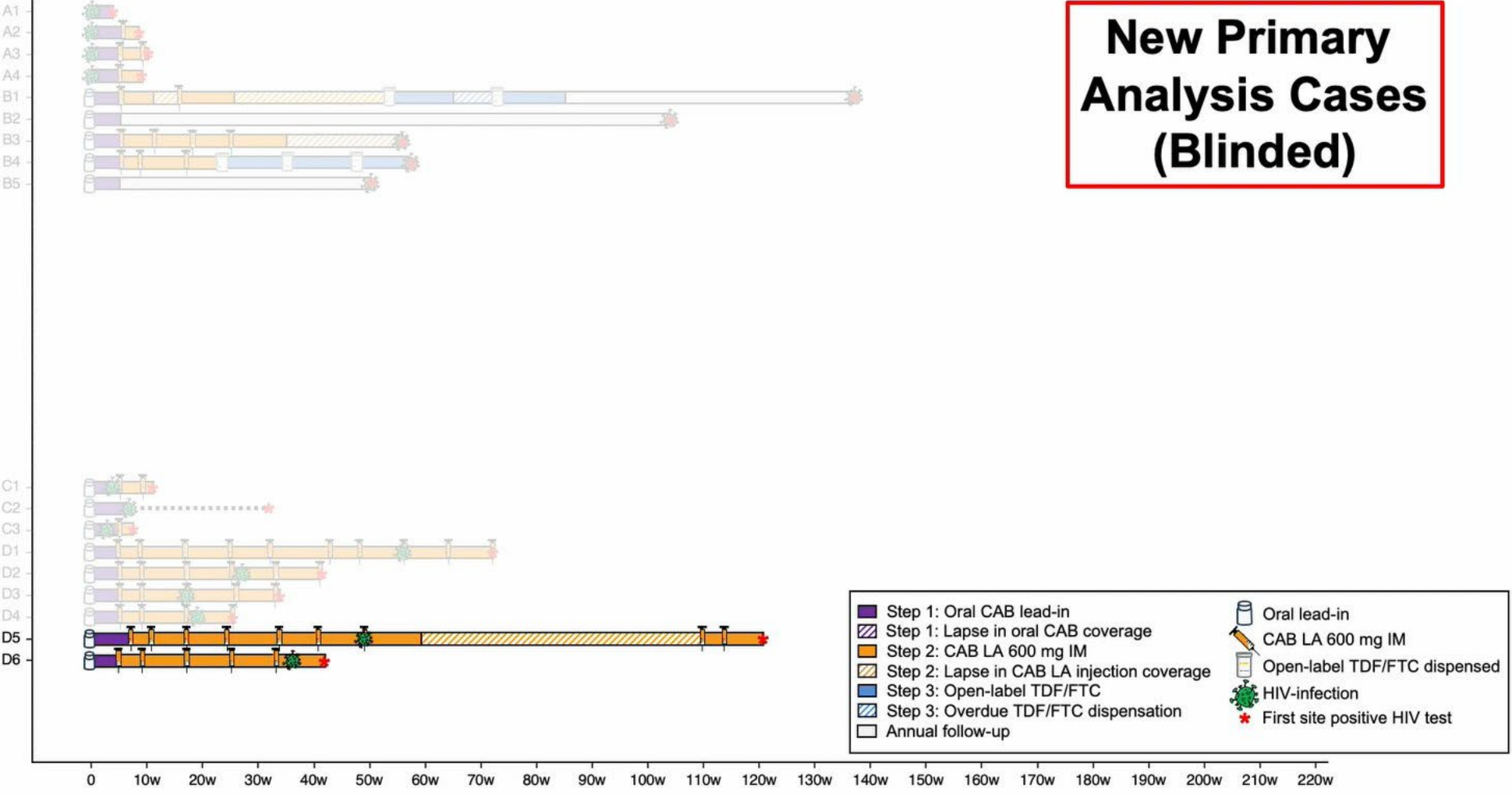
Cabotegravir Arm Infections

**Primary Analysis
Cases
(Blinded)**

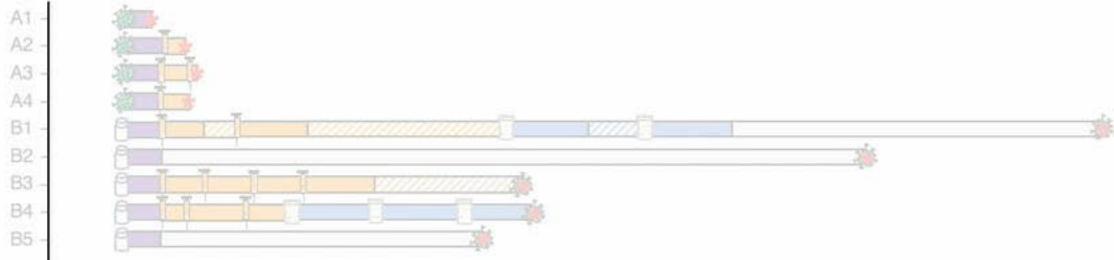


Cabotegravir Arm Infections

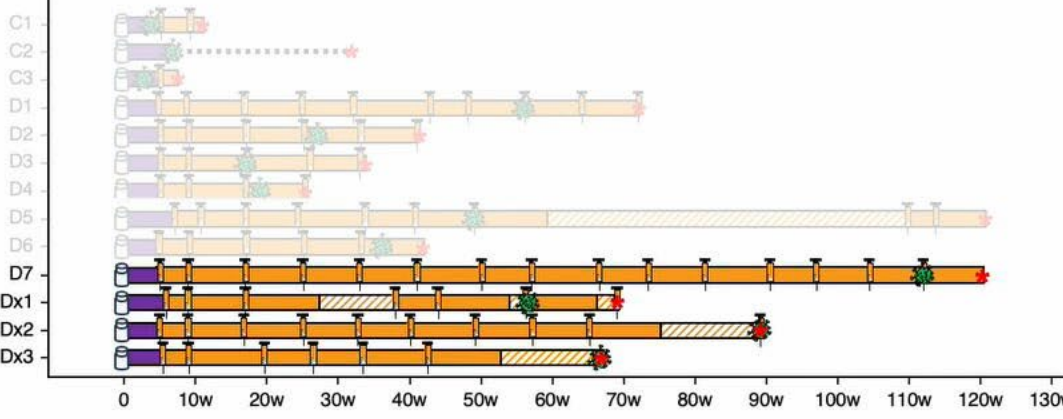
New Primary Analysis Cases (Blinded)



Cabotegravir Arm Infections



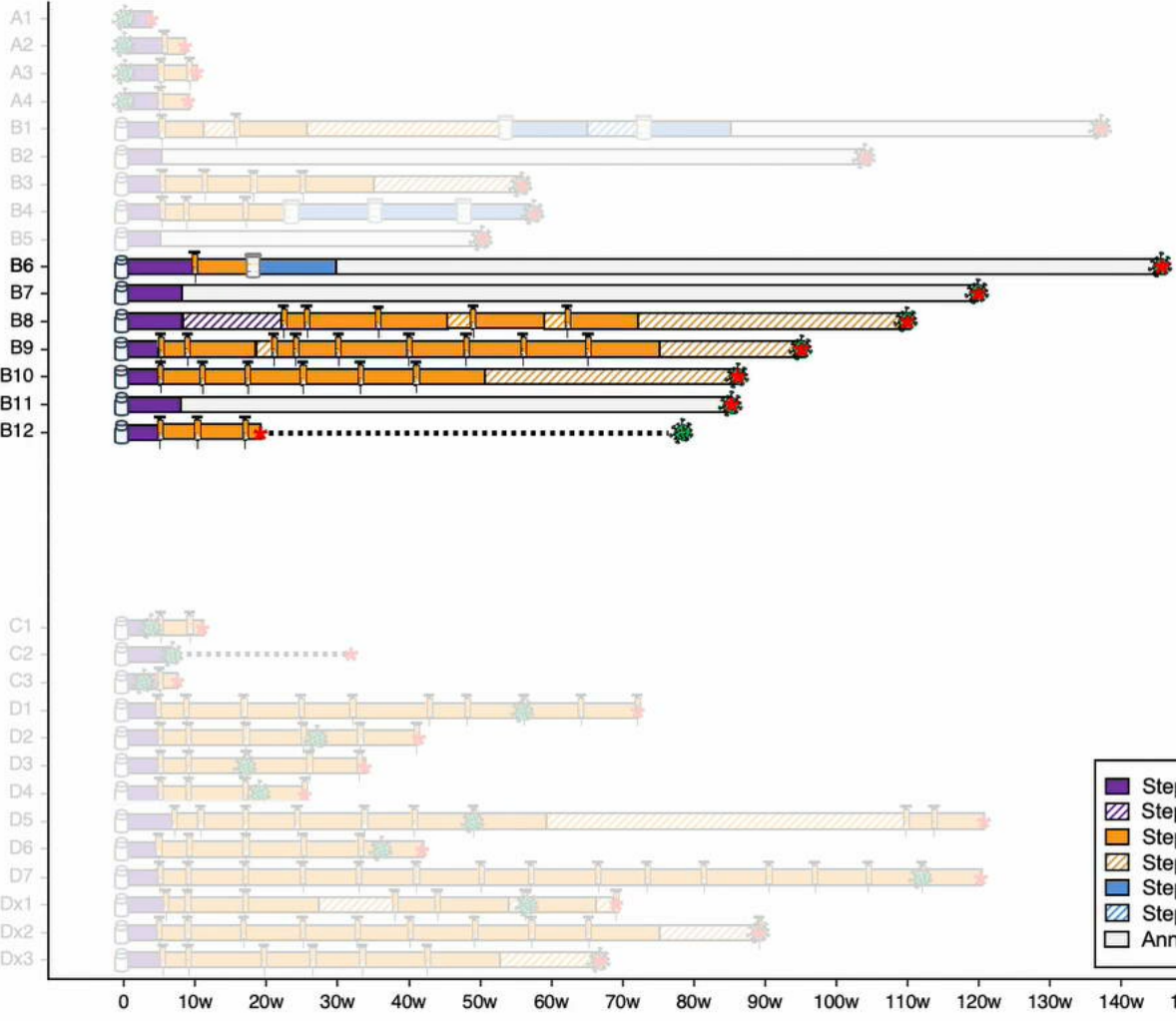
**New
Year 1 Cases
(Unblinded)**
 <6m after last (D, Dx)



| | |
|--|------------------------------|
| Step 1: Oral CAB lead-in | Oral lead-in |
| Step 1: Lapse in oral CAB coverage | CAB LA 600 mg IM |
| Step 2: CAB LA 600 mg IM | Open-label TDF/FTC dispensed |
| Step 2: Lapse in CAB LA injection coverage | HIV-infection |
| Step 3: Open-label TDF/FTC | First site positive HIV test |
| Step 3: Overdue TDF/FTC dispensation | |
| Annual follow-up | |



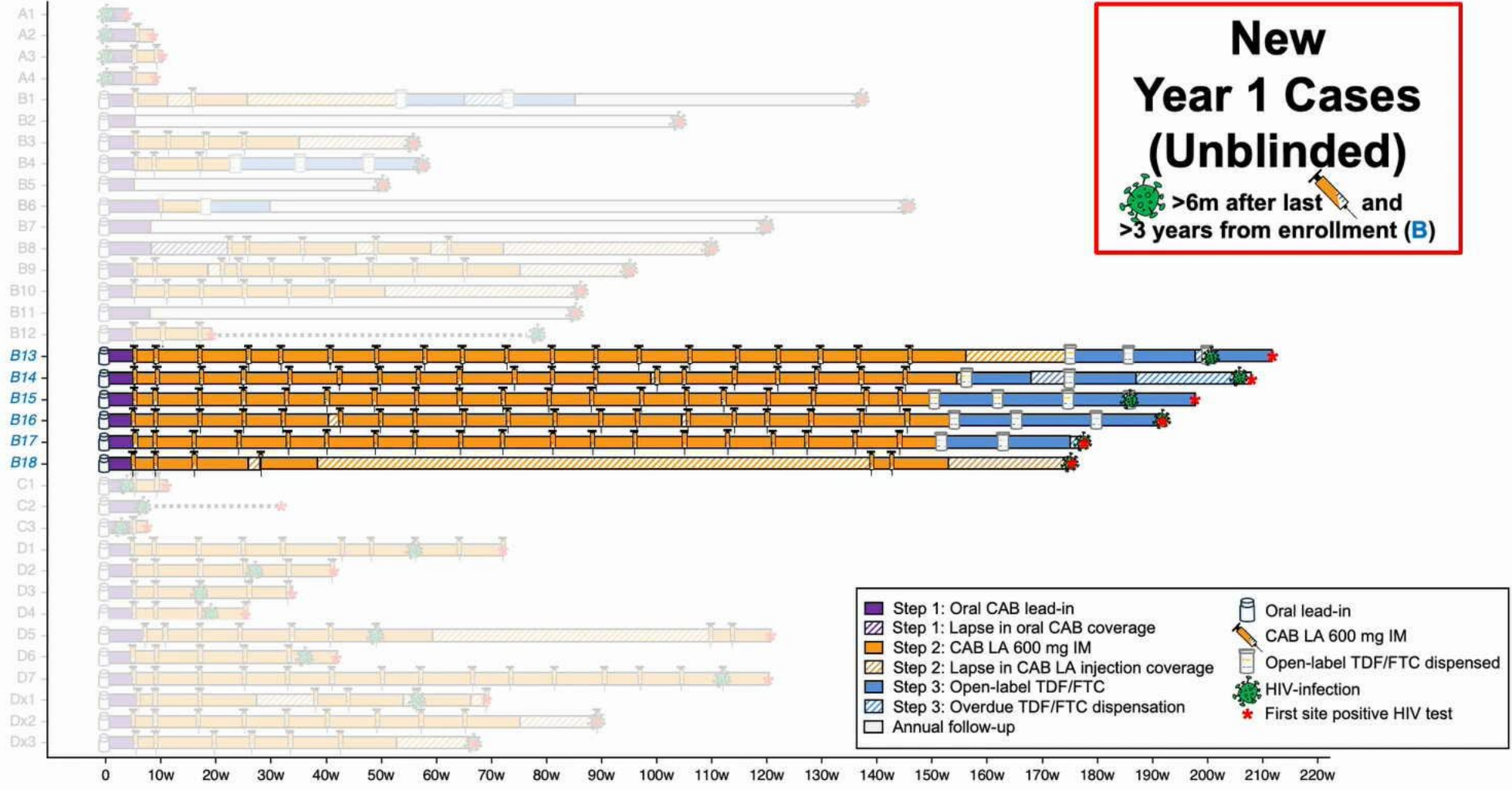
Cabotegravir Arm Infections



New Year 1 Cases (Unblinded)
 >6m after last (B)



Cabotegravir Arm Infections



Conclusions

The advantage of CAB-LA for HIV PrEP in MSM/TGW persists in magnitude (~66% reduction in HIV incidence) with 1 additional year of follow-up, unblinded

- Increased HIV incidence in both arms may be attributable to attenuation of adherence/persistence and increased contribution from high-incidence regions
- No new safety concerns were identified

CAB-LA PrEP breakthrough infections remain very rare, but unexplained

- HPTN 083 now reports a total of 7 cases of breakthrough despite on-time injections in 4660 person years of CAB-LA participant follow-up (0.15 per 100 PY)

HPTN 083 and 084, in Open Label Extension, will provide data on:

- Optional oral lead-in
- HIV RNA (LLOQ 50 c/mL or lower) as screening assay
- Impact of earlier detection of infections on CAB-LA PrEP on INSTI resistance risk is being presented in Abstract 095 (Eshleman S, et al.)



Acknowledgments



Sponsor

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HIV Prevention Trials Network (HPTN)

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- Leadership and Operations Center, FHI 360
- HPTN Leadership

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