

# Long acting injectable cabotegravir: updated efficacy and safety results from HPTN 084

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on behalf of the HPTN 084 study team



AIDS 2022, Montreal, abstract #OALBX0108







- HPTN 084 is an ongoing Phase 3 randomized, controlled trial that demonstrated the superiority of long-acting injectable cabotegravir (CAB) compared to daily oral TDF/FTC for HIV prevention in individuals assigned female at birth.
  - HIV incidence CAB 0.20 vs TDF/FTC 1.85 per 100 py, HR 0.12; 95% CI 0.05 0.31
- The blinded portion of the trial was stopped at a planned interim review in November 2020.
- Participants were subsequently unblinded and continued on their original randomised study regimen pending a protocol amendment to offer openlabel CAB.







- We report on HIV infections detected in the 12-month period following trial unblinding
  - 5 NOV 20 5 NOV 21, detected through 31 DEC 21
  - based on site and HPTN Laboratory Center testing.
- We estimated cumulative HIV incidence for the combined primary blinded and 12-month unblinded follow-up period, by study group.
- We report grade 2+ adverse events, injection site reactions, pregnancy incidence and outcomes for the 12-month post-unblinding period only.

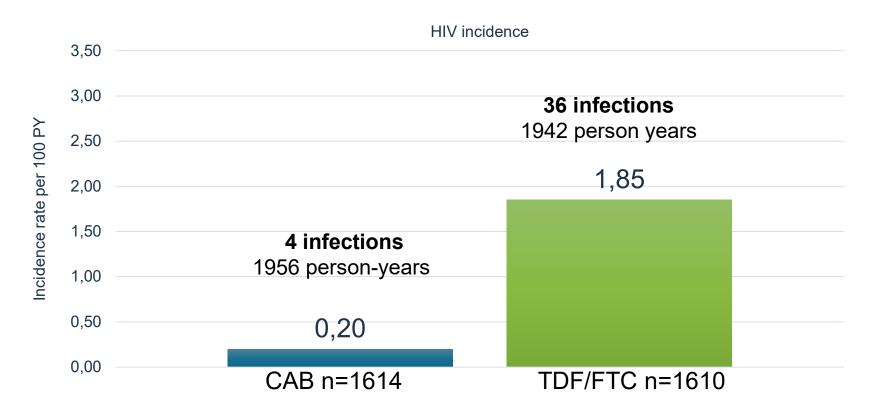


## HIV incidence: CAB vs TDF/FTC



Blinded period, through Nov 2020

#### HR 0.12; 95% CI 0.05 - 0.31

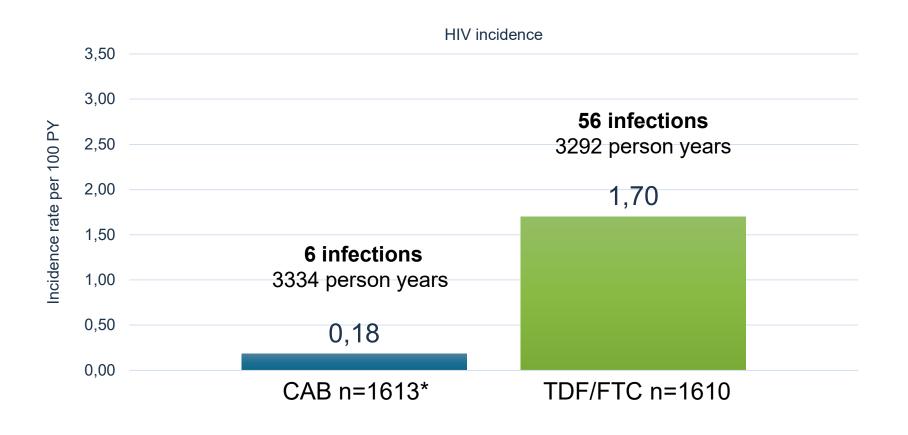




## HIV incidence: CAB vs TDF/FTC



#### Combined blinded and unblinded period, through Dec 2021 HR 0.11; 95% Cl 0.05 - 0.24

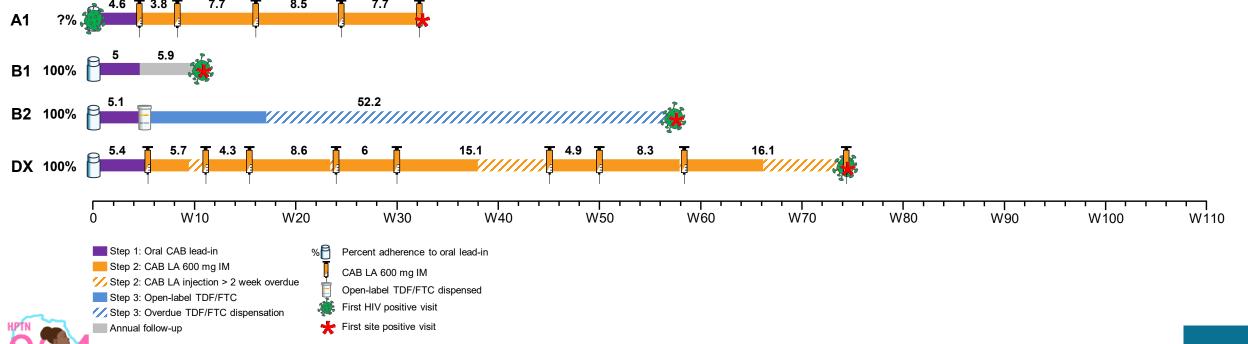




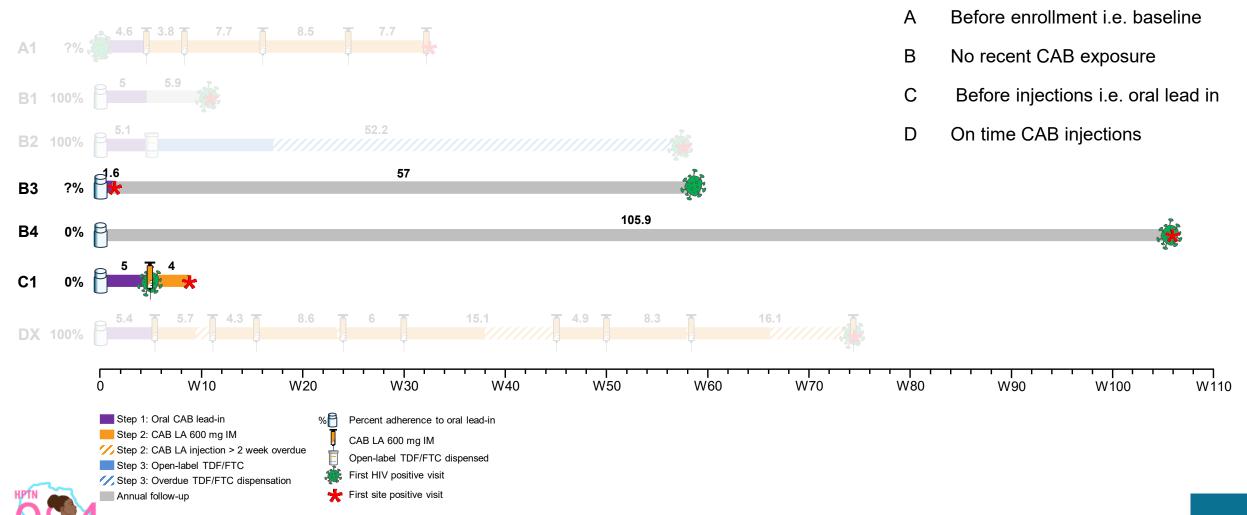
## **Cabotegravir infections: blinded period**



- A Before enrollment i.e. baseline
- B No recent CAB exposure
- C Before injections i.e. oral lead in
- D On time CAB injections



## **Cabotegravir infections: cumulative**



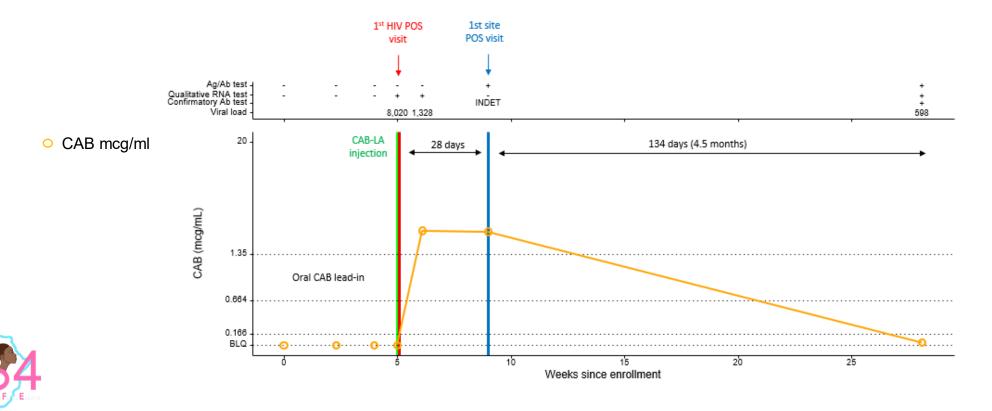
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## Cabotegravir group infections: C1

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- No quantifiable CAB during the oral lead-in
- Participant received first injection at first HIV positive visit
- Site-based testing did not detect infection at that visit
- Site detected infection 28 days later, when product was held
- Infection confirmed 4.5 months later



## Safety: Grade 2+ events, unblinded period

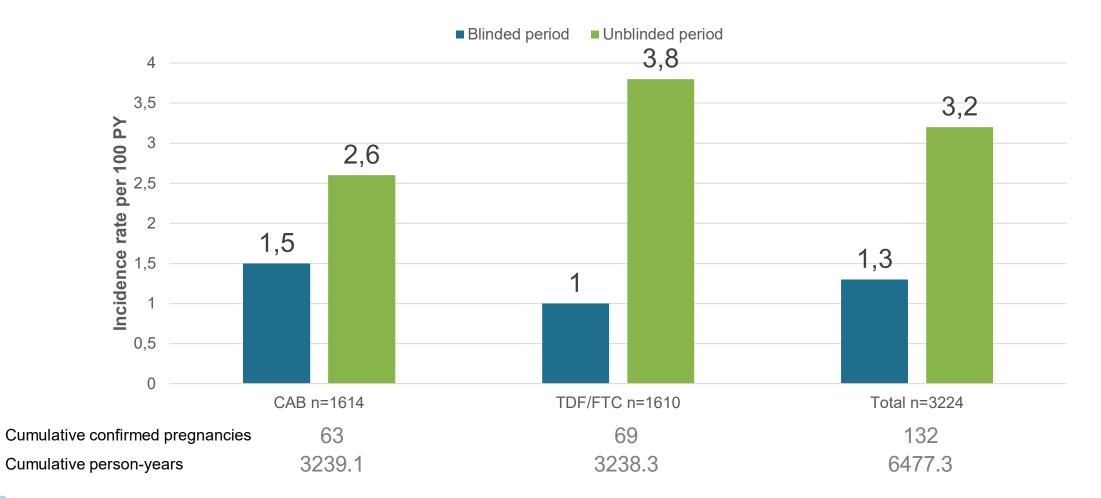
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Participants with ≥ Grade 2 events	Total (r	Total (n=2865)		CAB (n=1440)		TDF/FTC (n=1425)	
	n	%	n	%	n	%	
Any Grade 2+ events	2391	83%	1194	83%	1197	84%	
Creatinine clearance decreased	1146	40%	562	39%	584	41%	
Chlamydia infection	453	16%	225	16%	228	16%	
Gastrointestinal disorders	385	13%	211	15%	174	12%	
Creatinine increased	338	12%	168	12%	170	12%	
Urinary tract infection	258	9%	140	10%	118	8%	
Gonorrhoea	213	7%	115	8%	98	7%	
Upper respiratory tract infection	184	6%	89	6%	95	7%	
Trichomoniasis	165	6%	94	7%	71	5%	
Headache	164	6%	91	6%	73	5%	
Vulvovaginal candidiasis	157	5%	78	5%	79	6%	
Back pain	154	5%	75	5%	79	6%	
Blood glucose decreased	140	5%	71	5%	69	5%	
Abnormal uterine bleeding	123	4%	59	4%	64	4%	
Any SAE/EAE	48	2%	26	2%	22	2%	
Deaths	2	0,1%	2	0,1%	0	0%	
ISR - Grade 2+ (n=1318)			32	2%			

80% of Grade 2+ adverse events considered **unrelated** to study products, both arms



## Pregnancy incidence: CAB vs TDF/FTC





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## **Cumulative pregnancy outcomes**



	Total n=132	CAB n=63	TDF/FTC n=69
Ongoing	57	23	34
Known pregnancy outcomes*			
Live births	61	31	30
Pregnancy loss			
>=37 weeks	0	0	0
20-36 weeks	3	1	2
<20 weeks**	13	9	4
Congenital anomalies	0	0	0

\*includes multiple births

\*\*includes ectopic pregnancy, elective and spontaneous abortion



## Conclusions



- CAB continues to be superior to TDF/FTC in preventing HIV infection in individuals assigned female at birth
  - 89% lower risk of HIV in CAB vs. TDF/FTC group
  - No new safety concerns identified
  - Open-label CAB offered to all in the HPTN 084 open-label extension
- Three additional CAB group infections were identified
  - All associated with poor/absent product use
  - no on-injection breakthrough infections observed
- Pregnancy incidence increased in the unblinded period
  - Confirms importance of ongoing evaluation of CAB safety and pharmacology in pregnancy during the HPTN 084 open-label extension
- CAB access should be a priority for populations with greatest need



## Acknowledgments



#### Sponsor

 U.S. National Institute of Allergy and Infectious Diseases (NIAID), all components of the U.S. National Institutes of Health (NIH)

#### Additional funding support

- ViiV Healthcare
- Bill & Melinda Gates Foundation
- National Institutes of Mental Health

#### **Pharmaceutical support**

- Gilead Sciences
- ViiV Healthcare

#### **HIV Prevention Trials Network**

- Leadership and Operations Centre, FHI360
- Laboratory Centre (Johns Hopkins)
- Statistical Center for HIV/AIDS Research and Prevention, Fred Hutchison Cancer Research Center
- HPTN Leadership

#### HPTN 084 Study team

- 20 sites in 7 countries in sub-Saharan Africa
- Community advisory boards and partners
- ... and our study participants!



UM1AI068619-15 (HPTN Leadership and Operations Center), UM1AI068617-15 (HPTN Statistical and Data Management Center), and UM1AI068613-15 (HPTN Laboratory Center).

