4.1
DHAP Thailand, HIV/STD Research Program Updates

- 40th year celebration—HIV programs
  - Highlights of HIV accomplishments with re-prints of key peer-reviewed publications
  - Art to highlight the collaboration and work on ending the HIV Epidemic
  - WAD activities to celebrate achievements
- HIV/STD Research Program (HSRP) name change to DHAP Thailand (DHAP)
  - No changes in organization, staffing
  - Mirroring the CDC program (DHAP) supporting our work

  - What does this mean? We will be using DHAP Thailand as our program name going forward, no other changes

DHAP Thailand Program Updates

Notification of specimen disposal:

- Laboratory has reviewed specimens in storage in an effort to ensure good management and stewardship of the repository
- Currently there are ~400k specimens in storage
- 23,017 have been determined to be usable for a number of reasons:
    - No consent for future use and and/or no human subjects protocol available
    - Repeated freeze/thaws cycles have compromised sample
    - Epidemiologic information linked to specimen not available

- Destruction of specimens planned in September 2020

DHAP Thailand Program

Summary of specimens:

Serum 19,835, plasma 3,243, other 99 spanning 1992-2004.

Question or Comments?

Proposal (not yet funded):

Home-Based PrEP for Youth: A Study to enhance HIV prevention for young MSM

Sponsor: U.S. NIH: amfAR and the IeDEA Grant

Principal Investigator: Thai PI: Monthinee Vasantiupapokakorn MD
CDC PI: Joseph Woodring DO, MPH, MTM&H

Presented by Sarika Pattanasin Dr.P.H.

HIV Sub-steering Committee Meeting, August 14, 2020

Background

- Results from qualitative study in the Young MSM Cohort Study found youth are interested in **easier** prevention, and **less** clinic visits.
- Focused efforts are needed to prevent HIV infections among adolescence and young MSM and TGW have persistently high HIV incidence
  - **Recent published data from SCC VCT describe HIV incidence of 10 per 100 person/years**
- The proposed project also responds to needs for using remote strategies to strengthen PrEP service during the COVID-19 pandemic
- This activity supports the Ending the HIV Epidemic by 2030, aiming to find models that substantially improve PrEP uptake and adherence among adolescent and young MSM

Overview

- A two phase, 5-year project--a collaboration with MOPH, amfAR, CDC and UNICEF (who will procure PrEP and donate to Thai MoPH)

- Phase I: Pilot study to evaluate acceptability of a home-based PrEP model (Home-based PrEP) with HIV Self-Testing (HIVST) and PrEP adherence monitoring among adolescent and young MSM.

- Phase II: Finalize results of the pilot and qualitative research to optimize the model, disseminate findings for guidance and policies, as requested by our amfAR partner. Home-based PrEP manual to be developed and revised until finalize.

Objectives

- Among adolescent and young MSM in Bangkok,
- 1. To evaluate the acceptability of, and adherence to, home-based daily oral PrEP
- 2. To evaluate a Point of Care (POC) urine test for PrEP adherence
- 3. To optimize a model for Home-based PrEP to inform implementation practice.

Table. Planned Activities

Activities	Screening	Enrollment	M1	M3	M6	M9	M12
Clinic-based	X	X			X		X
Home-based			X	X		X	
Urine POC for adherence monitoring				X	X		
HIV Rapid test	X				X		X
HIV NAAT*							
Creatinine	X				X		X
Hepatitis B test		X			X [If HBsAg +]		X [If HBsAg +]
PrEP delivery			X	X		X	
PrEP provide at clinic		X			X		X
HIVST			X	X		X	
Syphilis testing		X			X		X
Online survey		X	X	X		X	X
Telemedicine			X	X		X	
In person counseling		X			X		X
Treatment at clinic**	X	X	X	X	X	X	X

* If poor PrEP adherence or acute HIV symptoms present to clinic. ** Referral for HIV treatment. STI treatment on site (clinic-based).

If Funded, Notice of award July 2021.

Phase I:

Year 1-2 with 6 months of recruitment of 75 participants who each will be followed for 12 months.

Enrollment planned January 2022. Preliminary results from the first 6-month to present in September 2022. Follow-up to complete June 2023.

Phase II:

Year 3: Summarize results of Phase I, youth stakeholder meeting to optimize a Home-based young MSM PrEP model.

Year 4 to develop guidelines and best practices with key stakeholders

Year 5 to finalize a “best practices” model for remote home-based PrEP

4.2 Study Updates

DHAP – COVAX study

Community engagement, communication, and access needs to support implementation planning for a novel COVID-19 vaccine

Study objectives:

- To evaluate acceptability and challenges for COVID-19 vaccine implementation
- To understand behavioral and cultural factors influencing the acceptability of vaccine through a qualitative assessment
- To evaluate vaccine messaging and providing general and tailored communication guidance for a COVID-19 vaccine

Study design:

- Mixed-methods:
  - Community consultations and Community Engagement Forums
  - KAP survey (on line)
  - qualitative assessment (In-depth interviews)
- Target populations
  - Policy makers and stakeholders
  - Health care workers
  - elderly population (>=65 years)
  - Person with pre-existing medical condition (obesity, asthma, heart disease and diabetes)
  - Healthy adult (Working age group)

- Study Timeline: 18 months (Jan 2021 – Jun 2022)
- Current status:
  - Finalize the protocol
  - Plan to submit to DDC EC end of Aug

GARDP Zoliflodacin study

Await resolution of 4th comments from MOPH EC on v 2.0.

CREC and Hospital for Tropical disease EC approved v3.0

CDC IRB reliance on CREC approved; MOPH EC through DSTDP underway

SCC study activation timeline scheduled to September 2020

COVID-19 mitigation plan is required to have EC approval before study start by Thai FDA request.

COPE4YMSM Study Updates

The study enrollment was conducted during 10 October 2017 to 31 August 2019.

Total enrolled participants are 992 (600 at SCC, 216 at RSAT, 146 at SWING Bangkok, and 30 at SWING Pattaya). 611 (61.6%) participants started PrEP at the baseline visit.

The study follow-up is ending 31 August 2020.

As of 13 August 2020, there are 79 participants remaining in the study (32 at SCC, 21 at RSAT, 16 at SWING Bangkok, and 10 at SWING Pattaya).

As of 14 July 2020, total person-years collected since 10 October 2017 is 741.6

(535.2 person-years on PrEP and 206.4 person-years off PrEP).

The 3rd study continuation was approved by JHU IRB on 12 February 2020, CDC IRB on 19 March 2020, and MOPH EC on 19 June 2020.

Protocol amendment #3 (LoA #1) (protocol v2.3, dated 12 Dec 2019) approved by CDC IRB on 23 April 2020 and MOPH EC on 15 July 2020.

TGW Study Updates

- TGW study has been approved by BIDI EC and CDC Reliance on BIDI EC
- Planned study start is October/November 2020
  - Study team is preparing SOPs, outreach plans, laboratory readiness, protocol training, activation check-list

4.3 HPTN 083 Study Updates

A Phase 2b/3 Double Blind Safety and Efficacy Study of Injectable Cabotegravir Compared to Daily Oral Tenofovir Disoproxil Fumarate/Emtricitabine (TDF/FTC), For Pre-Exposure Prophylaxis in HIV-Uninfected Cisgender Men and Transgender Women who have Sex with Men

DSMB May 2020

- May 14, 2020 DSMB for HPTN 083 met and reviewed un-blinded study results
  - At the time, 51 incident HIV infections had occurred, and they found the study had **reached its objective of demonstrating cabotegravir non-inferiority efficacy to TDF/FTC**
- A Press release shared on May 18, 2020
  - The results shared with participants, community members, and other stakeholders
    - Thai clinical research sites worked together to disseminate messaging in Thai
  - Late May 2020 HPTN 083 study team released the LOA with information on unblinding for regulatory review and approval.
    - SCC study team immediately submitted to MOPH EC and CDC IRB in order to provide participants their study assignments.
  - The information on study results was submitted to AIDS2020 virtual meeting and it was accepted as a presentation.

HPTN 083 FINAL RESULTS:

Pre-exposure Prophylaxis containing long-acting injectable cabotegravir is safe and highly effective for cisgender men and transgender women who have sex with men

Raphael J. Landovitz MD MSc
on behalf of the HPTN 083 Study Team

HPTN 083 Study Design

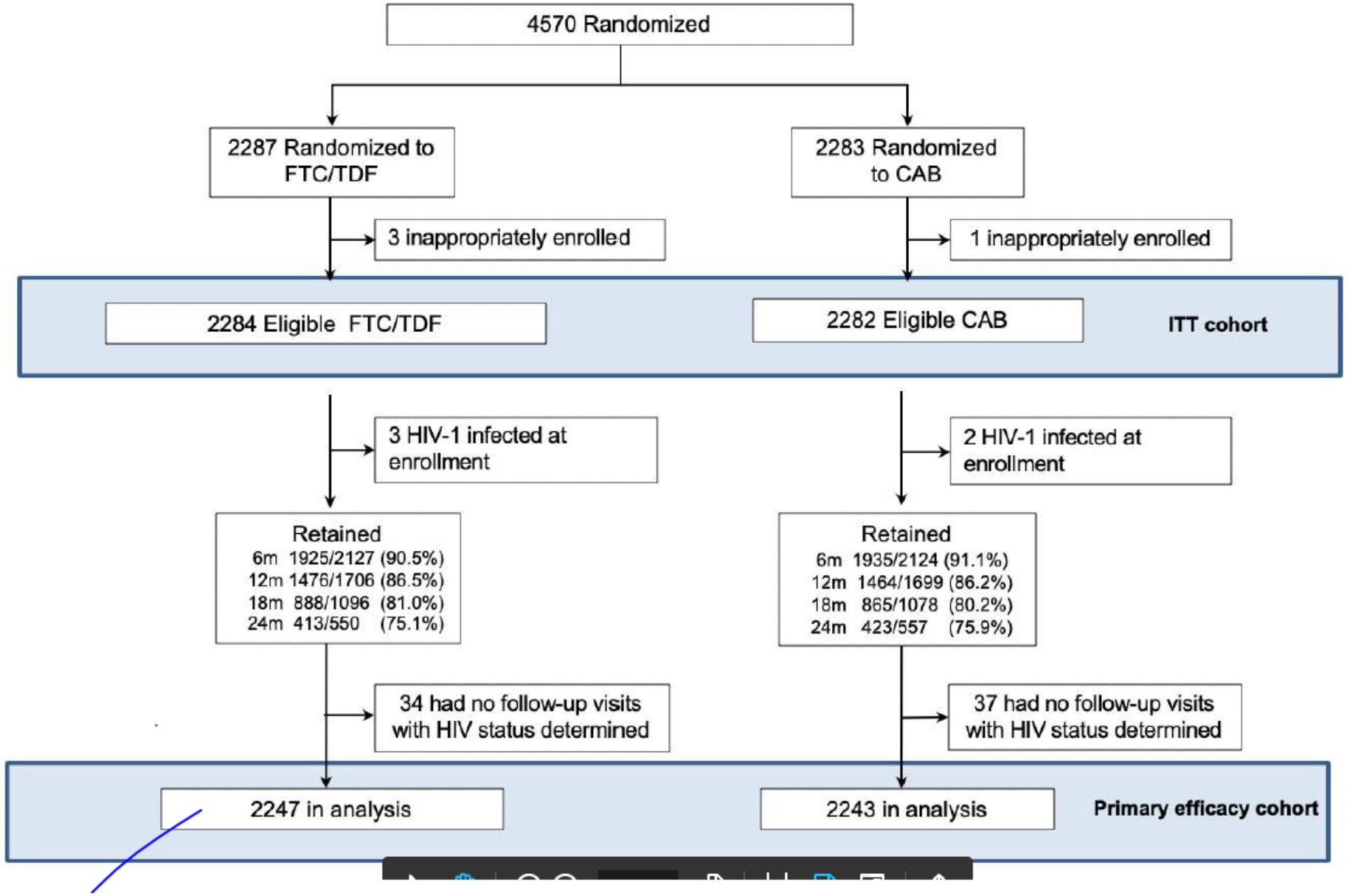
- Phase 2b/3 randomized, double-blind, double-dummy @ 43 sites globally
  - MSM/TGW age 18+
  - Risk: any nCRAI, >5 partners, stimulant drug use, incident rectal or urethral STI (or incident syphilis) in past 6 months; or SexPro Score ≤16 (US only)
  - Generally good health
  - No HBV or HCV
  - No contraindication to gluteal injections, seizures, gluteal tattoos/skin conditions

- Planned enrollment 5000
  - ≥ 50% under age 30
  - ≥ 10% TGW
  - ≥ 50% of US enrollment Black

Please see Grinsztejn B. et al, Abstract #OACLB0101

- Primary efficacy endpoint: Incident HIV infections during blinded comparison
- Primary safety endpoint: G2 or higher clinical and laboratory AEs

Participant Disposition

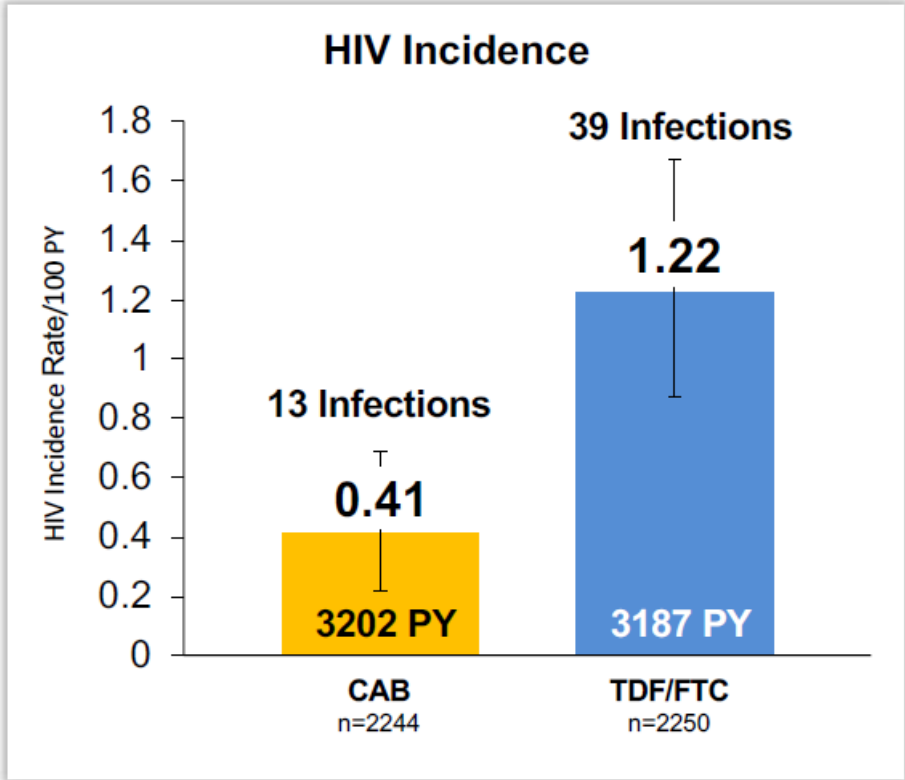


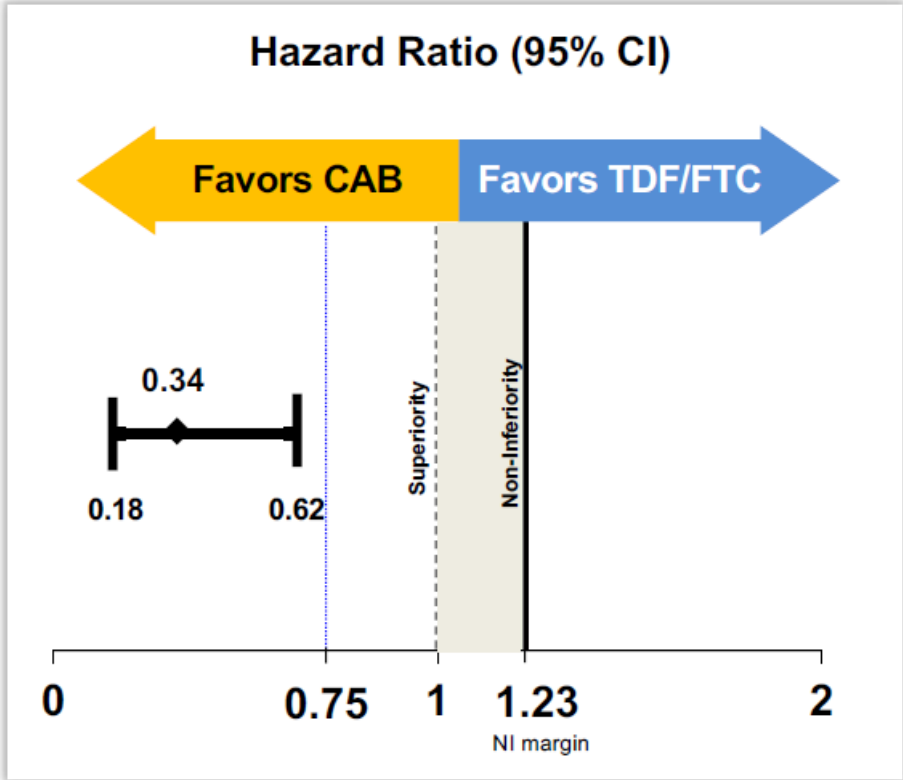
Study Population

	TOTAL (n=4566)	TDF-FTC (n=2284)	CAB (n=2282)
Race, n (%)			
United States			
Black/African American	844 (49.7)	433 (51.0)	411 (48.9)
White/Asian/Native/Other	854 (50.4)	416 (49.0)	438 (51.1)
Latin America			
Black/Afro-Carribean	395 (20.1)	196 (19.9)	199 (20.3)
Native	858 (43.7)	425 (43.2)	433 (44.2)
White/Asian/Other	711 (59.6)	363 (36.8)	348 (35.5)
Asia			
Asian	749 (99.6)	375 (99.5)	374 (99.7)
Other	3 (0.4)	2 (0.5)	1 (0.3)
Africa			
Black	119 (78.3)	57 (77.0)	62 (79.5)
Other	5 (3.3)	3 (4.1)	2 (2.6)
Ethnicity, n (%)			
United States: Latinx	303(17.8)	154 (18.1)	149 (17.6)
Latin America: Latinx	1805 (91.9)	912 (92.7)	893 (91.1)

HIV Incidence
CAB vs. TDF/FTC

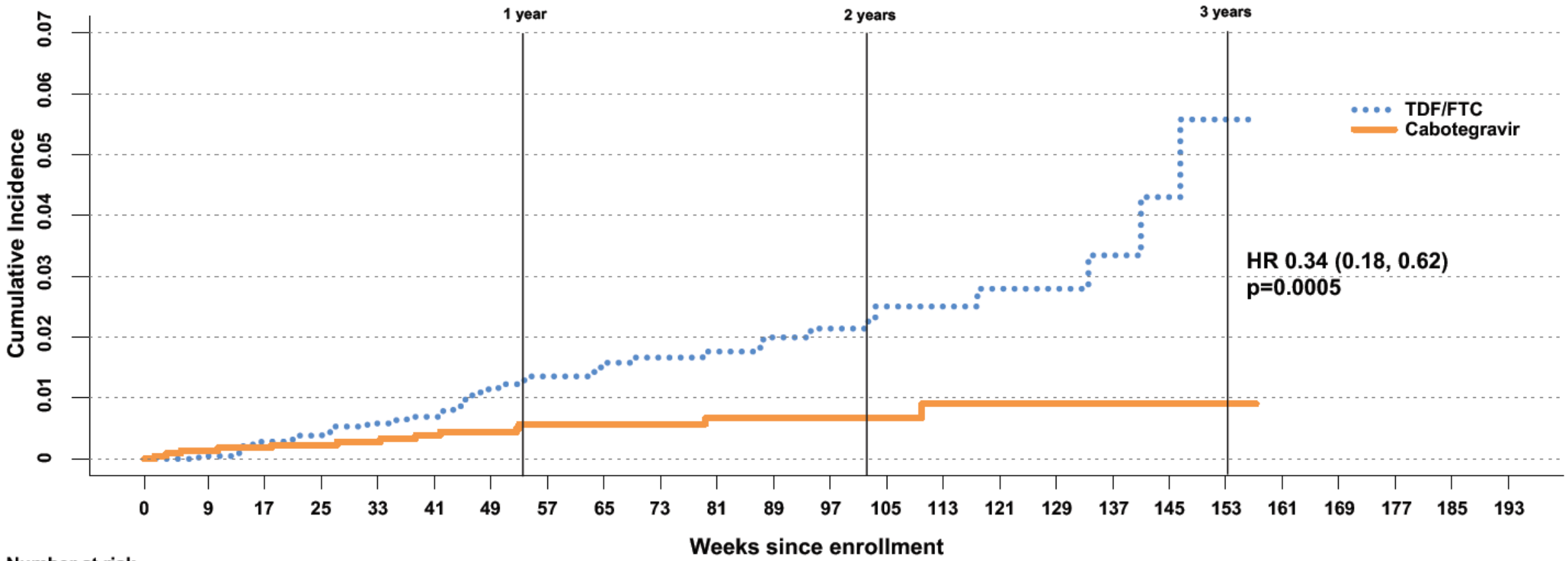
52 HIV infections in 6389 PY of follow-up
1.4 (IQR 0.8-1.9) years median per-participant follow-up
Pooled incidence 0.81 (95%CI 0.61-1.07) per 100 PY





CI, confidence interval

HIV Incidence – ITT



Number at risk

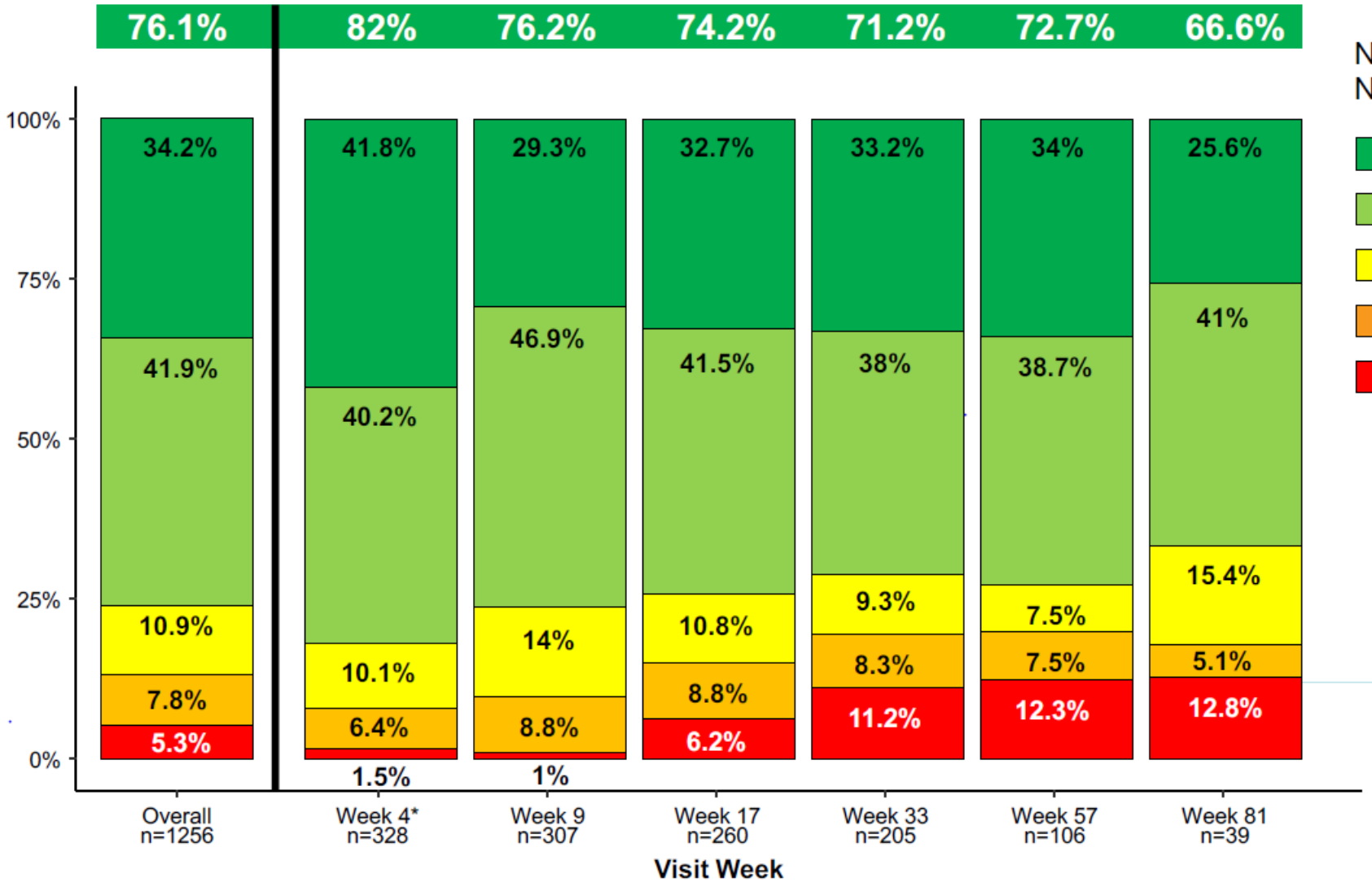
TDF/FTC	2247	2133	2081	2019	1913	1764	1624	1494	1294	1132	965	816	643	516	400	310	230	149	85	33	0	0	0	0	0
Cabotegravir	2243	2138	2092	2032	1921	1776	1632	1488	1312	1119	957	795	644	503	401	318	243	172	111	42	0	0	0	0	0

Cumulative number of events

TDF/FTC	0	1	6	8	12	14	22	25	27	29	30	32	33	35	35	36	36	37	38	39	0	0	0	0	0
Cabotegravir	0	3	4	5	6	8	9	11	11	11	12	12	12	12	13	13	13	13	13	13	0	0	0	0	0

DBS TFV-DP

Randomly selected "adherence" subset



Number of participants: 372
Number of samples assayed: 1256

- 7 doses/week (≥1250 fmol/punch)
- 4 – 7 doses/week 700 - <1250 fmol/punch)
- 2 – 4 doses/week (350 - <700 fmol/punch)
- <2 doses/week (LLOQ - <350 fmol/punch)
- No detectable drug (BLQ)

Plasma TFV

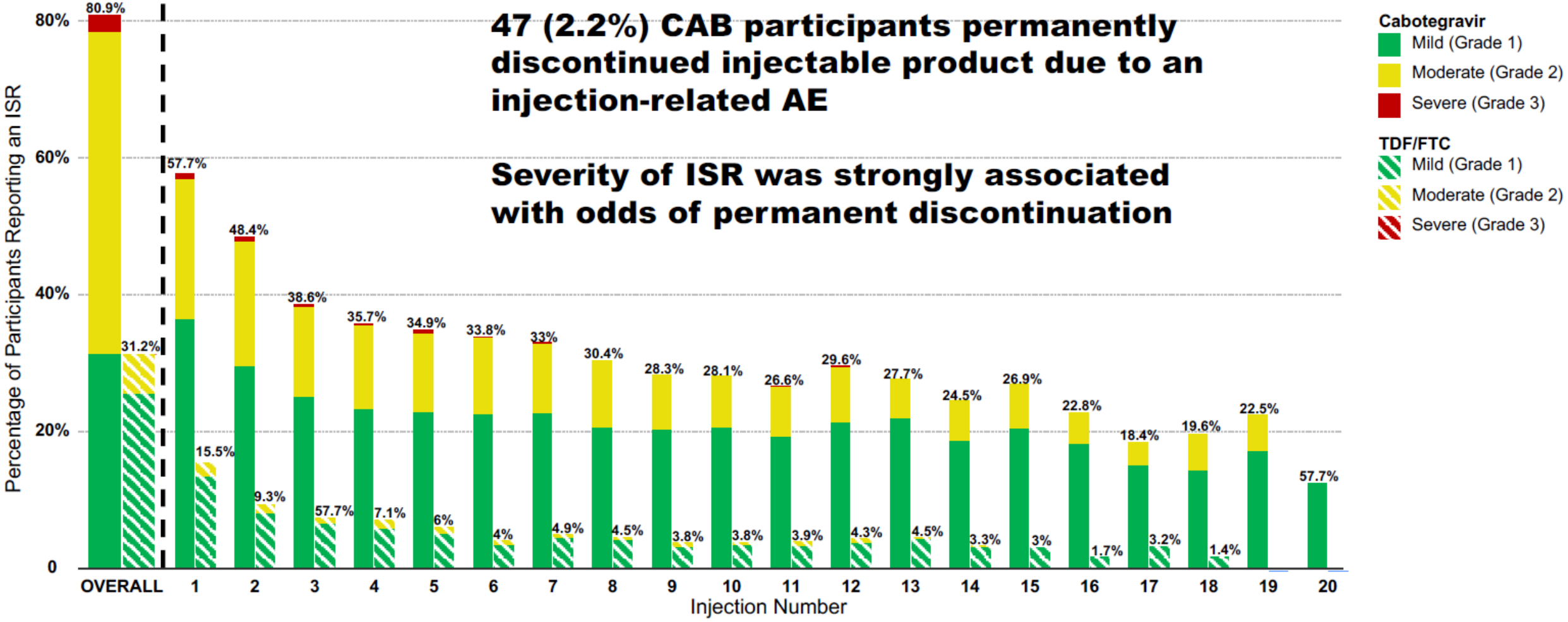
87% >10 ng/mL

75% >40 ng/mL

Injection Site Reactions

47 (2.2%) CAB participants permanently discontinued injectable product due to an injection-related AE

Severity of ISR was strongly associated with odds of permanent discontinuation



	OVERALL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Cabotegravir, n	2117	2117	2037	1938	1872	1761	1620	1464	1360	1200	1034	877	744	604	465	372	298	234	168	111	8
TDF/FTC, n	2081	2081	2014	1940	1869	1760	1606	1463	1355	1193	1037	903	760	596	482	370	288	220	146	89	6

Conclusions

- Both agents were highly effective for HIV prevention
- The PrEP regimen containing CAB-LA was superior to a daily oral regimen of TDF/FTC in HPTN 083, with a 66% reduction in risk of HIV infection observed in participants receiving CAB compared to TDF/FTC
- CAB-LA was well tolerated despite injection site reactions
- Peri-infection drug concentrations and detailed resistance profiles are needed to fully understand and contextualize results
- CAB is the first long-acting injectable agent to demonstrate robust HIV prevention efficacy in MSM/TGW
- Awaiting results for cisgender women (HPTN 084)

HPTN 083 at SCC

- Participants are continuing in the study and we are awaiting approval of LOA to unblind the study (approved by CDC IRB, awaiting MoPH EC)
- Version 4.0 Protocol in development
  - Open label cabotegravir planned as a part of next phase of study

Back-up slides (do not need to be printed)

Linelist of specimens for disposal

Study	Year of collection	STUDY NAME	# of specimens
2	1992-1992	Bamrad	2,537
3	1991-1992	HTLV	550
4	1992-1992	UpSocio I	2,000
6	1992-1993	UpSocio II	1,000
7	1993-1994	CR Blood protocol	3,620
8	1993-1996	HIV/AIDS (HACS)-Bamrasnaradura (BIH) Data Management Project	4,783
9	1994-1996	Pulmonary Tuberculosis and HIV con-infection: clinical Features, Immune status, and Response to therapy	641
10	1991-1997	Study of risk factors for HIV-infection among randomly selected Thai male age 21-23 years (Phitsanulok)	3,234
12	1993	Sentinel Survey-12/92	919
13	1993-1994	Sentinel Survey-12/93	985
14	1994-1995	Isolation and Genomic Characterization of HIV strains in Thailand	401
16	1992	Prison Study	34
19	1994	WHO IDU Peptide	119
20	1994-1995	Yunnan Peptide Serum	21
22	1995	Sentinel Survey-6/95	907
26	1996	Laos CPT Collection	7
28	1997	Sentinel Survey-6/97	884
32	1995-2004	BMA IDU Seroprevalence	312
40	2000	Perinatal NMS	101
41	2000-2004	VaxGen Phase I/II SC=s	86
48	2004	A Pilot Project of Antiretroviral Treatment for HIV-infected Injection Drug Users in the Bangkok Metropolitan Area	36
		Total =	23,177