Outcomes of a Community-Clinic PrEP Trial in China During COVID Lockdown, 2021-2023

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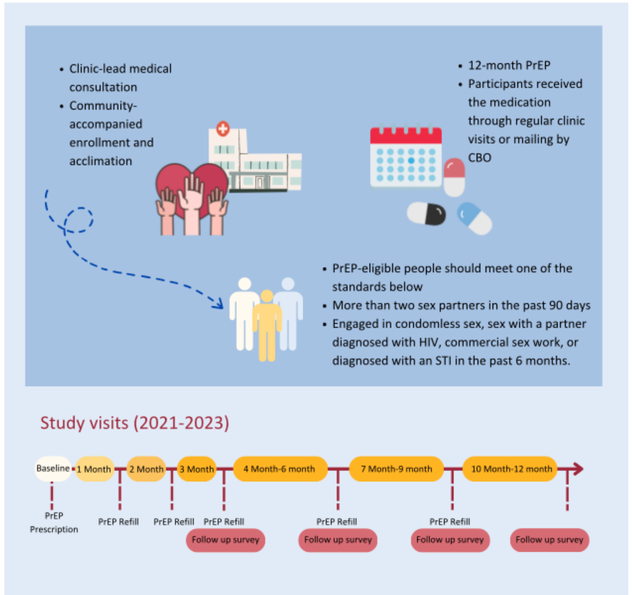
BACKGROUND

- Data on **PrEP uptake, persistence, discontinuation, adverse events, and HIV incidence among** people who would benefit from PrEP in China **is limited**. This study addresses the research gap by summarizing the results of a PrEP phase 4 clinical trial in China.

METHODS

- A **community and clinic hybrid delivery model** for recruitment, participant engagement, and PrEP delivery in Wuhan and Guangzhou, China from 2021 to 2024



Measurement:

- **PrEP continuation and adherence** information (defined as self-reported taking more than 4 pills in 7 days for daily and over 75% strict adherence to 2+1+1 for events-driven) was surveyed quarterly.
- Lockdowns occurred during 2021-2022 due to covid restrictions.

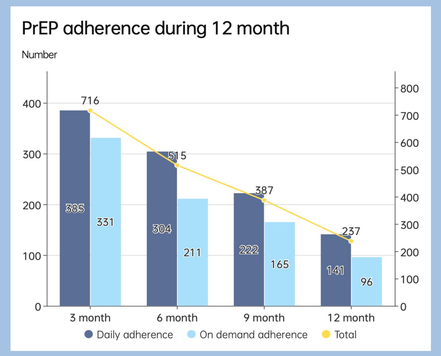
- **Demographics, enrollment, PrEP persistence, adherence, discontinuation, and adverse events were descriptively summarized.**

RESULTS （ September 2021 to July 2023 ）

3649 were screened, 1200 were enrolled, and 1138 participants started oral PrEP, with a median age of 29.1(SD=5.9).

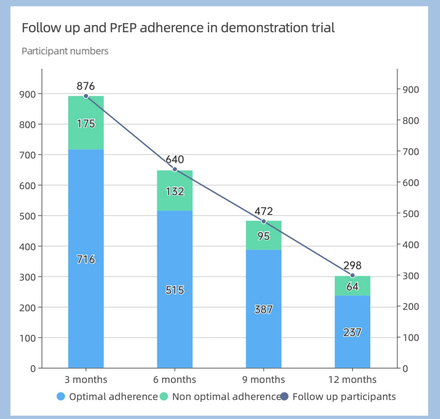
- 93.7% gay or bisexual (1066/1138)
- 99.6% were cis-gender men (1134/1138)
- 77.1% gained a bachelor's or higher educational background (877/1138)
- 62.9% of participants had a monthly income of over 5000 RMB (694.5 USD)

Self-reported adherence 75.4%-47.1%



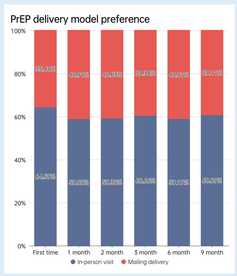
3 month: 75.4%(716/950), 6 month: 67.1%(515/768),
9 month: 58.6%(387/660), 12 month: 47.1%(237/503).

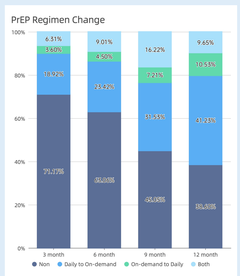
Persistence rate 84.2%-55.5%



3 month: 84.2%(876/1059), 6 month: 75.8%(640/845),
9 month: 67.1%(472/703), 12 month: 55.5%(298/537).

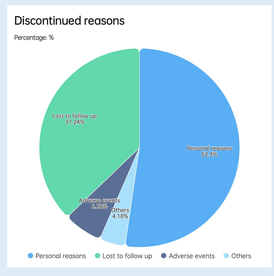
Delivery model and Regimen change

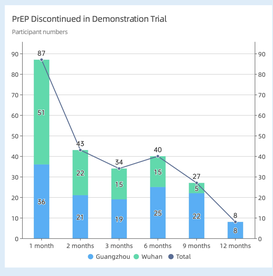




Daily : 45.2%(396/876) / On-demand: 54.8%(480/876)
Among ever dosing-switched participants, **62.7%(126/201) of participants** transferred from daily to on-demand regimen, and **14.4%(29/201)** from on-demand to daily.

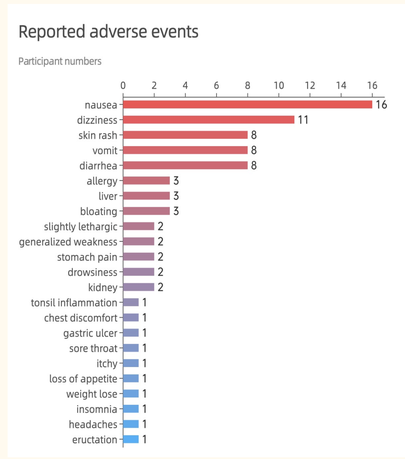
Discontinuation





239 participants (21.0%, 239/1138) discontinued PrEP use during the study. Major of the participants discontinued before the 3 months (68.6%, 164/239).

Adverse events and seroconverted



Six participants were seroconverted

HIV incidence rate of **0.73** per 100 person-years.

HIV incidence in the absence of PrEP in this population is **5.10** per 100 person-years[1]

Order	Finished follow-up	Regimen
SiteA 1	1 month	On-demand
SiteA 2	1 month	Daily
SiteA 3	2 month	On-demand
SiteB 4	2 month	Daily
SiteB 5	3 month	Daily
SiteB 6	6 month	On-demand

Two participants reported Acute facial neuralgia (included in allergy) may be a rare AEs. [2]

1 Wang H, Wang Z, Huang X, Chen Y, Wang H, Cui S, Zhang J, Chu Z, Hu Q, Ding H, Qian H, Zou H, Tang W, Gao Y, Jin X, Liu Z, Zhang L, Zhao J, He X, Jiang Y, Geng W, Xu J, Shang H; China Real-World Oral Intake of PrEP (CROPrEP) Study Team. Association of HIV Preexposure Prophylaxis Use With HIV Incidence Among Men Who Have Sex With Men in China: A Nonrandomized Controlled Trial. JAMA Netw Open. 2022 Feb 1;5(2):e2148782. doi: 10.1001/jamanetworkopen.2021.48782. PMID: 35171258; PMCID: PMC8851305.
2 Yin Z, Tan RKJ, Tucker JD, Li Q, Sherer R, Li L, Tang W. Acute facial neuralgia related to initiation of emtricitabine/tenofovir for HIV PrEP: a report of two cases in a PrEP demonstration trial. Sex Health. 2024 Jan 29. doi: 10.1071/SH23129. Epub ahead of print. PMID: 38281491.

CONCLUSIONS

- **The hybrid CBO and clinic-based model proved feasible for reaching and dispensing PrEP among people who would benefit from PrEP**
- **On-demand use and mail-order drugs were popular alternatives and one-half of participants engaged in sex using alcohol and nitrates.**
- **Long-term PrEP persistence and optimal adherence continuously decreased among Chinese users during the 12 months.**

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Acknowledgements:
We would like to thank all other implementors from Guangzhou Eighth People's Hospital (Heping Zhao, Wu Sun, Cong Liu, Xu Yang, Dandan Gong); Social Entrepreneur to Spur Health (Hengran Qian, Shixiang Bao, Yingge Wang, Nachuan Wu, Jiayi Luo, Bin Yu, Yutong Jiang, Yongjie Sha, Yuan Xiong, Anna Fan), Kun Wang (Wuhan Tongzhi Center), Jie Liu (Zhongnan Hospital of Wuhan University).

This research was funded by Gilead Sciences.