Developing and Introducing a Dual Prevention Pill



Background

A coalition of partners is developing a novel Dual Prevention Pill (DPP) for prevention of pregnancy and HIV acquisition in high-need countries. Women in sub-Saharan Africa are disproportionately affected by HIV compared to men, and 214 million women of reproductive age in the developing world have an unmet need for contraception.¹ In particular, young women ages 15-24 in sub-Saharan Africa account for 71 percent of new infections in their age group and 29 percent of new infections among adults in the region.² As the "youth bulge" results in millions of young people entering their reproductive years,³ it will impact efforts to end the HIV epidemic and reduce unintended pregnancies. It is critical to ensure all women have access to both contraception and HIV prevention.

The results of the Evidence for Contraceptive Options in HIV Outcomes (ECHO) Trial, released in June 2019, found that HIV incidence rates were alarming among women using widely available forms of contraception who were receiving a comprehensive HIV prevention package.⁴ The findings underscore the urgent need to optimize access to HIV prevention and contraception for African women.

Contraceptive multipurpose prevention technologies (MPTs) have the potential to overcome adherence and uptake challenges seen with oral pre-exposure prophylaxis (PrEP) and stigma associated with HIV service delivery. A DPP, an MPT comprising oral PrEP and an oral contraceptive, will offer significant advantages. It will be highly effective at preventing both HIV and pregnancy when used daily, feasible to deliver in various settings, with the potential to deliver public health impact by expanding choice and method mix. Adding an MPT to the available method mix could empower users with choices that better fit their needs and lives.

In the near-term, a DPP could increase the uptake of PrEP decreasing new infections among women in high-burden settings — and reduce the number of unintended pregnancies. A DPP could also lay the groundwork for the development and rollout of other MPTs currently in the research pipeline, such as vaginal rings, injectables, implants and films.

Project Goal

Rapidly and successfully introduce a daily oral pill for HIV and pregnancy prevention.

A coalition of organizations, including AVAC, the Clinton Health Access Initiative (CHAI), Mann Global Health, Mylan and the Population Council are implementing the DPP project. These efforts are supported by the Children's Investment Fund Foundation (CIFF), the Bill & Melinda Gates Foundation (BMGF), the U.S. Agency for International Development (USAID) and WCG Cares.

Geographic Scope

Settings that demonstrate **need** (high HIV incidence and high unmet need for modern contraception), **potential demand** (current oral PrEP and contraceptive use) and **enabling policy and regulatory environments** will be prioritized for early DPP introduction, but early estimates indicate a potential market of 251,000-1.25 million women in 15 countries in sub-Saharan Africa.⁵

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PRIORITIZED COUNTRIES					
INDICATOR	KENYA	SOUTH Africa	ZIMBABWE		
HIV Incidence (per 1,000 population) ²	1.02	4.94	2.79		
New HIV Infections, (# women $15+$) ²	24,000	140,000	19,000		
Unmet Need for Modern Contraception (%) ⁶	20.3	15	9.9		
Unintended Pregnancies (#) ⁶	956,000	1,060,000	298,000		
Oral Contraceptive Use (% of method mix) ⁶	14.1	12.3	56.5		
Total PrEP Initiations (#) ⁷	56,000	44,304	17,588		

a copper intrauterine device, or a levonorgestrel implant for contraception: a randomised, multicentre, open-label trial, Lancet 2019; 394: 303–13.

7 AVAC, Global PrEP Tracker, Jan. 2020.

¹ FP 2020. FP2020 Catalyzing Collaboration 2017-2018. http://progress.familyplanning2020.org/. 2019.
² UNAIDS 2019 data.

³ UNAIDS, The Youth Bulge and HIV. https://www.unaids.org/sites/default/files/media_asset/the-youth-bulgeand-hiv_en.pdf. 2018.

⁴ ECHO Trial Consortium, HIV incidence among women using intramuscular depot medroxyprogesterone acetate,

⁵ Population Council, Oral cMPT Market Sizing Report. 2020 (forthcoming).

⁶ FP2020 Core Indicator Summary Sheet: 2017-2018 Annual Progress Reports.

Key Milestones for Dual Prevention Pill Development



A single **co-formulated**

tablet containing Truvada and combined oral contraceptive (COC) active pharmaceutical ingredients (APIs) is under development.

Conduct bioequivalence study

to compare bioavailability of co-formulated tablet to Truvada and COC separately.

File dossier with SRA

for regulatory approval.



To shape product development and demand creation strategies, **conduct humancentered design research** in South Africa and Zimbabwe on perceptions, barriers, and motivators of end users, providers and influencers as they relate to the DPP. To inform clinical cross-over acceptability studies, **conduct formative research** to understand perspectives on the DPP among women, health care providers, community members and key opinion leaders.

Conduct clinical cross-over acceptability studies in South Africa and Zimbabwe to compare women's experiences using a DPP to two separate Truvada and COC pills.



Establish Advisory Board with

leading research entities, normative agencies, donors, implementers and advocates working on HIV and SRHR to plan for and coordinate introduction of the DPP in parallel with product development activities.

Engage with policymakers, regulators, civil society and key opinion leaders in HIV and SRH to generate buyin, shape introduction plans, understand potential market size and inform regulatory strategies for DPP introduction.

Develop a comprehensive Go-To-Market Strategy with global and national stakeholders.

2020	2021	2022	2023
 Go-To-Market Strategy approved Investment case developed Human-centered design and formative research conducted 	 Donor commitments secured to operationalize Go-To-Market Strategy Clinical cross-over acceptability studies begin 	 Pilot introduction projects developed Bioequivalence study results available 	Target introduction in prioritized countries

* Timelines are subject to modification given funding, government buy-in, development feasibility, and regulatory requirements.

For inquiries, updates and resources on the development of the DPP, please visit prepwatch.org/dpp.















CHILDREN'S









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