Microbicides: Woman-centered HIV Prevention Products to Help End AIDS by 2030

Invest in microbicide R&D for women—it’s the smart choice

What are microbicides?

Vaginal microbicides are biomedical products being developed to protect women from HIV during vaginal sex. They could come in different forms—such as a long-acting vaginal ring found to help reduce HIV risk in large clinical trials—and other products in earlier stages of development such as films and inserts.

Women bear the burden of the HIV/AIDS epidemic

• Women and girls lack the range of prevention options they need to protect their own health.

• HIV/AIDS is the leading cause of death globally in women ages 15-44, and one of the biggest threats to women’s health and well-being.

• Every day, nearly 2,000 women acquire HIV, putting their sexual and reproductive health at risk.

• Young women ages 15-24 are at greater risk. Worldwide they are more than twice as likely to be living with HIV as young men and, in sub-Saharan Africa, are more than twice as likely to become infected.

• Women urgently need new self-initiated and discreet HIV prevention methods like microbicides to help them protect their sexual and reproductive health.

Small investment, enormous pay-off

• Modeling studies show that a microbicide like a monthly HIV prevention ring could have a meaningful impact on the HIV/AIDS epidemic as part of a combination prevention strategy while helping to empower women and girls to safeguard their health.

• The dapivirine ring is the first microbicide to reach regulatory review, which is now underway. To save lives and see years of global investment and scientific progress pay off, we must sustain investment in microbicides.

IPM is a nonprofit organization dedicated to developing new HIV prevention technologies designed to empower women to protect their sexual and reproductive health, and making them available in developing countries.

Microbicides R&D is a tiny fraction—about 0.001%—of annual development budgets globally.
The dapivirine ring—hope for women’s HIV prevention

• The monthly microbicide vaginal ring—developed by the nonprofit International Partnership for Microbicides (IPM) with investment from the United States and many European governments—is the first long-acting HIV prevention method shown to help reduce women’s HIV risk in large clinical trials.

• The flexible silicone ring, which women insert themselves into the vagina, is designed to slowly release the antiretroviral drug dapivirine over the course of a month.

• While vaccines and other methods are on the long-term horizon, they are not yet available and none will be 100% effective. That is why a range of new tools is needed.

Advancing the ring: Status and next steps

The application process to license the product for public use is underway.

• The ring is under review by the European Medicines Agency. IPM also plans to submit to the US Food and Drug Administration and the South African Health Products Regulatory Authority, followed by other national regulatory agencies in Africa.

• If the monthly dapivirine ring is approved, its successful introduction will be crucial to launching follow-on products like IPM’s three-month dapivirine-contraceptive ring.

Prevention is critical

With 1.6 million new adult infections in 2018, treatment is essential but cannot end the AIDS epidemic on its own.

“Simply put, girls and women are the keys that will unlock sustainable development. They are also at the center of the healthier and more resilient societies we desire.”

– Tedros Adhanom Ghebreyesus
    Director-General, World Health Organization

Why are women at such high risk?

Gender inequities play a major role in limiting women’s ability to negotiate safe sex, or even select their partners or the timing of sex. Condoms, while highly effective, are not a feasible option for many women. Women are also biologically more susceptible to HIV infection than men.
Investing in microbicides is smart for economic growth, political stability and gender equality

Current HIV prevention options aren’t enough to end the epidemic. With Africa’s pending “youth bulge” and global population growth, as many as 100 million people could be living with HIV by 2030.

- The 2016 UN’s Political Declaration on HIV/AIDS explicitly recognizes the urgency of developing safe and effective microbicides to prevent HIV.
- Increased spending to end AIDS in endemic countries could generate US$124-612 billion of income growth and economic benefits by 2030 from increased life expectancy alone.
- Economic growth would decrease poverty, help maintain political stability and decrease dependence on foreign aid.
- Countries that received PEPFAR assistance saw political instability and violence fall by 40 percent over 10 years (2004–2014) compared to a 3 percent drop in similar countries that did not.
- Microbicide R&D builds research capacity and infrastructure in areas most affected by the epidemic, strengthening health systems.
- Microbicides would help lower HIV infection rates among women, allowing them to pursue work and support their families, and enabling more girls to stay in school.

Access to the ring

We are now preparing the ring for potential market introduction to help ensure it will be affordable and accessible if it is approved for use. Access to potentially lifesaving new technologies depends on sustained and new funding.
Investment in microbicides like the dapivirine ring are leveraged by major global financial support

**Country governments**
- Denmark
- Flanders
- Germany
- Ireland
- Netherlands
- United Kingdom
- United States

**Philanthropic sector**
- **BILL & MELINDA GATES foundation**

**Private sector**
- **Johnson & Johnson**

Intellectual property, technical assistance and support for product introduction

The contents of this document are the responsibility of IPM and do not necessarily reflect the views of its donors.

As a nonprofit product development partnership (PDP), IPM aggregates resources from public and private sectors to develop women-centered HIV prevention technologies for use in developing countries, where the need is urgent but market incentive is lacking.