



## Breakthrough Microbicide Gel Prevents HIV and Herpes in Women

### Highlights

**S&T Innovation:** Antiretroviral gel that prevents HIV and herpes in women

**Sector:** Global Health

**Development Challenge:** HIV/AIDS; reproductive health

**Location:** South Africa

**Potential for Replication:** Currently conducting confirmatory trials

**Implementing Partners:** CAPRISA, CONRAD, FHI 360

**Host Country Counterpart:** South Africa Ministry of Science and Technology – Technology Innovation Agency

**Private Sector Partners:** Vulindella Community, eThekweni Community, University of Cape Town, University of North Carolina

African women, especially unmarried women or those with partners, who may have unprotected sex outside of marriage, may soon have options to protect themselves against HIV.

With support from USAID, the Centre for the AIDS Programme of Research in South Africa conducted the now historic CAPRISA 004 trial that determined that a vaginal gel containing 1% Tenofovir, an oral antiretroviral drug, is effective in preventing HIV in women.

USAID contributed \$16.5 million to the double-blind, randomized controlled trial, which compared Tenofovir gel in 445 women with a placebo gel in 444 women. The women participating in the trial were all non-infected and sexually active, between 18 and 40, in HIV epidemic areas in and around Durban, South Africa.

Overall HIV reduction among the gel users was estimated at 39%. Among women who followed the dosing regimen more of the time, HIV reduction was higher.

A welcome and unexpected result is the gel's additional effectiveness in preventing genital herpes, the presence of which increases HIV transmission risk.

The confirmation trial, FACTS 001, is more extensive than CAPRISA 004, involving up to 2,900 uninfected women aged 18 to 45 years at nine trial sites across South Africa.