

Insert for the Prevention of HIV, HSV, and STIs



Intellectual Property Status

PCT application with national phase selection in 2020

Advantages

- On-demand, user-controlled, multipurpose STI prevention method
- Efficacious against HIV, HSV, and bacterial STIs
- Completed Phase I clinical trial for safety and surrogates of efficacy (HIV/HSV)

Inventors

Dr. Gustavo Doncel

Dr. Meredith Clark

Dr. Onkar Singh

Dr. Tim McCormick

Dr. Vivek Agrahari

Dr. Melissa Peet

Dr. Jill Schwartz

Technology Overview

Sexually transmitted infections (STIs) and diseases such as those caused by HIV, HSV (genital herpes), chlamydia trachomatis, neisseria gonorrhoeae, and treponema pallidum (syphilis) are on the rise globally with more than 1 million STIs acquired every day. Furthermore, more than 500 million people are living with genital herpes infection. Unfortunately, STIs are major causes of pelvic inflammatory disease and can increase the risk of HIV acquisition three-fold or more. With only one exception being condoms, no method exists to prevent non-HIV STIs.

Researchers at Eastern Virginia Medical School's CONRAD, a nonprofit global health R&D organization, have developed a unique combination product for simple, on-demand prevention of HIV, HSV and bacterial STIs, that can be used by both men and women. The product comes in the form of a small dissolvable insert that can be discreetly self-administered to the vagina or rectum before or after sex. Active ingredients include two potent antiretrovirals – tenofovir alafenamide and elvitegravir (TAF/EVG) – that allow for flexible pre- or post-exposure dosing. Preclinical and Phase I clinical studies have been completed thus far with positive results on stability, safety, pharmacokinetics, and efficacy against HIV and HSV. Specifically, for HIV, this insert showed a 92% protection in animals. The product is also stable in room-temperature storage. A combination conferring protection against bacterial STIs is in early stages of development.

Please contact techtransfer@evms.edu if you are interested in partnering on the commercialization of this technology.