



## **What is HPTN 076?**

HPTN 076 is a Phase II clinical research study that was designed to find out if a new form of the drug rilpivirine is safe and acceptable for use as HIV Pre-Exposure Prophylaxis (PrEP). The pill form of rilpivirine is U.S. FDA-approved and is used for treatment of HIV. HPTN 076 studied the new, long-acting liquid form of rilpivirine which stays in the body for months and is given by injection into the buttock muscle.

## **Who participated in the study?**

HPTN 076 enrolled a total of 136 HIV-uninfected women in four cities: Cape Town, South Africa; Harare, Zimbabwe; Newark, New Jersey; and Bronx, New York. Study participants were at low risk for becoming HIV-infected, were between the ages 18-45 years old, and able to provide informed consent.

## **What happened during the study?**

HPTN 076 study started in March 2015 and ended in March 2017. At the beginning of the study, participants were randomly placed into one of two groups. One group of women received the new, long-acting rilpivirine; the other group received no active drug (they received a placebo). The placebo looked like the long-acting rilpivirine so neither the participants nor study staff knew which group was receiving the new rilpivirine drug.

Before participants could receive an injection, they had medical evaluations to make sure they were healthy. Next, all participants took a pill daily for four weeks (either a rilpivirine pill or a placebo pill which looked like the rilpivirine pill). Pills were given for the safety of the participants. The drug in the pill passes through the body in about a day; however, the drug in the long-acting injection remains in the body for several months. It is not possible to remove the long-acting rilpivirine from a participant once it is injected. By giving participants pills first, the research team could make sure no one had negative side effects before giving an injection of the long-acting rilpivirine.

Participants who had no serious side effects after taking pills began study injections. Injections were given every eight weeks for 40 weeks at six different clinic visits. Throughout this time, participants received injections, medical information was collected and safety lab tests were done to make sure participants were not having negative side effects. Also, during the time period participants were receiving injections they were asked questions about what they liked and/or disliked about the long-acting injectable. After the last injection visit, face-to-face group discussions with a subset of study participants were held to help researchers better understand participant feelings about the long-acting rilpivirine as an option for PrEP.

## **How Many Women Received Injections?**

- 136 women were enrolled in HPTN 076.
- 122 of those women moved on to receive injections.
  - 80 women received long-acting rilpivirine and 42 received placebo.
- 98 women received all six injection doses.
  - 64 received long-acting rilpivirine and 34 received placebo.

## Safety Results

**Long-acting rilpivirine is safe.** Overall there was no difference in the number and type of side effects (adverse events) between the study group receiving long-acting rilpivirine and the study group receiving placebo.

- 67 of the 80 (84%) women who received long-acting rilpivirine injections had side effects.
- 33 of the 42 (79%) women who received placebo injections had side effects.
- The most common side effect was weight loss.

## Acceptability Results

**Women liked the option of a long-acting injectable form of PrEP.**

- Most participants preferred the option of injectable PrEP compared to other types of PrEP (pills, vaginal gels and rings).
- About 80% of the participants liked that the injectable is easier to use than some other HIV prevention methods.
- About 70% of the participants liked that the injectable can offer longer-term HIV protection.
- More than 75% of the participants rated the number, size, location, and frequency of the injections as very acceptable.
- Most participants (61-67%) reported pain with the injection but found the pain to be acceptable.

## What's Next for Long-acting Injectables?

The information collected in HPTN 076 has helped “pave the way” for moving long-acting injectable PrEP research forward. A new study for women, called HPTN 084, will be launched in the fall of 2017. HPTN 084 will evaluate the safety and acceptability of a different long-acting injectable drug, cabotegravir. Cabotegravir is thought to be a better option than long-acting rilpivirine because it does not have to be kept cold during transport and storage. In addition, the potential for resistance is lower with cabotegravir. HPTN 084 will take place at seven sites in South Africa, five sites in Zimbabwe, three sites in Uganda, two sites in Malawi, and a site in Kenya, Botswana and Swaziland.