

# ESTIMATED EFFICACY OF DOT

## Interim Results After Six Cycles

Fertility apps have enormous potential to address unmet need for family planning. To provide accurate information to women and couples, as well as to their health-care providers, it is critical that fertility apps be studied according to standard procedures for contraceptive efficacy studies.

The Institute for Reproductive Health at Georgetown University is conducting a prospective, real-world efficacy study of Dynamic Optimal Timing™, or Dot™, to determine the app's perfect- and typical-use efficacy and to understand how users act on the information they receive from Dot in order to avoid pregnancy.

After all participants had been in the study for six cycles, researchers published the interim efficacy results. This timely report contributes to the ongoing conversation about the efficacy of family planning apps.

### Collecting Data on Dot

Study participants are asked to record their period start dates and pregnancy intention every cycle, keep a coital diary, and report any other family planning method used during the study. The data is collected in the app itself through a research interface called Proofmode™.

### Categorizing Cycles

Dot uses an algorithm to predict probability of pregnancy on each day of a woman's menstrual cycle using her cycle lengths. The app flags days of high and low fertility. To use the method correctly, users should abstain from sex or use a condom on days of high fertility. Cycles in which women did not have unprotected intercourse were used to calculate the app's efficacy with perfect use. Both correct-use and incorrect-use cycles were used to calculate typical-use efficacy.

### Perfect and Typical Use Efficacy

There were 15 confirmed pregnancies in the first six cycles of the study, resulting in an early typical-use failure rate of 3.5% for women 18-39. All of the pregnancies occurred in cycles when users had unprotected sex on days that Dot identified as high risk. Because no pregnancies occurred in cycles when participants reported using the app correctly, a perfect-use failure rate was not calculated.

### What's Next?

Findings from the first six cycles of the study suggest that Dot provides accurate information to women about their fertility, and that women are able to use this information successfully for pregnancy prevention. The typical-use failure rate is comparable to the failure rates of other modern methods. Full efficacy results after 13 cycles of study are expected in 2019.



**99%** of participants completed **100%** of their daily data entries



**CORRECT USE:** users abstained from intercourse or used a condom during the fertile window



**INCORRECT USE:** users had unprotected sex during the fertile window



PERFECT USE FAILURE RATE

No pregnancies occurred during a cycle in which Dot was used correctly.



TYPICAL USE FAILURE RATE

**3.5%**

### TYPICAL USE PREGNANCIES

resulted from sex on fertile days with **no other method, withdrawal, and a combination** of no method, withdrawal, condoms, and EC.

Read the full paper: <http://bit.ly/Dot6cycles>