Developing new methods of birth control and STI prevention to meet the unique needs of women worldwide

Each woman has unique needs for birth control, and the more methods there are, the more likely she is to find one that best meets those needs. The Bixby Center is developing new methods that include benefits beyond delaying pregnancy, including preventing common sexually transmitted infections (STIs).

Since its inception, the UCSF Bixby Center has tested every method of birth control now available in the United States. Our clinical studies have been a key part of testing these methods for safety, effectiveness, and acceptability to women.

Our commitment to a wide range of birth control options continues today. Bixby investigators are studying a dozen new methods of birth control and STI prevention. If they meet high standards for safety and acceptability, women around the world will have access to these new methods in the coming years.

New methods of birth control
The Bixby Center is helping to test a levonorgestrel-releasing intrauterine device (IUD) called Liletta®.¹ Unlike past IUD studies, this one includes women who have not had a child and women of all weights, so it is gathering information about the safety and effectiveness of this method for most US women. The Food and Drug Administration has already approved Liletta® for up to three years of use, and the study will continue to track women for up to seven years.²

We are testing the drug ulipristal acetate – now known as the emergency contraceptive Ella® – as a daily contraceptive pill.³ The goal of the study is to learn whether cyclical or continuous use of this drug will prevent ovulation, and whether the changes it causes to menstrual bleeding are acceptable to women. If it becomes a method of birth control, it may have the benefit of reducing bleeding and discomfort caused by uterine fibroids, a common condition.⁴
Our research with women shows that they want a highly effective, on-demand method of birth control that works when taken around the time of sex. We are developing a method that meets this description and is also free of hormones. It is based on UCSF research that showed how pregnancy begins, and how to reach cells lining the uterus that can block a pregnancy.

New ways to prevent STIs

Through our partnership with the University of Zimbabwe, we helped show that a vaginal ring with the antiretroviral drug dapivirine reduced the risk of HIV for women. Others are now testing a ring with both dapivirine and levonorgestrel to prevent HIV and pregnancy — an approach known as a multipurpose prevention technology (MPT). Ensuring that women like MPTs and that they don’t disrupt their lives is essential to their success. That is why we are testing women’s preferences and experiences with four different types of MPT: a vaginal insert that melts quickly, a ring worn around the cervix, a film and a gel.

Another strategy to prevent HIV is pre-exposure prophylaxis (PrEP), taken as a daily pill. Studies have shown that it may take longer for PrEP to protect women compared to men. We are studying this among US women at high risk of HIV, and also plan to learn more about how PrEP medications interact with birth control.

Bacterial vaginosis (BV) is an imbalance of bacteria in the vagina that can make a woman more susceptible to STIs, including HIV. We are testing a new probiotic treatment called LACTIN-V, which contains healthy vaginal bacteria called Lactobacillus crispatus. Our research shows it is effective to treat BV and now we are learning whether it can prevent recurrent BV after women take antibiotics.

Why we continue to innovate

Access to a wide range of birth control methods improves the quality of family planning care and increases the chances of women finding a method that works for them. Furthermore, the prestigious Institute of Medicine confirmed that scientists should prioritize providing “a broader, safer, more effective array of [birth control] options.” The Bixby Center is fulfilling this vision, and working to support the right of all women to choose a method of birth control that fits their unique needs.