

FAQ: Effectiveness of Contraceptive Implants beyond Labeled Use

Q: Progestin-only implants, such as Jadelle, Sino-implant (II), and Implanon, are currently approved by regulatory authorities for five, four, and three years of use, respectively. How effective are contraceptive implants if they are kept in place beyond their labeled use?

A: Implants are among the most effective methods of contraception, with annual pregnancy rates less than 1 percent during the duration of their labeled use. Although manufacturers decide on the duration of labeled use when seeking product registration, clinical evidence suggests that implants remain effective beyond this time period. According to this evidence, when use of Jadelle, Sino-implant (II), and Implanon is extended by at least one year, pregnancy rates remain below 1 percent to 2 percent. This compares favorably to pregnancy rates associated with common use of other reversible methods of contraception, such as COCs (8 percent), progestin-only injectables (3 percent), and condoms (15 percent).

For example:

- Eight randomized, controlled trials followed a total of 1578 women, with approximately half of them using Norplant and the other half using Implanon. No pregnancies were reported over a four-year period.¹
- In a combined analysis of three clinical studies of Jadelle, the annual pregnancy rate was 0.8 per 100 users in Year 5. The rate rose slightly above 1 per 100 users in the sixth year after placement and above 2 per 100 in the seventh year.²
- Four randomized trials with a total of 15,943 women assigned to Sino-implant (II) showed annual pregnancy rates well below 1 percent for the first four years. The three trials following women through Year 5 had five-year cumulative pregnancy rates between 0.7 percent and 2.1 percent.³

Women should be counseled that replacing implants on time ensures maximum effectiveness. Keeping implants another year means they are still relying on effective pregnancy prevention—more effective, in fact, than many other available methods of contraception. An understanding of the comparative effectiveness may help women in making an informed decision about implants.⁴

¹ Power J, French R, Cowan F. Subdermal implantable contraceptives versus other forms of reversible contraceptives or other implants as effective methods of preventing pregnancy. *Cochrane Database Syst Rev* 2007(3):CD001326.

² Sivin I, Wan L, Ranta S, et al. Levonorgestrel concentrations during 7 years of continuous use of Jadelle contraceptive implants. *Contraception* Jul 2001;64(1):43-49.

³ Steiner MJ, Lopez LM, Grimes DA, et al. Sino-implant (II)—levonorgestrel-releasing two-rod implant: systematic review of the randomized clinical trials. *Contraception* 2010;81:197-201.

⁴ Steiner MJ, Trussell J, Mehta N, et al. Communicating contraceptive effectiveness: a randomized controlled trial to inform a World Health Organization family planning handbook. *Am J Obstet Gynecol* 2006;195:85-91.