Contraception decision tree for female mammals: Ctrl+Click on product for product details

Yes. Which taxon?

Anticipated breeding recommendation within 1-2 years?

No, go to next page

Ungulates

- Depo-Provera Injections: •Dosage & frequency of injection vary by taxon •Not for use in equids •Variable time to reversal
- MGA Implant: •Requires surgery •Remove implant to speed reversal •Not for use in equids
- MGA Feed/Liquid*: •Oral daily •Quick to reverse •Not for use in Perissodactyls or Suids
- Regumate* Feed: •Commonly used for Perissodactyls
- Improvest Vaccine: •Data on dosage/efficacy/safety limited to few species •Short-term use only to maximize reversibility

*Used for long-term or seasonal contraception as well in some taxa.
**See page 2 for further details on suprelorin

Primates

Lactating?

Yes → Progestin-only BC Pills: •No placebo week provides continuous suppression of estrous behavior

No → Implant just expired, awaiting transfer (<6 months)?

Yes → Leave implant in & watch for repro behaviors

No

- Depo-Provera Injections*: •Commonly used for prosimians, for post-partum estrus in NWP, and after parturition in OWM until MGA implant can be placed at weaning
- MGA Implant: •Requires surgery •Remove implant to speed reversal •Remove after breeding season in prosimians
- Combination Birth Control Pills*: •Daily oral •Placebo week can be skipped unless estrus behavior desired •Commonly used in apes
- Suprelorin Implant**: •Diabetic females only •Removal after 6 months – 1 year encouraged

Carnivores

History of progestin use?

Yes → Suprelorin Implant**: •4.7mg (6 month formulation) may be sufficient for seasonal breeders •Removal after 6 months – 1 year encouraged

No

- Megestrol Acetate/Ovaban: •Oral daily •Quick to reverse
- MGA Implant: •Requires surgery •Remove implant to speed reversal

Miscellaneous Mammals

- MGA Implant: •Requires surgery •Commonly used in marsupials, bats, and rodents
- Regumate Feed: •Commonly used in marine mammals
- MGA Liquid: •Sometimes used in anteaters, aardvarks, and rodents
- Depo-Provera injections: •Commonly used in marine mammals, marsupials, and bats and rodents

AZA Reproductive Management Center at the Saint Louis Zoo

Anticipated breeding recommendation within 1-2 years?

No

MGA Implant	PZP (Porcine zona pellucida) Vaccine	Suprelorin Implant	Improvest Vaccine
•Requires surgery •Minimum duration of efficacy is 2 years; implants may last longer if not removed •Remove to speed reversal •Not for use in equids or for long-term use in carnivores or callimico	•Injectable; boosters required •Reversibility not guaranteed and decreases with repeated use •Variable effect on behavior •Commonly used in bears and ungulates but not effective in suids •Not effective in canids & felids	•Large bore needle insertion device •Effects similar to spaying •Separation of sexes or prevention of stimulation phase with alternative contraception (e.g. Ovaban) necessary •Variable and/or lengthy reversal times •Remove to speed reversal •Commonly used in carnivores. •Not for use in perissodactyls	•Injectable; boosters every 3 months •Expected effects like spaying •Reversibility unknown •Check with Zoetis to see if it is available for use in other species •Commonly used in ungulates, but limited data for some ungulate taxa.

MGA feed or liquid, Regumate, Depo-Provera & Combination Birth Control Pills	•See details from previous page

This guide is meant to give you an idea of the most commonly used contraceptive options available and start discussion about which approaches might be desirable in your scenario. **This guide is NOT meant to substitute for consultation with the RMC and your veterinarian.** All approaches here are generally considered effective at preventing reproduction. As with all treatments, individual responses may vary but this chart outlines options that are recommended for various taxa in a majority of cases. The timeline from treatment to return of fertility varies across contraceptive options, species, and individuals. The RMC strongly recommends removal of contraceptive implants (i.e. Suprelorin or MGA) after use whenever possible to quicken the return to fertility. **Some approaches are not recommended for certain taxa and not recommended during pregnancy. This guide applies to mammals only.** Full details are available at stlzoo.org/contraception or contact us at contraception@stlzoo.org

Though it is not listed here, separation of the sexes is an option for consideration. However, any reproductive management technique that allows a female to continually experience reproductive cycles without producing offspring could contribute to fertility challenges later, particularly in mammals. Separation of the sexes, placing females with castrated or vasectomized males, and treating females with PZP exposes them to continual waves of ovarian activity and thus poses some risk to future fertility. All of these options except PZP will alter aspects of courtship and/or reproductive behavior. Some products will also eliminate secondary sexual characteristics in some species.

Permanent contraception (e.g. tubal ligation, ovariohysterectomy, [vasectomy & castration in males]) is also a possibility. However, in some taxa (e.g. male cervids) there may be complications that could result from loss of circulating reproductive hormones. Before sterilizing any animal in an SSP-managed population, contact the SSP coordinator first.