

Synthetic Steroid Hormones - Progestins Only Birth Control Pills

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The EAZA RMG encourages all institutions using contraception to supplement any contraceptive with behavioural and hormone monitoring. For more information, please contact contraception@chesterzoo.org

Females	
Commercial Name:	Several commercial oral combination pills are available in the market for human use e.g. Norgestone® has been used successfully in gorillas.
Contraceptive Product:	Oral synthetic progestagens e.g. Norgestone = 30mcg Levonorgestrel
Product Category:	Synthetic steroid hormones
Product Availability:	Widely available in pharmacies for human use
Restrictions and/or permit required by Importing Country:	N/A The EAZA RMG recommends always checking with your local licensing authority
Mechanism of action:	Interference with fertilization by thickening cervical mucus, interrupting gamete transport. Disruption of implantation. Inhibition of the LH surge necessary for ovulation. These mechanisms are dose dependent, typically higher doses of synthetic progestagens are required to block ovulation than to block fertilisation and/or implantation
Product information	Contraceptive pill that only contains synthetic progestagen without oestrogen component
Delivery Route and dose:	Oral pill to be given daily. Used with great apes, maybe lesser apes and some old world monkeys The EAZA RMG recommends always reading the manufacturer's data sheet
Females	
Latency to effectiveness:	1 to 2 weeks, although this varies quite a bit depending on the brand. Please read the packet insert. The packet will outline when to start and how long to use secondary protection and/or how long the individual may need to be separated. The EAZA RMG recommends always reading the manufacturer's data sheet
Oestrus cycles during contraceptive treatment:	Oestrus behaviour may be observed. Ovulation and cycling can occur in adequately contracepted individuals (but is unlikely and the degree of suppression is dose dependent). Be aware that progestagen-only pills are not as effective at suppression of oestrus as the combination pills.
Managing of initial stimulation phase:	Separation of the sexes or alternative contraception method should be used for 1-2 weeks minimum.
Use during pregnancy:	Progestagens are not recommended in pregnant animals because of the possibility of prolonged gestation, stillbirth, abortion, etc. in some species, although the effect may depend on dose. Progestagens do not appear to interfere with parturition in primates, but this is a taxon-specific phenomenon. (see taxon sheets)
Use during lactation:	Considered safe for nursing infant.

Use in prepubertals or juveniles:	The use of synthetic progestagens in pre-pubertals or juveniles has not been fully assessed. Possible long-term effects on fertility are not known.
Use in seasonal breeders:	Treatment should begin at least 1 month before the breeding season.
Duration	Not more than one day. Pills need to be administered daily (follow packet insert instructions if one day is missed).
Reversibility	It should be reversible after cessation of treatment, although return to cycling can vary per individual. Even in humans, it may take several months (cycles) before normal ovulation returns.
Effects on Behaviour	Effects on behaviour have not been studied, individuals may react differently. Further research in the subject is necessary.
Effects on sexual physical characteristics	Females with sexual perineal skin may exhibit partial to normal swellings on birth-control pills. With the continuous use of pills, swelling may not occur. It depends on the formulation chosen.
Males	
Latency to effectiveness:	N/A
Use in prepubertals or juveniles:	N/A
Use in seasonal breeders:	N/A
Duration and Reversibility	N/A
Effects on Behaviour	N/A
Effects on sexual physical characteristics	N/A
General:	
Side effects	Progestagens likely cause weight gain in all species. Possible deleterious effects on uterine and mammary tissues vary greatly by species. To date, few studies have shown link between synthetic progestagen treatment and serious health risk in nonhuman primates. The EAZA RMG recommends always reading the manufacturer's data sheet
Warnings	Progestagen only contraceptive pills can fail in obese animals. Be aware that progestagen-only pills are not being as effective at suppression oestrus as the combination pills. The EAZA RMG recommends always reading the manufacturer's data sheet
Reporting Requirements: In order to increase our knowledge of the efficacy of contraception methods it is recommended that all individuals on contraception be reported to the EAZA RMG	

References:

- 1) Wildlife contraception: issues, methods and applications, C.S. Asa, I.J. Porton (2005) The Johns Hopkins University Press
- 2) British National Formulary BNF (2009) BNJ Group and RPS Publishing, London, UK
- 3) www.stlzoo.org/contraception

Disclaimer: The EAZA RMG endeavours to provide correct and current information on contraception from various sources. As these are prescription only medicines it is the responsibility of the veterinarian to determine the dosage and best treatment for an individual animal under their care. The EAZA RMG can therefore not be held liable for any injury, damage or contraception failure in an animal.