

Synthetic Steroid Hormones - Progestins plus Oestrogens



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Commercial Name:	Several commercial oral combination pills are available for human use e.g. Microgynon 30
Contraceptive Product:	Combinations of a synthetic progestagen and oestrogen at various doses are available e.g. Microgynon 30 = ethinylestradiol and 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 EGZA recommends always checking with your local licensing authority
Mechanism of action:	Inhibit follicular development and LH surge preventing ovulation. Progestagen part also blocks fertilisation and/or implantation.
Product information	Human combination birth-control pills are available in different dose formulations with various administration regimes, from 21 days with 7 days of placebo to allow menstruation, to 90 days before the placebo week. Treatment can begin in any phase of the cycle, but may not be effective in the first month if treatment begins near the time of ovulation. Birth-control pills have mostly been used in apes and typically the human regimen was followed. Recent data from treatment of women indicate that the placebo week is not necessary for uterine health, so continual treatment to prevent sexual swellings, for example, is an option.
Delivery Route and dose:	Oral pills to be given daily. Used with great apes, maybe lesser apes and some old world monkeys EGZAC recommends always reading the manufacturer's data sheet
Females	Great apes, maybe lesser apes and some Old World Monkeys
Latency to effectiveness:	1 to 2 weeks but can take up to one month if treatment starts near the time of ovulation (refer to product insert for exact information on this).
Oestrus cycles during contraceptive treatment:	Sings of oestrus can occur during the placebo week if treatment not administer continuously (placebo week not necessary).
Managing of initial stimulation phase:	Separation of the sexes or alternative contraception method should be used for 1-2 weeks minimum.

Use during pregnancy:	Not recommended - risk to foetus unknown.
Use during lactation:	Not recommended - may interfere with milk production and affect the developing infant.
Use in prepubertals or juveniles:	Not recommended - lack of data and potential long-term effects in fertility.
Use in seasonal breeders:	Treatment should begin at least 1 month before the breeding season and continue one month past breeding season. If treatment stops too soon, if the animal doesn't get pregnant during its typical breeding season it may continue to cycle beyond the normal season.
Duration	More than 1 day as effective during the placebo week in human. Duration for other species not fully established.
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, every individual may react differently. Further research in the subject is necessary.
Effects on sexual physical characteristics	In some cases, minimal to moderate impact on the cyclic intumescence is seen in females on this method of contraception with various degrees of swelling and breeding behaviour possible. However, without a pill-free or placebo week swelling and sexual behaviour are more likely to be suppressed.
Males	
Latency to effectiveness:	N/A
Use in prepubertals or juveniles:	N/A
Use in seasonal breeders:	N/A
Duration	N/A
Reversibility	N/A
Effects on Behaviour	N/A
Effects on sexual physical characteristics	N/A
General:	
Side effects	Possible weight gain and/or fluid retention. Some generic formulations have been found to be less effective in chimpanzees, so brand-named products might be more reliable. EGZAC recommends always reading the manufacturer's data sheet
Warnings	Some antibiotics (rimfampicin, ampicillin, doxycycline), barbiturates and anti-epileptic drugs may reduce the effect of the oral pill EGZAC 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 EGZAC

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

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Disclaimer: EGZAC 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. EGZAC can therefore not be held liable for any injury, damage or contraception failure in an animal. EGZAC recommends that individuals managed within breeding programmes should not be contracepted without the agreement of the programme coordinator.