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BMEC Antibiotic Advisory Group

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OPHTHALMIC INFECTIONS**The use of Topical Ophthalmic Antimicrobials in Pregnancy and Lactation**

Swabs should be taken from pregnant and lactating women to ensure that decisions about treatment in this group are based on the most complete and relevant information available to the prescriber.

Key points for use of drugs in pregnancy and lactation

General –

- Avoid drugs whenever possible and attempt non-drug treatments first
- Use the drug with the safest side-effect profile
- Drugs should be given in the lowest effective dose for the shortest time possible
- Always weigh up the risk-benefit ratio for both the mother and the fetus/infant
- Advise punctal occlusion - pressure on the lacrimal punctum for at least a minute after applying eye drops reduces nasolacrimal drainage and therefore decreases systemic absorption from the nasal mucosa.

Pregnancy	Lactation
<ul style="list-style-type: none"> • Avoid all drugs in the first trimester wherever possible • Avoid drugs that have not been used extensively in pregnant women 	<ul style="list-style-type: none"> • Where possible the infant should feed immediately before the dose, or the dose taken immediately after the feed • If drugs are to be used that are not compatible with breast feeding, the milk should be expressed and discarded. An appropriate length of time should be allowed after stopping the drug before recommencing breast feeding, e.g. four times the elimination half-life

A brief summary of information gathered about topical ophthalmic antimicrobials follows. Further details about individual drugs including risk factors and references to use in pregnancy and lactation are available from the pharmacy department.

	Pregnancy	Lactation
Evidence appraisal suggests that topical ophthalmic product is probably safe	Aciclovir 3% Amphotericin 0.15% Azithromycin 1.5% Cefuroxime 5% Chloramphenicol 0.5%,1% Chlorhexidine 0.02% Fusidic Acid 1% Penicillin 5000 units/ml	Aciclovir 3% Amphotericin 0.15% Azithromycin 1.5% Cefuroxime 5% Chlorhexidine 0.02% Penicillin 5000 units/ml
Evidence suggests that there are risks associated with the use of the topical ophthalmic product and it should only be used when the benefits outweigh the risks	Ciprofloxacin 0.3% Gentamicin 0.3% Levofloxacin 0.5% Ofloxacin 0.3% Propamidine isetionate 0.1% Voriconazole 1%	Chloramphenicol 0.5%, 1% Fusidic acid 1% Gentamicin 0.3% Levofloxacin 0.5% Propamidine isetionate 0.1% Voriconazole 1%
Evidence suggests that topical ophthalmic product is not safe – avoid these products	Ganciclovir 0.15%	Ciprofloxacin 0.3% Ganciclovir 0.15% Ofloxacin 0.3%

There is no information about the following products:

Polyhexamethylbiguanide (PHMB) 0.02%

Trifluorothymidine 1%

Drugs marked in **red** contain penicillin and are contra-indicated in penicillin allergy; drugs marked in **orange** can cause allergic reactions in penicillin allergic patients, and must be avoided if there is any history of anaphylaxis to penicillin; drugs marked in **green** are safe in penicillin allergy. See 'Management [of Penicillin Allergy in Adult Patients](#)' policy on trust intranet for full details.

References

Electronic medicines compendium <http://www.medicines.org.uk/emc/>

Walker S, Diaper CJ, Bowman R, Sweeney G, Seal DV, Kirkness CM. Lack of evidence for systemic toxicity following topical chloramphenicol use. Eye (Lond). 1998;12 (Pt 5):875-9.

Giamarellou H, Kolokythas E, Petrikos G, Gazis J, Aravantinos D, Sfikakis P. Pharmacokinetics of three newer quinolones in pregnant and lactating women. Am J Med. 1989 Nov 30;87(5A):49S-51S

Summary of Product Characteristics Oftaquix® available at <http://www.kestrelophthalmics.com/oftaquix-levofloxacin-5mgml>