

## Birmingham and Midland Eye Centre Topical Ophthalmic Antibiotic Selection Guide

This table relates to antibiotics for topical treatment only.

This is a guide for selecting a suitable topical ophthalmic antibiotic based on the microbiology sensitivity report. It does not replace clinical judgement and BMEC ophthalmic infection guidelines should be followed – in cases of doubt, antibiotic therapy should be discussed with the duty microbiologist and a consultant ophthalmologist.

| Sensitive to           | First choice            | Alternatives (in order of preference)                  |   |
|------------------------|-------------------------|--|---|
|                        |                         | Preserved  | Preservative free   |
| <b>Miscellaneous</b>   |                         |  |   |
| Chloramphenicol        | G. chloramphenicol 0.5% | G. fusidic acid 1%<br>Check quinolone sensitivity      | G. chloramphenicol 0.5%<br>Oc. chloramphenicol 1%<br>Oc. Polyfax®<br>Check quinolone sensitivity<br>Check cefuroxime sensitivity<br>G. vancomycin 5%*,‡ |
| Fusidic acid           | G. fusidic acid 1%      | G. chloramphenicol 0.5%<br>Check quinolone sensitivity | G. chloramphenicol 0.5%<br>Oc. chloramphenicol 1%<br>Oc. Polyfax®<br>Check quinolone sensitivity<br>Check cefuroxime sensitivity                        |
| Azithromycin           | G. azithromycin 1.5%    | G. chloramphenicol 0.5%<br>Check quinolone sensitivity | G. chloramphenicol 0.5%<br>Oc. chloramphenicol 1%<br>Oc. Polyfax®<br>Check quinolone sensitivity<br>Check cefuroxime sensitivity<br>G. vancomycin 5%*,‡ |
| <b>Aminoglycosides</b> |                         |  |   |
| Gentamicin             | G. gentamicin 0.3%      | G. gentamicin 1.5%‡<br>Check quinolone sensitivity     | G. gentamicin 1.5%‡<br>G. amikacin 2.5%*,‡<br>Check quinolone sensitivity   |

Drugs marked in red contain penicillin; drugs marked in orange should be used with caution in penicillin allergy and avoided if there is any history of anaphylaxis to penicillin; drugs marked in green are safe in penicillin allergy. PF = preservative free.

\*May not be readily available – check availability with pharmacy and discuss with microbiology for interim alternatives if supply will be delayed.

‡Restricted – must be prescribed in accordance with BMEC ophthalmic infection policies

|                      |                         | Alternatives (in order of preference)                           |   |
|----------------------|-------------------------|---|---|
| Sensitive to         | First choice            | Preserved   | Preservative free   |
| Amikacin             | G. amikacin 2.5% PF*‡   | Check quinolone sensitivity                                     | Check cefuroxime sensitivity<br>Check quinolone sensitivity<br>Check cefuroxime sensitivity<br><i>Ps. aeruginosa</i> : check ceftazidime* |
| <b>Beta-lactams</b>  |                         |   |   |
| Penicillin           | G. chloramphenicol 0.5% | G. fusidic acid 1%<br>G. penicillin 5000 units/ml               | G. chloramphenicol 0.5%<br>Oc. chloramphenicol 1%<br>G. penicillin 5000 units/ml*<br>G. cefuroxime 5%‡<br>G. vancomycin 5%*‡              |
| Flucloxacillin       | G. chloramphenicol 0.5% | G. fusidic acid 1%  | G. chloramphenicol 0.5%<br>Oc. chloramphenicol 1%<br>G. cefuroxime 5%‡<br>G. vancomycin 5%*‡  |
| Cefuroxime           | G. cefuroxime 5% PF‡    | Check quinolone sensitivity<br>Check aminoglycoside sensitivity | Check quinolone sensitivity<br>Check aminoglycoside sensitivity<br>Check vancomycin sensitivity   |
| Ceftazidime          | G. ceftazidime 5% PF*‡  | Check quinolone sensitivity<br>Check aminoglycoside sensitivity |   |
| <b>Glycopeptides</b> |                         |   |   |
| Vancomycin           | G. vancomycin 5% PF*‡   | G. chloramphenicol 0.5%<br>G. fusidic acid 1%                   | G. chloramphenicol 0.5%<br>Oc. chloramphenicol 1%<br>Oc. Polyfax®   |
| <b>Quinolones</b>    |                         |   |   |
| Ofloxacin            | G. ofloxacin 0.3%‡      | G. ciprofloxacin 0.3%‡  | Oc. ciprofloxacin 0.3%<br>G. levofloxacin 0.5%‡<br>Check cefuroxime sensitivity<br><i>Ps. aeruginosa</i> : check ceftazidime              |
| Ciprofloxacin        | G. ciprofloxacin 0.3%‡  | G. ofloxacin 0.3%‡  | Oc. ciprofloxacin 0.3%  |
| Levofloxacin         | G. levofloxacin 0.5%    |   |   |
| Moxifloxacin         | G. moxifloxacin 0.5%    |   |   |

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