

OTIC PREPARATIONS

| Generic | Brand | | Form |
|--|---|-----|------------------------|
| ANTIBIOTICS | | | |
| ofloxacin 0.3% | Floxin Otic | Rx | soln |
| ANTIBIOTICS + CORTICOSTEROIDS | | | |
| ciprofloxacin 0.3% + dexamethasone 0.1% | Ciprodex | Rx | susp |
| ciprofloxacin 2mg/mL + hydrocortisone 10mg/mL | Cipro HC Otic | Rx | susp |
| colistin sulfate 3mg/mL + neomycin sulfate 3.3mg/mL + hydrocortisone acetate 10mg/mL + thonzonium bromide 0.5mg/mL | Coly-Mycin S Otic | Rx | susp |
| colistin sulfate 3mg/mL + neomycin 3.3mg/mL + thonzonium bromide 0.5mg/mL + hydrocortisone 10mg/mL | Cortisporin-TC Otic | Rx | susp |
| polymyxin B sulfate 10000Units/mL + neomycin sulfate 3.5mg/mL + hydrocortisone 10mg/mL | Cortisporin Otic Solution | Rx | soln |
| | Pediotic | Rx | susp |
| | polymyxin B/neomycin/hydrocortisone otic suspension | Rx | susp |
| CERUMINOLYTICS | | | |
| carbamide peroxide 6.5% | Auro | OTC | soln |
| | Debrox | OTC | soln |
| | Murine Ear Drops | OTC | soln |
| isotonic, desalinated seawater | Murine Earigate | OTC | spray |
| | Murine Earigate Kids | OTC | reduced-pressure spray |
| DRYING AGENTS | | | |
| isopropyl alcohol 95% + anhydrous glycerin 5% | Auro-Dri | OTC | soln |
| | Swim Ear | OTC | soln |
| STEROIDS | | | |
| fluocinolone acetonide 0.01% | Dermotic Oil | Rx | drops |
| NOTES | | | |
| Warming an otic product by holding the bottle in hand for 1-2min may minimize dizziness and pain on application; do not heat above body temperature. | | | |
| (Rev. 7/2014) | | | |

CLASSES & PHARMACOLOGY:

ANESTHETICS: Benzocaine, pramoxine, and antipyrine relieve pain and pruritus.

ANTIBIOTICS: **Neomycin** is active against *S. aureus*, *E. coli*, *H. influenzae*, *K. pneumoniae*, *Enterobacter*, *Neisseriae*, *P. aeruginosa*.

Neomycin can cause hearing loss and should usually not be used for more than 10 days; it can also cause sensitization.

Ofloxacin is a fluoroquinolone antibiotic active against *S. aureus*, *P. aeruginosa*, *P. mirabilis*, *S. pneumoniae*, *H. influenzae*, *M. catarrhalis*.

Ciprofloxacin is a fluoroquinolone antibiotic active against *S. aureus*, *P. mirabilis*, *P. aeruginosa*.

Colistin is active against most strains of gram negative bacteria including *P. aeruginosa*, *E. coli*, *K. pneumoniae*, *Aerobacter*.

CORTICOSTEROIDS: Hydrocortisone controls inflammation, edema, pruritis. It should not be used in the presence of local viral infections and it can impede wound healing.

CERUMINOLYTICS: Carbamide peroxide mechanically softens and loosens excessive ear wax. Triethanolamine polypeptide olate is a surfactant that breaks up cerumen.

DRYING AGENTS: Isopropyl alcohol and anhydrous glycerin have surface-tension releasing properties which dislodge trapped water from the sides of the ear canal, allowing it to run out or evaporate.

PRESERVATIVES: Thimerosal (a mercury derivative), parabens, sulfites, oxyquinoline sulfate, or benzalkonium chloride may cause sensitization. Benzalkonium chloride also reduces surface tension.

EXCIPIENTS AND VEHICLE: Propylene glycol, polysorbate 80 aid in product formulation. Products that contain hydrochloric acid should be used only in the presence of an intact eardrum.

SURFACTANTS: Thonzonium bromide is a surface-active agent that promotes tissue contact by dispersion and penetration of the cellular debris and exudate.