

# OTIC PREPARATIONS

Generic	Brand	Form
<b>ANTIBIOTICS</b>		
ciprofloxacin 6%	<b>Otiprio</b>	R <sub>x</sub> susp
ofloxacin 0.3%	—	R <sub>x</sub> soln
<b>ANTIBIOTICS + CORTICOSTEROIDS</b>		
ciprofloxacin 0.3% + dexamethasone 0.1%	<b>Ciprodex</b>	R <sub>x</sub> susp
ciprofloxacin 0.3% + fluocinolone acetonide 0.025%	<b>Otovel</b>	R <sub>x</sub> soln
ciprofloxacin 0.2% + hydrocortisone 1%	<b>Cipro HC Otic</b>	R <sub>x</sub> susp
colistin sulfate 3mg/mL + neomycin sulfate 3.3mg/mL + hydrocortisone acetate 10mg/mL + thonzonium bromide 0.5mg/mL	<b>Coly-Mycin S Otic<sup>1</sup></b>	R <sub>x</sub> susp
	<b>Cortisporin-TC Otic<sup>1</sup></b>	R <sub>x</sub> susp
polymyxin B sulfate 10000 U/mL + neomycin sulfate 3.5mg/mL + hydrocortisone 10mg/mL	—	R <sub>x</sub> susp
		R <sub>x</sub> soln <sup>2</sup>

<b>CERUMINOLYTICS</b>		
carbamide peroxide 6.5%	<b>Auro</b>	OTC soln
	<b>Debrox</b>	OTC soln
	<b>Murine Ear Drops</b>	OTC soln
	<b>Murine Earigate</b>	OTC spray
isotonic, desalinated seawater	<b>Murine Earigate Kids</b>	OTC reduced-pressure spray

<b>DRYING AGENTS</b>		
isopropyl alcohol 95% + anhydrous glycerin 5%	<b>Auro-Dri</b>	OTC soln
	<b>Swim Ear</b>	OTC soln

<b>STEROIDS</b>		
fluocinolone acetonide 0.01%	<b>Dermotic Oil<sup>3</sup></b>	R <sub>x</sub> drops

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.

## Classes & Pharmacology

**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, pruritus. 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 oleate 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.

## NOTES

<sup>1</sup> Contains thimerosal

<sup>2</sup> Contains sulfites

<sup>3</sup> Contains peanut oil