

# Oxytetracycline

(Engemycin (c,d), Oxycare (d)) POM-V

## Formulations

Injectable: 100 mg/ml solution. Oral: 50 mg, 100 mg, 250 mg tablets.

## Action

Time-dependent antimicrobial agent inhibiting protein synthesis by inhibiting the 30S ribosomal subunit in bacteria.

## Use

- Active against many Gram-positive and Gram-negative bacteria, rickettsiae, mycoplasmas, spirochaetes and other microbes.
- Has been used in combination with nicotinamide in the management of immune-mediated conditions, including discoid lupus erythematosus and lupoid onychodystrophy.

Long term use for management of chronic enteropathy is **not** recommended.

## DOSES

**Classified as category D (Prudence) by the EMA. See Appendix for [Guidelines for responsible antibiotic use](#)**

- **Dogs** 10 mg/kg i.m., s.c. q24h; 20–25 mg/kg p.o. q6–8h for 5–21 days (dependent on indication). Give oral dose on an empty stomach.
- **Cats** 10 mg/kg i.m., s.c. q24h or once and repeat once after 48–60 hours if required.

## Warnings

### Adverse reactions

Include vomiting, diarrhoea, depression, hepatotoxicity (rare), fever, hypotension (following i.v. administration) and anorexia (cats). Prolonged use may lead to development of superinfections. Oral tetracyclines may cause GI disturbances. Although not well documented in veterinary medicine, tetracyclines induce dose-related functional changes in renal tubules in several species, which may be exacerbated by dehydration, haemoglobinuria, myoglobinuria or concomitant administration of other nephrotoxic drugs. Severe tubular damage has occurred following the use of outdated or improperly stored products and occurs due to the formation of a degradation product. Tetracyclines stain the teeth of children when used in the last 2–3 weeks of pregnancy or the first month of life. Although this phenomenon has not been well-documented in animals, it does occur in dogs and it is prudent to restrict the use of tetracyclines in all young animals.

**Contraindications**

Only use in cats when no other agent is suitable. The concentrated injectable depot formulations used for cattle and sheep should never be given to small animals.

**Drug interactions**

The bactericidal action of penicillins may be inhibited by oxytetracycline. Antacids containing divalent or trivalent cations ( $Mg^{2+}$ ,  $Ca^{2+}$ ,  $Al^{3+}$ ), food or milk products bind tetracycline, reducing its absorption. Tetracyclines may increase the nephrotoxic effects of methoxyflurane. The GI effects of tetracyclines may be increased if administered concurrently with theophylline products.

**Safety and handling**

Normal precautions should be observed.