Trimethoprim/Sulphonamide (Potentiated sulphonamides)

(Duphatrim (c,d), Norodine (c,d), Trimacare, Trimedoxine (d), Septrin*) POM-V, POM

- **Client Information Leaflet: Trimethoprim/Sulphonamide**
- **Formulations**

Trimethoprim and sulphonamide are formulated in a ratio of 1:5. Injectable: 40 mg/ml trimethoprim + 200 mg/ml sulfadiazine (240 mg/ml total) solution. Oral: trimethoprim and sulfadiazine in a variety of tablet sizes designated by the amount of trimethoprim (e.g. 20 mg, 80 mg); 40 mg trimethoprim/5 ml + 200 mg sulfamethoxazole/5 ml paediatric suspension (48 mg/ml); 80 mg trimethoprim + 400 mg sulfamethoxazole tablets. If availability of veterinary formulations is limited, POM products or veterinary specials may be used on a named patient basis.**VSP**

More +

- **Action**

Trimethoprim and sulphonamides block sequential steps in the synthesis of tetrahydrofolate, a cofactor required for the synthesis of many molecules, including nucleic acids. The two-step mechanism ensures that bacterial resistance develops more slowly than to either agent alone. Time-dependent mechanism of action.

- **Use**
    - Many organisms are susceptible, including *Nocardia*, *Brucella*, Gram-negative bacilli, some Gram-positive organisms (*Streptococcus*), plus *Pneumocystis carinii*, *Toxoplasma gondii* and other coccidians. *Pseudomonas* and *Leptospira* are usually resistant.
    - Trimethoprim/sulphonamide is useful in the management of urinary, respiratory tract and prostatic infections, but ineffective in the presence of necrotic tissue.
    - Trimethoprim alone may be used for urinary, prostatic, systemic salmonellosis and respiratory tract infections (fewer adverse effects anticipated).

Trimethoprim is a weak base which becomes ion-trapped in fluids that are more acidic than plasma (e.g. prostatic fluid and milk). Ensure patients receiving sulphonamides are well hydrated and are not receiving urinary acidifying agents.

- **DOSES**

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

Doses of total product (trimethoprim + sulphonamide).

References

Dogs, Cats 15–30 mg/kg p.o. q12h; 30 mg/kg s.c. q24h.