

Co-trimoxazole Suspension

Background

Teva-Trimel is the only brand of co-trimoxazole (TMP/SMX) suspension remaining on the market.¹ It currently has an indeterminate availability date² due to disruption of the manufacture of the drug.³

Table 1: Canadian Suppliers of Co-trimoxazole suspension¹

DIN	Brand Name	Strength	Manufacturer
00726540	Teva-Trimel suspension	40mg/8mg per ml	TEV

Health Canada approved indications of co-trimoxazole⁴:

Co-trimoxazole is indicated for the treatment of the following infections when caused by susceptible organisms:

- Acute uncomplicated urinary tract infections (UTI)
- Acute exacerbations of chronic bronchitis (AECB)
- Bacillary dysentery
- Brucellosis
- Cholera
- Nocardiosis
- Pneumocystis jirovecii pneumonia (PJP)

Off-label uses of co-trimoxazole⁴:

Co-trimoxazole can be used for many other infections caused by sensitive organisms, for example:

- complicated UTI, prostatitis, pyelonephritis, recurrent UTI
- Toxoplasma gondii encephalitis prophylaxis
- Infectious diarrhea caused by cyclospora (*C. cayetanensis*), cystoisospora (*C. belli*)
- Opportunistic infections such as those caused by *S. maltophilia*

Management Options:

Pharmaceutical alternatives:

Table 2 lists other formulations and brands of co-trimoxazole which are currently approved and marketed in Canada.

Table 2: Alternative Co-trimoxazole products⁴

DIN	Brand Name	Strength	Manufacturer
00445266	Sulfatrim Pediatric tablet	100 mg/20 mg	AAP
00445274	Sulfatrim Regular Strength tablet	400 mg/80 mg	AAP
00510637	Teva-Trimel Regular Strength tablet	400 mg/80mg	TEV
00445282	Sulfatrim DS tablet	800 mg/160 mg	AAP
00510645	Teva-Trimel DS tablet	800 mg/160 mg	TEV
00550086	Septra Injection	16 mg/ml	ASC

- If the dose is easily obtained from a tablet (full tablet or ½ tablet), crush the tablet immediately before administration and mix with soft food or water. Note a pediatric tablet is available, although it is not chewable (Sulfatrim Pediatric tablet 100 mg/20 mg)¹.
- If the drug is being administered through an enteral tube, general recommendations are to crush the tablet into a fine powder, mix into a slurry with water making sure to flush the tube both prior to and after administration of the slurry⁵.

Pharmacological Alternatives:

Urinary Tract Infection (UTI)

- Co-trimoxazole is a 2nd line option for the empiric treatment of cystitis in children.⁶ Confirmation of sensitivity should be confirmed before use as there is significant E. coli resistance to co-trimoxazole. 2018 antibiograms list resistance at 23-29% in Saskatchewan.^{4,6}
- Co-trimoxazole is one the drugs of choice for prophylaxis of recurrent UTI.^{4,7}
- Alternative antibiotics for these indications are listed in Table 3.

Table 3: Alternatives to Co-trimoxazole for Treatment of UTI in Children^{4, 6-9}

Indication	1 st line treatment	2 nd line treatment
Cystitis	Nitrofurantoin: 5-7 mg/kg/day PO divided QID for 5 days OR Cefixime: 8mg/kg/day PO divided q12-24 hrs for 5 -7 days	Amoxi/Clav: 40mg/kg/day (amoxi) PO divided TID for 5 – 7 days
Prophylaxis of Recurrent UTI (only rarely recommended in children)	Nitrofurantoin: 1 to 2 mg/kg PO as a single daily dose for six months	

Prophylaxis of Pneumocystis jirovecii pneumonia (PJP, previously called PCP)

Co-trimoxazole is the treatment of choice for PJP prophylaxis in immunocompromised children.^{10, 11} Alternatives are listed in Table 4.

Table 4: Alternatives to Co-trimoxazole for PJP prophylaxis^{2, 10, 11}

Prophylaxis Criteria	Alternatives	Comments
Pneumocystis jirovecii pneumonia (PJP)	Dapsone Infants and children: 2 mg/kg/dose orally once daily (maximum daily dose: 100 mg/day)	Only available in tablet form. A suspension can be compounded. See Sick Kids Hospital Compounding Service for formula
	Atovaquone: 1 to 3 months: 30 mg/kg orally once daily 4 to 24 months: 45 mg/kg orally once daily >24 months: 30 mg/kg orally once daily	An oral suspension is available but it is very expensive
	Pentamidine Children <5 years: 9 mg/kg (maximum dose: 300 mg/dose) inhalation per nebulizer once every 4 weeks Children >5 years: 300 mg inhalation per nebulizer once every 4 weeks	Not available from McKesson

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