CO-TRIMOXAZOLE (trimethoprim/sulfamethoxazole)

Table 1 lists the brands and formulations of co-trimoxazole (TMP/SMX) currently approved and marketed in Canada.

**TABLE 1: Co-trimoxazole products**

<table>
<thead>
<tr>
<th>DIN</th>
<th>Company</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>00510645</td>
<td>NOVOPHARM LIMITED</td>
<td>NOVO-TRIMEL DS TAB 800/160</td>
</tr>
<tr>
<td>00726540</td>
<td>NOVOPHARM LIMITED</td>
<td>NOVO-TRIMEL ORAL SUS 40/8</td>
</tr>
<tr>
<td>00510637</td>
<td>NOVOPHARM LIMITED</td>
<td>NOVO-TRIMEL TAB 400/80</td>
</tr>
<tr>
<td>00512524</td>
<td>PRO DOC LIMITÉE</td>
<td>PROTRIN DF TAB 800/160</td>
</tr>
<tr>
<td>00550086</td>
<td>TRITON PHARMA INC.</td>
<td>SEPTRA INJECTION</td>
</tr>
<tr>
<td>00885932</td>
<td>JAAPHARM CANADA INC.</td>
<td>TRISULFA DS TAB 800/160</td>
</tr>
<tr>
<td>00885940</td>
<td>JAAPHARM CANADA INC.</td>
<td>TRISULFA S SUSP 40/8MG/ML</td>
</tr>
<tr>
<td>00885924</td>
<td>JAAPHARM CANADA INC.</td>
<td>TRISULFA TAB 400/80</td>
</tr>
</tbody>
</table>

*Apotex and Nu-Pharm products appear on the DPD, but according to Customer Service Representatives, neither continues to manufacture the suspension.

- TMP/SMX is a drug of choice for the empiric treatment of acute urinary tract infections in women (if local resistance rates < 20 %) and acute exacerbations of chronic obstructive pulmonary disease. Alternative antibiotics for these conditions are listed in Table 2 below.

**TABLE 2: Alternatives to TMP/SMX for treatment of common conditions**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Alternatives – 1st line</th>
<th>Alternatives – 2nd/3rd line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute uncomplicated UTI in women</td>
<td>Trimethoprim 100 mg BID or 200 mg once daily × 3 days</td>
<td>Amoxicillin 500 mg TID x 7 days</td>
</tr>
<tr>
<td></td>
<td>Nitrofurantoin 50 mg QID or MacroBID 100 mg Bid × 5 days</td>
<td>Norfloxacin 400 mg BID x 3 days</td>
</tr>
<tr>
<td>Acute exacerbation of COPD (Recommended duration of treatment for mild to moderate disease is 5 days unless otherwise specified)</td>
<td>Amoxicillin 500 mg TID</td>
<td>Ciprofloxacin 250 mg BID or 500 mg ER once daily x 3 days</td>
</tr>
<tr>
<td></td>
<td>Doxycycline 100 mg BID x 2 doses, then 100 mg once daily</td>
<td>THIRD LINE</td>
</tr>
<tr>
<td></td>
<td>Tetracycline 250 to 500 mg QID</td>
<td>Cephalexin 250 to 500 mg QID × 7 days</td>
</tr>
<tr>
<td></td>
<td>Clarithromycin 500 mg BID or 1000 mg ER once daily</td>
<td>Levofoxacin 250 mg once daily x 3 days</td>
</tr>
<tr>
<td></td>
<td>Azithromycin 500 mg 1st day, then 250mg x 4 days or 500 mg daily x 3 days</td>
<td>Cefuroxime axetil 500 mg BID</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cefprozil 500 mg BID</td>
</tr>
</tbody>
</table>
TMP/SMX is the treatment of choice for prophylaxis of *Pneumocystis jirovecii* pneumonia (PJP, previously called PCP) and *Toxoplasma gondii* encephalitis in immunocompromised patients. Alternatives are listed in Table 3. These drugs are much more expensive and/or can only be obtained through Special Access.

Prophylaxis is usually not required when CD4 > 200 cells/µL.

Table 3: Alternatives to TMP/SMX for prophylaxis

<table>
<thead>
<tr>
<th>Prophylaxis criteria</th>
<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Pneumocystis jirovecii</em> pneumonia (PJP)</td>
<td>Dapsone 100 mg once daily alone</td>
</tr>
<tr>
<td>CD4 &lt;200 cells/µL or thrush</td>
<td>Dapsone 50 mg or 200 mg once daily + <strong>pyrimethamine</strong> 50 or 75 mg once weekly + leucovorin 25 mg once weekly</td>
</tr>
<tr>
<td></td>
<td>Atovaquone 1500 mg daily</td>
</tr>
<tr>
<td></td>
<td>Pentamidine 300 mg / month by aerosol or IV infusion</td>
</tr>
</tbody>
</table>

| *Toxoplasma gondii* Encephalitis | Dapsone 100 mg once daily alone |
| CD4 <100 cells/µL and positive *T. gondii* serology | Dapsone 50 mg or 200 mg once daily + **pyrimethamine** 50 or 75 mg once weekly + leucovorin 25 mg once weekly |
| | Atovaquone 1500 mg daily |
| | Atovaquone 1500 mg daily + **pyrimethamine** 50 or 75 mg once weekly + **leucovorin** 25 mg once weekly |

TMP/SMX is the drug of choice if treatment is required for the following infections:

- Cyclospora (*C. cayetanensis*) – alternative ciprofloxacin
- *Stenotrophomonas maltophilia* – often resistant to multiple antibiotics; alternatives should be based on susceptibility report but may be sensitive to doxycycline, minocycline, piperacillin/tazobactam, ceftazidime or moxifloxacin
- *Isospora belli* – alternative pyrimethamine + leucovorin or sulfadoxine

Prepared by Karen Jensen
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References.

2. e-CPS [Internet]. Ottawa (ON): Canadian Pharmacists Association; c2012 Sulfamethoxazole-Trimethoprim [CPhA monograph]. Available from: [http://www.e-cps.ca](http://www.e-cps.ca)