Appendix A: Non-Biologic Disease-Modifying Anti-Rheumatic Drugs (DMARDs)

- Note that all DMARDs take 6-8 weeks to work
- Consider drug interactions
- Review medications if considering pregnancy as many are teratogenic
- Dose is oral unless specified

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Trade Name (dosage form and strength)</th>
<th>Usual Adult Dose</th>
<th>Cost per 30 days</th>
<th>PharmaCare Coverage</th>
<th>Adverse Effects</th>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydroxychloroquine sulfate</td>
<td>Plaquenil®, G (tablet: 200 mg)</td>
<td>200-400 mg PO daily (Max: 6.5 mg/kg lean body weight)</td>
<td>$8-17 (G) $20-40</td>
<td>Regular Coverage</td>
<td>nausea, diarrhea, anorexia, skin rash Serious: retinopathy, retinal deposition, myopathy</td>
<td>Ophthalmologic exam: Q 6-12 months</td>
</tr>
<tr>
<td>sulfasalazine</td>
<td>Salazopyrin EN®, G (Enteric-coated tablet: 500 mg)</td>
<td>(Use enteric-coated tablets) Initial: 500 mg PO daily to bid; increase weekly to 1000 mg PO bid (Max: 1000 mg PO tid)</td>
<td>$44-66 (G) $52-78</td>
<td>Regular Coverage</td>
<td>nausea, headache, skin rash Serious: bone marrow toxicity</td>
<td>CBCs with differentials, LFTs monthly x 3 months, then Q 3 months</td>
</tr>
</tbody>
</table>
| methotrexate | Methotrexate (injections: 2.5, 10, 25 mg/mL; tablets: 2.5, 10 mg) | Initial: 7.5 mg PO/SC weekly; increased by 2.5-5 mg Q 1-4 weeks (max: 25 mg/week) Maintenance: 7.5-25 mg PO/SC weekly | $8-27 (tabs) $7-25 (injection) | Regular Coverage (tablet); Special Authority (injection) | nausea, vomiting, oral ulcers, flu-like symptoms Serious: bone marrow toxicity (avoid TMP-SMX), hepatitis, infection, pneumonitis | • LFT at baseline  
• Hepatitis B & C serology at baseline  
• CBC, LFTs, albumin, creatinine monthly x 6 months, then Q 2 months thereafter.  
• Give folic acid 5 mg PO once weekly. Folic acid may improve patient’s ability to tolerate methotrexate therapy.1,6 |
| leflunomide | Arava®, G (tablets: 10, 20 mg) | 10-20 mg PO daily (Max: 20 mg PO daily) | $120 (G) $353 | Special Authority | nausea, vomiting, diarrhea Serious: hypertension, alopecia, weight loss, hepatic toxicity, bone marrow toxicity, pneumonitis | • Hepatitis B & C serology: baseline  
• ALT, AST, CBCs (differentials and platelets): baseline & monthly during first 6 months. If stable, repeat Q 6-8 weeks (or monthly if also on methotrexate)  
• Blood pressure monthly x 3 months |
| gold sodium thiomalate | Myochrysine®, G (Injections: 10, 25, 50 mg/mL) Initial: 10 mg IM first week, 25 mg IM second week, then 25-50 mg weekly x 20 weeks; then decrease to maintenance Maintenance: 50 mg IM Q 2-4 weeks | $15-30 (G) | Regular Coverage | rash, pruritus, stomatitis Serious: bone marrow toxicity, proteinuria, vasodilatation with hypotension | CBC with differentials and platelets  
• Urinalysis weekly x 4 weeks, then Q 2 weeks x 20 weeks, then Q 3 weeks x 50 weeks, then Q 4-8 injections |
| azathioprine | Imuran®, G (tablet: 50 mg) Initial: 1 mg/kg/day PO (once daily or divided BID) x 6-8 weeks, increase by 0.5 mg/kg Q 4 weeks until optimal response (max: 2.5 mg/kg/day) | $11-27 (G) $32-80 | Regular Coverage | nausea, vomiting, diarrhea Serious: hepatitis, drug fever, infection, bone marrow toxicity | CBC with differentials and platelets, LFTs Q 1-3 months, more frequently with dosage modifications |
| cyclosporine | Neoral®, G (capsules: 25, 50, 100 mg; solution: 100 mg/mL) Initial: 2.5 mg/kg/day PO (divided BID); increased by 0.5-0.75 mg/kg/day after 4 weeks & 8 weeks if insufficient response (Maximum: 5 mg/kg/day) Discontinue if no benefit by 16 weeks Maintenance: 2.5-5 mg/kg/day (divided BID) | $223-535 (capsules); $198-475 (solution) | Special Authority | hirsutism, gum hyperplasia, nausea Serious: hypertension, renal toxicity, viral infection | Blood pressure monthly (more frequently after dosage change)  
• CBCs with differentials & platelets, LFTs, magnesium, serum creatinine: baseline and Q 2-4 weeks  
• drug blood levels when drug interactions or altered bioavailability are suspected |
| minocycline | Minocin®, G (capsules: 50 mg, 100 mg) | 100 mg PO bid | $38 (G) | Regular Coverage | gastrointestinal symptoms, dizziness, skin rash, photosensitivity Serious: hyperpigmentation, SLE | |
Abbreviations
AL T alanine aminotransferase; AST aspartate aminotransferase; bid twice daily; CBCs complete blood counts; G generics; IM intramuscularly; max maximum; LFTs liver function tests; mg milligrams; PO by mouth; Q every; SC subcutaneously; SLE systemic lupus erythematosus; tid three times daily


Pricing is approximate as per PharmaCare Formulary Search 2012/10/05 and does not include dispensing fee.

PharmaCare Coverage Definitions
G: generic(s) are available.

Regular Coverage: also known as regular benefit; does not require Special Authority. Regular benefits may be fully or partially covered*.

Limited Coverage: requires Special Authority for coverage. Limited coverage benefits approved by Special Authority may be fully or partially covered*.

No Coverage: also known as non-benefit, does not fit the above categories.

* Note: Information on which products PharmaCare covers can be obtained using the BC PharmaCare Formulary Search (http://www.health.gov.bc.ca/pharmacare/benefitslookup/). In all cases, coverage is subject to drug price limits set by PharmaCare and to the patient's PharmaCare plan rules and deductibles. See http://www.health.gov.bc.ca/pharmacare/plans/index.html and http://www.health.gov.bc.ca/pharmacare/policy.html for further information.

References
1. e-CPS [Internet]. Ottawa (ON): Canadian Pharmacists Association; c2011 [cited 2011 Sep 7]. Available from: http://www.e-cps.ca. Also available in paper copy from the publisher.