Isosorbide Mononitrate (ISMN) Shortage
Updated 16th May 2017

Suppliers of isosorbide mononitrate (ISMN) extended release tablets in Canada:

<table>
<thead>
<tr>
<th>DIN</th>
<th>Brand Name</th>
<th>Manufacturer</th>
<th>Status as of May 15th 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>2126559</td>
<td>Imdur 60 mg ER TAB</td>
<td>AST</td>
<td>Unavailable: no projected date</td>
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<tr>
<td>2272830</td>
<td>APO-ISMN 60 mg ER TAB</td>
<td>APO</td>
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<td>2301288</td>
<td>PMS-ISMN 60 mg ER TAB</td>
<td>PMS</td>
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</tbody>
</table>

Indication for ISMN extended release tablets:
- Prevention of anginal attacks in patients with chronic stable angina pectoris associated with coronary artery disease. ISMN is not intended for the immediate relief of acute attacks of angina pectoris²

Note: when switching drug treatment for stable ischemic heart disease (angina pectoris), ensure that patients have their rescue nitroglycerin (SL spray or SL tabs) with them at all times. ISMN and ISDN are NOT indicated for the treatment of immediate relief of acute symptoms of angina.

Alternatives for ISMN:
1. Isosorbide dinitrate (ISDN) tablets:
   - ISMN is the active metabolite of ISDN³
   - Shown to be similarly effective vs. ISMN ER, but in a limited body of evidence⁴-⁶
   - Generally as well tolerated as ISMN, but has higher rate of headache⁵,⁶
   - Faster onset (30 minutes vs. <4 hours) and shorter duration of action (5 hours vs. 12 hours) compared to extended release ISMN⁷
   - 20 mg TID of ISDN has been shown similarly effective as 60 mg ISMN ER OD in one trial,⁶ but effective doses of ISDN were higher in some comparative trials to achieve similar efficacy⁴-⁶
   - Consider converting from ISMN ER tablets (e.g. 60 mg OD) to the same total daily milligram dose of ISDN IR tablets (e.g. 20 mg TID) administered TID
     - Titrate dose of ISDN up or down as needed (Usual maintenance dose= 10-40mg BID-TID)⁸
   - Administer ISDN tablets TID, such that a nitrate-free period of 10-14 hours is given (e.g. a dose at 7 a.m., 12 p.m., and 5 p.m.)⁸
Suppliers of isosorbide dinitrate (ISDN) tablets in Canada:

<table>
<thead>
<tr>
<th>DIN</th>
<th>Brand Name</th>
<th>Manufacturer</th>
<th>Status as of May 15th 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>441694</td>
<td>AA-ISDN 30 mg TAB</td>
<td>AAP</td>
<td>Available on McKesson</td>
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<td>441686</td>
<td>AA-ISDN 10 mg TAB</td>
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<td>Available on McKesson</td>
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<td>670944</td>
<td>AA-ISDN 5 mg TAB</td>
<td>AAP</td>
<td>Available on McKesson</td>
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</table>

2. Nitroglycerin transdermal patches:
   - Initial dose 0.2-0.4 mg/hr applied from 0800-2000h\(^7,9\)
   - Can increase up to 0.8 mg/hr\(^7\)
   - If switching from a higher dose of ISMN (e.g. >120 mg/day), \textit{consider} initiating at a higher dose.

3. Nitroglycerin 2% ointment (e.g. Nitrol):
   - Initial dose: 1.25 cm of ointment applied daily\(^7\)
   - Can increase up to 5 cm TID\(^7\)

References:

4. Lupanov VP, Alekseeva IA, Vasilenko O, 
5. Martsevich S, Semenova I, Alimova EV, 
6. Seabra-Gomes R, Aleixo AM, Adao JS, 