TITLE: Liquid or Water Soluble Polysaccharide-Iron Complex versus Ferrous Sulfate for Pediatric Populations: Clinical and Cost-Effectiveness

DATE: 26 May 2016

RESEARCH QUESTIONS

1. What is the clinical effectiveness of liquid or water soluble polysaccharide-iron complex versus ferrous sulfate in pediatric populations?

2. What is the cost-effectiveness of liquid or water soluble polysaccharide-iron-complex versus ferrous sulfate in pediatric populations?

KEY FINDINGS

No relevant literature was identified regarding the clinical or cost-effectiveness of liquid or water soluble polysaccharide-iron complex versus ferrous sulfate in pediatric populations.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents, and the search was not limited by date. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

SELECTION CRITERIA

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.
### Table 1: Selection Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>Children requiring iron supplementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Polysaccharide-iron complex (PIC) liquid or water soluble powder (e.g., FeraMAX)</td>
</tr>
<tr>
<td>Comparator</td>
<td>Concentrated ferrous sulfate drops or liquid (e.g., Fer-In-Sol syrup or liquid, Pms-Ferrous Sulfate Solution or Drops, Dom-Ferrous Sulfate Drops)</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Q1: Clinical effectiveness (e.g., absorption, iron status, compliance, patient satisfaction); Harms (e.g., tolerability and acceptability issues [e.g., tooth staining, taste disturbances], gastrointestinal side-effects) Q2: Cost-effectiveness outcomes</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, economic evaluations</td>
</tr>
</tbody>
</table>

### RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and economic evaluations.

No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, or economic evaluations were identified regarding liquid or water soluble polysaccharide-iron complex versus ferrous sulfate in pediatric populations.

References of potential interest are provided in the appendix.

### OVERALL SUMMARY OF FINDINGS

No relevant literature was identified regarding the clinical or cost-effectiveness of liquid or water soluble polysaccharide-iron complex versus ferrous sulfate in pediatric populations; therefore, no summary can be provided.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies
No literature identified.

Economic Evaluations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies – Alternate Population and Comparator

   PubMed: PM1361844

   PubMed: PM7177687

Laboratory Studies

   PubMed: PM10715589

Additional References

   PubMed: PM10676823