TITLE: Liquid and Water Soluble Oral Iron Products: Tooth Staining

DATE: 20 June 2016

RESEARCH QUESTIONS

1. What is the clinical evidence regarding the occurrence of tooth staining in patients taking liquid ferrous sulfate?

2. What is the clinical evidence regarding the occurrence of tooth staining or discoloration in patients taking liquid or water soluble polysaccharide-iron complex?

KEY FINDINGS

No relevant literature was identified regarding the occurrence of tooth staining in patients taking liquid ferrous sulfate, or liquid or water soluble polysaccharide-iron complex.

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 published between January 1, 2006 and June 15, 2016. Internet links were provided, where available.

SELECTION CRITERIA

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

<table>
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<th>Population</th>
<th>Patients of any age requiring oral iron solution</th>
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| Intervention                | Q1: Concentrated ferrous sulfate drops or liquid (e.g., Fer-In-Sol syrup or liquid, Pms-Ferrous Sulfate Solution or Drops, Dom-Ferrous Sulfate Drops)  
Q2: Polysaccharide-iron complex (PIC) liquid or water soluble powder (e.g., FeraMAX) |
| Comparator                  | No comparator                                    |
| Outcomes                    | Tooth staining or discoloration;  
Other dental outcomes        |
| Study Designs               | Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies |

### RESULTS

No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or non-randomized studies were identified regarding the occurrence of tooth staining in patients taking liquid ferrous sulfate, or liquid or water soluble polysaccharide-iron complex.

References of potential interest are provided in the appendix.

### OVERALL SUMMARY OF FINDINGS

No relevant literature was identified regarding the occurrence of tooth staining in patients taking liquid ferrous sulfate, or liquid or water soluble polysaccharide-iron complex; 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.

PREPARED BY:
Canadian Agency for Drugs and Technologies in Health
Tel: 1-866-898-8439
www.cadth.ca
APPENDIX – FURTHER INFORMATION:

Previous CADTH Reports


Randomized Controlled Trials – Alternate Forms of Iron Supplements


Non-Randomized Studies – Type of Iron Supplement Not Specified


Laboratory Studies

