

## **How effective is erythromycin in improving symptoms in patients with gastroparesis?**

### **Search methods**

The databases Medline (via Ovid), Embase (via Ovid), Cochrane Library, Web of Science (Core Collection) and Scopus will be searched from inception to November 2023 by VP. The search strategy was peer-reviewed by two librarian colleagues of VP using the Peer Review of Electronic Search Strategies (PRESS) checklist (McGowan et al., 2016), and evaluated against the PRISMA-S guidelines (Rethlefsen et al., 2021). Databases will be searched by VP separately, rather than multiple databases being searched on the same platform. The search syntax was adapted for each database, and to account for variation between thesaurus terms/controlled vocabulary across each database. Results will be imported to Endnote 20 by VP for deduplication, using the method outlined by Bramer et al. (Bramer et al., 2016). The searches will all be rerun prior to submission in order to include any papers published between the initial searching, and submission for peer review. Dates when searches were run will be indicated in the results table. The full search strategies used in each database are documented in full below.

### **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process, In-Data-Review & Other Non-Indexed Citations, Daily and Versions <1946 to November 09, 2023>**

1 (Erythromycin or macrolide\* or Azithromycin or Clarithromycin or Ketolide\* or Roxithromycin).ti,ab,kw,kf. 55649  
2 exp Erythromycin/ 28057  
3 1 or 2 62211  
4 (Gastropares\* or "chronic delayed gastric emptying" or "stomach pares\*" or (gastric adj2 stas\*)).ti,ab,kw,kf. 3826  
5 Gastroparesis/ 2487  
6 4 or 5 4493  
7 3 and 6 211

### **Embase <1974 to 2023 November 09>**

1 (Erythromycin or macrolide\* or Azithromycin or Clarithromycin or Ketolide\* or Roxithromycin).ti,ab,kw,kf. 74590  
2 erythromycin/ 82051  
3 macrolide/ 38008  
4 azithromycin/ 53619  
5 clarithromycin/ 43175  
6 ketolide/ 1281  
7 roxithromycin/ 6167  
8 1 or 2 or 3 or 4 or 5 or 6 or 7 189321  
9 (Gastropares\* or "chronic delayed gastric emptying" or "stomach pares\*" or (gastric adj2 stas\*)).ti,ab,kw,kf. 7534  
10 stomach paresis/ 10810  
11 gastric stasis/ 124  
12 9 or 10 or 11 12609  
13 8 and 12 1022

## **Cochrane Library**

(Erythromycin or macrolide\* or Azithromycin or Clarithromycin or Ketolide\* or Roxithromycin):ti,ab,kw OR MeSH descriptor [Erythromycin] explode all trees

AND

(Gastropares\* or "chronic delayed gastric emptying" or "stomach pares\*" or (gastric Near/2 stas\*)):ti,ab,kw OR MeSH descriptor: [Gastroparesis] this term only

## **Web of Science (Core Collection)**

TS=(Erythromycin or macrolide\* or Azithromycin or Clarithromycin or Ketolide\* or Roxithromycin)

AND

TS=(Gastropares\* or "chronic delayed gastric emptying" or "stomach pares\*" or (gastric Near/2 stas\*))

## **Scopus**

Title-abs-key (Erythromycin or macrolide\* or Azithromycin or Clarithromycin or Ketolide\* or Roxithromycin)

AND

Title-abs-key (Gastropares\* or "chronic delayed gastric emptying" or "stomach pares\*" or (gastric W/2 stas\*))

## **What treatments are available for bile acid diarrhoea, and how effective are they in reducing symptoms?**

### **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process, In-Data-Review & Other Non-Indexed Citations, Daily and Versions <1946 to November 09, 2023>**

- 1 ("Bile acid diarrhoea" or "bile acid diarrhea" or "bile acid malabsorption" or "bile salt malabsorption").ti,ab,kw,kf. 632
- 2 "Bile Acids and Salts"/ and (diarrhea/ or Malabsorption Syndromes/) 852
- 3 1 or 2 1177
- 4 Colesevelam Hydrochloride/ 221
- 5 Colestipol/ 399
- 6 Cholestyramine Resin/ 2675
- 7 Liraglutide/ 2524
- 8 diet therapy/ 10919
- 9 drug therapy/ 31167

10 (Sequest\* or colesevelam or colestyramine or colestipol or questran or liraglutide or treat\* or "diet therap\*" or "drug therap\*" or manag\* or prevent\* or control\*).ti,ab,kw,kf. 11879444  
11 4 or 5 or 6 or 7 or 8 or 9 or 10 11897441  
12 3 and 11 608

### **Embase <1974 to 2023 November 09>**

1 ("Bile acid diarrhoea" or "bile acid diarrhea" or "bile acid malabsorption" or "bile salt malabsorption").ti,ab,kw,kf. 1048  
2 bile acid diarrhea/ 277  
3 bile acid/ 30900  
4 diarrhea/ 288530  
5 malabsorption/ 16832  
6 4 or 5 302140  
7 3 and 6 1542  
8 1 or 2 or 7 2170  
9 (Sequest\* or colesevelam or colestyramine or colestipol or questran or liraglutide or treat\* or "diet therap\*" or "drug therap\*" or manag\* or prevent\* or control\*).ti,ab,kw,kf. 15575395  
10 sequestering agent/ 220  
11 colesevelam/ 1561  
12 colestyramine/ 11017  
13 colestipol/ 2958  
14 liraglutide/ 12780  
15 diet therapy/ 63977  
16 drug therapy/ 953029  
17 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 15842406  
18 8 and 17 1515

### **Cochrane Library**

("Bile acid diarrhoea" or "bile acid diarrhea" or "bile acid malabsorption" or "bile salt malabsorption"):ti,ab,kw OR (MeSH descriptor: ["Bile Acids and Salts"] this term only and (MeSH descriptor: [diarrhea] this term only or MeSH descriptor: [Malabsorption Syndromes] this terms only))

AND

MeSH descriptor: [Colesevelam Hydrochloride] this term only OR MeSH descriptor: [Colestipol] this term only OR MeSH descriptor: [Cholestyramine Resin] this term only OR MeSH descriptor: [Liraglutide] this term only OR MeSH descriptor: [diet therapy] this term only OR MeSH descriptor: [drug therapy] this term only OR (Sequest\* or

colesevelam or colestyramine or colestipol or questran or liraglutide or treat\* or "diet therap\*" or "drug therap\*" or manag\* or prevent\* or control\*):ti,ab,kw

### Web of Science (Core Collection)

TS=("Bile acid diarrhoea" or "bile acid diarrhea" or "bile acid malabsorption" or "bile salt malabsorption")

AND

TS=(Sequest\* or colesevelam or colestyramine or colestipol or questran or liraglutide or treat\* or "diet therap\*" or "drug therap\*" or manag\* or prevent\* or control\*)

### Scopus

Title-abs-key ("Bile acid diarrhoea" or "bile acid diarrhea" or "bile acid malabsorption" or "bile salt malabsorption")

AND

Title-abs-key (Sequest\* or colesevelam or colestyramine or colestipol or questran or liraglutide or treat\* or "diet therap\*" or "drug therap\*" or manag\* or prevent\* or control\*)

### Results

Database	Results 10/11/2023
Medline	608
Embase	1515
Cochrane Library	68
Web of Science	495
Scopus	624

Results after deduplication: 2021

### What diagnostic tests are available for bile acid diarrhoea and how accurate are they in diagnosing the condition?

### Ovid MEDLINE(R) and Epub Ahead of Print, In-Process, In-Data-Review & Other Non-Indexed Citations, Daily and Versions <1946 to November 09, 2023>

1 ("Bile acid diarrhoea" or "bile acid diarrhea" or "bile acid malabsorption" or "bile salt malabsorption").ti,ab,kw,kf. 632

2 "Bile Acids and Salts"/ and (diarrhea/ or Malabsorption Syndromes/) 852

3 1 or 2 1177

4 Diagnostic Tests, Routine/ 15199  
5 diagnosis/ or "diagnostic techniques and procedures"/ 21174  
6 Taurocholic Acid/ 3749  
7 Fibroblast Growth Factors/ 15057  
8 Cholestenones/ 722  
9 (sehcat or diagnos\* or "23-seleno-25-homotaurocholic acid" or "selenium homochoholic acid taurine" or "Se-homochoholic acid taurine" or "tauroselcholic acid" or "tauroselcholic 75 selenium acid" or "fgf 19" or "Fibroblast growth factor 19" or c4 or "7-alpha-hydroxy-4-cholesten-3-one c4").ti,ab,kw,kf. 3167990  
10 4 or 5 or 6 or 7 or 8 or 9 3198067  
11 3 and 10 419

### **Embase <1974 to 2023 November 09>**

1 ("Bile acid diarrhoea" or "bile acid diarrhea" or "bile acid malabsorption" or "bile salt malabsorption").ti,ab,kw,kf. 1048  
2 bile acid diarrhea/ 277  
3 bile acid/ 30900  
4 diarrhea/ 288530  
5 malabsorption/ 16832  
6 4 or 5 302140  
7 3 and 6 1542  
8 1 or 2 or 7 2170  
9 (sehcat or diagnos\* or "23-seleno-25-homotaurocholic acid" or "selenium homochoholic acid taurine" or "Se-homochoholic acid taurine" or "tauroselcholic acid" or "tauroselcholic 75 selenium acid" or "fgf 19" or "Fibroblast growth factor 19" or c4 or "7-alpha-hydroxy-4-cholesten-3-one c4").ti,ab,kw,kf. 4551929  
10 diagnostic test/ 88082  
11 tauroselcholic acid se 75/ 182  
12 tauroselcholic acid/ 295  
13 fibroblast growth factor 19/ 2479  
14 9 or 10 or 11 or 12 or 13 4584486  
15 8 and 14 961

### **Cochrane Library**

("Bile acid diarrhoea" or "bile acid diarrhea" or "bile acid malabsorption" or "bile salt malabsorption"):ti,ab,kw OR (MeSH descriptor: ["Bile Acids and Salts"] this term only and (MeSH descriptor: [diarrhea] this term only or MeSH descriptor: [Malabsorption Syndromes] this terms only))

AND

MeSH descriptor: [Diagnostic Tests, Routine] this term only OR MeSH descriptor: [diagnosis] this term only or MeSH descriptor: ["diagnostic techniques and procedures"] this term only OR MeSH descriptor: [Taurocholic Acid] this term only OR MeSH descriptor: [Fibroblast Growth Factors] this term only OR MeSH descriptor: [Cholestenones] this term only OR (sehcat or diagnos\* or "23-seleno-25-homotaurocholic acid" or "selenium homochoholic acid taurine" or "Se-homochoholic acid

taurine" or "tauroselcholic acid" or "tauroselcholic 75 selenium acid" or "fgf 19" or "Fibroblast growth factor 19" or c4 or "7-alpha-hydroxy-4-cholesten-3-one c4"):ti,ab,kw

### Web of Science (Core Collection)

TS=("Bile acid diarrhoea" or "bile acid diarrhea" or "bile acid malabsorption" or "bile salt malabsorption")

AND

TS=(sehcat or diagnos\* or "23-seleno-25-homotaurocholic acid" or "selenium homochoholic acid taurine" or "Se-homochoholic acid taurine" or "tauroselcholic acid" or "tauroselcholic 75 selenium acid" or "fgf 19" or "Fibroblast growth factor 19" or c4 or "7-alpha-hydroxy-4-cholesten-3-one c4")

### Scopus

Title-abs-key ("Bile acid diarrhoea" or "bile acid diarrhea" or "bile acid malabsorption" or "bile salt malabsorption")

AND

Title-abs-key (sehcat or diagnos\* or "23-seleno-25-homotaurocholic acid" or "selenium homochoholic acid taurine" or "Se-homochoholic acid taurine" or "tauroselcholic acid" or "tauroselcholic 75 selenium acid" or "fgf 19" or "Fibroblast growth factor 19" or c4 or "7-alpha-hydroxy-4-cholesten-3-one c4")

### Results

Database	Results 10/11/2023
Medline	419
Embase	961
Cochrane Library	39
Web of Science	459
Scopus	513

Results after deduplication: 1482

### References

BRAMER, W. M., GIUSTINI, D., DE JONGE, G. B., HOLLAND, L. & BEKHUIS, T. 2016. De-duplication of database search results for systematic reviews in EndNote. *J Med Libr Assoc*, 104, 240-3.

MCGOWAN, J., SAMPSON, M., SALZWEDEL, D. M., COGO, E., FOERSTER, V. & LEFEBVRE, C. 2016. PRESS peer review of electronic search strategies: 2015 guideline statement. *Journal of clinical epidemiology*, 75, 40-46.

RETHLEFSEN, M. L., KIRTLEY, S., WAFFENSCHMIDT, S., AYALA, A. P., MOHER, D., PAGE, M. J. & KOFFEL, J. B. 2021. PRISMA-S: an extension to the PRISMA statement for reporting literature searches in systematic reviews. *Systematic reviews*, 10, 1-19.