

Multi-society consensus conference and guideline on the treatment of gastroesophageal reflux disease (GERD)

Supplement 3: Screening criteria and Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) figures for each Key Question.

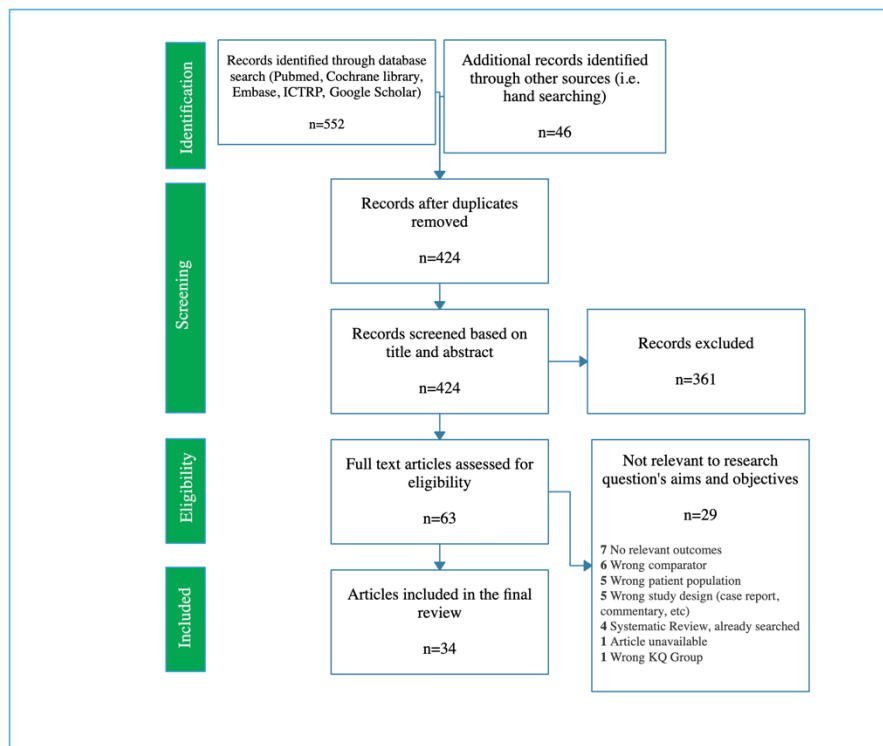
KEY QUESTION 1

- 1a. Do preoperative pH studies impact the results of endoscopic or surgical interventions for GERD?
- 1b. Does preoperative impedance testing impact the results of endoscopic or surgical interventions for GERD?
- 1c. Does preoperative manometry impact the results of endoscopic or surgical interventions for GERD?
- 1d. Does preoperative endoscopy impact the results of endoscopic or surgical interventions for GERD?

Exclusions: *studies with ONLY the following*

- Pediatric population (age <18 yr)
- Esophageal/gastric cancer
- Barrett's with **high** grade dysplasia
- Lung transplantation patients
- Giant/large paraoesophageal/hiatal hernia (≥ 3 cm)
- Radiation induced reflux patients

KQ1 PRISMA



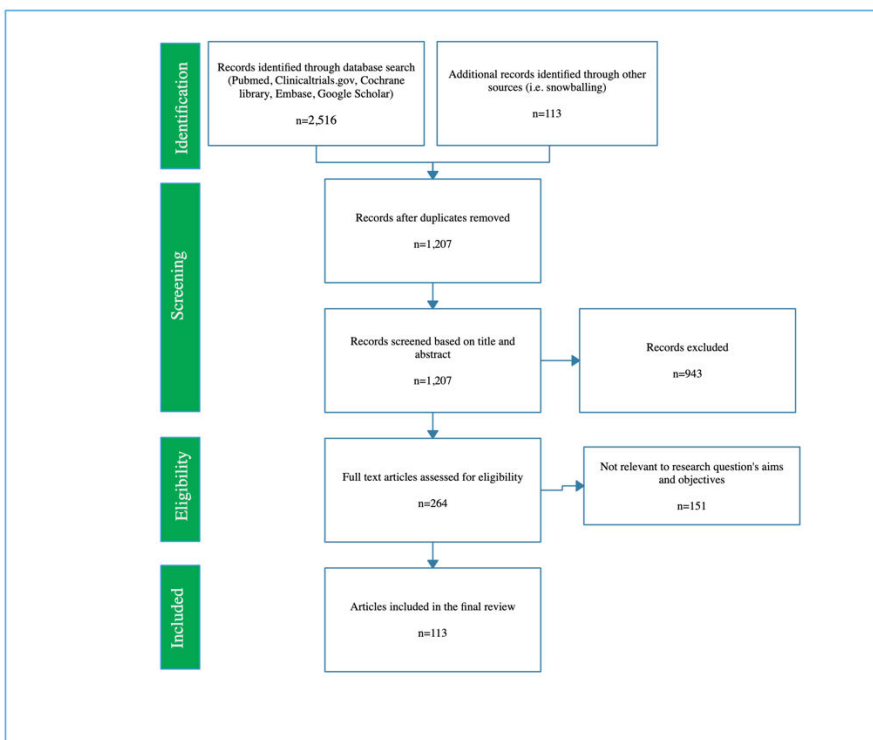
KEY QUESTION 2

- 2a. Should treatment with Magnetic Sphincter Augmentation (MSA) vs fundoplication be used for patients with GERD?
- 2b. Should treatment with MSA vs medical treatment (PPI) be used for patients with GERD?
- 2c. Should endoscopic treatment with TIF 2.0 vs fundoplication be used for patients with GERD?
- 2d. Should endoscopic treatment with TIF 2.0 vs medical treatment (PPI) be used for patients with GERD?
- 2e. Should endoscopic treatment with Stretta vs fundoplication be used for patients with GERD?
- 2f. Should endoscopic treatment with Stretta vs medical treatment (PPI) be used for patients with GERD?

Exclusions: *studies with ONLY the following*

- Pediatric population (age <18 yr)
- Preoperative presence of esophageal/gastric cancer
- Primary motility disorder (such as Achalasia)
- Lung transplantation patients
- Large paraesophageal/hiatal hernia (≥ 3 cm)
- Radiation induced reflux patients
- **Single arm studies**
- Revisional Surgery
- Endoscopic devices which are not TIF2 or Stretta (ie TIF1, EndoCinch)
- Medical treatment arm with only H2B
- Studies before 1990

KQ2 PRISMA



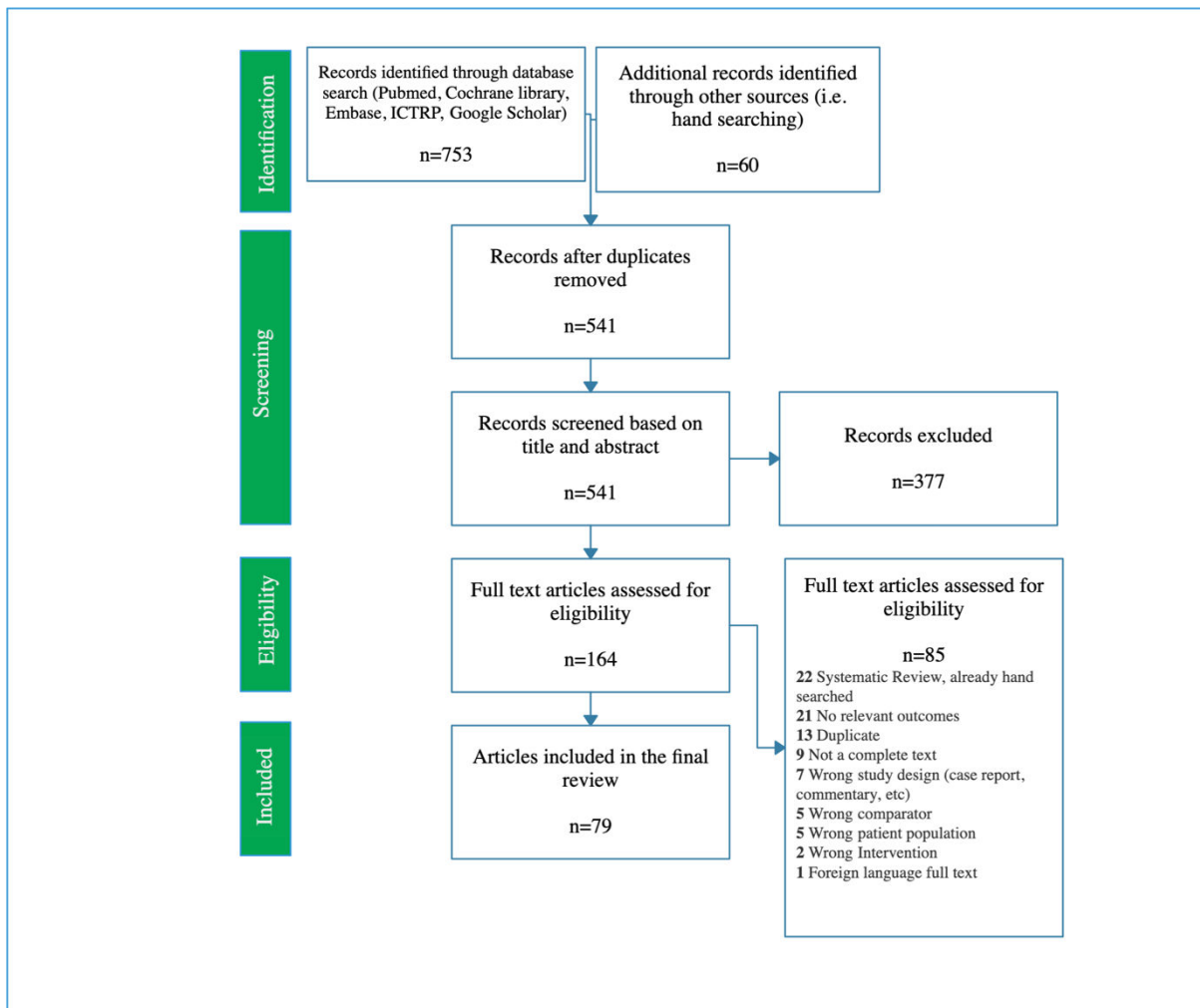
KEY QUESTION 3

- 3a. Should complete fundoplication vs partial fundoplication be used in adults with GERD?
3b. Should complete fundoplication vs partial fundoplication be used for adult patients with GERD who on preop manometry have esophageal dysmotility?

Exclusions: *studies with ONLY the following*

- Pediatric population (age <18 yr)
- Preoperative presence of esophageal/gastric cancer
- Lung transplantation patients
- Large paraesophageal/hiatal hernia (≥ 3 cm)
- Radiation induced reflux patients
- **Single arm studies**
- Revisional Surgery

KQ3 PRISMA



KEY QUESTION 4

- 4a. Should morbidly obese (BMI >35) patient with GERD undergo fundoplication vs gastric bypass for optimal control of their GERD?
- 4b. Should morbidly obese (BMI >35) candidate patients with GERD refractory to best medical management undergo fundoplication vs Sleeve Gastrectomy?
- 4c. After failed fundoplication should a redo fundoplication versus gastric bypass be performed for symptom control in obese (BMI >35) adults?

Acceptance of single arm studies:

- studies that have morbidly obese patients with GERD that undergo:
fundoplication -OR- RYGB -OR- sleeve gastrectomy
- studies that have patients with a history of fundoplication then recurrent GERD symptoms that undergo:
redo fundoplication -OR- RYGB

Exclusions: studies with ONLY the following

- Pediatric population (age <18yr)
- Esophageal/gastric cancer
- Primary motility disorders (such as Achalasia patients)
- Lung transplantation patients
- Radiation induced reflux patients
- Lengthening procedures

KQ4 PRISMA:

