

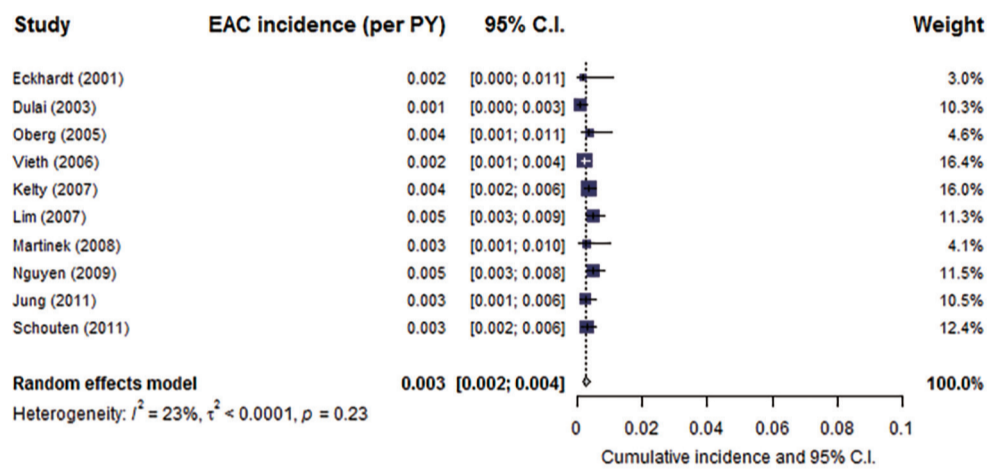
**Appendix 1 Search strategies*****Ovid Medline/Pubmed 1990 – Current. Run 26-11-2020***

1. Barrett Esophagus/
  2. (Barret\$ adj1 (esophag\$ or oesophag\$ or epitheli\$ or metaplasia\$ or syndrome?)).tw,kw.
  3. (((no or non or without) adj1 (dysplasia or dysplastic\$)) or non-dysplastic or nondysplastic).tw,kw.
  4. 1 or 2
  5. 3 and 4
  6. 1 or 2 or 5
  7. Catheter Ablation/
  8. Laser coagulation/
  9. photochemotherapy/
  10. Cryoablation/
  11. Esophagoscopy/
  12. (eradicat\$ adj3 (endoscopy\$ or strateg\$)).tw,kw.
  13. (ablati\$ or coagulate\$ or radiofrequen\$ or photodynamic\$ or cryo\$).tw,kw.
  14. 7 or 8 or 9 or 10 or 11 or 12 or 13
  15. 6 and 14
  16. postoperative complications/ or pain, postoperative/ or postoperative hemorrhage/
  17. Treatment outcome/
  18. Recurrence/
  19. Disease progression/
  20. Disease free survival/
  21. Cost-Benefit Analyses/
  22. Cost savings/
  23. (stricture\$ or bleed\$ or hemorrhage\$ or haemorrhage\$ or pain or perforat\$).tw,kw.
  24. (respon\$ or recurren\$ or reduction or durability).tw,kw.
  25. ((bury or buried or subsquamous or sub-squamous) adj2 (metaplas\$ or gland?)).tw,kw.
  26. (survival or mortality).tw,kw.
  27. ((cost adj1 effect\$) or cost-effect\$ or cost-utility or economi\$).tw,kw.
  28. 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27
  29. 15 and 28
  30. limit 29 to yr="1990 -Current"
- Hits: 1460

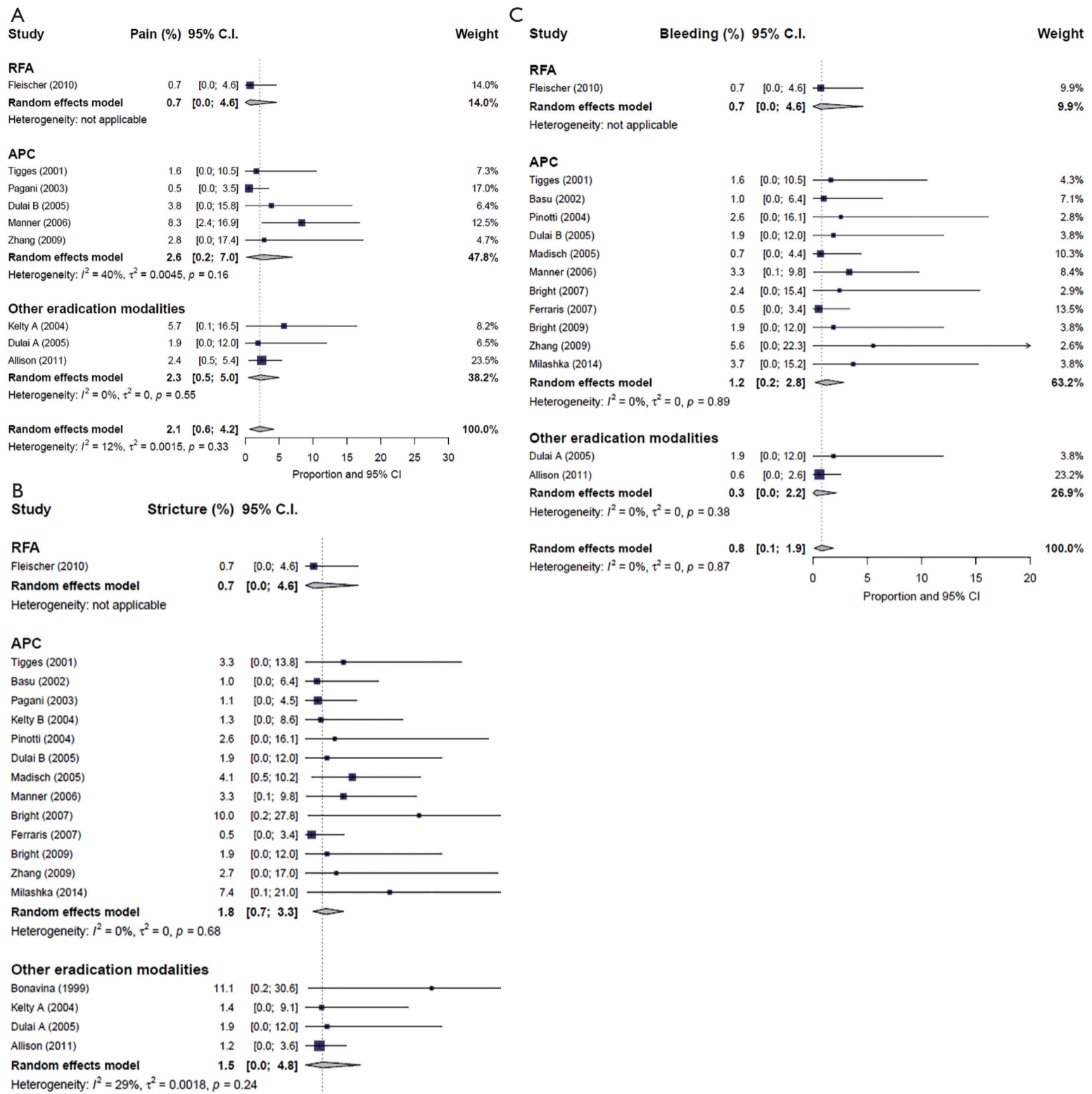
***EMBASE 1990-current. Run 26-11-2020***

1. Barrett Esophagus/
  2. (Barret\$ adj1 (esophag\$ or oesophag\$ or epitheli\$ or metaplasia\$ or syndrome?)).tw,kw.
  3. (((no or non or without) adj1 (dysplasia or dysplastic\$)) or non-dysplastic or nondysplastic).tw,kw.
  4. 1 or 2
  5. 3 and 4
  6. 1 or 2 or 5
  7. Catheter Ablation/
  8. Laser coagulation/
  9. photochemotherapy/
  10. Cryoablation/
  11. Esophagoscopy/
  12. (eradicat\$ adj3 (endoscopy\$ or strateg\$)).tw,kw.
  13. (ablati\$ or coagulate\$ or radiofrequen\$ or photodynamic\$ or cryo\$).tw,kw.
  14. 7 or 8 or 9 or 10 or 11 or 12 or 13
  15. 6 and 14
  16. postoperative complications/ or pain, postoperative/ or postoperative hemorrhage/
  17. Treatment outcome/
  18. Recurrence/
  19. Disease progression/
  20. Disease free survival/
  21. "cost benefit analysis"/
  22. Cost savings/
  23. (stricture\$ or bleed\$ or hemorrhage\$ or haemorrhage\$ or pain or perforat\$).tw,kw.
  24. (respon\$ or recurren\$ or reduction or durability).tw,kw.
  25. ((bury or buried or subsquamous or sub-squamous) adj2 (metaplas\$ or gland?)).tw,kw.
  26. (survival or mortality).tw,kw.
  27. ((cost adj1 effect\$) or cost-effect\$ or cost-utility or economi\$).tw,kw.
  28. 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27
  29. 15 and 28
  30. limit 29 to yr="1990 -Current"
  31. limit 30 to conference abstract
  32. 30 not 31
- Hits: 1386

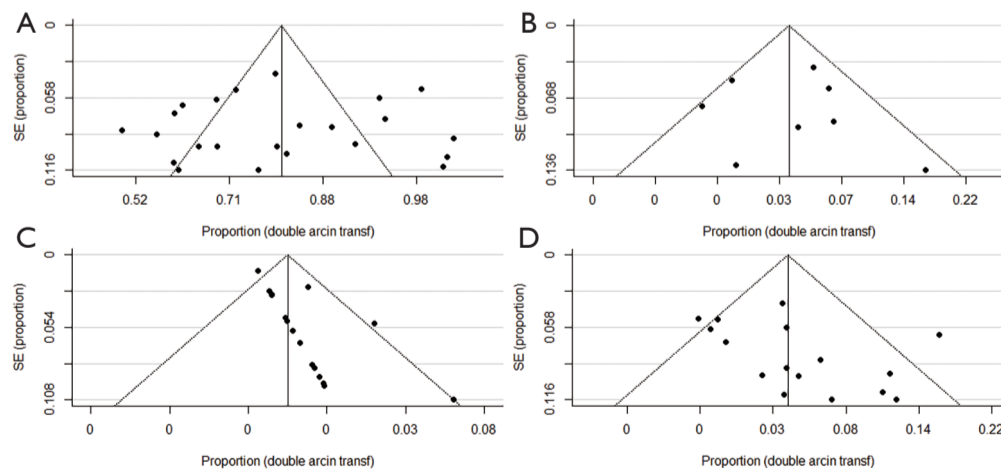
1. Barrett Esophagus/
  2. (Barret\* NEAR/1 (esophag\* or oesophag\* or epitheli\* or metaplas\* or syndrome?)):ti,ab,kw
  7. Catheter Ablation/
  8. Laser coagulation/
  9. photochemotherapy/
  10. Cryoablation/
  11. Esophagoscopy/
  12. (eradicate\* NEAR/3 (endoscopy\* or strategy\*)):ti,ab,kw
  13. (ablate\* or coagulate\* or radiofrequency\* or photodynamic\* or cryo\*):ti,ab,kw
  16. postoperative complications/ or pain, postoperative/ or
  17. Treatment outcome/
  18. Recurrence/
  19. Disease progression/
  20. Disease free survival/
  21. "cost benefit analysis"/
  22. Cost savings/
  23. (stricture\* or bleed\* or hemorrhage\* or haemorrhage\* or pain or perforat\*):ti,ab,kw
  24. (respon\* or recurren\* or reduction or durability):ti,ab,kw
  25. ((bury or buried or subsquamous or sub-squamous) adj2 (metaplas\* or gland?)):ti,ab,kw
  26. (survival or mortality):ti,ab,kw
  27. ((cost adj1 effect\*) or cost-effect\* or cost-utility or economi\*):ti,ab,kw
- Hits: 147



**Figure S1** Effect of surveillance on the progression to esophageal adenocarcinoma (EAC) in patients with non-dysplastic Barrett's esophagus. Annual cumulative incidences are shown with 95% confidence intervals (CIs).



**Figure S2** Forest plots for secondary outcomes of adverse events after endoscopic therapy in patients with non-dysplastic Barrett's esophagus. (A) Pain requiring analgesics. (B) Formation of strictures. (C) Bleeding.



**Figure S3** Funnel plots of the main study outcomes. (A) Funnel plot of the effect of endoscopic eradication therapy on the complete eradication of intestinal metaplasia (CE-IM). (B) Funnel plot of the effect of endoscopic eradication therapy on the recurrence of intestinal metaplasia post-eradication. (C) Funnel plot of the effect of endoscopic eradication therapy on the progression to esophageal adenocarcinoma (EAC). (D) Funnel plot of overall adverse events after endoscopic eradication therapy. SE, standard error.

**Table S1** Quality assessment of the full text randomized control trials and cohort studies

	Bonavina 1999	Tigges 2001	Basu 2002	Kahaleh 2002	Pagani 2003	Kelty 2004	Pinotti 2004	Dulai 2005	Manner 2006	Bright 2007	Ferraris 2007	Bright 2009	Mörk 2007	Zhang 2009	Fleisher 2010	Allison 2011	Madisch 2005	Milashka 2014	Saligram 2015	Skrobić 2016	Komanduri 2017
<b>Reporting</b>																					
Hypothesis/aim	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
Main outcomes	0	1	1	1	0	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1
Characteristics of included patients	1	1	1	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1
Interventions	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Distributions of principal confounders	0	0	0	0	0	0	0	2	0	1	0	1	0	1	0	0	0	0	1	0	0
Main findings	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
Estimates of random variability	0	0	1	0	1	1	0	1	1	0	1	0	0	1	1	1	0	0	1	1	1
Important adverse events	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1
Characteristics of patients lost to follow-up	1	0	0	0	0	1	0	1	1	0	0	1	1	0	1	1	1	1	1	1	1
Actual probability values	0	0	1	1	1	0	0	1	0	0	1	0	0	1	0	1	1	0	1	1	1
<b>External validity</b>																					
Subjects asked to participate	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1	0	0	0	1
Subjects prepared to participate	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Staff, places, and facilities	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
<b>Internal validity—bias</b>																					
Blinding of subjects	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Blinding of those measuring outcomes	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	0	0	0	0	0
Data dredging	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjustment for different follow-up time	0	1	1	1	0	1	0	1	0	1	1	1	0	0	1	0	1	1	1	1	1
Statistical testing	0	0	1	0	1	1	0	1	0	0	1	0	0	1	1	0	0	0	1	1	1
Compliance to testing reliability	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Main outcomes accuracy	0	1	1	1	0	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1
<b>Internal validity—confounding</b>																					
Different interventions	0	1	0	0	1	1	1	1	0	1	1	0	1	1	0	1	1	0	1	1	1
Recruitment over same time period	1	1	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
Randomization	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	0	0	1	0	0
Randomization concealment	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
Adequate adjustment for confounding	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
Losses to follow-up	0	0	0	0	0	1	0	1	1	0	0	0	1	0	1	1	0	1	1	1	1
<b>Power</b>																					
Sufficient power	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	0
<b>Total</b>	<b>10</b>	<b>13</b>	<b>14</b>	<b>12</b>	<b>12</b>	<b>19</b>	<b>10</b>	<b>25</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>15</b>	<b>9</b>	<b>18</b>	<b>18</b>	<b>19</b>	<b>17</b>	<b>14</b>	<b>21</b>	<b>17</b>	<b>19</b>

**Table S2** Meta-regression analysis of moderators affecting the proportion of CE-IM, recurrence, total adverse events and EAC incidence after EET

Variable	CE-IM			IM recurrence			Total adverse events			EAC incidence		
	Coefficient	I <sup>2</sup> (%) <sup>†</sup>	P value	Coefficient	I <sup>2</sup> (%) <sup>†</sup>	P value	Coefficient	I <sup>2</sup> (%) <sup>†</sup>	P value	Coefficient	I <sup>2</sup> (%) <sup>†</sup>	P value
BE segment length <sup>‡</sup>	0.08	88.2	0.78	3.03	11.2	0.08	0.05	51.7	0.81	3.59	17.6	0.058

<sup>†</sup>, I<sup>2</sup> = residual heterogeneity; <sup>‡</sup>, based on the study mean or median. CE-IM, complete eradication of intestinal metaplasia; EAC, esophageal adenocarcinoma; EET, endoscopic eradication therapy; CI, confidence interval; BE, Barrett's esophagus.