

Comparative Efficacy and Safety of Regimens for Pretreated Gastric or Gastroesophageal Junction Cancer: A Systematic Review and Network Meta-Analysis

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OBJECTIVES

- Comparative evidence on the efficacy of emerging subsequent-line therapies for advanced gastric cancer remains limited.
- This study performed a network meta-analysis (NMA) to evaluate the comparative efficacy and safety of different regimens for **patients with previously treated (second-line and beyond) locally advanced, recurrent, or metastatic gastric or gastroesophageal junction (G/GEJ) cancer.**

METHODS

- A systematic review and frequentist NMA based on a random-effects model was performed. A systematic search was conducted in **Embase, Web of Science, Medline and CINAHL** databases **up to March 10, 2026**
- to identify eligible clinical trials that assessed regimens for individuals with advanced gastric or gastroesophageal junction cancer who progressed after at least one prior line of systemic therapy.

- The **primary outcomes analysed were progression-free survival (PFS) and overall survival (OS).** A frequentist NMA based on a random-effects model was conducted using R software to calculate pooled effect estimates with 95% confidence intervals (CIs).
- Study selection, data extraction, and quality assessment were performed independently by two reviewers. This study was registered with PROSPERO (CRD 420261326355) to ensure transparency.

RESULTS

- Of 6,486 studies retrieved, **23 were included in our study** (Figure 1).
- Compared with chemotherapy, the top-ranked **PFS** regimens were **anbenitamab plus chemotherapy** (HR, 0.25; 95% CI, 0.17-0.38; P-score, 0.982), **camrelizumab plus chemotherapy** (HR, 0.33; 95% CI, 0.14-0.77; P-score, 0.925), and **trastuzumab deruxtecan** (HR, 0.50; 95% CI, 0.40-0.62; P-score, 0.871) (Figure 2).
- For **OS**, **anbenitamab plus chemotherapy** (HR, 0.29; 95% CI, 0.17-0.50; P-score, 0.994), **trastuzumab deruxtecan** (HR, 0.61; 95% CI, 0.48-0.76; P-score, 0.859), and **camrelizumab plus chemotherapy** (HR, 0.62; 95% CI, 0.35-1.09; P-score, 0.779) ranked highest (Figure 3).
- In **subgroup analysis of HER2-positive and trastuzumab treated patients**, **anbenitamab-based regimens achieved the top efficacy** across 4 assessed regimens. **Safety analysis** showed that Trastuzumab deruxtecan was associated with higher risks of both TEAEs and TRAEs than anbenitamab plus chemotherapy and chemotherapy. Anbenitamab plus chemotherapy showed the greatest consistency in P-score values for PFS, OS, and safety.

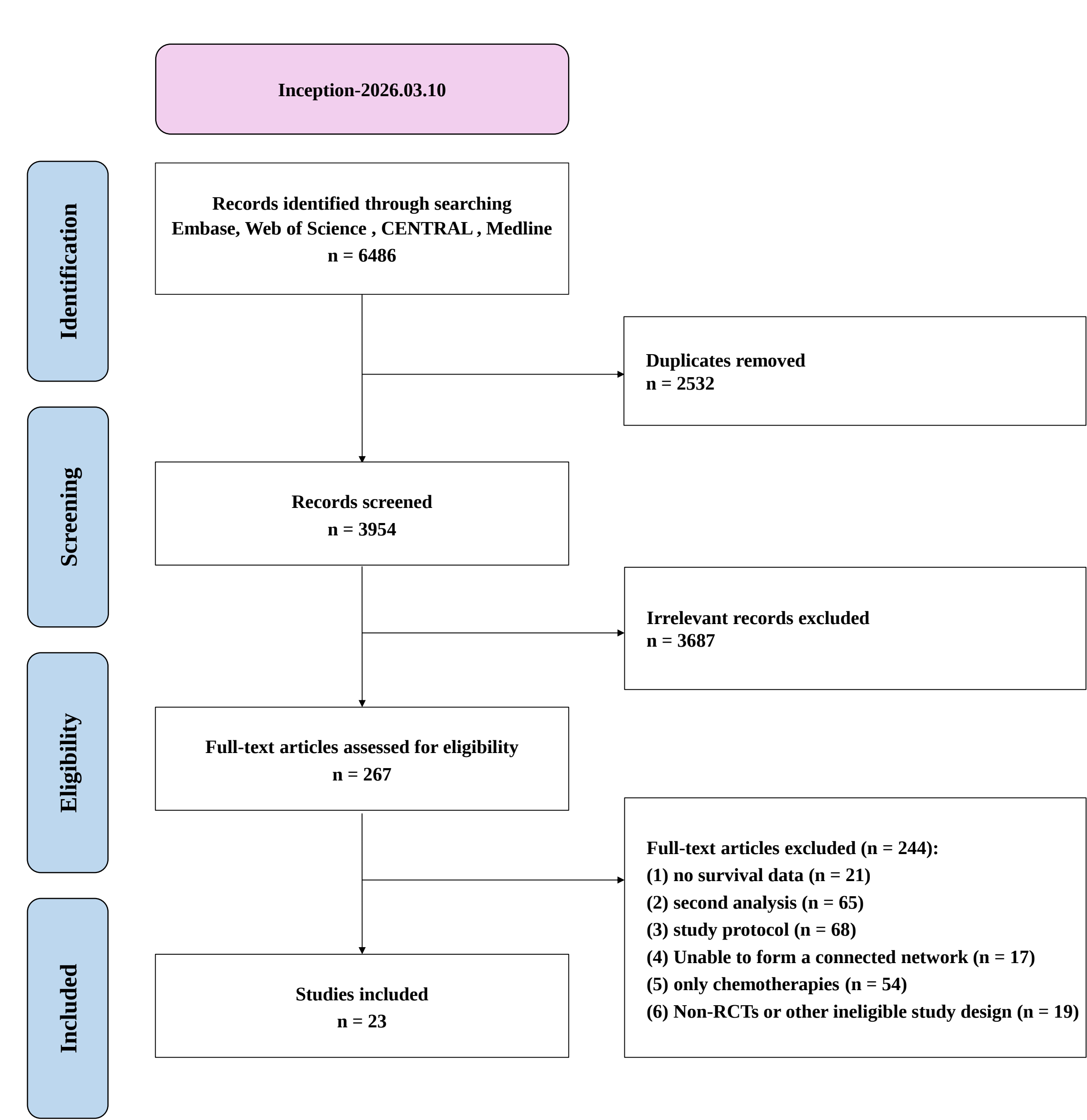


Figure 1. PRISMA flow chart for study selection

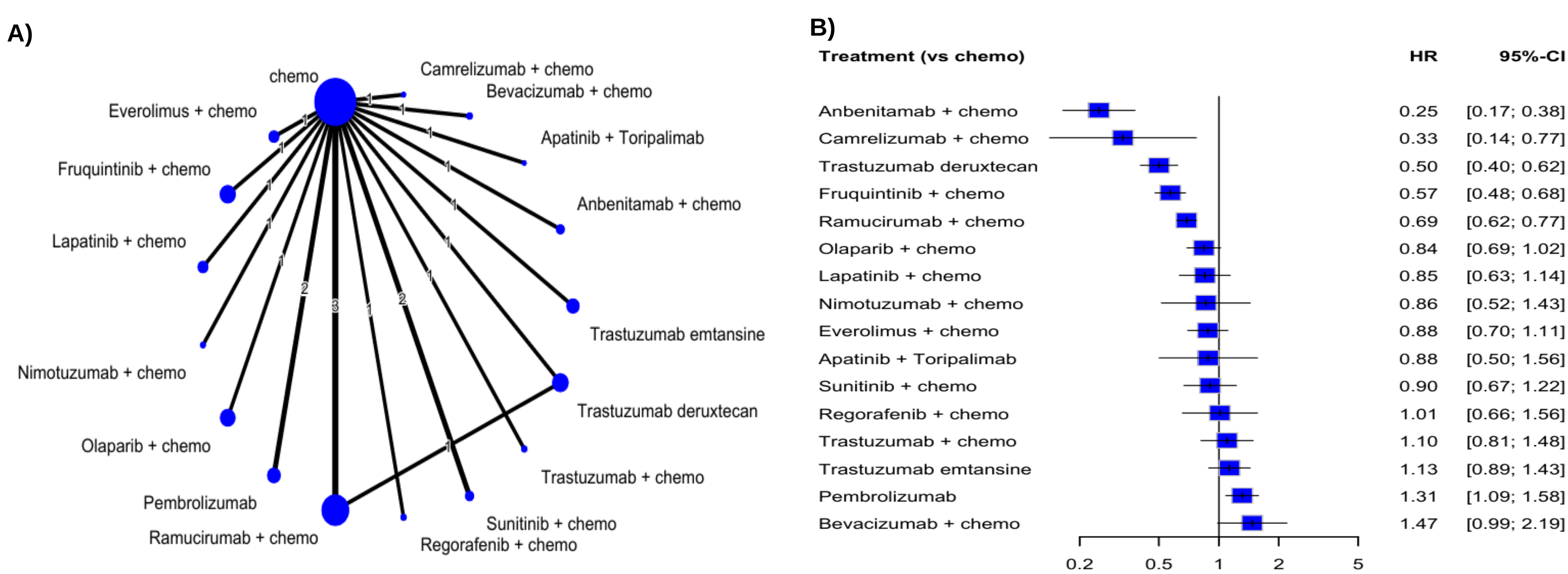


Figure 2. Results for Progression-Free Survival. A) Network geometry; B) Forest plot comparing the network meta-analysis with chemotherapy

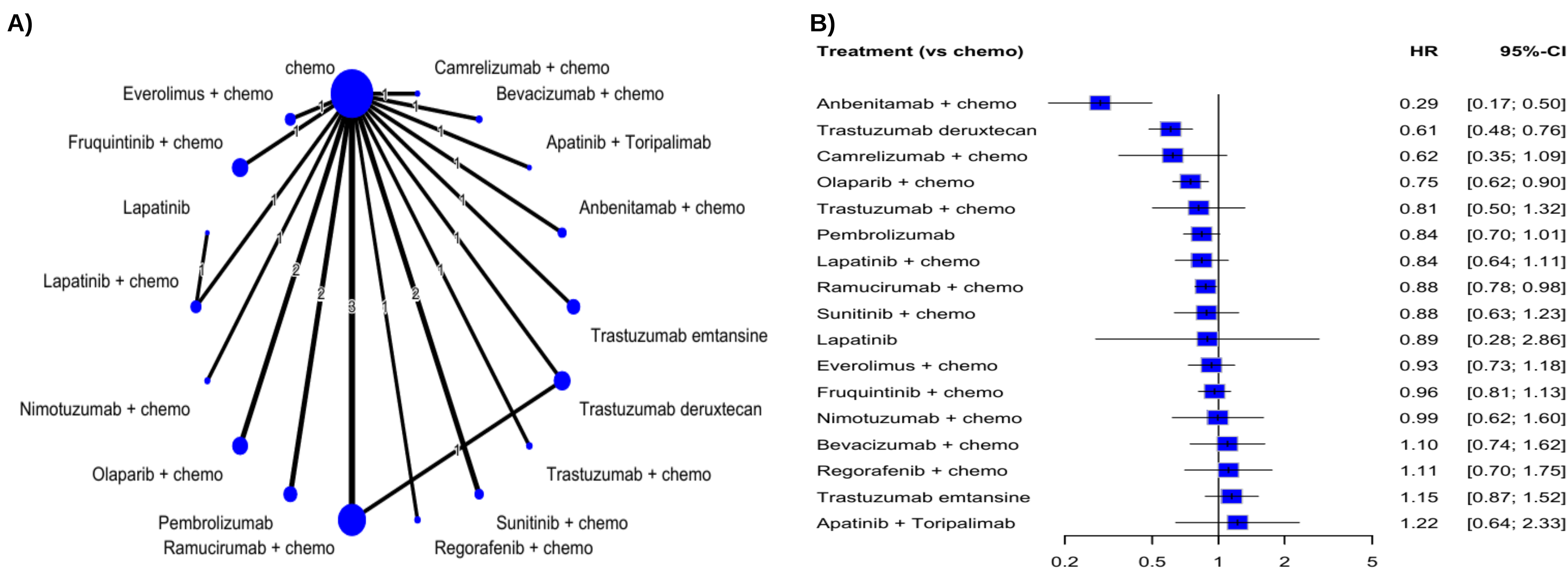


Figure 3. Results for Overall Survival. A) Network geometry; B) Forest plot comparing the network meta-analysis with chemotherapy

CONCLUSIONS

- Anbenitamab plus chemotherapy showed the most favourable efficacy outcomes, with acceptable toxicity, among evaluated regimens for advanced G/GEJ cancer.

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