Supplementary

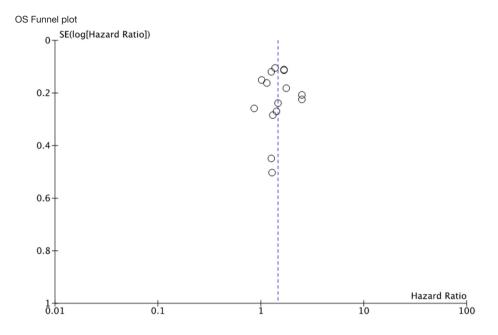
Table S1 Search strategy for Medline

- 1: Exp ErbB Receptors/ai [antagonists and inhibitors] or Exp Protein Kinase Inhibitors/
- 2: (((epidermal growth factor receptor* or egfr or tyrosine kinase or erb* or her1) adj inhibitor*) or erlotinib or gefitinib or afatinib or dacomitinib or osimertinib or weak base drug*).tw.
- 3: 1 or 2
- 4: Exp Proton Pump Inhibitors/ or Exp Histamine H2 Antagonists/ or Exp Omeprazole/ or Exp Gastric Acid/
- 5: (acid reduc* or acid suppress* or PPI* or histamine h2 receptor antagonist* or h2 blocker* or omeprazole or antacid*).tw.
- 6: 4 or 5
- 7: Exp Drug Interactions/
- 8: (effect* or efficac* or toxic* or impact* or interaction* or ddi*).tw.
- 9: 7 or 8
- 10: 3 and 6 and 9

Table S2 Summary of adverse effects

Adverse Effect	Outcome
Rash	OR =0.81, 95% CI: 0.50–1.32; P=0.40
Diarrhoea	OR =1.03, 95% CI: 0.63–1.67; P=0.91
Vomiting	4% AS vs. 2% non-AS; P=0.61
Loss of appetite	8% AS vs. 2% non-AS; P=0.18
Oral ulcers	10% AS vs. 16% non-AS; P=0.44
Stomatitis	2% AS vs. 0% non-AS; P=0.091
Elevated aminotransferase (AST/ALT)	OR =0.83, 95% CI: 0.39-1.79; P=0.64
Interstitial lung disease	OR =1.90, 95% CI: 0.24-14.9; P=0.54; 1.31% AS vs. 0.691% non-AS
Infection	33.7% AS vs. 20% non-AS; P=0.0008

OR, odds ratio; AST, aspartate aminotransferase; ALT, alanine aminotransferase.



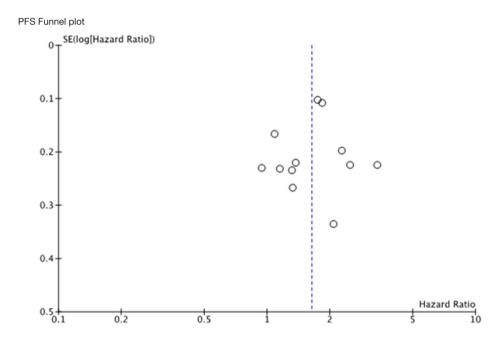


Figure S1 Funnel plots.