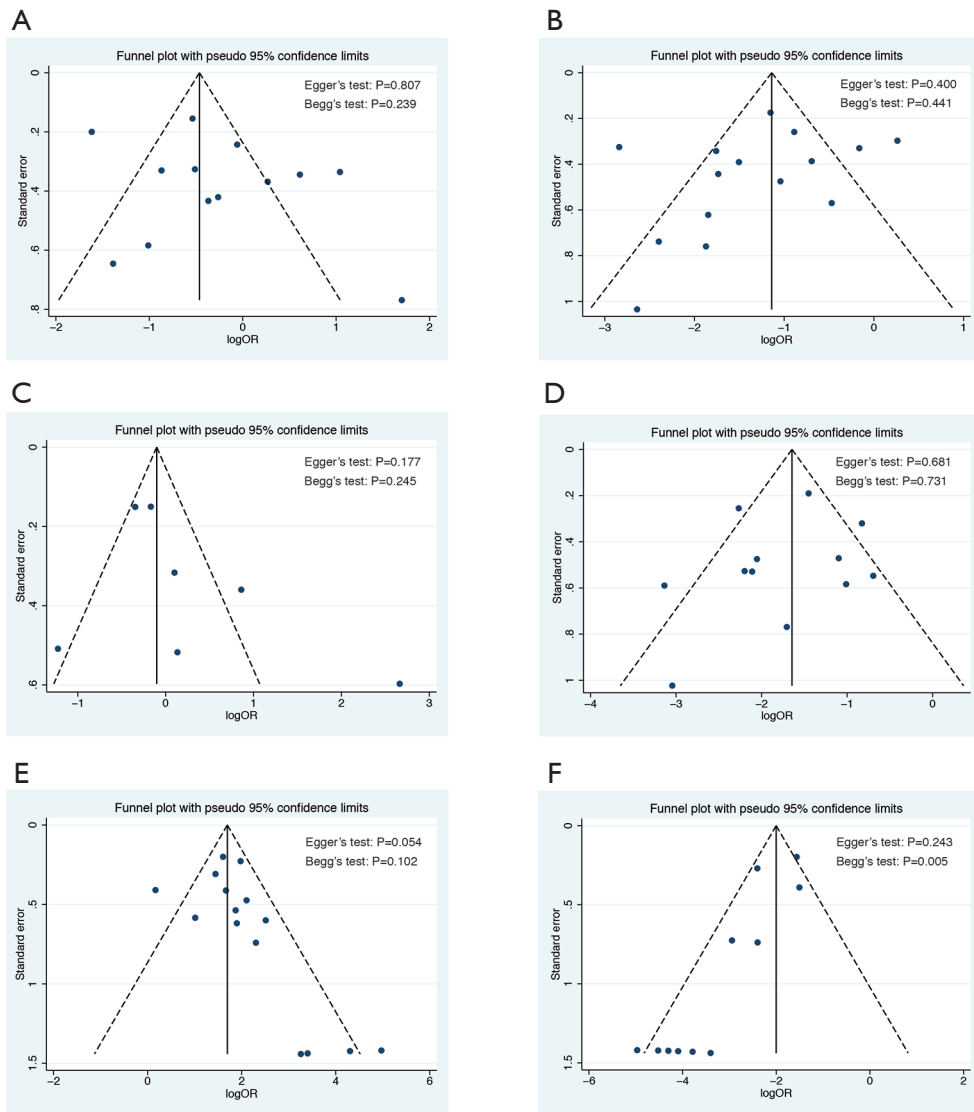
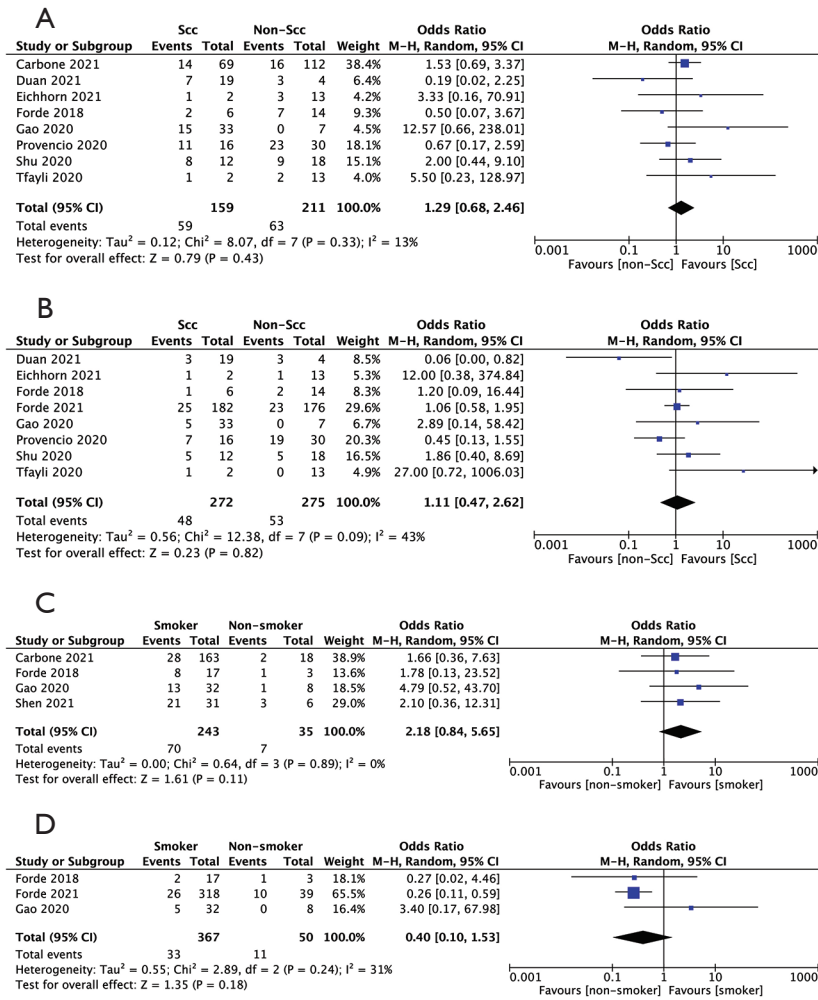


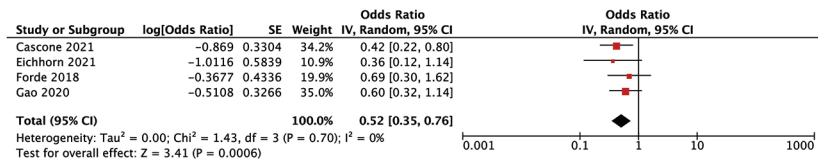
**Figure S1** The risk of bias of the included studies. (A) Risk of bias of randomized trials; (B) Risk of bias of non-randomized trials.



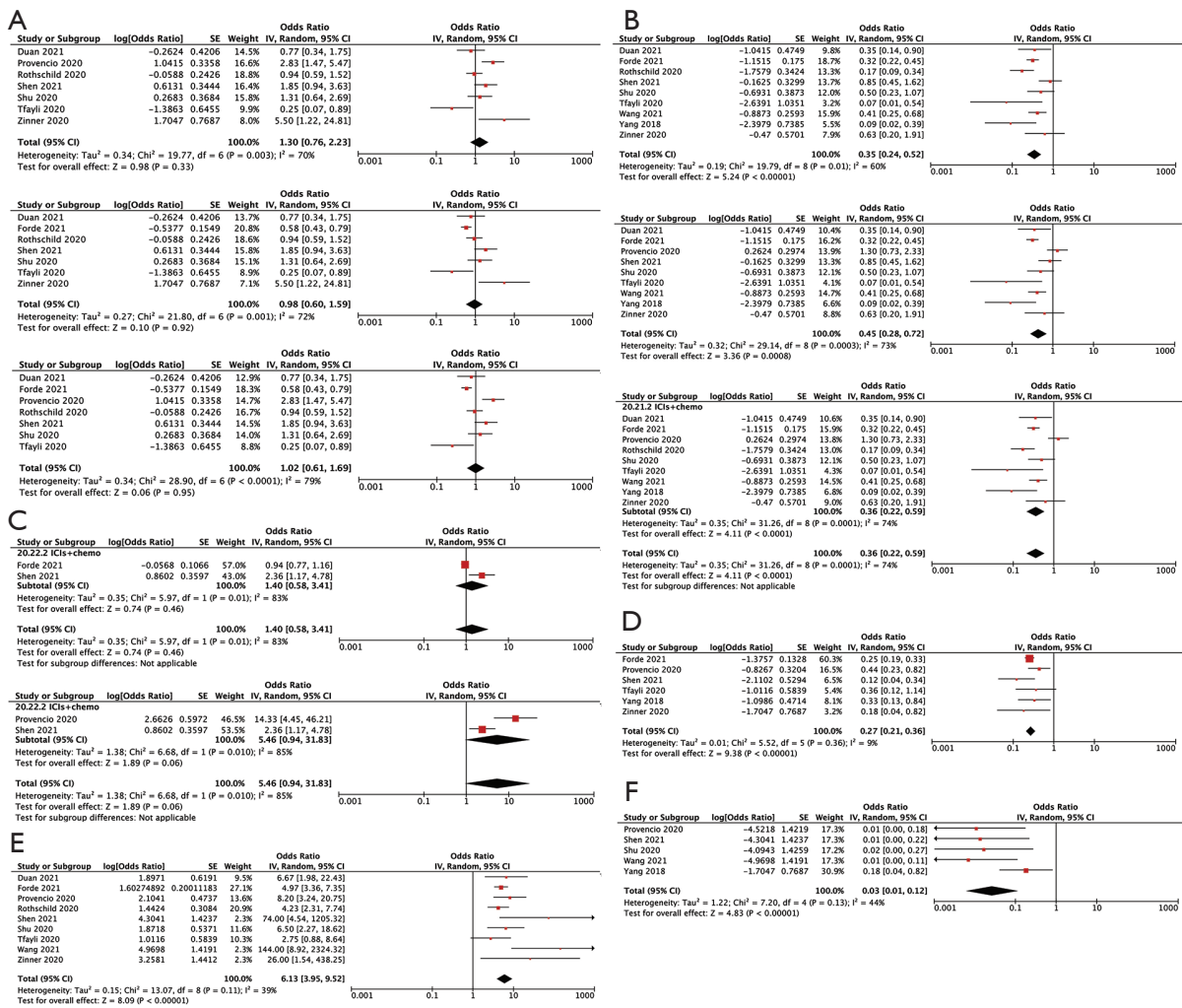
**Figure S2** Publication bias of included studies. (A) Funnel plot for MPR; (B) Funnel plot for pCR; (C) Funnel plot for incidence of TRAE; (D) Funnel plot for incidence of SAE; (E) Funnel plot for resection rate; (F) Funnel plot for surgical delay rate.



**Figure S3** Forest plot of the pathological response of subgroup analysis based on histology subtypes and smoking status. (A) MPR among patients who are diagnosed with squamous cell carcinoma or non-squamous cell carcinoma; (B) pCR among patients diagnosed with squamous cell carcinoma or non-squamous cell carcinoma; (C) MPR among patients who are smokers or non-smokers; (D) pCR among patients who are smokers or non-smokers. Smokers, including current and former smokers; MPR, major pathological response; pCR, complete pathological response; M-H, Mantel-Haenszel; CI, confidence interval.



**Figure S4** Forest plot of the MPR rate of the mono-ICI subgroup after removal of the Carbone 2021 study in the sensitivity analysis. MPR, major pathological response; ICI, immune checkpoint inhibitor.



**Figure S5** Forest plot of the efficacy and safety of the ICI + chemo subgroup in the sensitivity analysis. (A) MPR rate; (B) pCR rate; (C) Incidence of TRAEs; (D) incidence of SAEs; (E) resection rate; (F) surgical delay rate. MPR, major pathological response; pCR, complete pathological response; TRAE, treatment-related adverse event; SAE, severe adverse event; SE, standard error; IV, inverse variance; CI, confidence interval.

**Table S1** Sensitivity analysis of efficacy- and safety-related endpoints

Subgroup	Endpoints	Ratio (95% CI)
Mono-ICI	MPR rate	34.2 (25.9–43.2)
ICI + chemo	MPR rate	56.5 (43.2–69.0) <sup>a</sup> ; 49.5 (37.5–61.4) <sup>b</sup> ; 50.5 (37.9–62.8) <sup>c</sup>
ICI + chemo	pCR rate	25.9 (19.4–34.2) <sup>d</sup> ; 31.0 (21.9–41.9) <sup>e</sup> ; 26.5 (18.0–37.1) <sup>f</sup>
ICI + chemo	Incidence of TRAEs	58.3 (36.7–77.3) <sup>g</sup> ; 84.5 (48.5–97.0) <sup>h</sup>
ICI + chemo	Incidence of SAEs	21.3 (17.4–26.5)
ICI + chemo	Resection rate	86.0 (79.8–90.5)
ICI + chemo	Surgical delay rate	2.9 (1.0–10.7)

<sup>a, b, c</sup> refer to the pooled MPR rate of the ICI + chemo subgroup after removal of the Forde 2021 study, Provencio 2020 study, or Zinner 2020 study, respectively; <sup>d, e, f</sup> refer to the pooled pCR rate of the ICI + chemo subgroup after removal of the Provencio 2020 study, Rothchild 2021 study, or Shen 2021 study, respectively; <sup>g, h</sup> refer to the pooled incidence of TRAEs of the ICI + chemo subgroup after removal of the Provencio 2020 study and Forde 2021 study, respectively. ICI, immune checkpoint inhibitor; chemo, chemotherapy; mono-ICI, single-agent immune checkpoint inhibitor; MPR, major pathological response; pCR, complete pathological response; TRAE, treatment-related adverse event; SAE, severe adverse event; CI, confidence interval.