Table S1 The percentage of patients with different resectability across included studies

Study	FOLFIRINOX			GA		
	RPC	BRPC	LAPC or unresectable	RPC	BRPC	LAPC or unresectable
Wolfe et al., 2020	0%	67.30%	32.70%	0%	67.30%	25%
Macedo et al., 2019	21.90%	43.20%	30.60%	23.10%	52.70%	15.40%
Dhir et al., 2018	21%	79%	0%	40.80%	59.20%	0%
Chapman et al., 2018	0%	68.70%	31.30%	0%	59.50%	40.50%
Perri et al., 2020	32%	31%	37%	45%	23%	32%
Weniger et al., 2020	NA	NA	NA	NA	NA	NA
Gage et al., 2019	NA	NA	NA	NA	NA	NA
Napolitano et al., 2019	NA	NA	NA	NA	NA	NA

GA, gemcitabine and nab-paclitaxel; RPC, resectable pancreatic cancer; BRPC, borderline resectable pancreatic cancer; LAPC, locally advanced pancreatic cancer.

Table S2 Compare positive lymph nodes between two groups

Study	Lymph nodes positive			
	FOLFIRINOX		GA	
	Numbers	N1 percentage	Numbers	N1 percentage
Wolfe et al., 2020	1.3 (0–7)		2.9 (0–11)	
Macedo et al., 2019	1 (0–2)		1 (0–3)	
Dhir et al., 2018		56%		71.70%
Chapman et al., 2018		49%		51%
Perri et al., 2020	–	–	–	–
Weniger et al., 2020		78.20%		51.20%
Gage et al., 2019	–	–	–	–
Napolitano et al., 2019	–	–	–	–

*, means the difference is statistically significant. GA, gemcitabine and nab-paclitaxel.
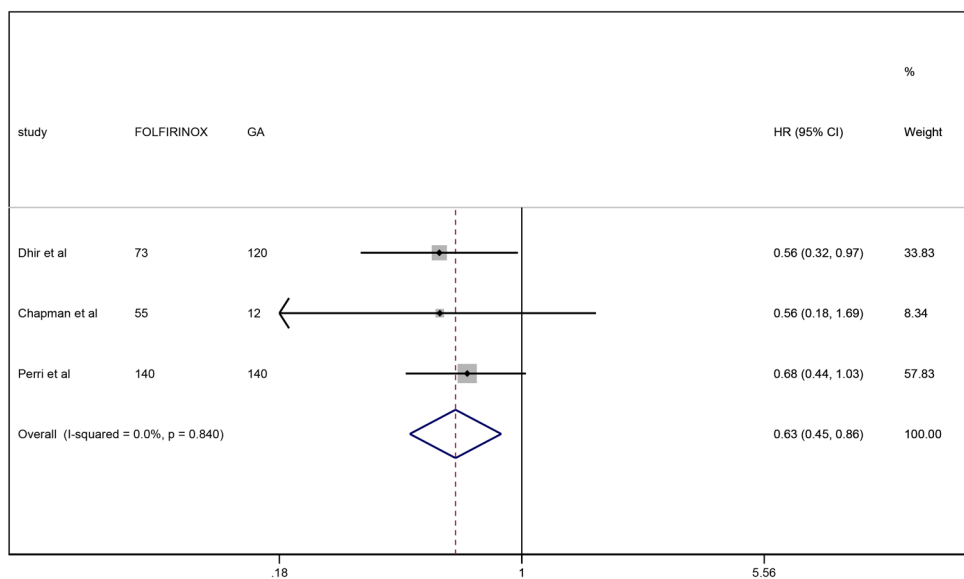
Figure S1 Forest plot showing the confounding factor-adjusted HR for the overall survival interval of patients who received preoperative FOLFIRINOX versus GA.
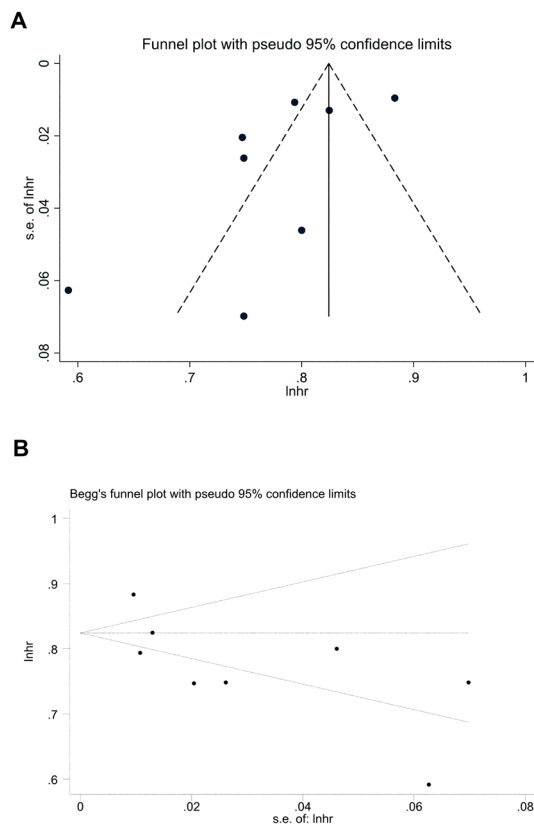
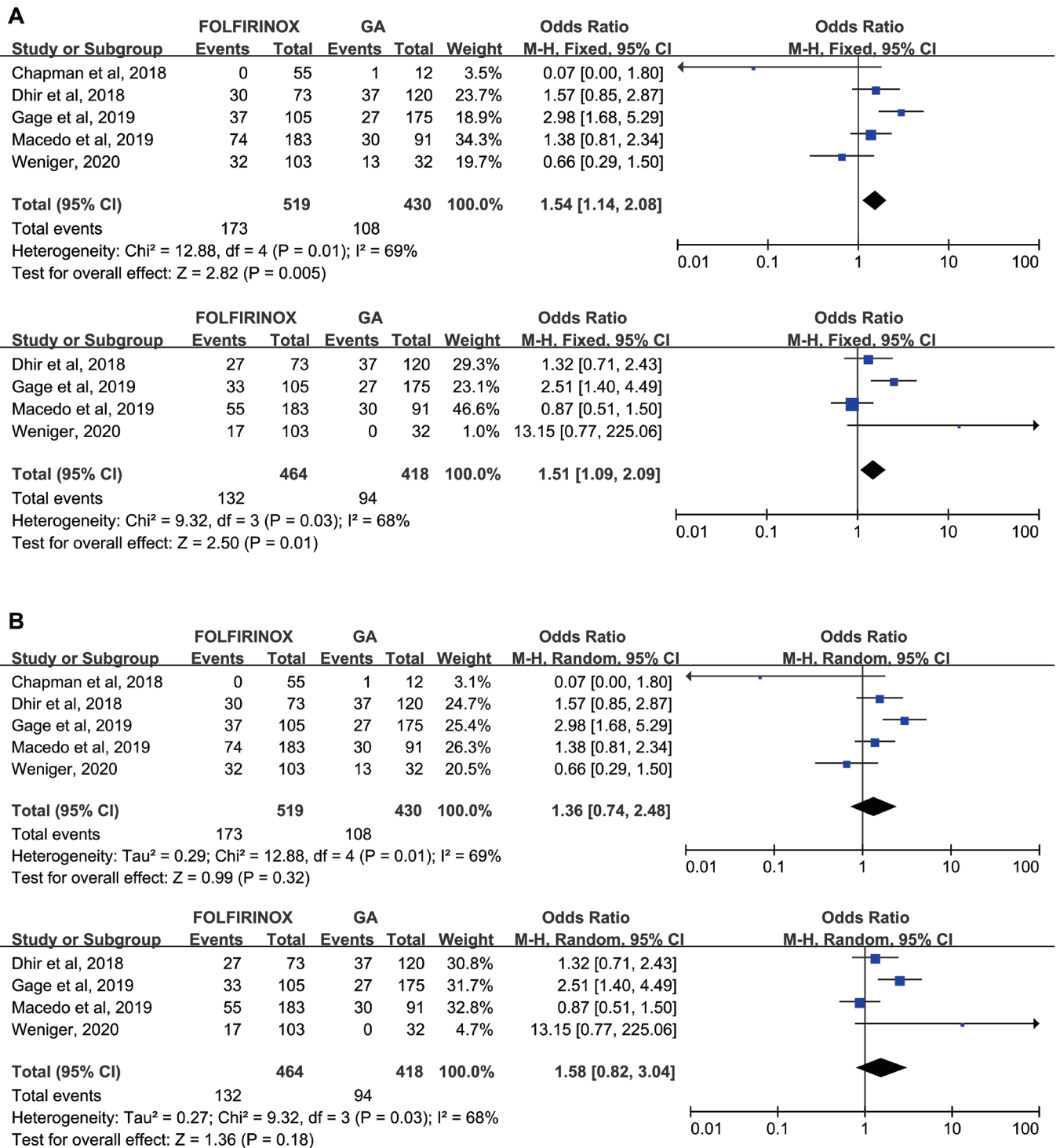**Figure S2** Publication bias detection. (A) Funnel graph. (B) Begg's test.

A

Study or Subgroup	FOLFIRINOX Events	Total	GA Events	Total	Weight	Odds Ratio M-H, Fixed, 95% CI
Chapman et al, 2018	0	55	1	12	3.5%	0.07 [0.00, 1.80]
Dhir et al, 2018	30	73	37	120	23.7%	1.57 [0.85, 2.87]
Gage et al, 2019	37	105	27	175	18.9%	2.98 [1.68, 5.29]
Macedo et al, 2019	74	183	30	91	34.3%	1.38 [0.81, 2.34]
Weniger, 2020	32	103	13	32	19.7%	0.66 [0.29, 1.50]
Total (95% CI)		519		430	100.0%	1.54 [1.14, 2.08]
Total events	173		108			

Heterogeneity: Chi² = 12.88, df = 4 (P = 0.01); I² = 69%
Test for overall effect: Z = 2.82 (P = 0.005)

Study or Subgroup	FOLFIRINOX Events	Total	GA Events	Total	Weight	Odds Ratio M-H, Fixed, 95% CI
Dhir et al, 2018	27	73	37	120	29.3%	1.32 [0.71, 2.43]
Gage et al, 2019	33	105	27	175	23.1%	2.51 [1.40, 4.49]
Macedo et al, 2019	55	183	30	91	46.6%	0.87 [0.51, 1.50]
Weniger, 2020	17	103	0	32	1.0%	13.15 [0.77, 225.06]
Total (95% CI)		464		418	100.0%	1.51 [1.09, 2.09]
Total events	132		94			

Heterogeneity: Chi² = 9.32, df = 3 (P = 0.03); I² = 68%
Test for overall effect: Z = 2.50 (P = 0.01)

B

Study or Subgroup	FOLFIRINOX Events	Total	GA Events	Total	Weight	Odds Ratio M-H, Random, 95% CI
Chapman et al, 2018	0	55	1	12	3.1%	0.07 [0.00, 1.80]
Dhir et al, 2018	30	73	37	120	24.7%	1.57 [0.85, 2.87]
Gage et al, 2019	37	105	27	175	25.4%	2.98 [1.68, 5.29]
Macedo et al, 2019	74	183	30	91	26.3%	1.38 [0.81, 2.34]
Weniger, 2020	32	103	13	32	20.5%	0.66 [0.29, 1.50]
Total (95% CI)		519		430	100.0%	1.36 [0.74, 2.48]
Total events	173		108			

Heterogeneity: Tau² = 0.29; Chi² = 12.88, df = 4 (P = 0.01); I² = 69%
Test for overall effect: Z = 0.99 (P = 0.32)

Study or Subgroup	FOLFIRINOX Events	Total	GA Events	Total	Weight	Odds Ratio M-H, Random, 95% CI
Dhir et al, 2018	27	73	37	120	30.8%	1.32 [0.71, 2.43]
Gage et al, 2019	33	105	27	175	31.7%	2.51 [1.40, 4.49]
Macedo et al, 2019	55	183	30	91	32.8%	0.87 [0.51, 1.50]
Weniger, 2020	17	103	0	32	4.7%	13.15 [0.77, 225.06]
Total (95% CI)		464		418	100.0%	1.58 [0.82, 3.04]
Total events	132		94			

Heterogeneity: Tau² = 0.27; Chi² = 9.32, df = 3 (P = 0.03); I² = 68%
Test for overall effect: Z = 1.36 (P = 0.18)

Figure S3 Comparison of four- and five-year survival probability between patients who received preoperative FOLFIRINOX versus GA. (A) Fixed effect model. (B) Random effect model.
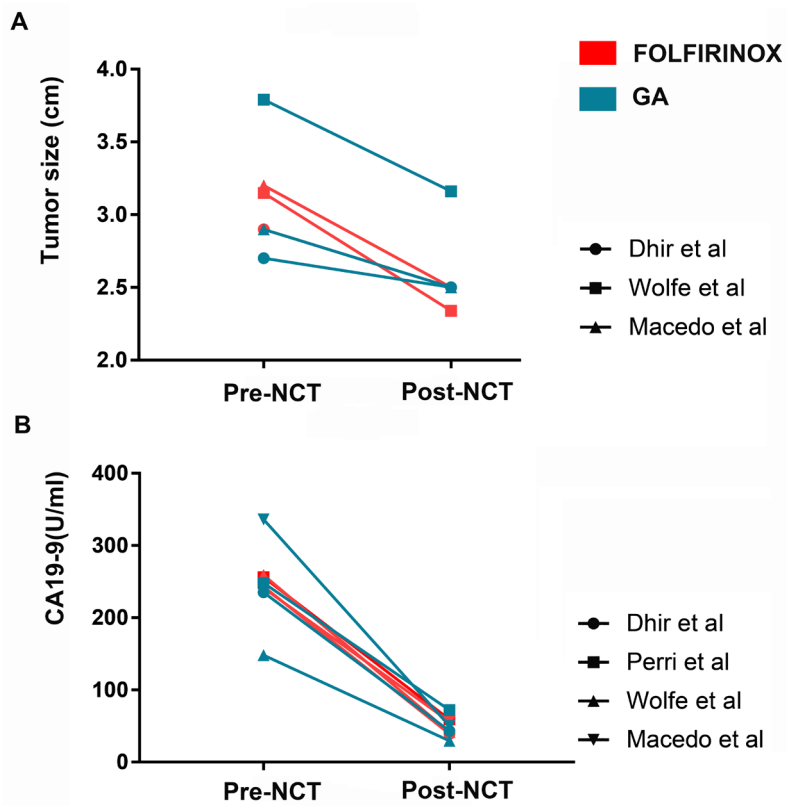
Figure S4 Qualitative analysis presented a similar trend in the variation in (A) tumour size and (B) CA19-9 level between patients who were preoperatively treated with FOLFIRINOX versus GA.