

Supplementary Material

1 Supplementary Data

Search Strategy Used in Pubmed 2020/7/19

#1 Stomach Neoplasms [Mesh]

#2 (gastr*[Title/Abstract] OR stomach*[Title/Abstract] OR digest*[Title/Abstract] OR epigastr*[Title/Abstract]) AND (carcin*[Title/Abstract] OR cancer*[Title/Abstract] OR neoplas*[Title/Abstract] OR tumour*[Title/Abstract] OR tumor*[Title/Abstract] OR growth*[Title/Abstract] OR adenocarcin*[Title/Abstract] OR malig*[Title/Abstract])

#3 #1 OR #2

#4 Astragalus propinquus [Mesh]

#5 "astragalus"[Text Word] OR "radix astragali"[Text Word] OR "huang qi"[Text Word] OR "huangqi"[Text Word]

#6 kangai[Title/Abstract] OR kang-ai[Title/Abstract] OR aidi[Title/Abstract] OR ai-di[Title/Abstract] OR shenqi*[Title/Abstract] OR delisheng[Title/Abstract] OR de-li-sheng[Title/Abstract] OR qizhen[Title/Abstract] OR boerning[Title/Abstract] OR compound banmao[Title/Abstract] OR zhenqi[Title/Abstract] OR yangzheng xiaoji[Title/Abstract] OR qijiao shengbai[Title/Abstract] OR lianqi[Title/Abstract] OR cidan [Title/Abstract] OR compound tianxian[Title/Abstract] OR buzhong yiqi[Title/Abstract] OR shiquan dabu[Title/Abstract] OR guipi[Title/Abstract] OR renshen yangrong[Title/Abstract] OR danggui buxue[Title/Abstract]

#7 #4 OR #5 OR #6

#8 #3 AND #7

2 Supplementary Figures and Tables

2.1 Supplementary Figures

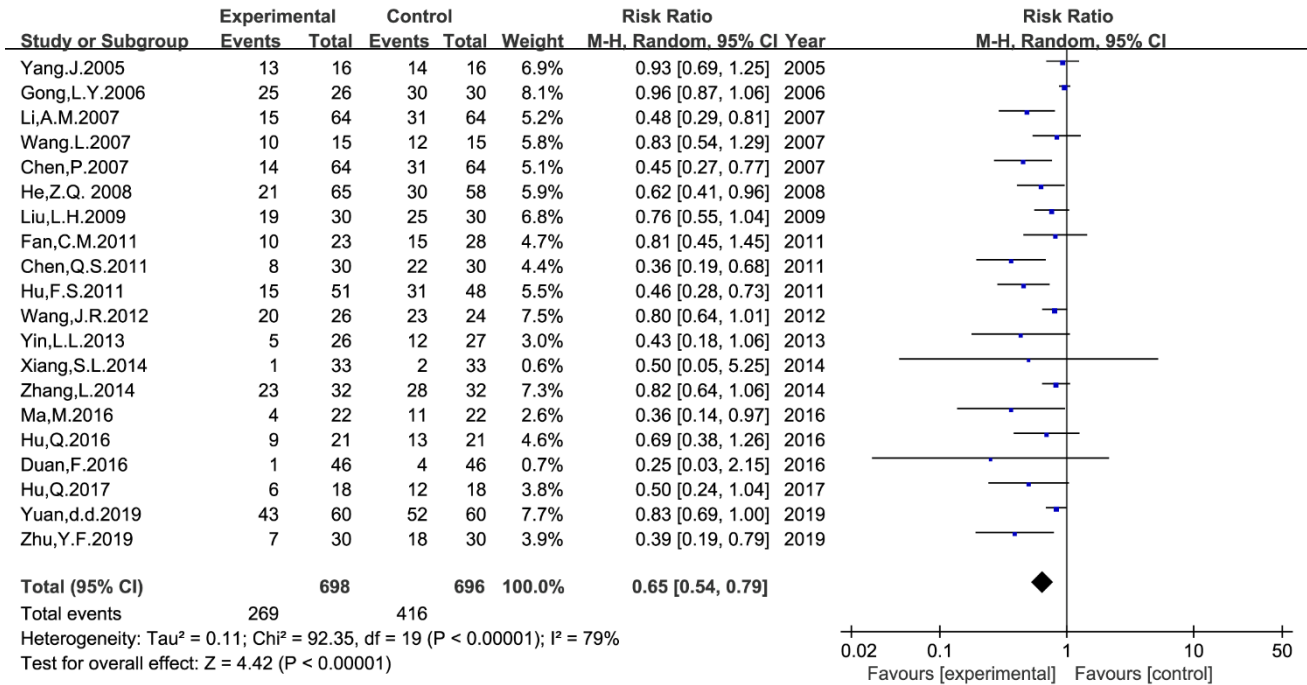


Figure S1. Meta-analysis results of neutropenia between the two groups

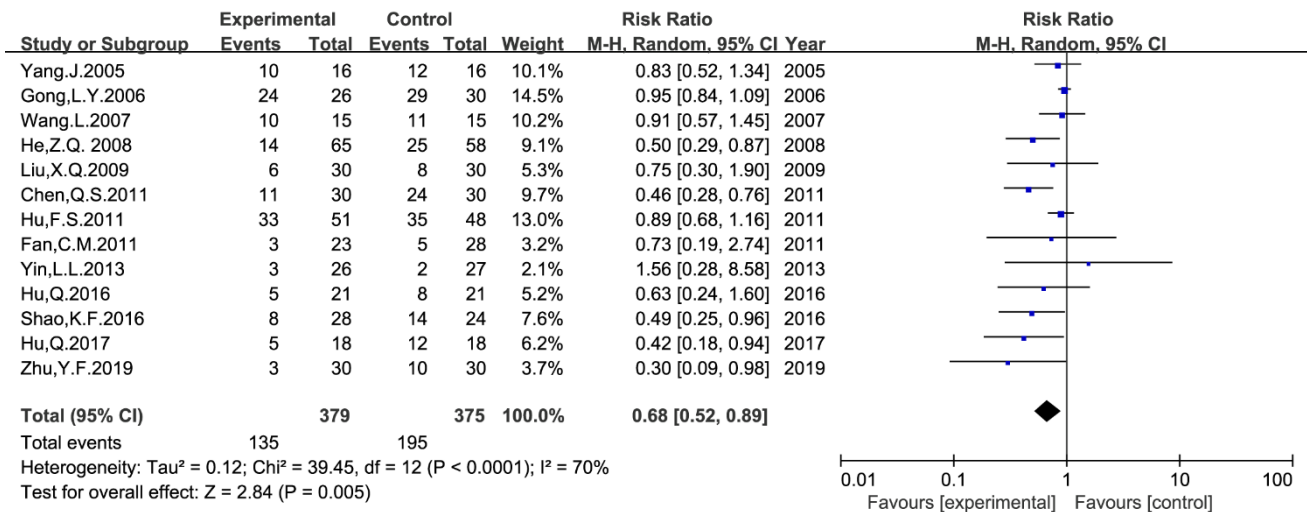


Figure S2. Meta-analysis results of anemia between the two groups

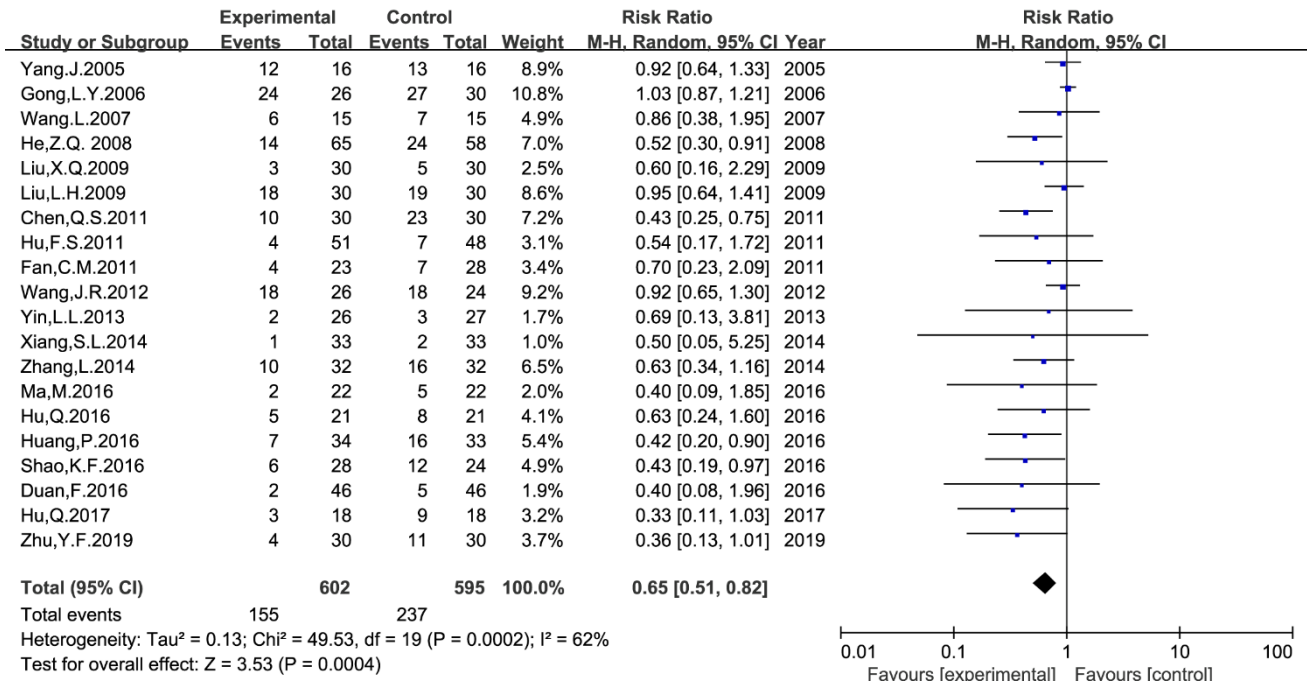


Figure S3. Meta-analysis results of thrombocytopenia between the two groups

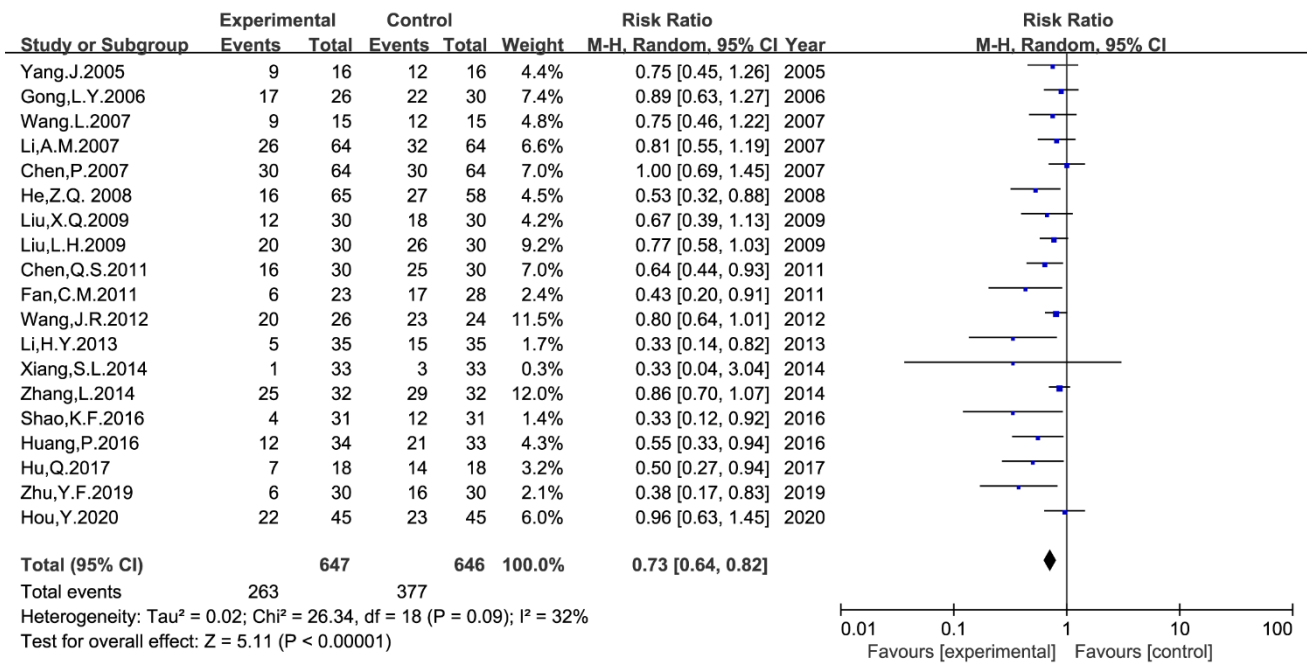


Figure S4. Meta-analysis results of nausea and vomiting between the two groups

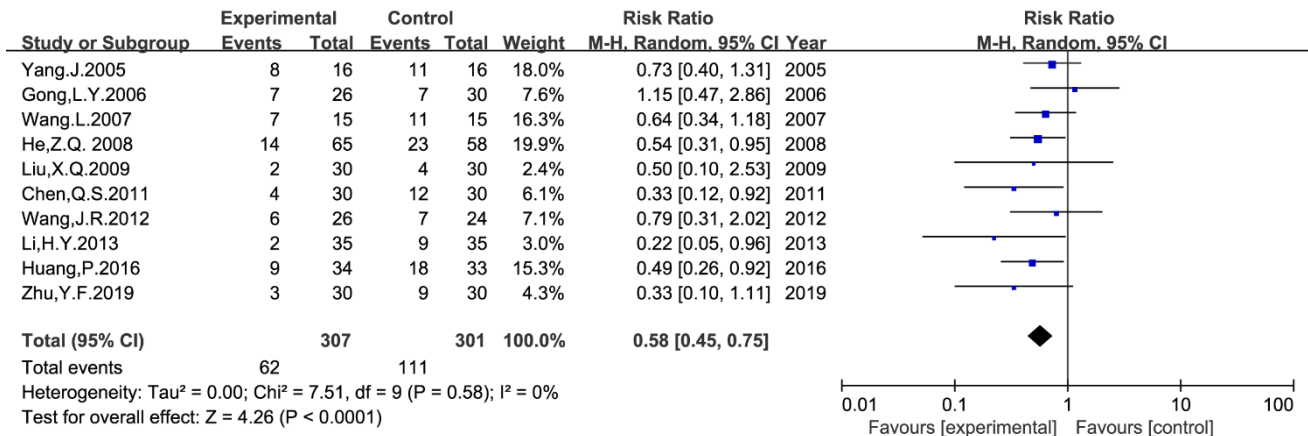


Figure S5. Meta-analysis results of diarrhea between the two groups

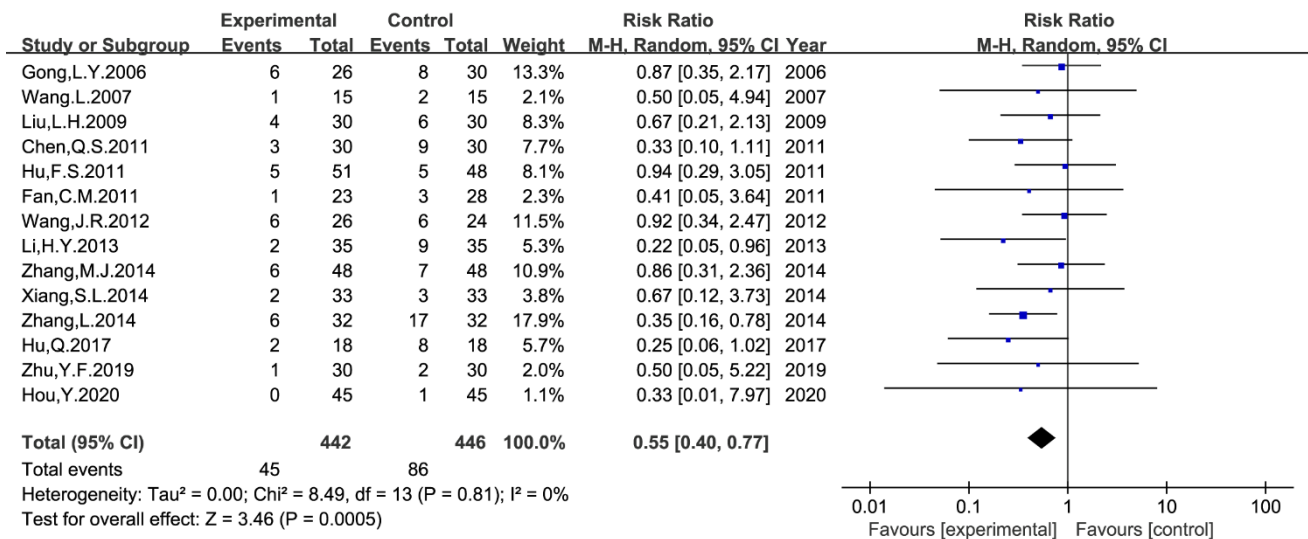


Figure S6. Meta-analysis results of hepatic dysfunction between the two groups

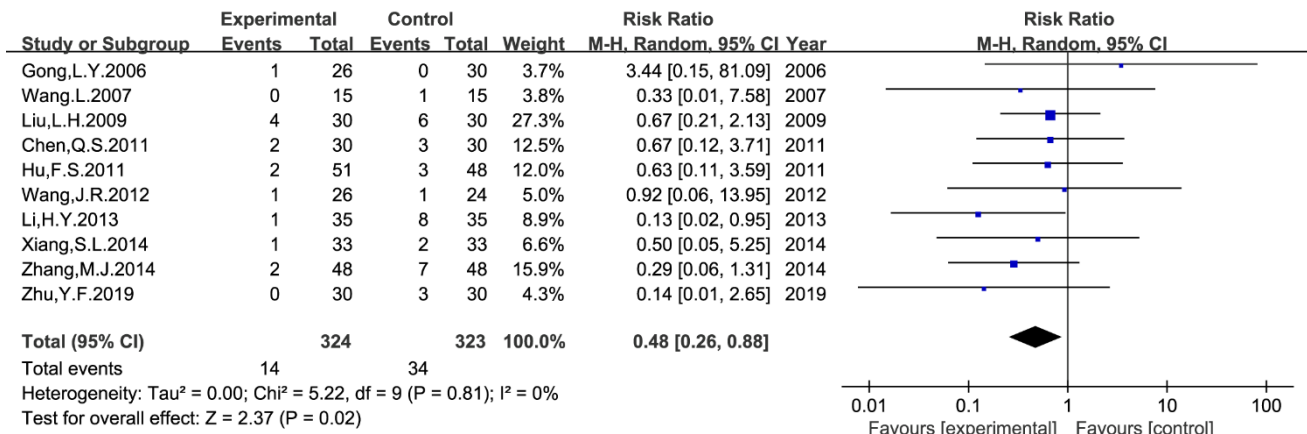


Figure S7. Meta-analysis results of renal dysfunction between the two groups

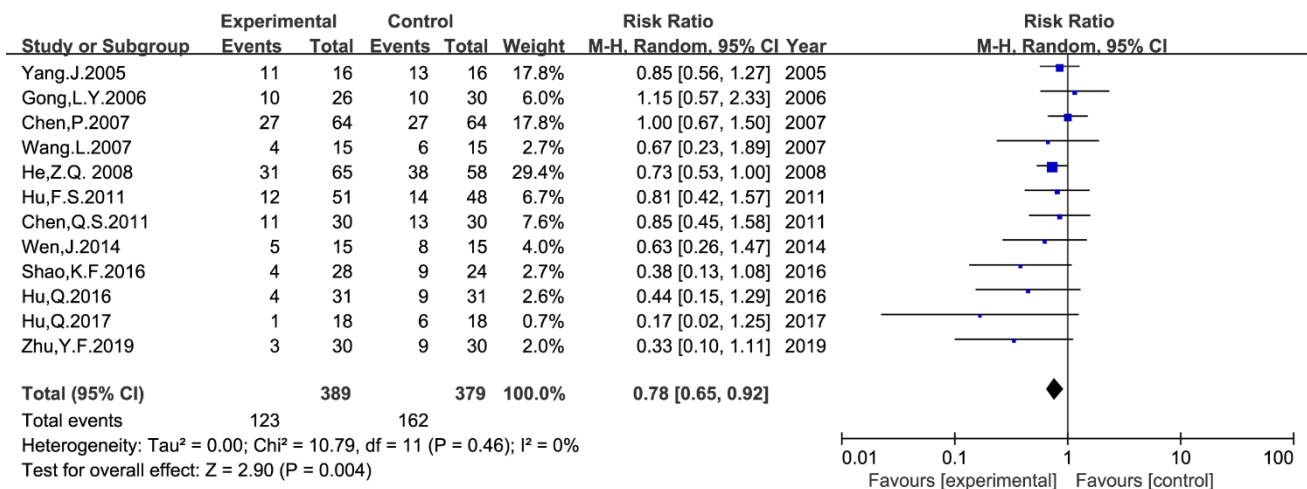


Figure S8. Meta-analysis results of neurotoxicity between the two groups

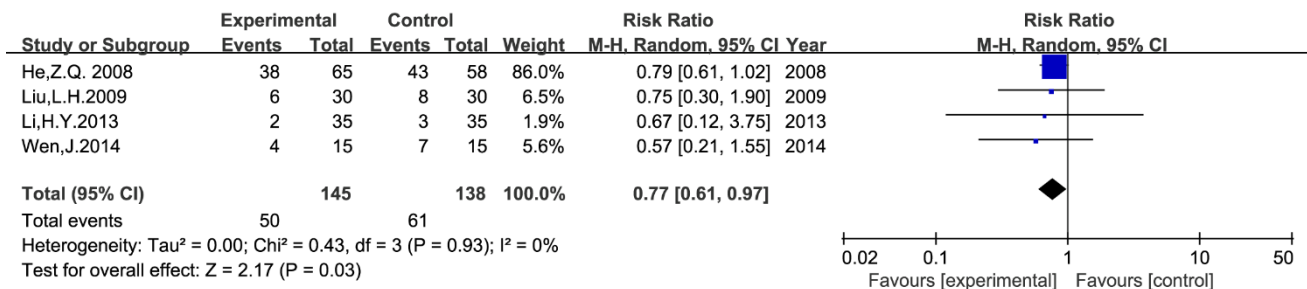


Figure S9. Meta-analysis results of alopecia between the two groups

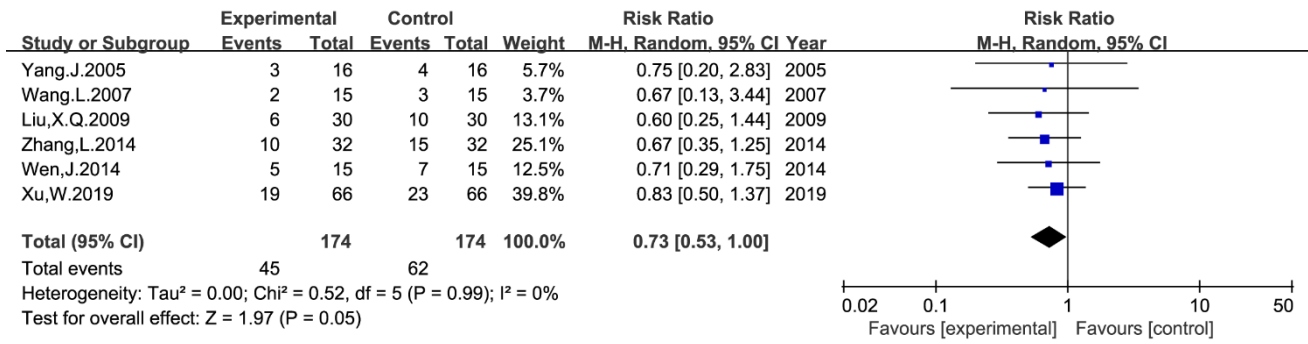


Figure S10. Meta-analysis results of stomatitis between the two groups

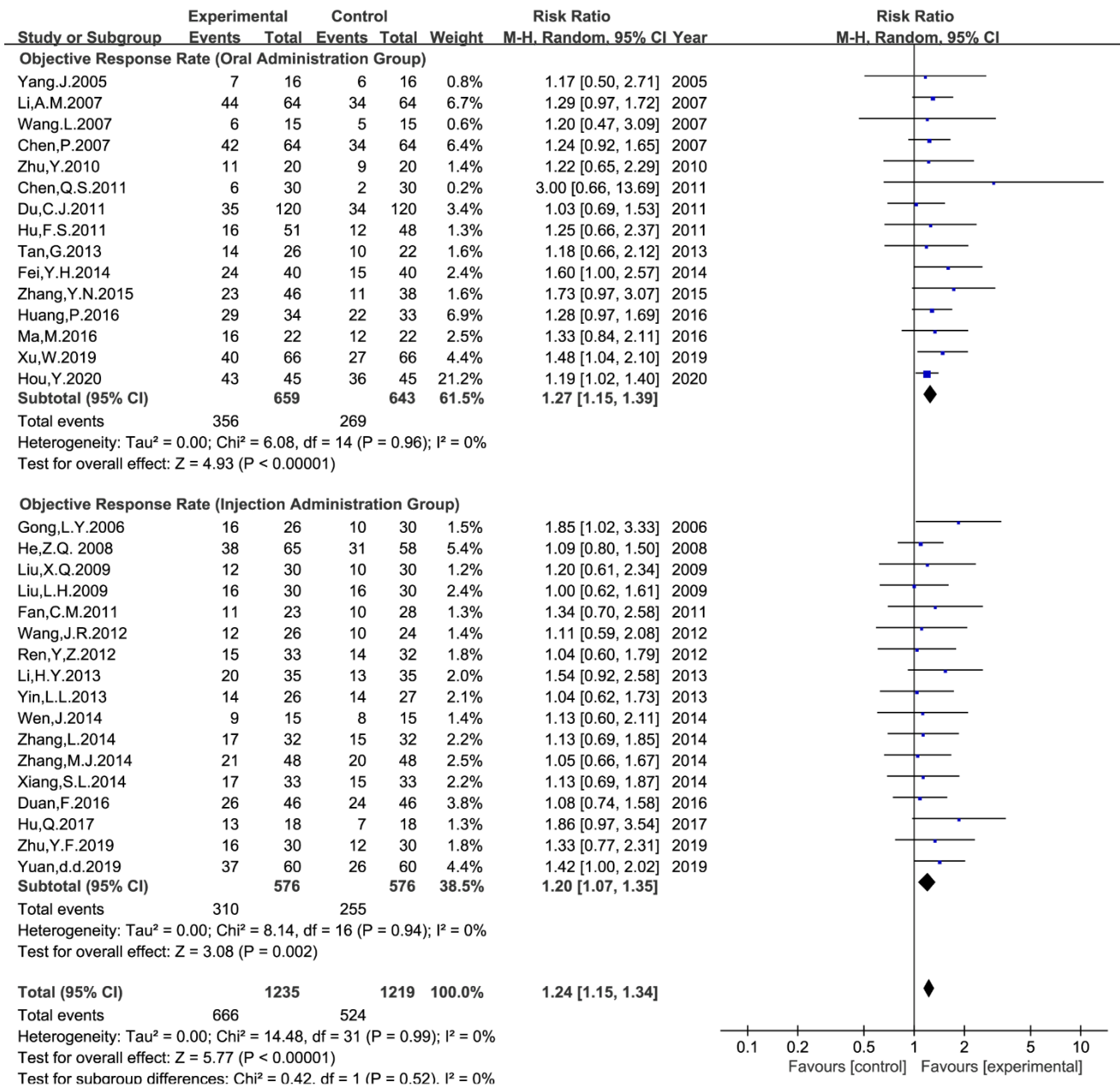


Figure S11. Subgroup analysis of ORR via drug delivery

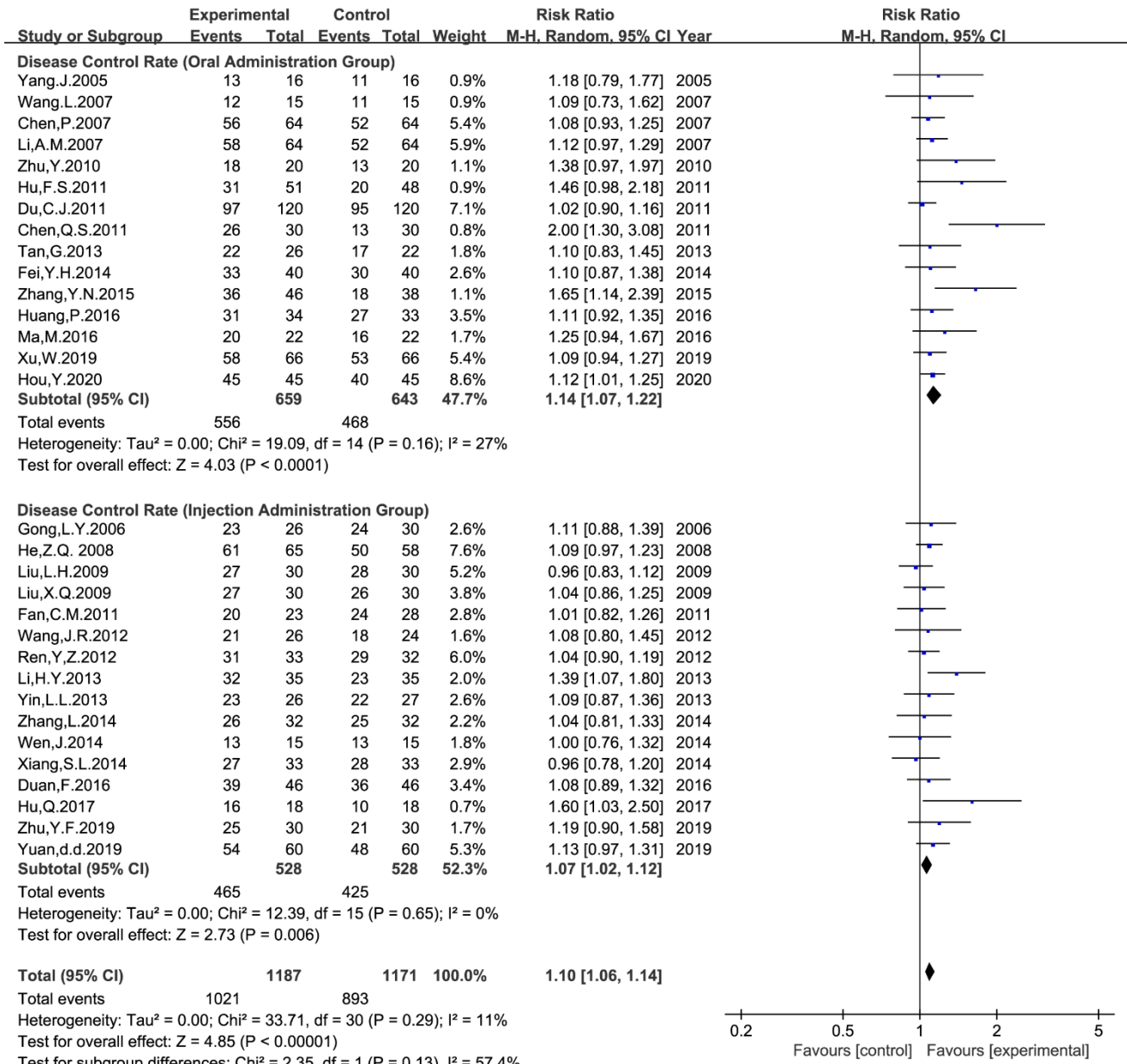


Figure S12. Subgroup analysis of DCR via drug delivery

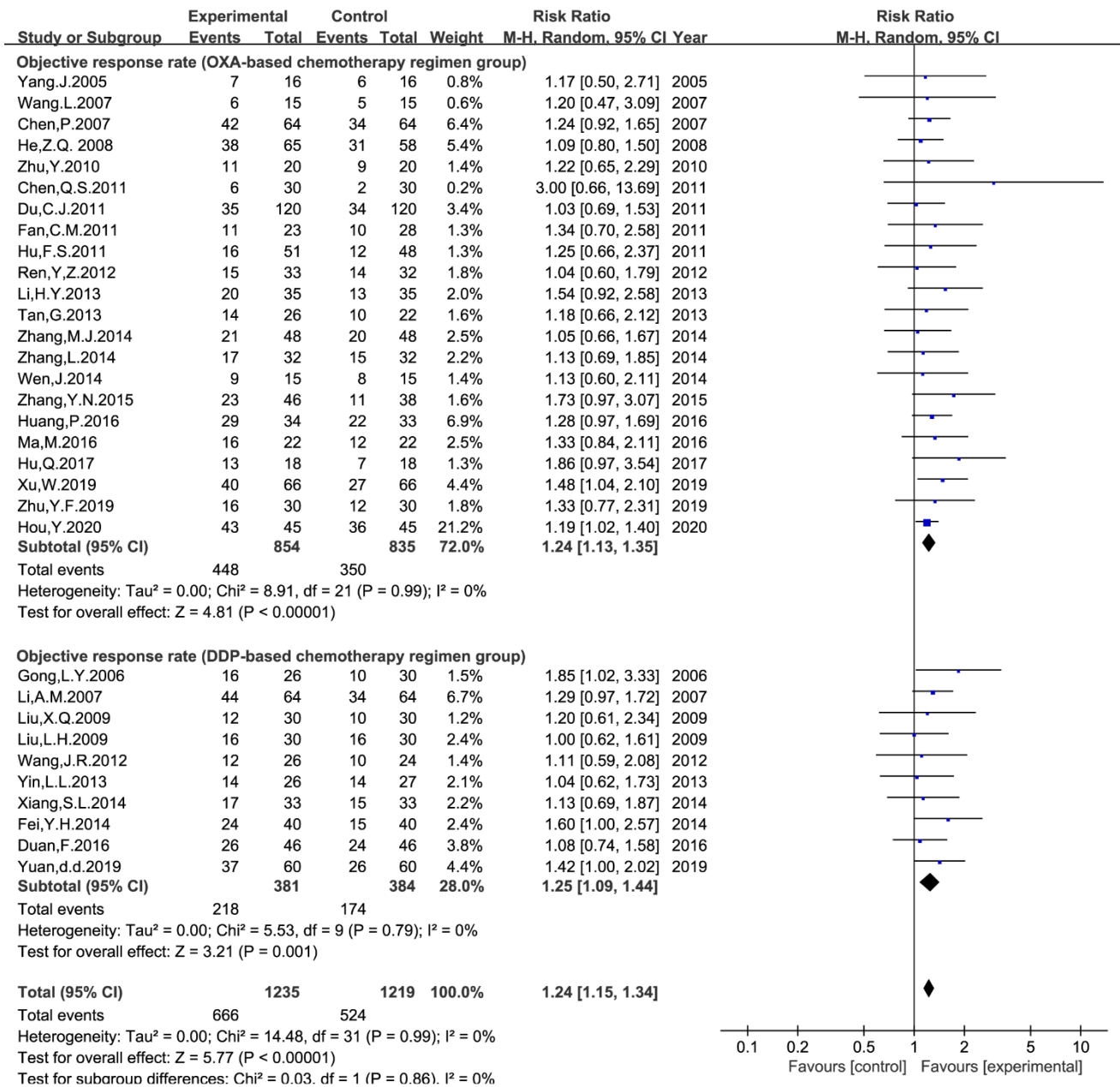


Figure S13. Subgroup analysis of ORR via chemotherapy regimen

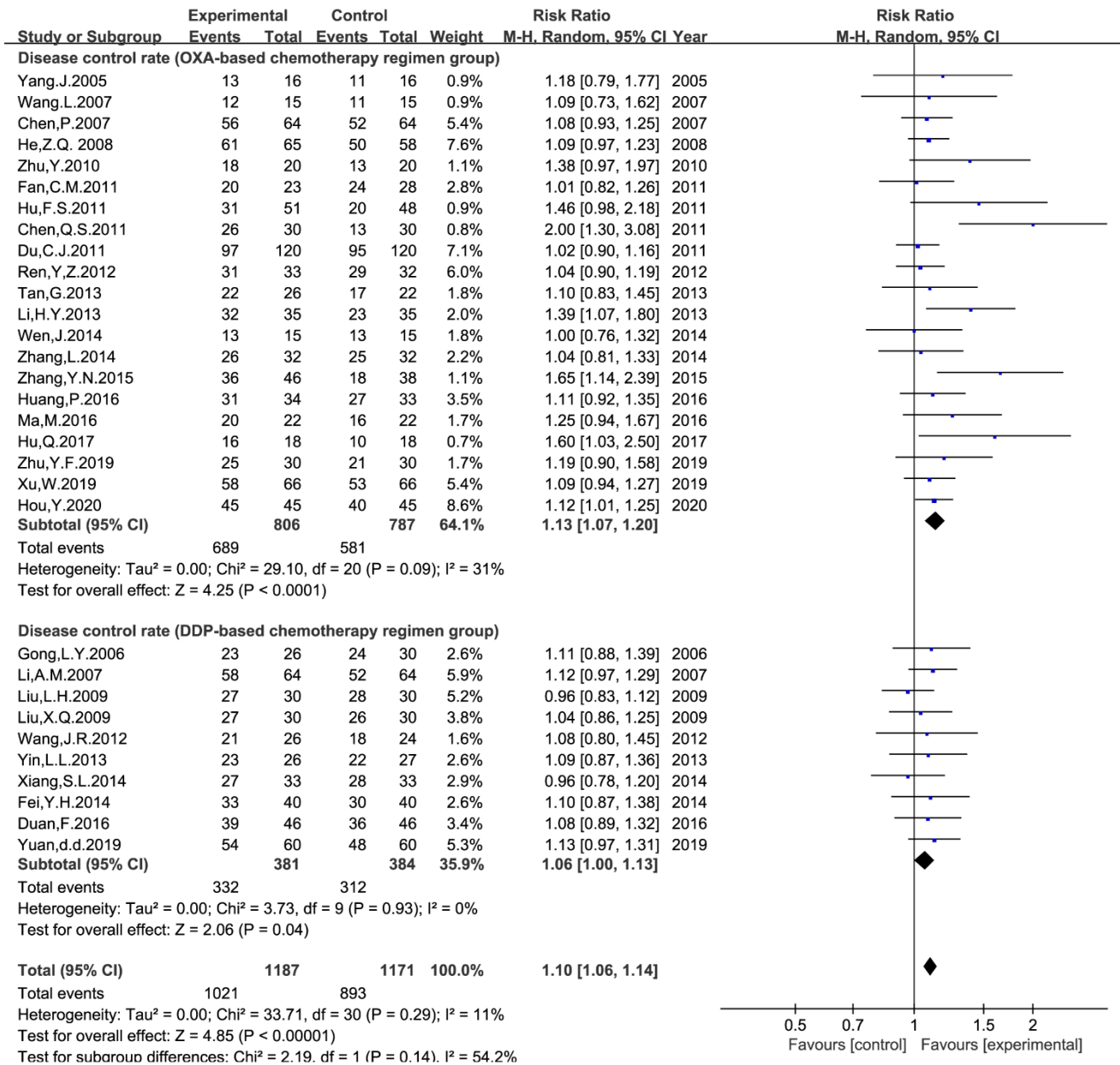


Figure S14. Subgroup analysis of DCR via chemotherapy regimen

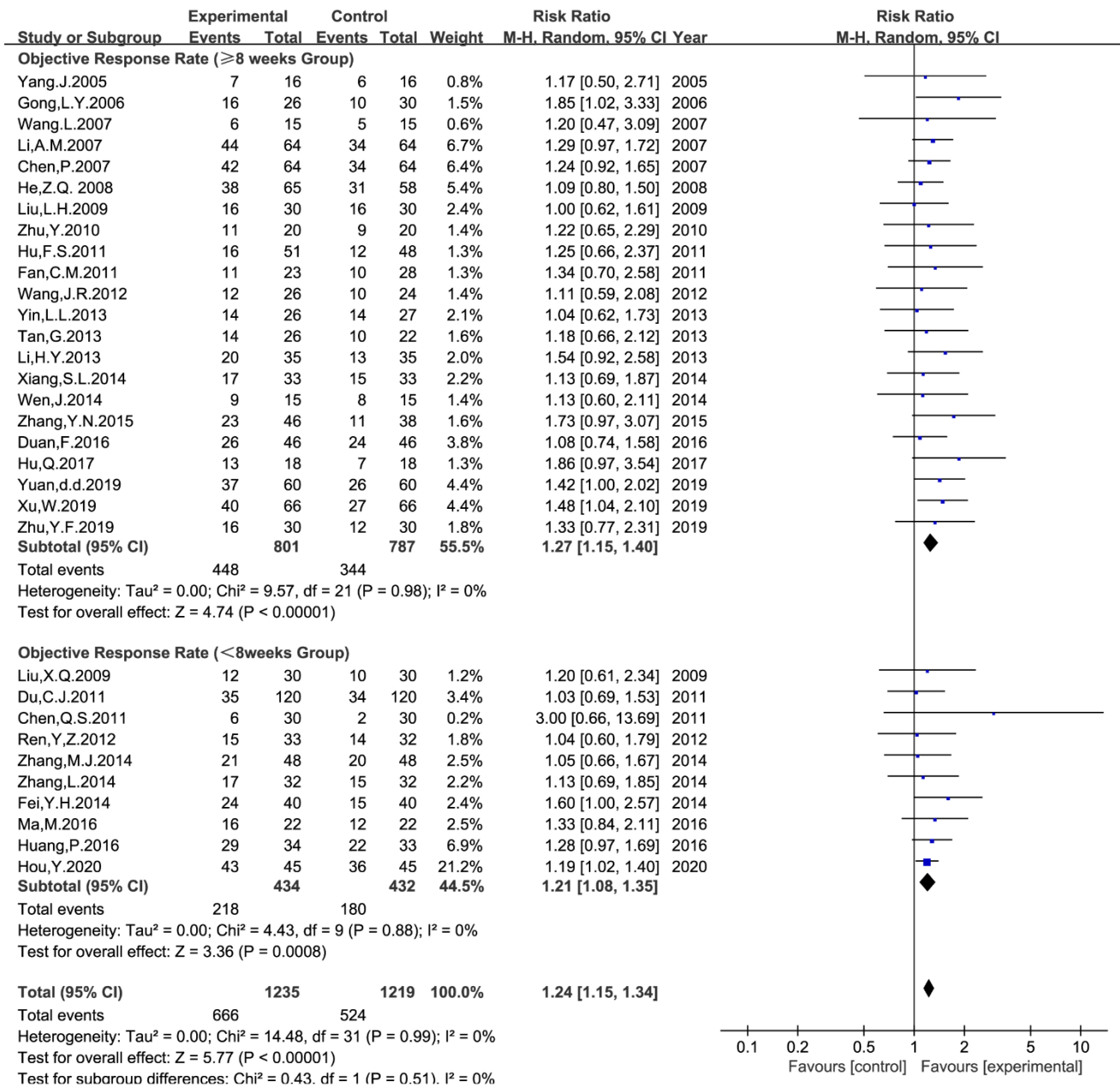


Figure S15. Subgroup analysis of ORR via treatment duration

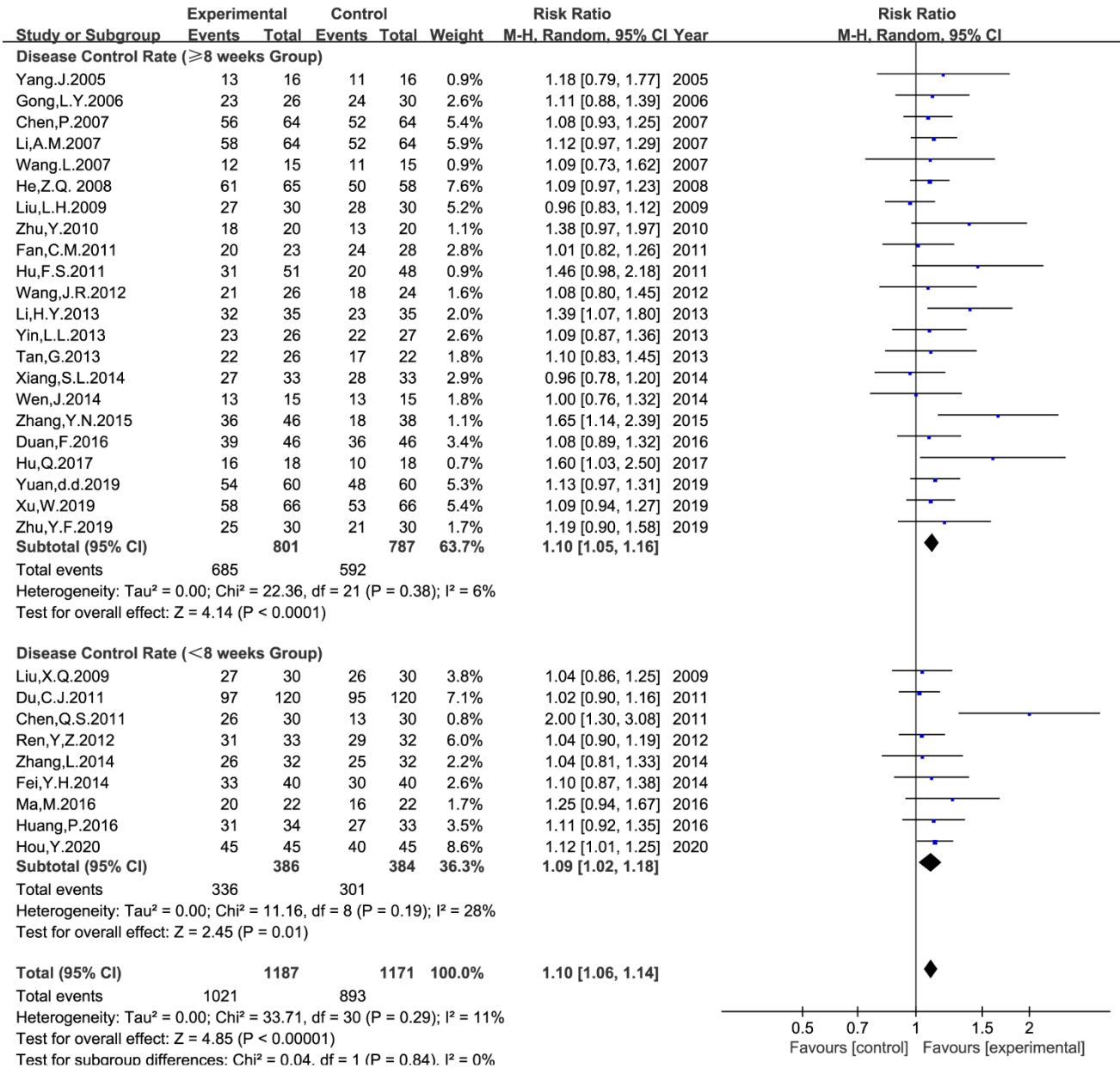


Figure S16. Subgroup analysis of DCR via treatment duration

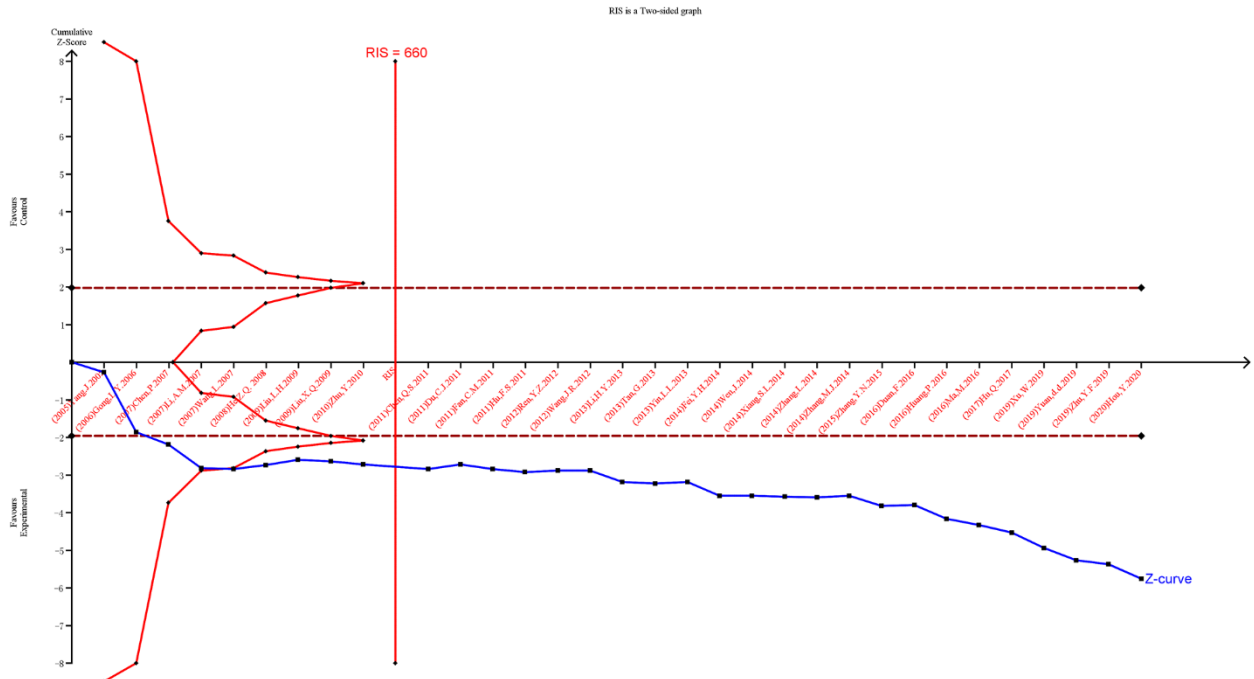


Figure S17. TSA of ORR

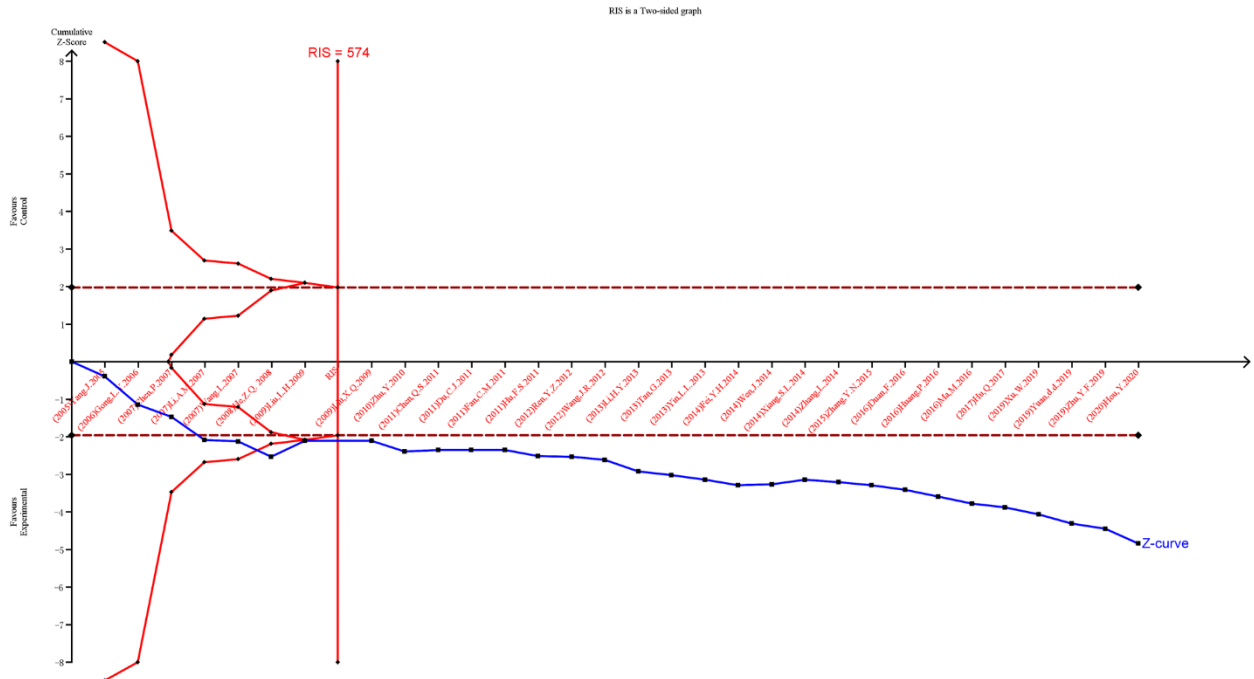


Figure S18. TSA of DCR

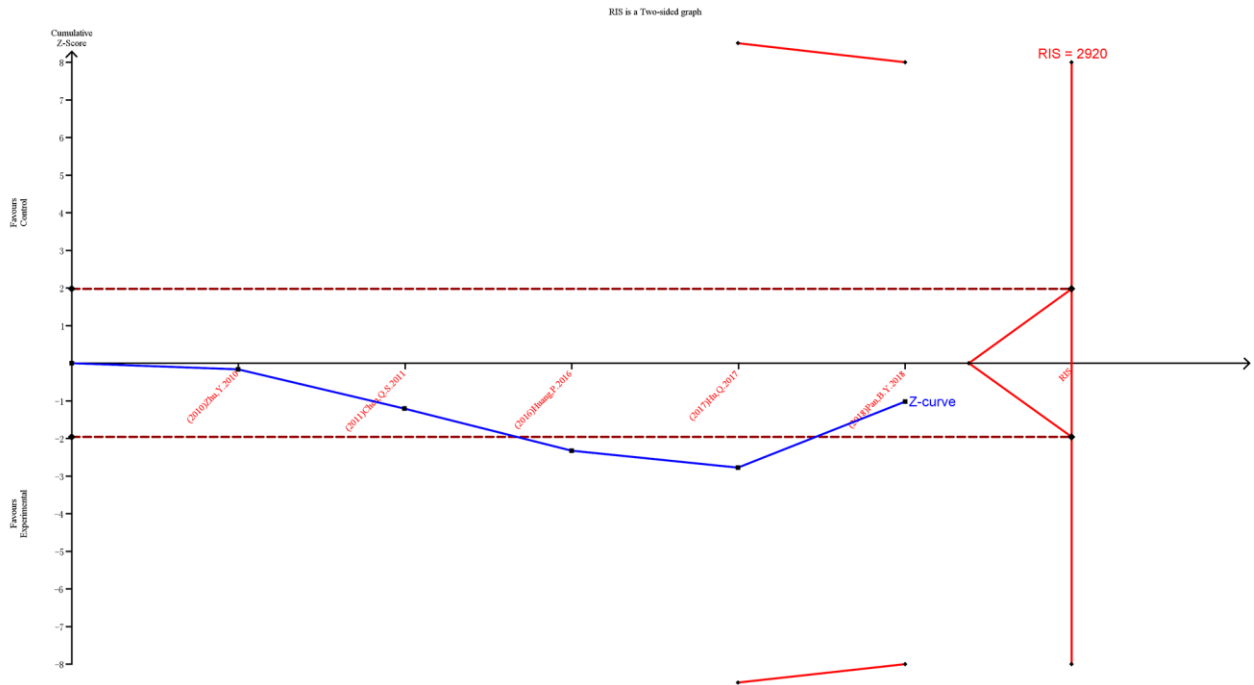


Figure S19. TSA of half-year survival rate

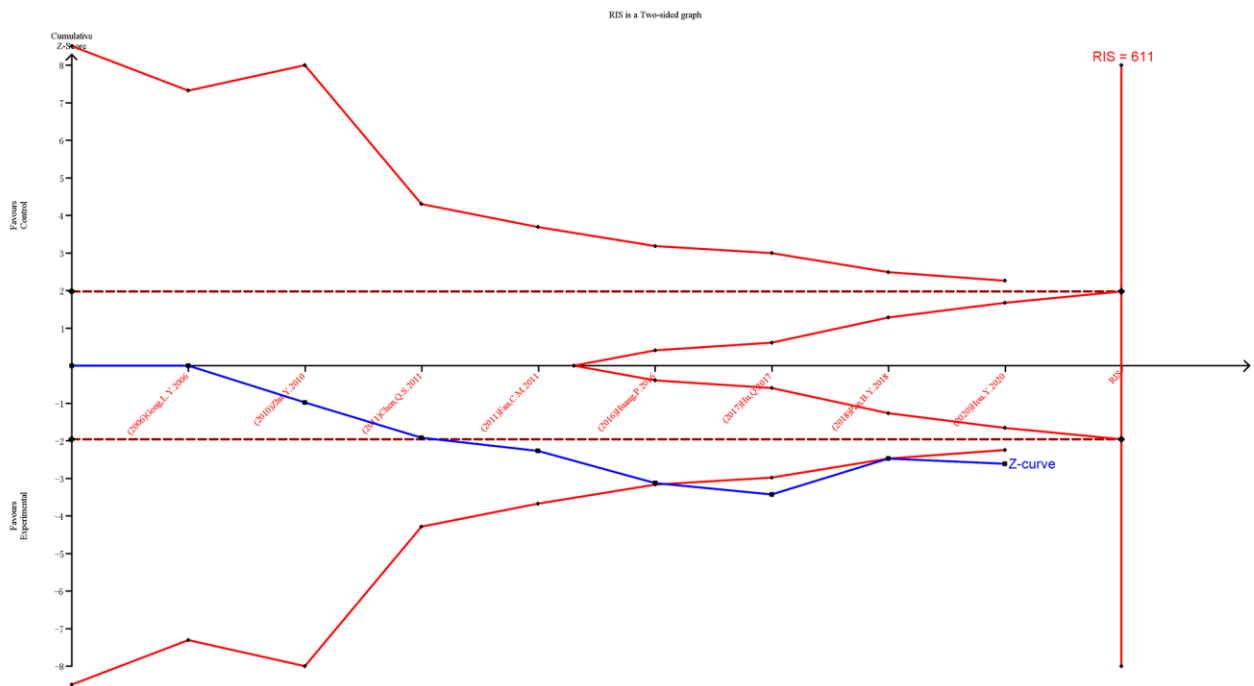


Figure S20. TSA of 1-year survival rate

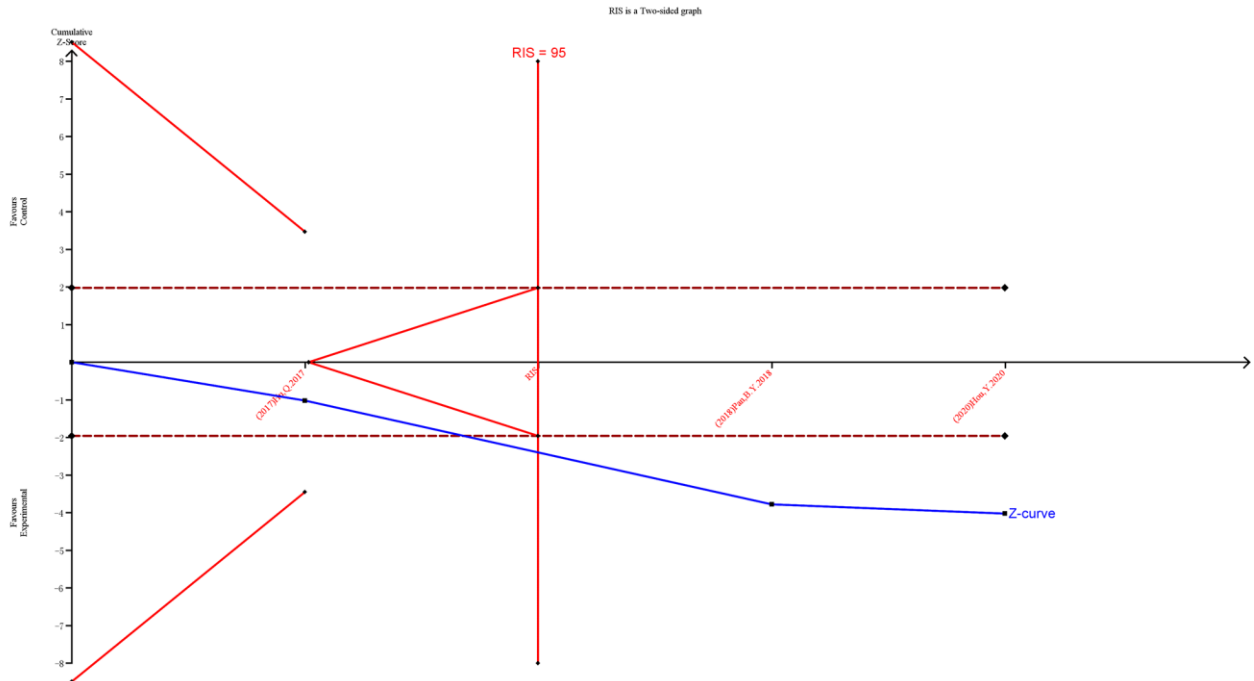


Figure S21. TSA of 2-year survival rate

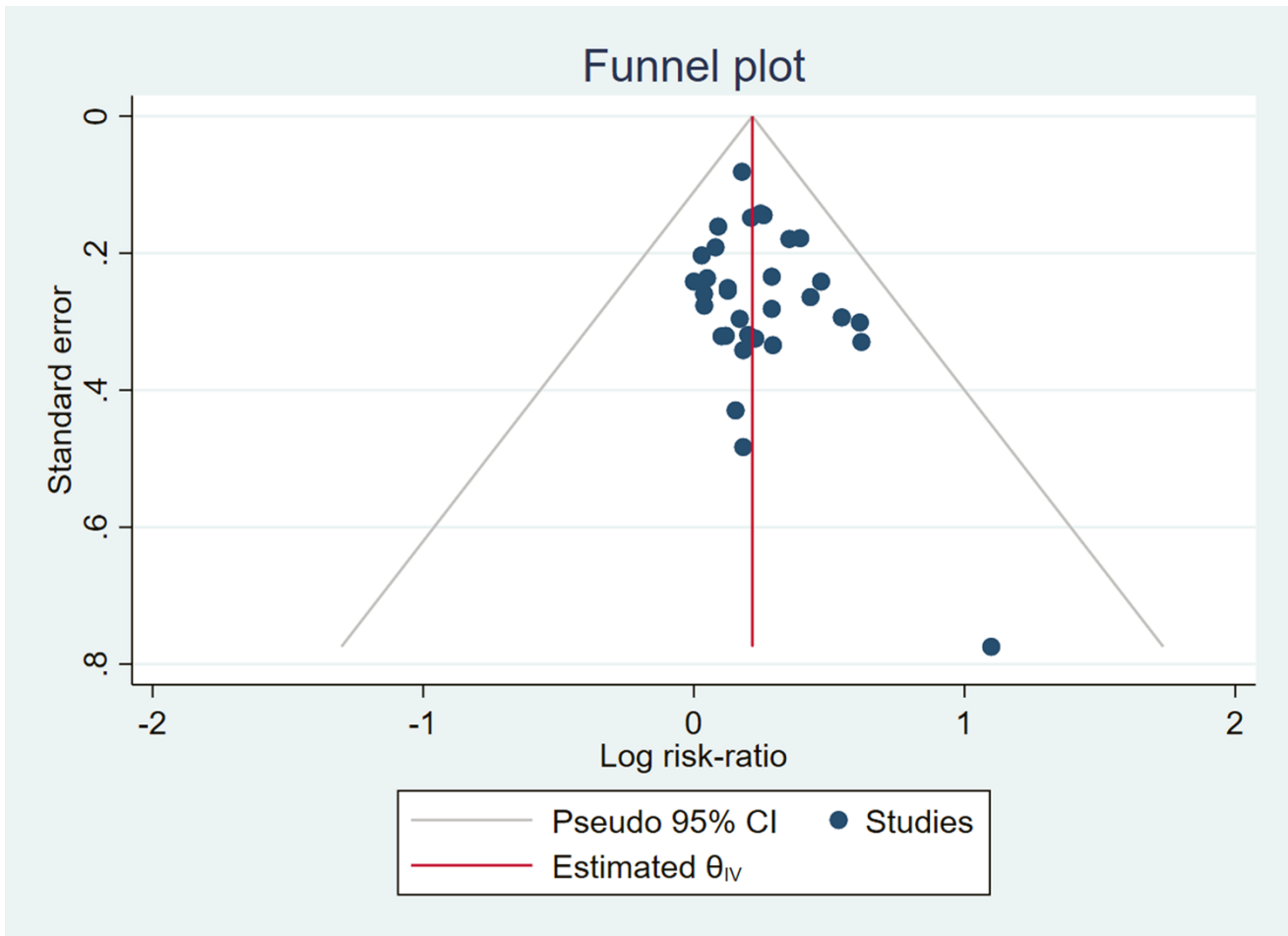


Figure S22. ORR funnel plot

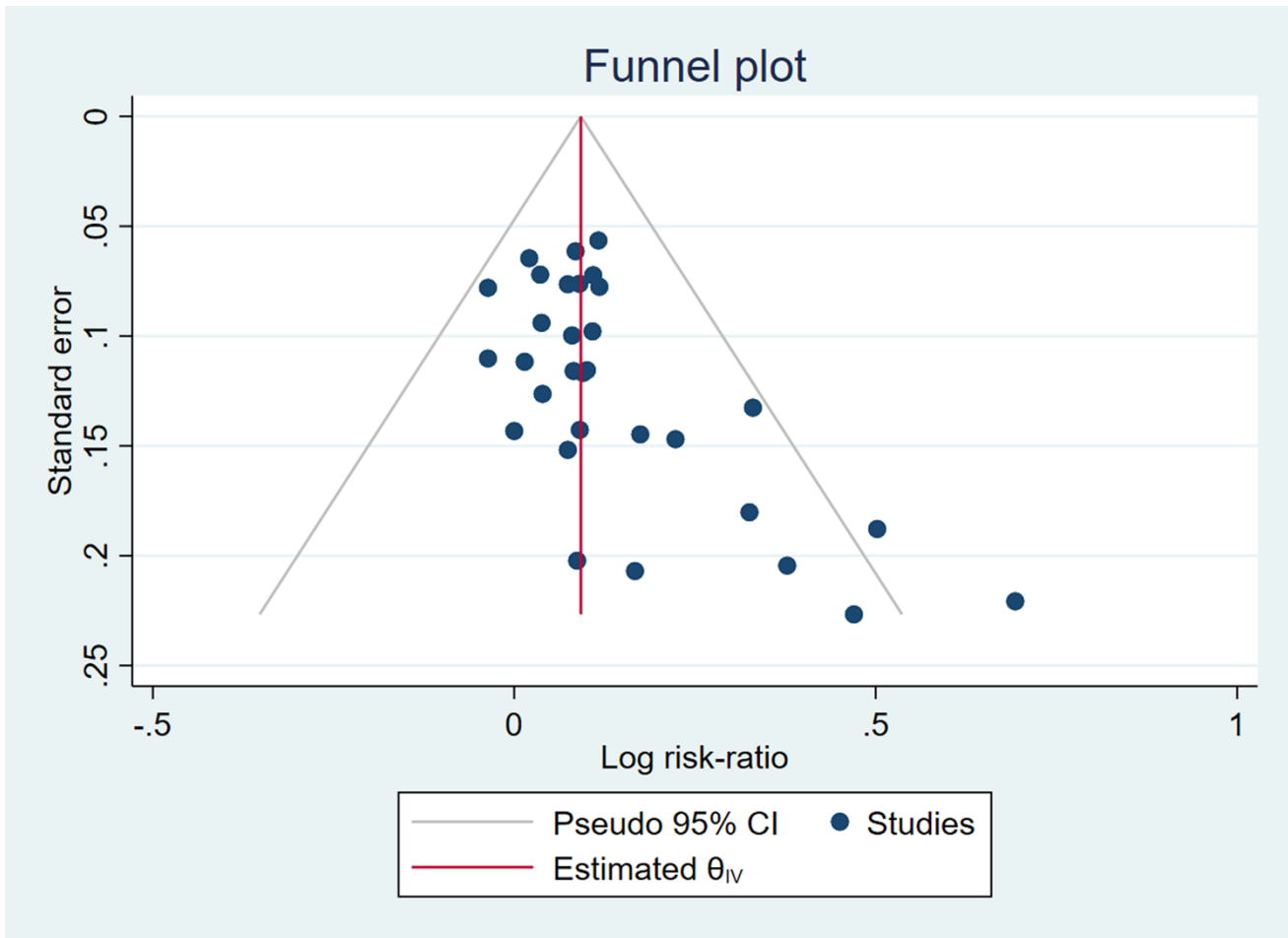


Figure S23. DCR funnel plot

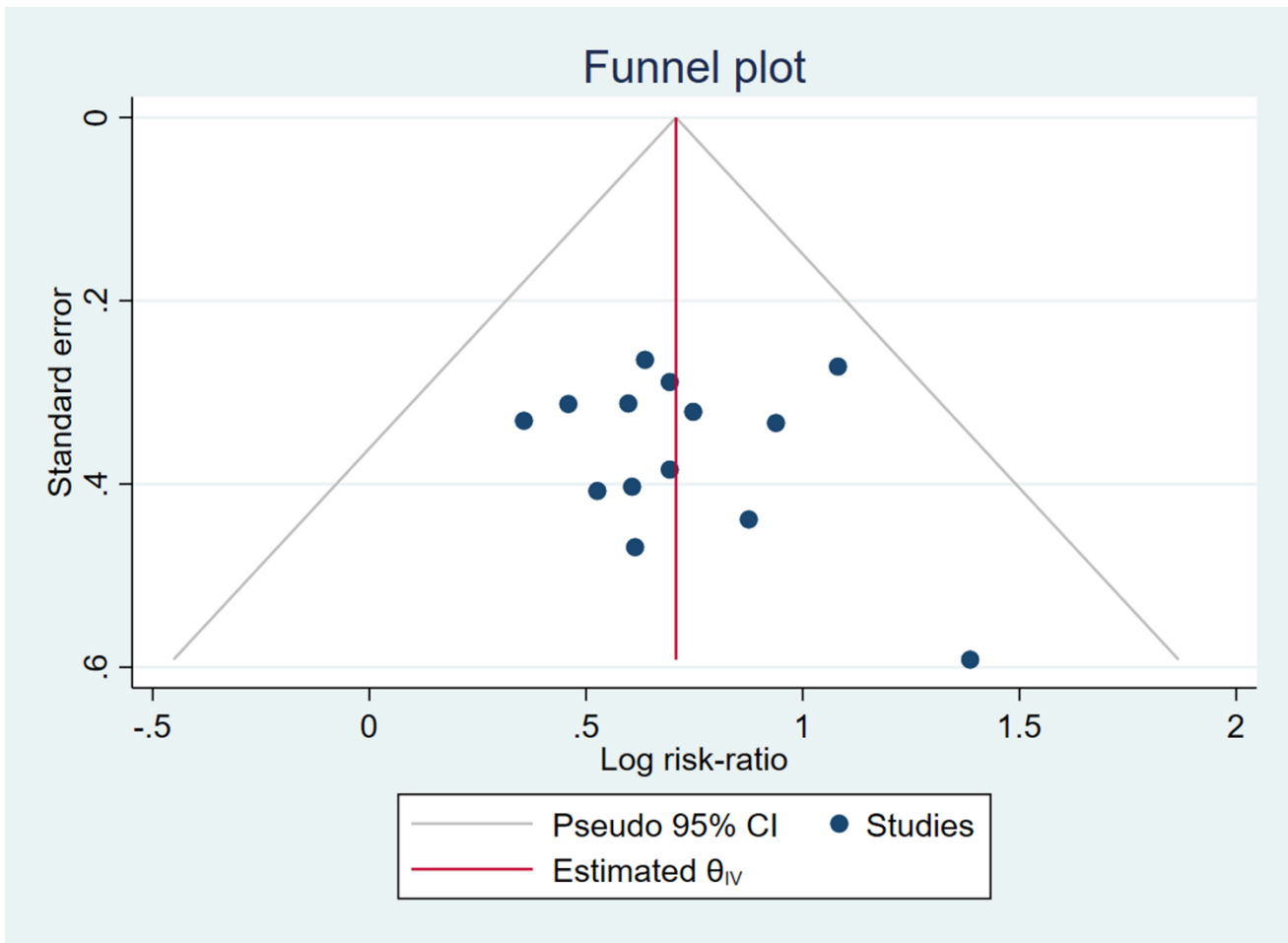


Figure S24. QOL funnel plot

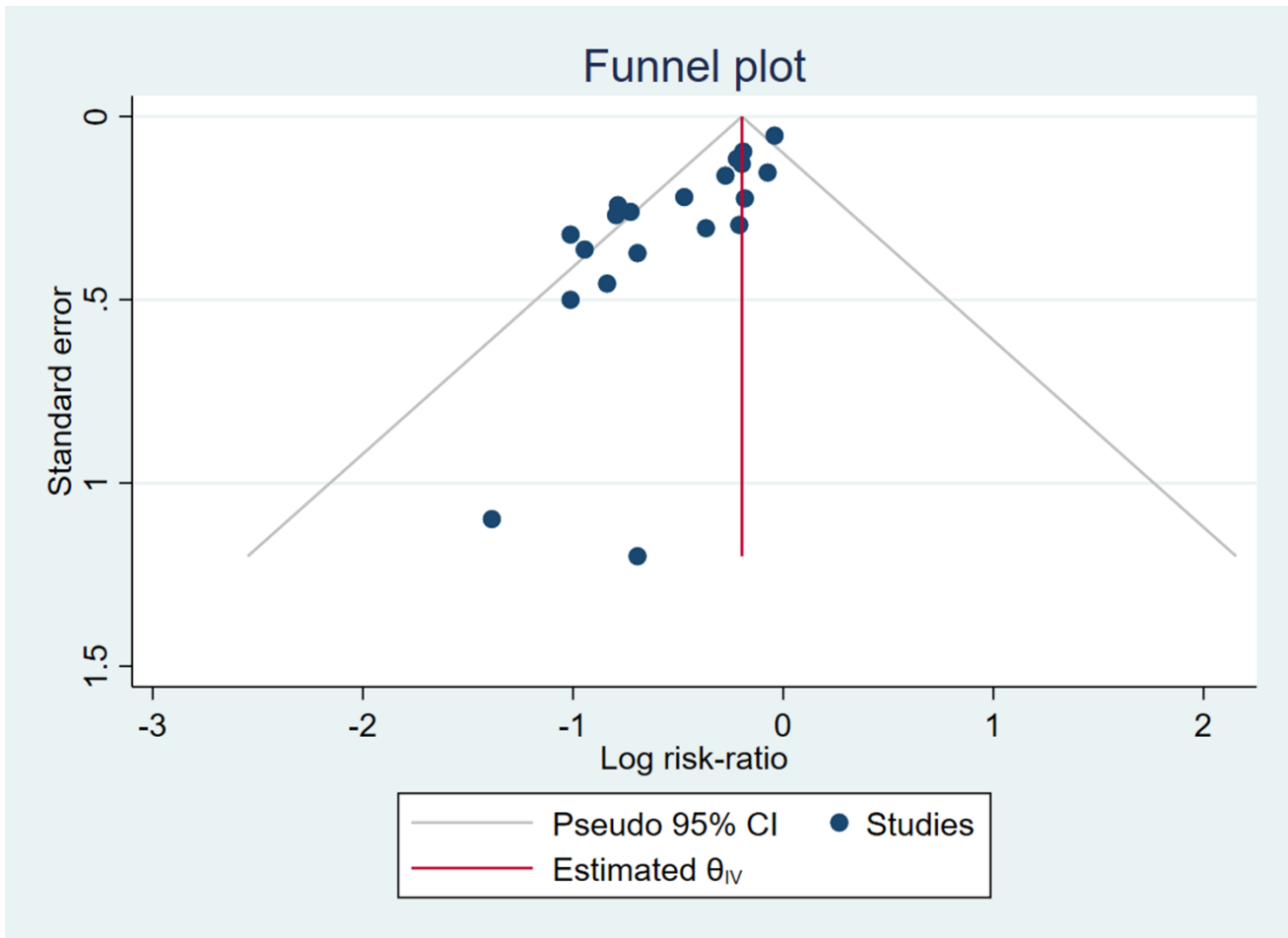


Figure S25. Neutropenia funnel plot

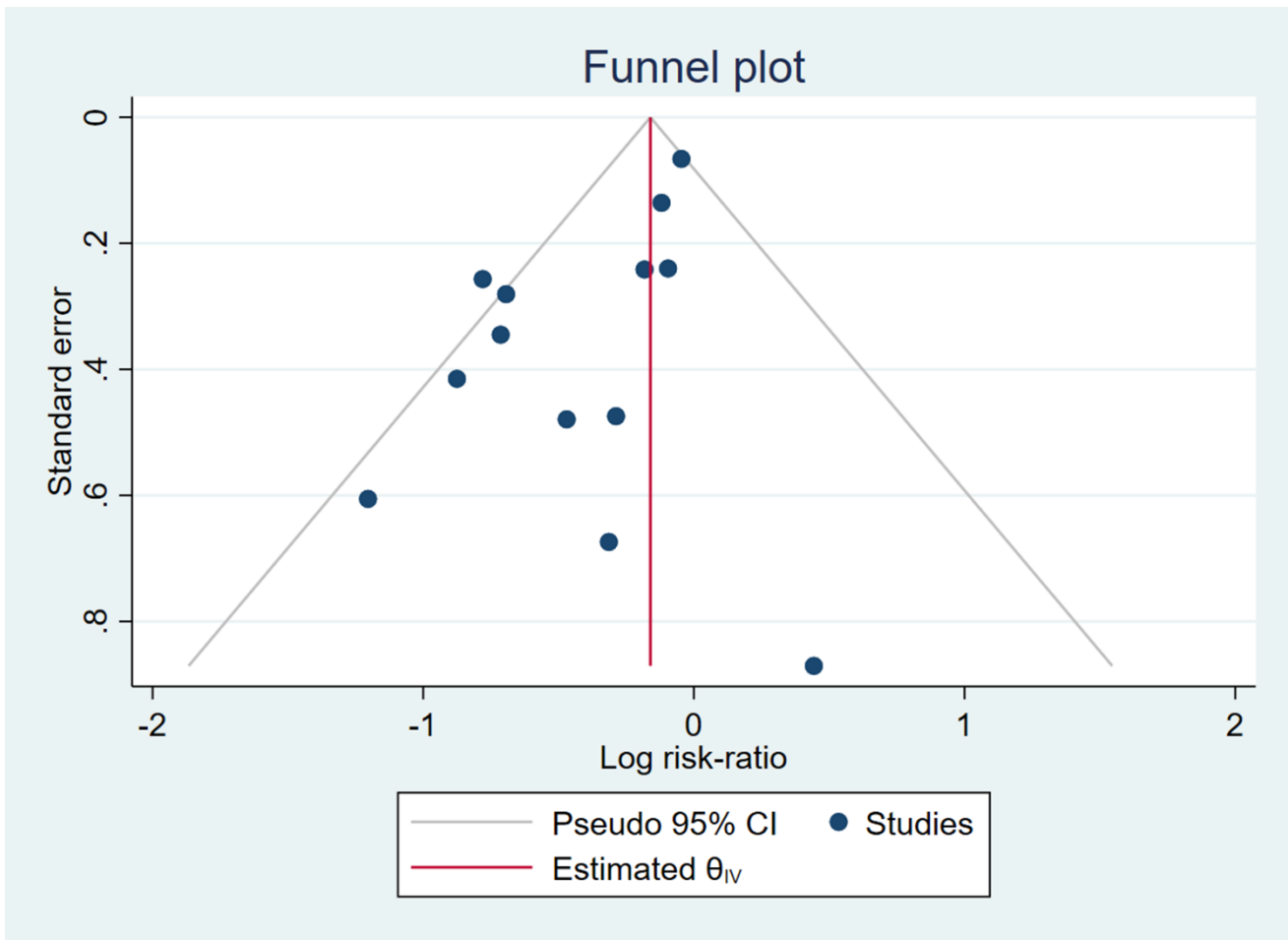


Figure S26. Anemia funnel plot

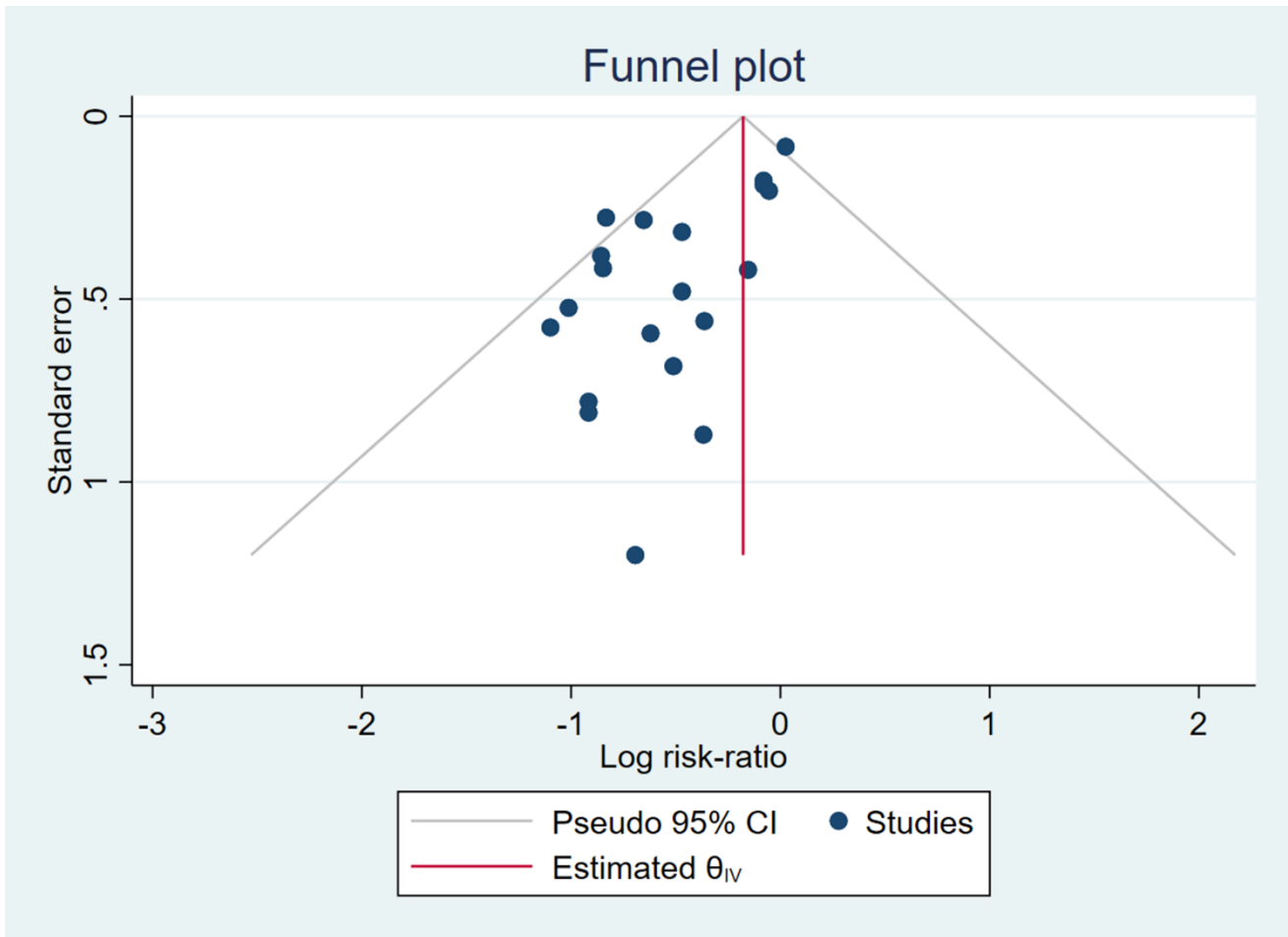


Figure S27. Thrombocytopenia funnel plot

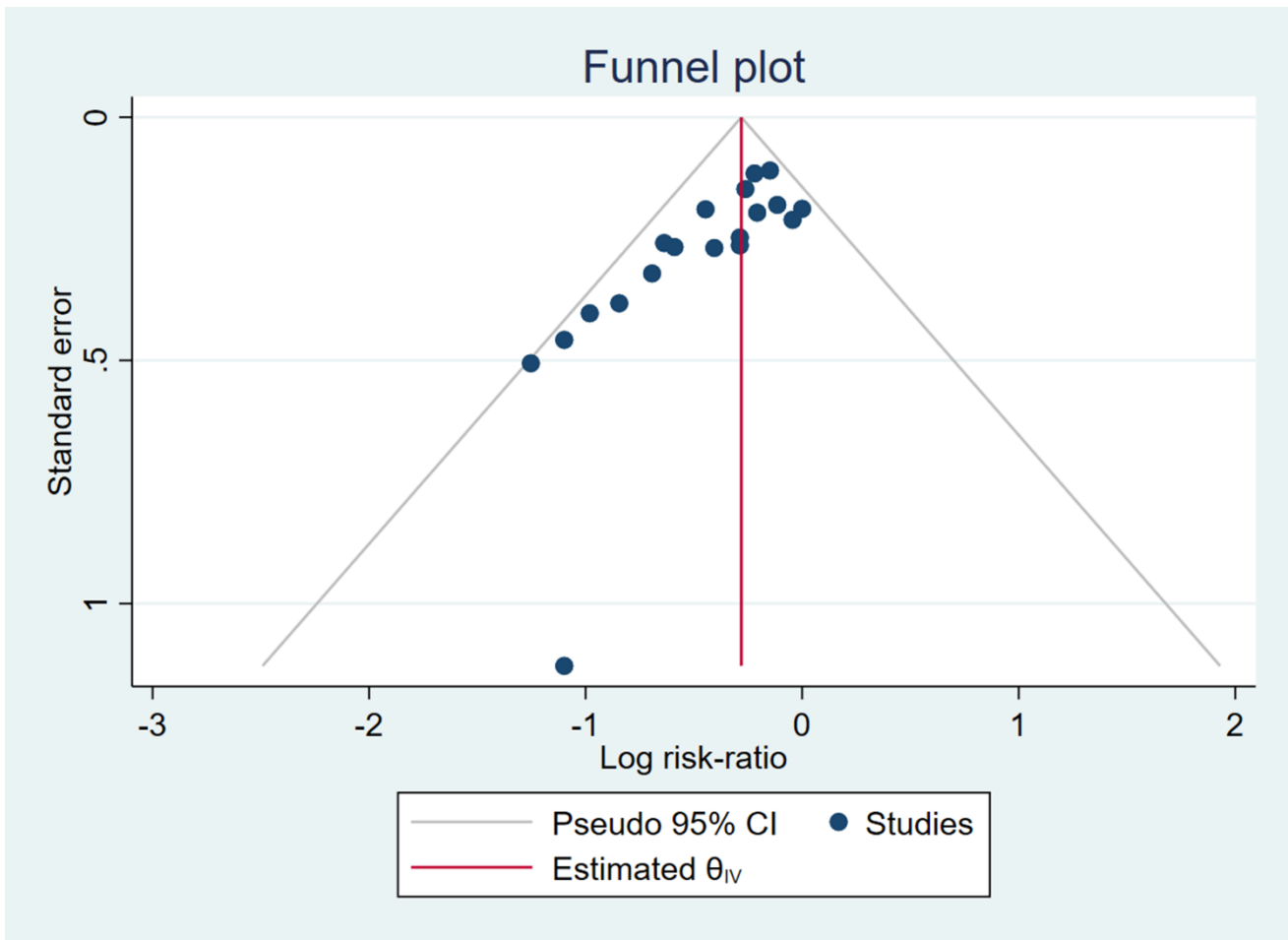


Figure S28.Nausea and vomiting funnel plot

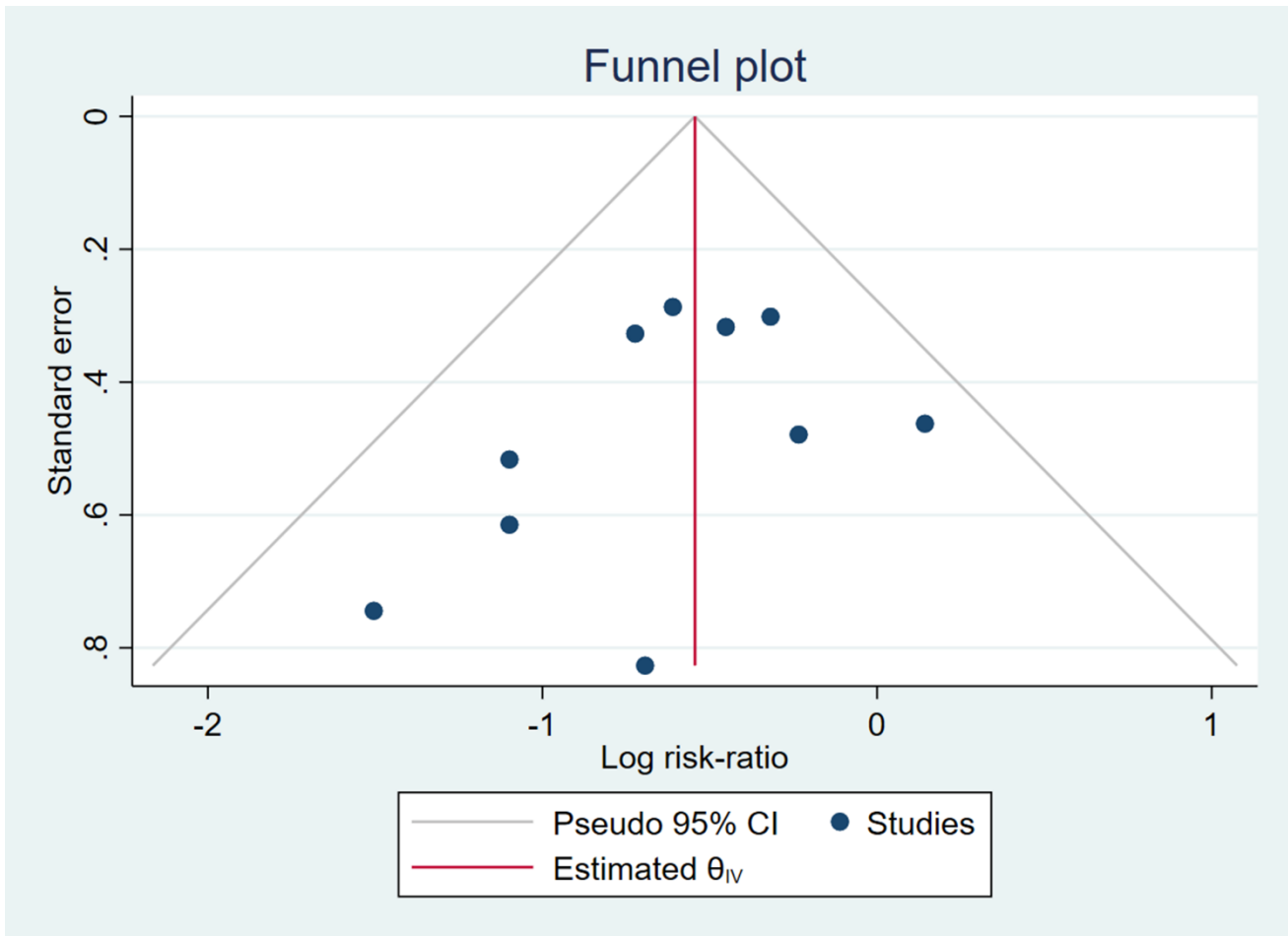


Figure S29. Diarrhea funnel plot

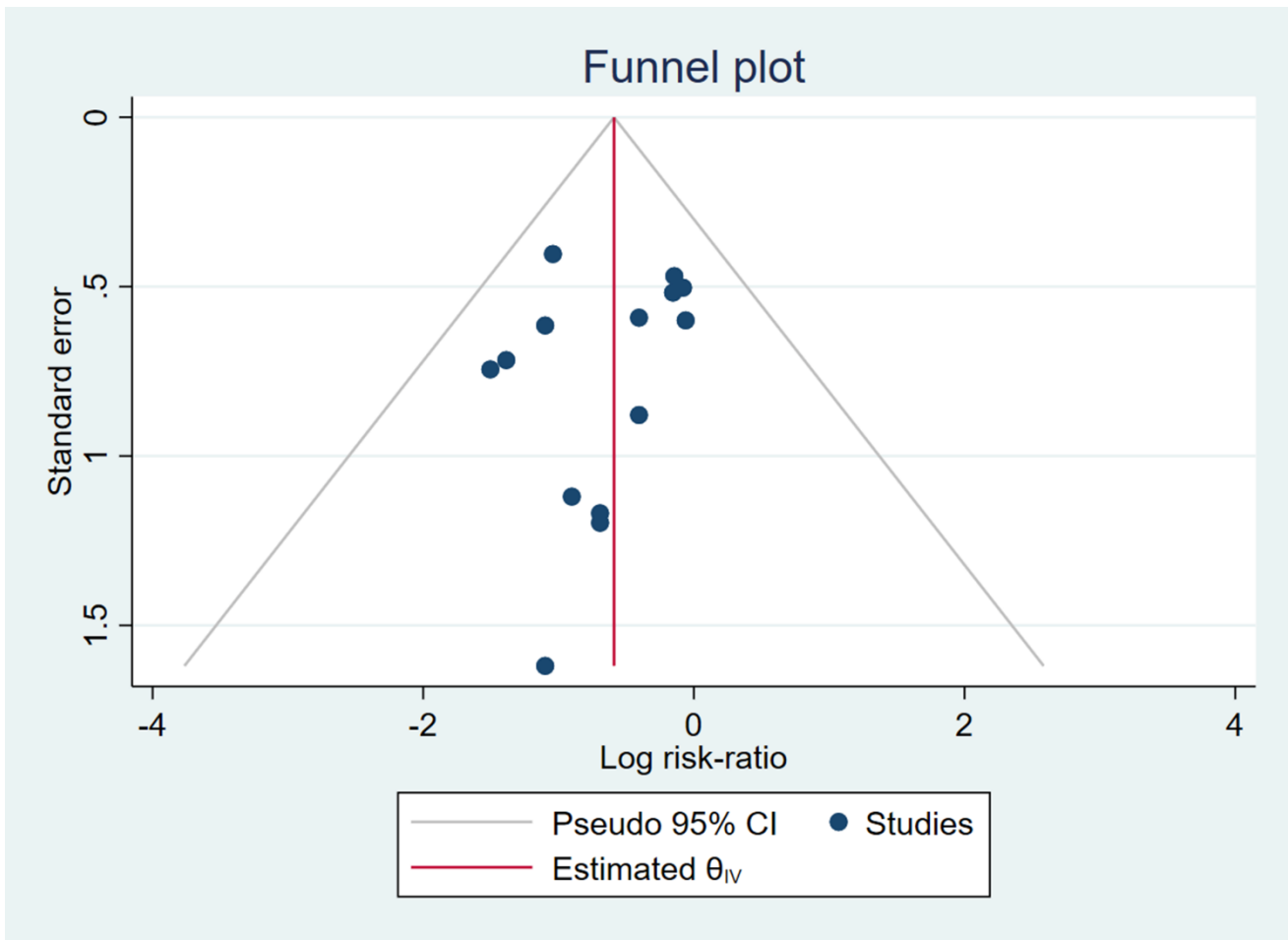


Figure S30. Hepatic Dysfunction funnel plot

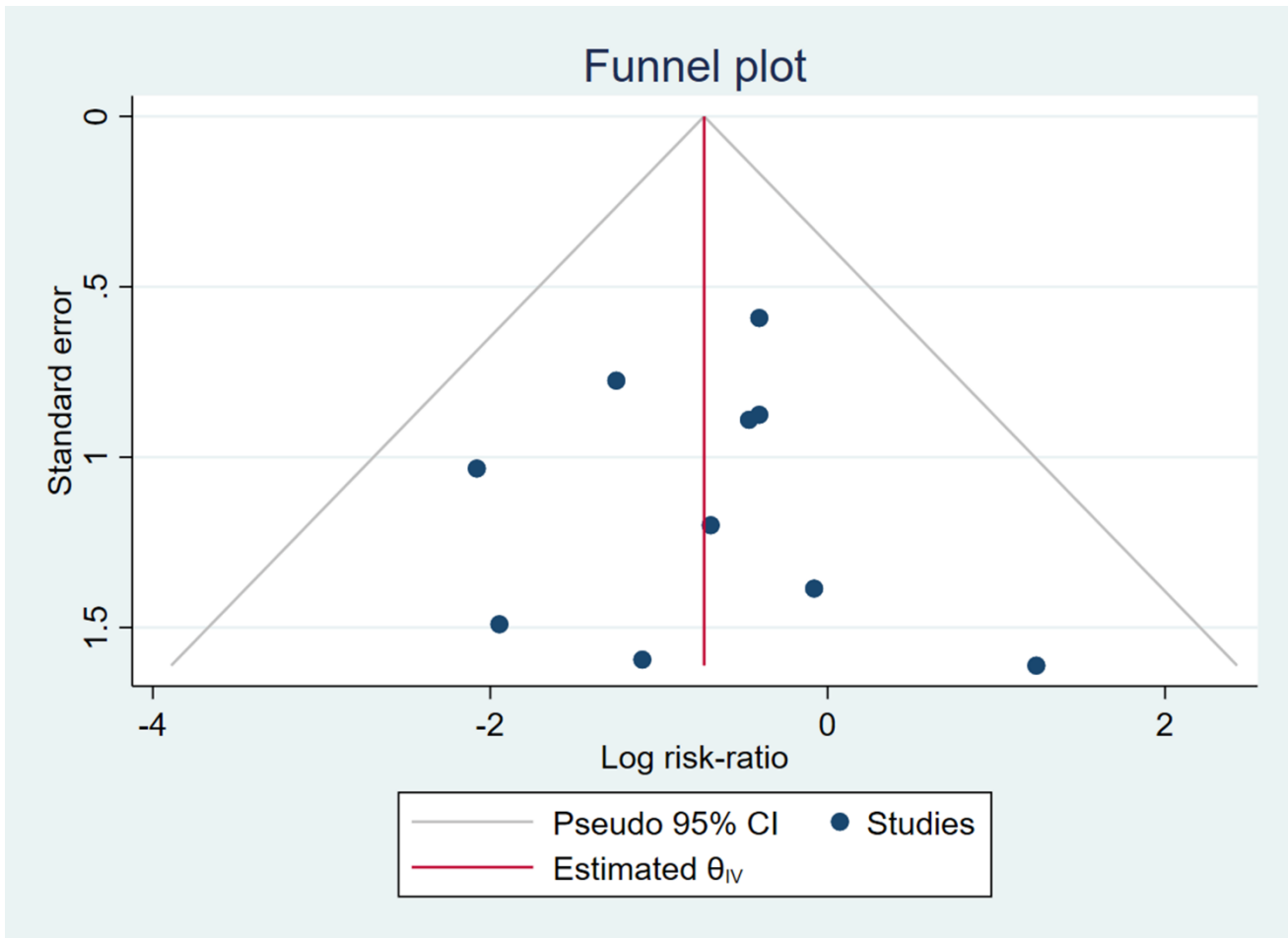


Figure S31. Renal Dysfunction funnel plot

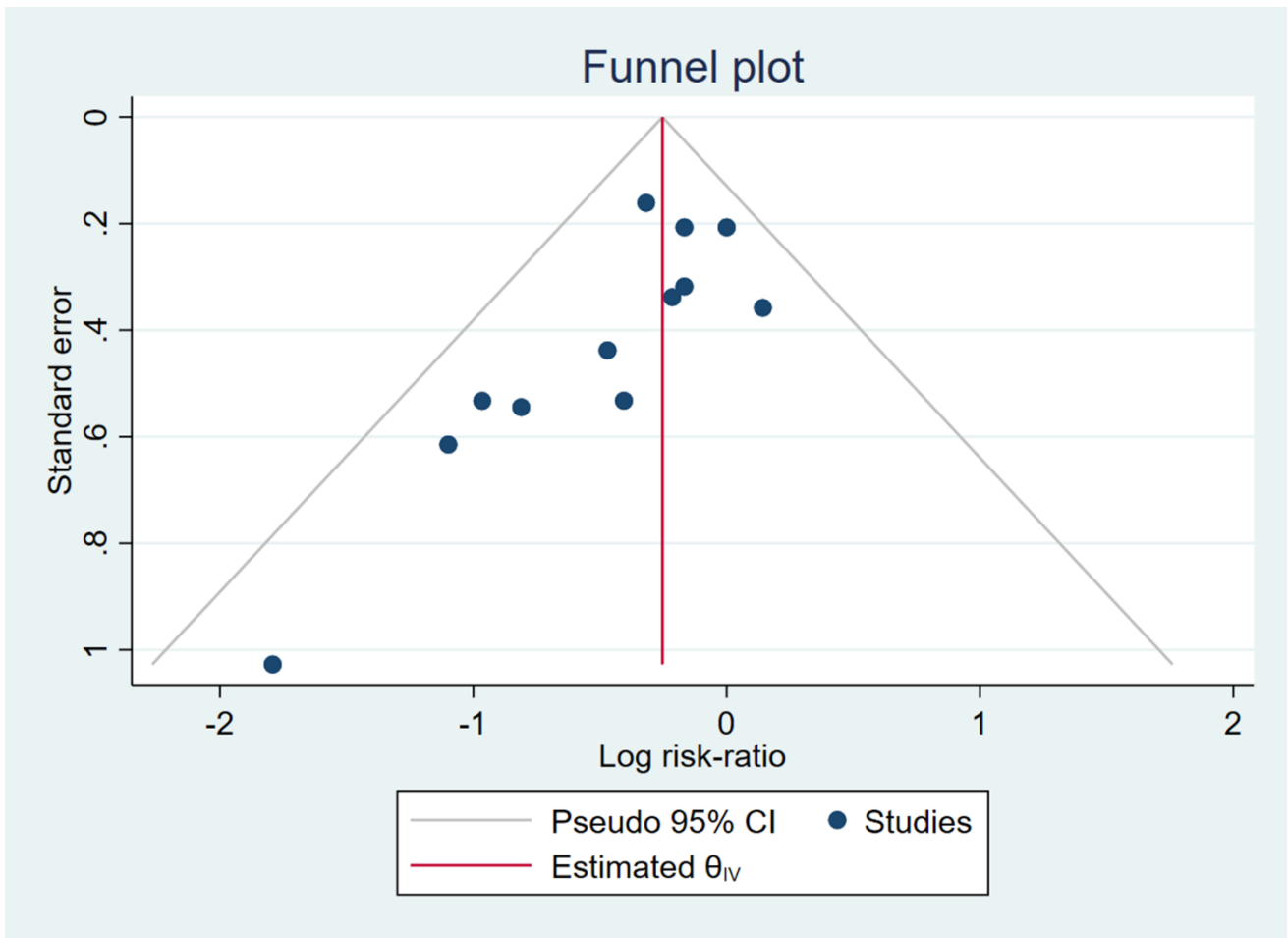


Figure S32. Neurotoxicity funnel plot

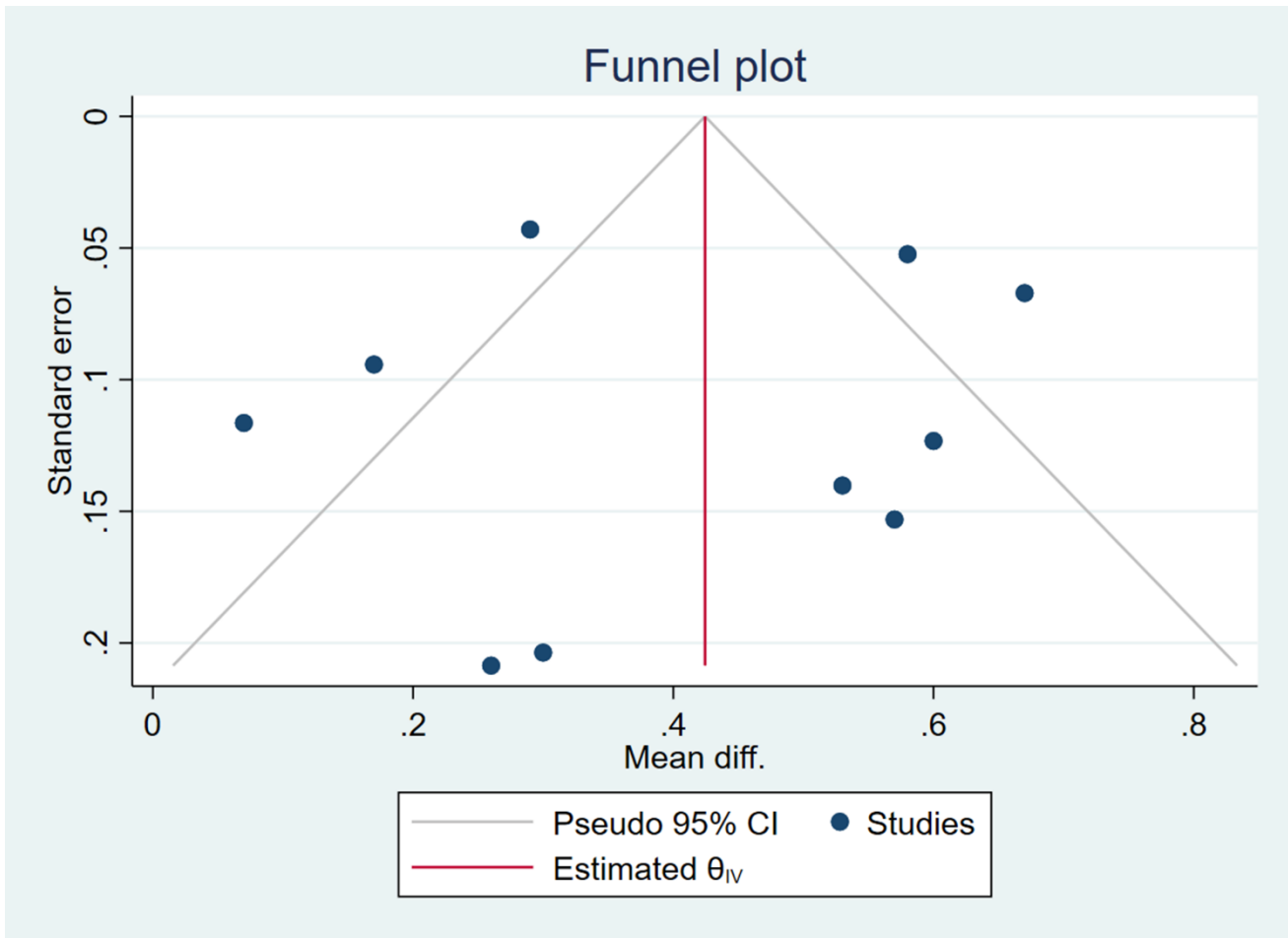


Figure S33.CD4⁺/CD8⁺ ratio funnel plot

2.2 Supplementary Tables

Table S1. Subgroup analysis of outcomes ($I^2 > 50\%$)

Table S1a. Subgroup analysis of Dichotomous outcomes ($I^2 > 50\%$)

Subgroups	Number of studies	RR (95% CI)	Z	P	Heterogeneity	
					I^2	P_h
1. Half year survival rate						
Drug delivery						
Orally	4	1.12 (0.84, 1.50)	0.79	0.43	91%	<0.00001
Injection	1	1.19 (0.95, 1.50)	1.53	0.13	/	/
PBC regimens						
DDP-based chemotherapy regimen	1	1.00 (0.97, 1.04)	0.00	1.00	/	/
OXA-based chemotherapy regimen	4	1.18 (1.05, 1.33)	2.79	0.005	0%	0.68
Treatment duration						
≥8 weeks	3	1.07 (0.88, 1.29)	0.67	0.50	74%	0.02
<8 weeks	2	1.24 (1.05, 1.47)	2.53	0.01	0%	0.60
Data sources						
from study	3	1.18 (1.03, 1.35)	2.33	0.02	0%	0.47
extracted from survival curve	2	1.08 (0.80, 1.45)	0.51	0.61	85%	0.009
2. 1-year survival rate						
Drug delivery						
Orally	5	1.62 (0.99, 2.66)	1.92	0.06	85%	<0.0001
Injection	3	1.21 (0.91, 1.60)	1.33	0.18	0%	0.65
PBC regimens						
DDP-based chemotherapy regimen	2	1.12 (1.02, 1.23)	2.27	0.02	0%	0.55
OXA-based chemotherapy regimen	6	1.58 (1.27, 1.96)	4.16	<0.0001	0%	0.74
Treatment duration						
≥8 weeks	5	1.19 (1.02, 1.38)	3.60	0.0003	0%	0.42
<8 weeks	3	1.83 (1.31, 2.55)	3.54	0.0004	0%	0.85

Data sources						
from study	6	1.51 (1.21, 1.90)	2.33	0.02	0%	0.47
extracted from survival curve	2	1.41 (1.09, 1.82)	2.14	0.03	6%	0.30
3. Neutropenia						
Drug delivery						
Orally	8	0.57 (0.41, 0.78)	3.51	0.0005	67%	0.003
Injection	12	0.74 (0.61, 0.89)	3.12	0.002	71%	<0.0001
PBC regimens						
DDP-based chemotherapy regimen	8	0.74 (0.57, 0.96)	2.31	0.02	79%	<0.0001
OXA-based chemotherapy regimen	12	0.61 (0.49, 0.77)	4.30	<0.0001	59%	0.005
Treatment duration						
≥8 weeks	17	0.67 (0.55, 0.82)	3.87	0.0001	79%	<0.00001
<8 weeks	3	0.51 (0.23, 1.11)	1.71	0.09	81%	0.005
4. Anemia						
Drug delivery						
Orally	6	0.72 (0.56, 0.94)	2.45	0.01	40%	0.14
Injection	7	0.63 (0.33, 1.23)	1.35	0.18	83%	<0.00001
PBC regimens						
DDP-based chemotherapy regimen	3	0.95 (0.84, 1.08)	0.74	0.46	0%	0.74
OXA-based chemotherapy regimen	10	0.64 (0.50, 0.82)	3.54	0.0004	42%	0.08
Treatment duration						
≥8 weeks	10	0.75 (0.57, 0.98)	2.12	0.03	63%	0.004
<8 weeks	3	0.51 (0.35, 0.73)	3.61	0.0003	0%	0.65
5. Thrombocytopenia						
Drug delivery						
Orally	8	0.60 (0.43, 0.82)	3.18	0.001	32%	0.17
Injection	12	0.70 (0.52, 0.95)	2.28	0.02	62%	0.002
PBC regimens						
DDP-based chemotherapy regimen	7	0.98 (0.86, 1.13)	0.26	0.80	0%	0.57
OXA-based chemotherapy regimen	13	0.59 (0.48, 0.73)	4.98	<0.00001	6%	0.39

Treatment duration						
≥8 weeks	14	0.76 (0.60, 0.97)	2.22	0.03	52%	0.01
<8 weeks	6	0.48 (0.35, 0.66)	4.61	<0.00001	0%	0.95

Table S1b. Subgroup analysis of Continuous outcomes ($I^2 > 50\%$)

Subgroups	Number of studies	Mean difference (95% CI)	Z	P	Heterogeneity	
					I^2	P_h
1. QOL: according to mean ± SD						
Drug delivery						
Orally	4	14.15 (5.94, 22.37)	3.38	0.0007	96%	<0.00001
Injection	2	6.48 (2.52, 10.44)	3.21	0.001	0%	0.42
Treatment duration						
≥8 weeks	4	13.17 (3.67, 22.68)	2.72	0.007	95%	<0.00001
<8 weeks	2	9.84 (7.47, 12.21)	8.13	<0.00001	0%	0.79
2. CD3⁺ T cells						
Drug delivery						
Orally	5	14.81 (9.00, 20.61)	5.00	<0.00001	95%	<0.00001
Injection	3	5.73 (1.12, 10.34)	2.44	0.01	89%	<0.0001
PBC regimens						
DDP-based chemotherapy regimen	3	11.49 (-2.71, 25.69)	1.59	0.11	99%	<0.00001
OXA-based chemotherapy regimen	5	11.49 (6.76, 16.22)	4.76	<0.00001	93%	<0.00001
Treatment duration						
≥8 weeks	5	6.83 (3.05, 10.61)	3.54	0.0004	92%	<0.00001
<8 weeks	3	19.31 (16.03, 22.59)	11.53	<0.00001	72%	0.03
3. CD3⁺ CD4⁺ T cells						
Drug delivery						
Orally	5	6.08 (1.32, 10.85)	2.50	0.01	94%	<0.00001
Injection	3	6.10 (5.24, 6.97)	13.80	<0.00001	19%	0.29
PBC regimens						
DDP-based chemotherapy regimen	3	5.14 (1.13, 9.15)	2.51	0.01	90%	<0.0001
OXA-based chemotherapy regimen	5	7.25 (4.16, 10.34)	4.60	<0.00001	91%	<0.00001

Treatment duration							
≥8 weeks	5	6.98 (5.12, 8.84)	7.35	<0.00001	85%	<0.0001	
<8 weeks	3	5.12 (-3.96, 14.20)	1.11	0.27	95%	<0.00001	
4. Nature Killer cells							
Drug delivery							
Orally	4	3.53 (2.08, 4.99)	4.76	<0.00001	0%	0.89	
Injection	2	6.46 (3.01, 9.90)	3.67	0.0002	67%	0.08	
PBC regimens							
DDP-based chemotherapy regimen	1	4.14 (0.23, 8.05)	2.07	0.04	/	/	
OXA-based chemotherapy regimen	5	4.63 (2.17, 7.09)	3.69	0.0002	80%	0.0006	
Treatment duration							
≥8 weeks	5	4.56 (2.00, 7.12)	3.50	0.0005	80%	0.0006	
<8 weeks	1	4.49 (1.39, 7.59)	2.84	0.004	/	/	
5. CD4⁺/CD8⁺ T cells ratio							
Drug delivery							
Orally	7	0.46 (0.29, 0.63)	5.27	<0.00001	83%	<0.00001	
Injection	3	0.29 (0.21, 0.37)	7.12	<0.00001	0%	0.99	
PBC regimens							
DDP-based chemotherapy regimen	3	0.46 (0.15, 0.76)	2.92	0.003	68%	0.04	
OXA-based chemotherapy regimen	7	0.39 (0.24, 0.55)	4.89	<0.00001	84%	<0.00001	
Treatment duration							
≥8 weeks	7	0.39 (0.24, 0.54)	5.06	<0.00001	78%	0.0001	
<8 weeks	3	0.45 (0.09, 0.82)	2.45	0.01	90%	<0.0001	

Note: ORR: objective response rate, DCR: disease control rate, QOL: quality of life, CI: confidence interval, OXA: oxaliplatin, DDP: cisplatin.