

Table SI. Features of included studies.

Author, year	Sample size		Number of patients with EGFR mutation		(Ref.)
	Apatinib plus chemo	Chemo	Apatinib plus chemo	Chemo	
Guo, 2017	19	20	6	8	(13)
Chen, 2017	42	42	NA	NA	(14)
Liu, 2018	40	40	NA	NA	(15)
Shang, 2019	31	31	No mutation	No mutation	(16)
Luo, 2019	32	36	10	11	(17)
Hu, 2020	19	20	NA	NA	(11)
Yu, 2020	22	11	No mutation	No mutation	(18)
Guo, 2020	50	50	No mutation	No mutation	(19)
Xie, 2020	38	38	38 (not reported types)	38 (not reported types)	(20)
Li, 2020	60	60	6	5	(21)
Cui, 2021	40	40	40	40	(22)
Chen, 2021	48	50	16 (not reported types)	19 (not reported types)	(23)
Huang, 2021	40	40	NA	NA	(24)
Liu, 2021	43	43	NA	NA	(25)
Guo, 2021	30	30	NA	NA	(26)
Song, 2021	34	34	NA	NA	(27)
Chen, 2022	47	45	NA	NA	(28)
Lu, 2022	42	42	NA	NA	(29)

EGFR, epidermal growth factor receptor; NA, not available; Chemo, chemotherapy.

Table SII. Sensitivity analysis.

A, ORR			
Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Guo, 2017	1.582	1.363	1.835
Chen, 2017	1.609	1.379	1.878
Liu, 2018	1.586	1.367	1.839
Shang, 2019	1.591	1.364	1.856
Luo, 2019	1.608	1.386	1.866
Hu, 2020	1.575	1.358	1.828
Yu, 2020	1.589	1.370	1.843
Xie, 2020	1.630	1.384	1.919
Li, 2020	1.631	1.399	1.902
Cui, 2021	1.612	1.376	1.889
Chen, 2021	1.591	1.372	1.847
Huang, 2021	1.600	1.369	1.870
Liu, 2021	1.603	1.367	1.880
Guo, 2021	1.587	1.362	1.850
Song, 2021	1.611	1.382	1.876
Chen, 2022	1.630	1.401	1.896
Lu, 2022	1.576	1.356	1.832
Combined	1.600	1.380	1.856
B, DCR			
Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Guo, 2017	1.284	1.203	1.371
Chen, 2017	1.304	1.217	1.399
Liu, 2018	1.278	1.197	1.364
Shang, 2019	1.292	1.209	1.382

Luo, 2019	1.290	1.208	1.378
Hu, 2020	1.281	1.199	1.368
Yu, 2020	1.293	1.210	1.382
Xie, 2020	1.314	1.224	1.410
Li, 2020	1.300	1.213	1.394
Cui, 2021	1.296	1.209	1.388
Chen, 2021	1.286	1.204	1.372
Huang, 2021	1.306	1.218	1.401
Liu, 2021	1.310	1.222	1.404
Guo, 2021	1.295	1.210	1.386
Song, 2021	1.288	1.205	1.377
Chen, 2022	1.295	1.210	1.386
Lu, 2022	1.283	1.201	1.370
Combined	1.294	1.212	1.381
C, PFS			

Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Guo, 2017	0.544	0.339	0.749
Luo, 2019	0.542	0.351	0.733
Yu, 2020	0.575	0.369	0.780
Chen, 2021	0.433	0.160	0.705
Song, 2021	0.574	0.356	0.791
Combined	0.542	0.351	0.733

D, Hypertension

Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Guo, 2017	3.808	1.747	8.300
Liu, 2018	3.388	1.520	7.551
Luo, 2019	4.104	1.733	9.718

Hu, 2020	3.426	1.615	7.270
Guo, 2020	3.440	1.532	7.727
Chen, 2021	3.343	1.491	7.494
Huang, 2021	4.343	2.069	9.118
Liu, 2021	4.205	2.007	8.809
Guo, 2021	4.526	2.163	9.469
Song, 2021	4.100	1.796	9.356
Lu, 2022	3.177	1.565	6.449
Combined	3.784	1.806	7.929

E, Hand-foot syndrome

Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Guo, 2017	6.353	3.609	11.185
Liu, 2018	7.094	3.559	14.139
Luo, 2019	9.015	4.658	17.449
Hu, 2020	6.111	3.468	10.769
Guo, 2020	5.100	2.886	9.011
Chen, 2021	4.951	2.640	9.284
Liu, 2021	7.070	3.938	12.694
Song, 2021	6.814	3.791	12.248
Lu, 2022	6.899	3.840	12.396
Combined	6.514	3.702	11.462

F, Liver dysfunction

Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Liu, 2018	1.230	0.726	2.086
Shang, 2019	1.194	0.691	2.063
Guo, 2020	1.003	0.568	1.771
Chen, 2021	1.145	0.641	2.046

Liu, 2021	1.253	0.757	2.074
Chen, 2022	1.386	0.794	2.418
Lu, 2022	1.211	0.729	2.012
Combined	1.203	0.730	1.981
G, Proteinuria			
Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Guo, 2017	1.497	0.749	2.993
Liu, 2018	2.141	1.287	3.562
Luo, 2019	1.498	0.705	3.181
Hu, 2020	1.468	0.741	2.910
Yu, 2020	1.594	0.775	3.280
Guo, 2020	1.478	0.712	3.068
Cui, 2021	1.543	0.766	3.109
Chen, 2021	1.320	0.700	2.491
Huang, 2021	1.623	0.797	3.304
Liu, 2021	1.700	0.836	3.458
Guo, 2021	1.701	0.836	3.461
Song, 2021	1.510	0.730	3.124
Lu, 2022	1.700	0.836	3.458
Combined	1.573	0.802	3.086
H, Bone marrow depression			
Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Liu, 2018	1.026	0.843	1.250
Shang, 2019	0.922	0.758	1.121
Luo, 2019	0.875	0.719	1.064
Guo, 2020	0.910	0.714	1.160
Chen, 2021	0.871	0.667	1.137

Liu, 2021	0.935	0.771	1.134
Song, 2021	0.896	0.738	1.088
Lu, 2022	0.907	0.748	1.100
Combined	0.918	0.757	1.114
I, Thrombocytopenia			

Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Guo, 2017	0.539	0.301	0.968
Chen, 2017	0.896	0.531	1.509
Hu, 2020	0.673	0.387	1.171
Xie, 2020	0.746	0.450	1.235
Cui, 2021	0.936	0.559	1.567
Song, 2021	0.755	0.422	1.352
Chen, 2022	0.767	0.457	1.286
Combined	0.754	0.459	1.238

J, Leukocytopenia

Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Chen, 2017	1.127	0.418	3.034
Xie, 2020	0.742	0.320	1.718
Cui, 2021	0.628	0.249	1.582
Huang, 2021	0.809	0.344	1.904
Chen, 2022	0.636	0.254	1.597
Combined	0.762	0.341	1.699

K, Fatigue

Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Hu, 2020	1.196	0.923	1.549
Yu, 2020	1.124	0.871	1.451

Guo, 2020	1.226	0.925	1.625
Chen, 2021	1.336	0.921	1.938
Song, 2021	1.357	1.033	1.782
Combined	1.236	0.961	1.589
L, Gastrointestinal reaction			
Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Chen, 2017	0.890	0.609	1.300
Liu, 2018	1.121	0.728	1.726
Shang, 2019	1.054	0.699	1.590
Luo, 2019	1.015	0.700	1.471
Yu, 2020	1.008	0.699	1.453
Xie, 2020	1.000	0.694	1.442
Cui, 2021	1.024	0.703	1.490
Liu, 2021	1.125	0.770	1.644
Lu, 2022	1.000	0.683	1.466
Combined	1.022	0.712	1.466
M, Nausea/vomiting			
Study omitted	Estimate (RR)	95% CI	
		Lower	Upper
Hu, 2020	1.077	0.836	1.388
Yu, 2020	1.051	0.849	1.302
Guo, 2020	1.010	0.802	1.271
Chen, 2021	1.132	0.860	1.491
Huang, 2021	1.061	0.856	1.313
Song, 2021	1.041	0.825	1.313
Combined	1.059	0.855	1.312

RR, relative risk; CI, confidence interval; ORR, objective response rate; DCR, disease control rate; PFS, progression-free survival.