

Figure S1 Funnel plot of the postoperative complications, tumor recurrence, and R0 resection rates. (A) Funnel plot of postoperative complications. meta-analysis of postoperative complications in the patients who underwent (B) ER and (C) LR. meta-analysis of the tumor recurrence rate in the patients who underwent (D) ER and (E) LR. (F) meta-analysis of the R0 resection rates in patients who underwent (F) ER and (G) LR. SE, standard error; OR, odds ratio; ES, effect size; ER, endoscopic resection; LR, laparoscopic resection.

Study ID	ES (95% CI)	% Weight	Study ID		ES (95% CI)	% Weight
		Weight				
Chen.L. (2019)	 5.650 (5.260, 6.040) 	10.34	Chen.L. (2019)	· ·	+ 7.870 (7.458, 8.282)	10.89
He.B. (2018)	✤ 8.090 (7.684, 8.496)	10.33	He.B. (2018)		✤ 9.900 (9.504, 10.296)	10.90
rin.X.N. (2018)		9.93	Yin.X.N. (2018)	+	6.330 (5.425, 7.235)	10.19
Gluzman.M.I. (2017)	→ 11.900 (11.022, 12.778	,	Gluzman.M.I. (2017) Mang X. (2017)		→ 11.400 (10.718, 12.082)	
Meng,Y. (2017) Nang.H. (2015)	 6.600 (5.989, 7.211) 6.740 (6.458, 7.022) 	10.14 10.41	Meng,Y. (2017) Wang.H. (2015)		 10.370 (9.409, 11.331) 7.790 (7.350, 8.230) 	10.09 10.86
Meng,Y. (2015)			Meng,Y. (2015)		11.440 (10.379, 12.501)	
Huang.L.Y. (2014)	+ 5.900 (5.415, 6.385)	10.27	Huang.L.Y. (2014)		- 8.900 (7.755, 10.045) - 7.300 (6.555, 8.045)	9.72
(hang.B. (2013)	6.000 (5.248, 6.752)	9.96	Zhang.B. (2013)	-		10.46
eong.I.H. (2012)	- 3.200 (2.559, 3.841)	10.10 100.00	Jeong.I.H. (2012)	~ ·	7.000 (4.404, 9.596)	6.44
Overall (I-squared = 97.5%, p = 0.000)	6.938 (5.880, 7.995)	100.00	Overall (I-squared = 95.6%, p = 0.00	0)	8.888 (7.871, 9.906)	100.00
NOTE: Weights are from random effects	s analysis		NOTE: Weights are from random effe	ects analysis		
-12.8	0 12.8		-12.5	0	12.5	
С			D			
Study		%	Study			%
D	ES (95% CI)	Weight	ID		ES (95% CI)	Weight
łe.B. (2018)	19837.670 (18919.646, 20755.69	3) 54.14	He.B. (2018)		27523.551 (26387.039, 28660.063)	51.12
Mong V (2015)	01011 000 101500 100 007	1) 45.00	Mana V (2015)		07000 000 /04017 044	40.00
Meng,Y. (2015)	24211.000 (21580.439, 26841.56	1) 45.86	Meng,Y. (2015)		37300.000 (34217.844, 40382.156)	48.88
Overall (I-squared = 89.4%, p = 0.002)	21843.469 (17572.369, 26114.56	8) 100.00	Overall (I-squared = 97.1%, p = 0.000)	\langle	32302.498 (22724.146, 41880.848)	100.00
NOTE: Weights are from random effects ana	lysis		NOTE: Weights are from random effects ana	alysis		
-	·				44004	
-26842 0	26842		-41881 0		41881	
E			F			
			T			
Study		%	Study			%
D	ES (95% CI)	Weight	ID		ES (95% CI)	Weight
Jeong.I.H. (2012)	43.700 (27.782, 59.618)	9.40	Jeong.I.H. (2012)		93.300 (80.346, 106.254)	11.04
Zhang.B. (2013)	90.000 (82.896, 97.104)	12.18	Zhang.B. (2013)		95.000 (85.797, 104.203)	11.72
Huang.L.Y. (2014)	78.500 (68.071, 88.929)	11.23	Huang.L.Y. (2014)		80.900 (64.189, 97.611)	10.24
Wang.H. (2015)	91.000 (70.128, 111.872		Wang.H. (2015)		→ 155.000 (142.376, 167.624)	
Meng,Y. (2015)	65.260 (54.404, 76.116)	11.09	Meng,Y. (2015)		- 90.810 (68.775, 112.845)	9.04
Gluzman.M.I. (2017)	89.800 (83.323, 96.277)		Gluzman.M.I. (2017)		104.700 (100.764, 108.636)	
Meng,Y. (2017)		12.00	Meng,Y. (2017)		79.120 (67.190, 91.050)	11.24
He.B. (2018)	104.440 (93.963, 114.91		He.B. (2018)	-	117.560 (108.818, 126.302)	
Chen.L. (2019)	82.320 (77.926, 86.714)		Chen.L. (2019)		- 124.540 (113.891, 135.189)	
Overall (I-squared = 90.2%, p = 0.000)		12.76	Overall (I-squared = 93.1%, p = 0.000)		105.115 (92.525, 117.705)	100.00
	T T				100.110 (02.020, 111.100)	
NOTE: Weights are from random effect	ts analysis					
-115	· · ·		NOTE: Weights are from random effects			
0	0 115			s analysis 0	168	
G	0 115				168	
$\overline{\mathbf{C}}$	0 115		-168 T. T.		168	
$\overline{\mathbf{C}}$	0 115		-168 T. T.		168	
G	0 115	%	-168 T. T.		168	%
G Study			-168 H Study			
G Study	0 115 ES (95% CI)	% Weight	Н		168 ES (95% CI)	% Weight
G Study D	ES (95% CI)	Weight	-168 Study ID		ES (95% CI)	Weight
G Study D '(in.X.N. (2018)	ES (95% CI)	Weight	-168 Study ID Yin.X.N. (2018)		ES (95% CI) 20.000 (15.169, 24.831)	Weight
G Study D '(in.X.N. (2018)	ES (95% CI)	Weight	-168 Study ID		ES (95% CI) 20.000 (15.169, 24.831) 	Weight
G Study D Yin X. N. (2018) Bluzman.M.I. (2017)	ES (95% CI)	Weight 21.55 97) 19.41	-168 Study ID Yin.X.N. (2018)		ES (95% CI) 20.000 (15.169, 24.831)	Weight
G Study ID (in.X.N. (2018) Gluzman.M.I. (2017) Aleng,Y. (2017)	ES (95% CI) • 6.980 (5.945, 8.015) • 33.300 (28.703, 37.85 8.530 (4.934, 12.126)	Weight 21.55 97) 19.41 20.23	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017)		ES (95% Cl) 20.000 (15.169, 24.831) 	Weight 20.00 19.98
G Study ID '(in.X.N. (2018) Gluzman.M.I. (2017) Weng,Y. (2017) Wang,H. (2015)	ES (95% CI) 	Weight 21.55 97) 19.41 20.23 21.64	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang.H. (2015)		ES (95% CI) 20.000 (15.169, 24.831) 	Weight 20.00 19.98 19.95 20.14
G Study ID '(in.X.N. (2018) Gluzman.M.I. (2017) Weng,Y. (2017) Wang,H. (2015)	ES (95% CI) • 6.980 (5.945, 8.015) • 33.300 (28.703, 37.85 8.530 (4.934, 12.126)	Weight 21.55 97) 19.41 20.23 21.64	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017)		ES (95% Cl) 20.000 (15.169, 24.831) 	Weight 20.00 19.98 19.95
G Study ID (in.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Meng,Y. (2015)	ES (95% CI) • 6.980 (5.945, 8.015) • 33.300 (28.703, 37.86 • 8.530 (4.934, 12.126) 0.600 (0.037, 1.163) 12.040 (5.156, 18.924	Weight 21.55 27) 19.41 20.23 21.64 4) 17.17	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang.H. (2015)		ES (95% CI) 20.000 (15.169, 24.831) 	Weight 20.00 19.98 19.95 20.14
G Study ID Juzman.M.I. (2018) Gluzman.M.I. (2017) Weng,Y. (2017) Wang,H. (2015) Weng,Y. (2015) Dverall (I-squared = 98.7%, p = 0.000)	ES (95% CI) • 6.980 (5.945, 8.015) • 33.300 (28.703, 37.85 • 8.530 (4.934, 12.126) 0.600 (0.037, 1.163) 12.040 (5.156, 18.924 11.889 (5.636, 18.142)	Weight 21.55 27) 19.41 20.23 21.64 17.17	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Meng,Y. (2015) Overall (I-squared = 98.4%, p = 0.00		ES (95% CI) 20.000 (15.169, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648)	Weight 20.00 19.98 19.95 20.14 19.93
G Study ID //in.X.N. (2018) Sluzman.M.I. (2017) wleng,Y. (2017) Wang,H. (2015) Wang,H. (2015) Dverall (I-squared = 98.7%, p = 0.000) IOTE: Weights are from random effects	ES (95% CI) 6.980 (5.945, 8.015) 33.300 (28.703, 37.85 8.530 (4.934, 12.126) 0.600 (0.037, 1.163) 12.040 (5.156, 18.924 11.889 (5.636, 18.142 analysis	Weight 21.55 27) 19.41 20.23 21.64 17.17	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Meng,Y. (2015) Overall (I-squared = 98.4%, p = 0.00 NOTE: Weights are from random effe	0 + + + + + + + + + + + + + + + + + + +	ES (95% C1) 20.000 (15.169, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648) 28.880 (12.331, 45.429)	Weight 20.00 19.98 19.95 20.14 19.93
G Study ID Juzman.M.I. (2018) Gluzman.M.I. (2017) Weng,Y. (2017) Wang,H. (2015) Weng,Y. (2015) Dverall (I-squared = 98.7%, p = 0.000)	ES (95% CI) • 6.980 (5.945, 8.015) • 33.300 (28.703, 37.85 • 8.530 (4.934, 12.126) 0.600 (0.037, 1.163) 12.040 (5.156, 18.924 11.889 (5.636, 18.142)	Weight 21.55 27) 19.41 20.23 21.64 17.17	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Meng,Y. (2015) Overall (I-squared = 98.4%, p = 0.00		ES (95% CI) 20.000 (15.169, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648)	Weight 20.00 19.98 19.95 20.14 19.93
G Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Weng,Y. (2017) Wang,H. (2015) Veng,Y. (2015) Overall (I-squared = 98.7%, p = 0.000) NOTE: Weights are from random effects	ES (95% CI) 6.980 (5.945, 8.015) 33.300 (28.703, 37.85 8.530 (4.934, 12.126) 0.600 (0.037, 1.163) 12.040 (5.156, 18.924 11.889 (5.636, 18.142 analysis	Weight 21.55 27) 19.41 20.23 21.64 17.17	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Meng,Y. (2015) Overall (I-squared = 98.4%, p = 0.00 NOTE: Weights are from random effe	0 + + + + + + + + + + + + + + + + + + +	ES (95% C1) 20.000 (15.169, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648) 28.880 (12.331, 45.429)	Weight 20.00 19.98 19.95 20.14 19.93
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G Study D 'in X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Vang,H. (2015) Dverall (I-squared = 98.7%, p = 0.000) OTE: Weights are from random effects -37.9 I Study	ES (95% CI)	Weight 21.55 37) 19.41 20.23 21.64 4) 17.17 2) 100.00	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Meng,Y. (2015) Overall (I-squared = 98.4%, p = 0.00 NOTE: Weights are from random effe -68.9 J Study	0 + + + + + + + + + + + + + + + + + + +	ES (95% Cl) 20.000 (15.169, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648) 28.880 (12.331, 45.429) 68.9	Weight 20.00 19.98 19.95 20.14 19.93 100.00
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G Study ID (in,X.N. (2018) Sluzman.M.I. (2017) Aeng,Y. (2017) Wang,H. (2015) Aeng,Y. (2015) Diverall (I-squared = 98.7%, p = 0.000) IOTE: Weights are from random effects -37.9 I Study D Chen.L. (2019) te.B. (2018)	ES (95% CI) . 6.980 (5.945, 8.015) . 33.300 (28.703, 37.85 8.530 (4.934, 12.126) 0.600 (0.037, 1.163) 12.040 (5.156, 18.924 11.889 (5.636, 18.142 analysis 0 37.9 ES (95% CI) . 1.540 (1.379, 1.701)	Weight 21.55 77) 19.41 20.23 21.64 1) 17.17 2) 100.00 % Weight 9 25.30 1 25.26	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang.H. (2015) Overall (I-squared = 98.4%, p = 0.00 NOTE: Weights are from random effe -68.9 J Study ID Chen.L. (2019)	0 + + + + + + + + + + + + + + + + + + +	ES (95% CI) 20.000 (15.169, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648) 28.880 (12.331, 45.429) 68.9 ES (95% CI) - 3.050 (2.646, 3.454)	Weight 20.00 19.98 19.95 20.14 19.93 100.00 % Weight 24.88
G Study ID G G G G G G G G G G G G G G G G G G	ES (95% CI)	Weight 21.55 21.57 19.41 20.23 21.64 4) 17.17 2) 100.00 % Weight 9 25.30 9 25.26 9 24.44	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Overall (I-squared = 98.4%, p = 0.00 NOTE: Weights are from random effe -68.9 J Study ID Chen.L. (2019) He.B. (2018) Yin.X.N. (2018)	0 + + + + + + + + + + + + + + + + + + +	ES (95% CI) 20.000 (15.169, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648) 28.880 (12.331, 45.429) 68.9 ES (95% CI) - 3.050 (2.646, 3.454) + 4.830 (4.610, 5.050) 3.770 (3.294, 4.246)	Weight 20.00 19.98 19.95 20.14 19.93 100.00 % Weight 24.88 25.62 24.49
G Study D (in.X.N. (2018) Gluzman.M.I. (2017) Aleng,Y. (2017) Vang,H. (2015) Aleng,Y. (2015) Diverall (I-squared = 98.7%, p = 0.000) (OTE: Weights are from random effects -37.9 I Study D Chen.L. (2019) te.B. (2018) (rin.X.N. (2018) Vang,H. (2015)	ES (95% CI) + 6.980 (5.945, 8.015) - 33.300 (28.703, 37.86 8.530 (4.934, 12.126) 0.600 (0.037, 1.163) 12.040 (5.156, 18.924 11.889 (5.636, 18.142 - 11.889 (5.636, 18.142 - 37.9 ES (95% CI) + 1.540 (1.379, 1.701) + 3.610 (3.423, 3.797) - 3.760 (3.286, 4.234) 2.540 (2.235, 2.845)	Weight 21.55 21.55 21.64 10.23 21.64 10.77 20.23 21.64 10.00 20.23 21.64 40 21.55 20.23 21.64 40 21.55 20.23 21.64 40 20.23 21.65 40 40 20.23 21.65 40 40 20.23 21.65 40 40 20.23 21.65 40 40 20.23 21.65 40 40 20.23 21.64 40 40 20.23 21.64 40 40 20.23 21.64 40 40 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.24 40 20.25	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang.H. (2015) Overall (I-squared = 98.4%, p = 0.00 NOTE: Weights are from random effe -68.9 J Study ID Chen.L. (2019) He.B. (2018)	0 + + + + + + + + + + + + + + + + + + +	ES (95% CI) 20.000 (15.166, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648) 28.880 (12.331, 45.429) 68.9 ES (95% CI) - 3.050 (2.646, 3.454) + 4.830 (4.610, 5.050)	Weight 20.00 19.98 19.95 20.14 19.93 100.00 % Weight 24.88 25.62 24.49 25.01
G Study ID //in.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Overall (I-squared = 98.7%, p = 0.000) IOTE: Weights are from random effects -37.9 I Study ID Chen.L. (2019) He.B. (2018) Yin.X.N. (2018) Wang,H. (2015)	ES (95% CI)	Weight 21.55 21.55 21.64 10.23 21.64 10.7.17 20.23 21.64 10.23 21.64 40 21.55 40 22.23 20.23 21.64 40 21.55 40 21.55 20.23 21.65 40 21.55 20.23 21.64 40 20.23 21.65 40 20.23 21.64 40 20.23 21.65 40 20.23 21.64 40 20.23 21.64 40 20.23 21.64 40 20.23 21.64 40 20.23 21.64 40 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.25	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Overall (I-squared = 98.4%, p = 0.00 NOTE: Weights are from random effe -68.9 J Study ID Chen.L. (2019) He.B. (2018) Yin.X.N. (2018)	0 + + + + + + + + + + + + + + + + + + +	ES (95% CI) 20.000 (15.169, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648) 28.880 (12.331, 45.429) 68.9 ES (95% CI) - 3.050 (2.646, 3.454) + 4.830 (4.610, 5.050) 3.770 (3.294, 4.246)	Weight 20.00 19.98 19.95 20.14 19.93 100.00 % Weight 24.88 25.62 24.49
G Study ID Juzman.M.I. (2017) Weng,Y. (2017) Wang,Y. (2017) Wang,Y. (2015) Dverall (I-squared = 98.7%, p = 0.000) IOTE: Weights are from random effects -37.9 I Study ID Chen.L. (2019) He.B. (2018) Yin.X.N. (2018) Wang,H. (2015) Dverall (I-squared = 99.0%, p = 0.000)	ES (95% Cl) 6.980 (5.945, 8.015) 3.3.300 (28.703, 37, 86 8.530 (4.934, 12.126) 0.600 (0.037, 1.163) 12.040 (5.156, 18.924 11.889 (5.636, 18.142 analysis 0 37.9 ES (95% Cl) 4 1.540 (1.379, 1.701) 4 3.610 (3.423, 3.797) 3.760 (3.286, 4.234) 2.845 (1.661, 4.050)	Weight 21.55 21.55 21.64 10.23 21.64 10.7.17 20.23 21.64 10.23 21.64 40 21.55 40 22.23 20.23 21.64 40 21.55 40 21.55 20.23 21.65 40 21.55 20.23 21.64 40 20.23 21.65 40 20.23 21.64 40 20.23 21.65 40 20.23 21.64 40 20.23 21.64 40 20.23 21.64 40 20.23 21.64 40 20.23 21.64 40 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.23 20.25	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Overall (I-squared = 98.4%, p = 0.00 NOTE: Weights are from random effe -68.9 J Study ID Chen.L. (2019) He.B. (2018) Yin.X.N. (2018) Wang,H. (2015)	0 + + + + + + + + + + + + +	ES (95% CI) 20.000 (15.169, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648) 28.880 (12.331, 45.429) 68.9 ES (95% CI) - 3.050 (2.646, 3.454) + 4.830 (4.610, 5.050) 3.770 (3.294, 4.246) 3.120 (2.741, 3.499)	Weight 20.00 19.98 19.95 20.14 19.93 100.00 % Weight 24.88 25.62 24.49 25.01
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G Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Overall (I-squared = 98.7%, p = 0.000) NOTE: Weights are from random effects -37.9 I Study ID Chen.L. (2019) He.B. (2018) Yin.X.N. (2018) Wang,H. (2015) Overall (I-squared = 99.0%, p = 0.000) NOTE: Weights are from random effects -4.23	ES (95% Cl)	Weight 21.55 77) 19.41 20.23 21.64 4) 17.17 2) 100.00 % Weight 0 25.26 0 24.44 0 25.00 0 100.00 % Weight 100.00	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang,H. (2015) Overall (I-squared = 98.4%, p = 0.00 NOTE: Weights are from random effect -68.9 J Study ID Chen.L. (2019) He.B. (2018) Yin.X.N. (2018) Wang,H. (2015) Overall (I-squared = 96.9%, p = 0.000) NOTE: Weights are from random effects L Study ID	0 + + + + + 0 0 0 0 0 - - - - - - - - - - - - -	ES (95% Cl) 20.000 (15.169, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648) 28.880 (12.331, 45.429) 68.9 ES (95% Cl) - 4.830 (4.610, 5.050) 3.770 (3.294, 4.246) 3.120 (2.741, 3.499) 3.700 (2.703, 4.697) 5.05 ES (95% Cl)	Weight 20.00 19.98 19.95 20.14 19.93 100.00 % Weight 24.88 25.62 25.01 100.00 % Weight 111.11
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G Study ID (in.X.N. (2018) Gluzman.M.I. (2017) Weng,Y. (2017) Wang,H. (2015) Overall (I-squared = 98.7%, p = 0.000) NOTE: Weights are from random effects -37.9 I Study ID Chen.L. (2019) He B. (2018) Yin.X.N. (2018) Wang.H. (2015) Overall (I-squared = 99.0%, p = 0.000) NOTE: Weights are from random effects K Study ID Chao.Yan. (2019) Dong.X.Y. (2019)	ES (95% Cl)	Weight 21.55 21.57 21.57 21.54 20.23 21.64 41 17.17 20.000 % Weight 25.26	-168 H Study ID Yin.X.N. (2018) Gluzman.M.I. (2017) Meng,Y. (2017) Wang.H. (2015) Overall (I-squared = 98.4%, p = 0.00 NOTE: Weights are from random effect -68.9 J Study ID Chen.L. (2019) He.B. (2018) Yin.X.N. (2018) Wang.H. (2015) Overall (I-squared = 96.9%, p = 0.000) NOTE: Weights are from random effects -5.05 L Study ID Zhao.Yan. (2019) Dong.X.Y. (2019)	0 + + + + + 0 0 0 0 0 0 0	ES (95% CI) 20.000 (15.166, 24.831) - 63.900 (58.942, 68.858) 17.160 (11.973, 22.347) 25.000 (21.247, 28.753) 18.330 (13.012, 23.648) 28.880 (12.331, 45.429) 68.9 ES (95% CI) - 4.830 (4.610, 5.050) 3.770 (3.294, 4.246) 3.120 (2.741, 3.499) 3.700 (2.703, 4.697) 5.05 ES (95% CI) - 3.130 (2.858, 3.402) 3.130 (2.858, 3.402) 3.600 (3.463, 3.737)	Weight 20.00 19.98 19.95 20.14 19.93 100.00 % Weight 24.88 25.62 24.49 25.01 100.00 % Weight 11.11 11.19 10.92
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Figure S2 Forest plots of the meta-analysis of other outcomes. Length of hospital stay for the patients who underwent (A) ER and (B) LR. Total hospital charges for the patients who underwent (C) ER and (D) LR. Operative time for the patients who underwent (E) ER and (F) LR. Intraoperative blood loss for the patients who underwent (G) ER and (H) LR. Postoperative dietary recovery time for the patients who underwent (I) ER and (J) LR. Tumor size for the patients who underwent (K) ER and (L) LR. ES, effect size; CI, confidence interval; ER, endoscopic resection; LR, laparoscopic resection.

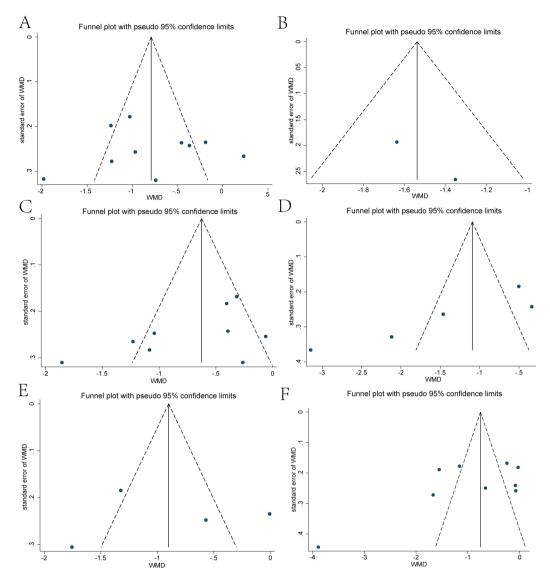


Figure S3 Funnel plot of the patients undergoing endoscopy and laparoscopy. (A) Length of hospital stay. (B) Total hospital charges. (C) Operative time. (D) Intraoperative blood loss. (E) Postoperative dietary recovery time. (F) Tumor size. WMD, weighted mean difference.

Quantitative Assessment for Publication Bias

	postoperative	Operative	Hospital	Tumor	Diet	Intraoperative	Hospitalization
	complications	time	stay	size	recovery	blood loss	cost
Number of studies	10	9	10	9	4	5	2
P value for Egger tests	0.908	0.124	0.927	0.173	0.978	0.037	-

Egger's test for Single arm meta-analysis

Table1. Endoscopic resection

	postoperative	Tumor	R0 resection
	complications	recurrence rate	rate
Number of studies	10	11	10
P value	0.412	0.605	0.408

Table2. Laparoscopic resection

	postoperative	Tumor	R0 resection		
	complications	recurrence rate	rate		
Number of studies	10	11	10		
P value	0.162	0.791	0.130		

Figure S4 Publication bias and Egger's test results.

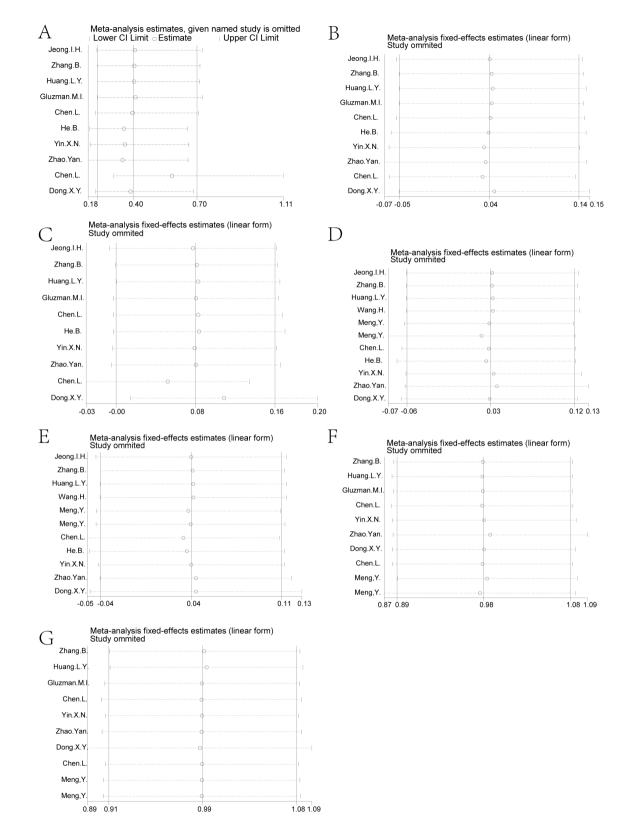


Figure S5 Sensitivity analysis of postoperative complications. (A) Sensitivity analysis of postoperative complications. Meta-analysis of the patients who underwent (B) ER and (C) LR. Meta-analysis of tumor recurrence following (D) ER and (E) LR. Meta-analysis of the R0 resection rates following (F) ER and (G) LR. CI, confidence interval; ER, endoscopic resection; LR, laparoscopic resection.