

Reference (Publish year)	N (LAP:OPEN)	Study period	Study design	Country	Single/ Multi center	Conversion rate	Location	Complication rate (LAP:OPEN)	Tumor stage	Combined resection (LAP:OPEN)	RI rate (LAP:OPEN)	5 years DFS (LAP:OPEN)	5 years OS (LAP:OPEN)
Park 2016 [22]	93:18	2000- 2010	RS	Korea	Single	5.6%	Colon rectum	14.1%:31.5%	-	9.9%:32.5%	5.5%:4.5%	81.8%:73.9%	95.3%:86.5%
Shukla 2015 [20]	61:22	2003- 2011	RS	USA	Single	21%	Colon	28%:36%	II:35 III:48	23%:41%	0%:4%	75%:65% (3 years)	82%:81% (3 years)
Kang 2016 [29]	52:57	2003- 2013	RS	Korea	Single	7.7%	Colon	13.5%:36.8%	II:41 III:68	13.5%:36.8 %	-	53.6%:62.6%	60.7%:61.9%
Angelis N 2016 [18]	106:106	2005- 2014	RPSM	France Switzerland	Multi	12.2%	Colon	29.1%:35.3%	II:85 III:127	14.2%:18.9 %	5.7%:6.6%	58.6%:59.9%	57.6%:50.2%
Angelis N 2016 [17]	52:52	2005- 2015	RPSM	France Switzerland Spain	Multi	21.2%	Rectum	30.8%:48.1%	II:42 III:33 IV:29	26.9%:30.8 %	19.2%:17.3%	66.7%:64.1%	55.4%:53.3%
Chan 2016 [30]	93:59	2008- 2014	RS	Singapore	Single	8.6%	Colon	-	-	0%:3.4%	0%:0.7%	-	75%:80%
Leon P 2017 [27]	68:79	2008- 2015	RS	Italy	Single	19%	Colon	7.4%:16.5%	II:69 III:78	-	11.8%:11.5%	40.3%:38.9%	44.6%:39.4%
Ahmad 2015 [25]	455:406	2011- 2012	RS	Canada	ACSNS QIP	24.7%	Colon	-	-	-	26.2%:24.3%	-	-

Table 7 Studies about laparoscopic surgery for pT4 Colorectal cancer. N-number of patients; LAP-laparoscopy,RS- retrospective study, RPSM- retrospective propensity score matching; ACSNS-American College of Surgeons National Surgical Quality Improvement Program, OS-overall survival, DFS-disease-free survival

