

Table S1. Methodological quality of retrospective studies evaluated by the modified Newcastle-Ottawa scale.

Study	Selection		Representative reference group	Comparability	Outcome		Quality Score
	Assignment for treatment	Representative cohort group		Comparable for 1,2,3,4,5,6,7,8,9,10	Assessment Adequate of outcome	fellow-up	
Bhindi2018[13]	no	yes	yes	2,8, 10	yes	yes	5
Caputo2017[14]	no	yes	yes	1,2,3,4,5,8,9,10	yes	yes	8
Chehab2016[16]	yes	yes	yes	2,3,4,8	yes	yes	7
Desai2005[17]	yes	yes	yes	2,3,6,7	yes	yes	7
Emara2014[2]	yes	yes	yes	2,6,8	yes	yes	6
Fraisse2018[18]	yes	yes	yes	2,3,4,10	yes	yes	7
Guillotreau2012[19]	no	yes	yes	3,6,7	yes	yes	5
Haber2012[20]	no	yes	yes	1,2,3,4,5,6,7,9,10	yes	yes	8
Haramis2012[3]	no	yes	yes	2,4,5,6,7,8	yes	yes	6
Hruby2006[21]	no	yes	yes	7	yes	yes	4
Klatte2011[22]	no	yes	yes	1,2,4,5,10	yes	yes	6
Lin2008[23]	yes	yes	yes	2,3,6,9	yes	yes	6
O'Malley2007[24]	no	yes	yes	1,2,3,4,5,6,7,9	yes	yes	8
Tanagho2013[10]	no	no	yes	2,3,6	yes	yes	4
Thompson2015[8]	no	yes	yes	1,2,4,5,10	yes	yes	7
Turna2009[25]	yes	yes	yes	1,2,3,4,7,9	yes	yes	7
Zondervan2016[26]	yes	yes	yes	2,3,10	yes	yes	6

Comparability variables: 1 = age, 2 = gender, 3 = body mass index, 4 = tumor size, 5 = preoperative renal function, 6 = tumor side, 7 = tumor location, 8 = nephrometry (RENAL) Score, 9 = American Society of Anesthesiologists score, 10 = Charlson comorbidity index.