

Supplementary Table 1. Search strategy and terms used to identify suitable studies for the systematic review and meta-analysis

Sources	Search in	MeSH terms	Limits	Search results
PubMed (MEDLINE)	Quick search	((laparoscopic surgery OR robotic surgery OR minimally invasive surgery OR "Laparoscopy"[Mesh] OR "Robotic Surgical Procedures"[Mesh] OR "Minimally Invasive Surgical Procedures"[Mesh]) AND (intracorporeal anastomosis OR extracorporeal anastomosis)) AND (right colon cancer OR ascending colon cancer OR cecal cancer OR transverse colon cancer OR right colon adenocarcinoma OR right colonic neoplasm OR cecal adenocarcinoma OR transverse colon adenocarcinoma OR ascending colon adenocarcinoma OR ascending colon neoplasm OR transverse colon neoplasm OR Cecal Neoplasms[Mesh])) AND ("Randomized Controlled Trial" [Publication Type] OR Randomized [Title/Abstract] OR Randomised[Title/Abstract] OR Randomization [Title/Abstract] OR Randomisation [Title/Abstract])	Since 2015	24
		'randomized controlled trial'/exp OR 'randomized OR 'randomised' OR 'randomisation' 'Right colon cancer'/exp OR 'ascending colon cancer'/exp OR 'transverse colon cancer' OR 'right colon adenocarcinoma' OR 'right colonic neoplasm' OR 'cecal adenocarcinoma' OR 'transverse colon adenocarcinoma' OR 'ascending colon adenocarcinoma' OR 'ascending colon neoplasm' OR 'transverse colon neoplasm' OR 'intracorporeal anastomosis' exp OR 'extracorporeal anastomosis' / Exp OR 'intracorporeal anastomosis OR 'extra-corporeal anastomosis' OR 'laparoscopic surgery'/exp OR 'robotic assisted surgery'/exp OR 'minimally invasive surgery'/exp OR 'laparoscopic surgery' OR 'robotic surgery' OR 'Minimally invasive surgery'	Since 2015	6
Cochrane	Quick search	'laparoscopic surgery' OR 'robotic surgery' OR 'minimally invasive surgery' OR [MeSH]: [Laparoscopy] explode all trees OR [MeSH] [Minimally Invasive Surgical Procedures] explode all trees AND 'intracorporeal anastomosis' OR 'extracorporeal anastomosis' OR 'right colon cancer' OR 'cecal cancer' OR 'transverse colon cancer' OR 'right colon adenocarcinoma' OR 'right colonic neoplasm' OR 'cecal adenocarcinoma' OR 'transverse colon adenocarcinoma' OR 'ascending colon adenocarcinoma' OR 'ascending colon neoplasm' OR 'transverse colon neoplasm' OR [MeSH]: [Cecal Neoplasms] explode all trees AND 'randomized' OR 'randomised' OR 'randomization' OR 'randomisation' OR MeSH [Randomized Controlled Trial] explode all trees	Since 2015	20