

Table 1. suppl. Search strategies.

Database	Research strategy	Studies matched
PubMed	("Robotic Surgical Procedures"[Mesh] OR (("Robotics"[Mesh] OR robot*[tiab] OR Davinci*[tiab] OR "Da-Vinci*" [tiab] OR Senhance*[tiab] OR "Revo-I*" [tiab] OR Versius*[tiab] OR Avatera*[tiab] OR Hinotori*[tiab]) AND (surgery[subheading] OR surg*[tiab] OR resect*[tiab] OR remov*[tiab] OR excis*[tiab]))) AND ("Colorectal Neoplasms"[Mesh] OR ((rectum[tiab] OR rectal[tiab] OR anus[tiab] OR anal[tiab] OR colorect*[tiab] OR colo-rect*[tiab] OR anorect*[tiab] OR ano-rect*[tiab]) AND (cancer*[tiab] OR tumor*[tiab] OR tumour*[tiab] OR neoplas*[tiab] OR malignan*[tiab] OR carcinoma*[tiab]))) AND ("Aged"[Mesh] OR "Aging"[Mesh] OR aged[tiab] OR aging[tiab] OR elder*[tiab] OR geriatr*[tiab] OR gerontol*[tiab] OR old[tiab] OR older[tiab]))	817
Embase	('robot assisted surgery'/exp OR 'robotic surgical procedure'/exp OR 'robotic surgical device'/exp OR (('robotics'/exp OR robot*:ti,ab,kw OR Davinci*:ti,ab,kw OR 'Da-Vinci*':ti,ab,kw OR Senhance*:ti,ab,kw OR 'Revo-I*':ti,ab,kw OR Versius*:ti,ab,kw OR Avatera*:ti,ab,kw OR Hinotori*:ti,ab,kw) AND (surgery:lnk OR surg*:ti,ab,kw OR resect*:ti,ab,kw OR remov*:ti,ab,kw OR excis*:ti,ab,kw))) AND ('colorectal tumor'/exp OR 'anorectal tumor'/exp OR ((rectum:ti,ab,kw OR rectal:ti,ab,kw OR anus:ti,ab,kw OR anal:ti,ab,kw OR colorect*:ti,ab,kw OR colo-rect*:ti,ab,kw OR anorect*:ti,ab,kw OR ano-rect*:ti,ab,kw) AND (cancer*:ti,ab,kw OR tumor*:ti,ab,kw OR tumour*:ti,ab,kw OR neoplas*:ti,ab,kw OR malignan*:ti,ab,kw OR carcinoma*:ti,ab,kw))) AND ('aged'/exp OR 'aging'/exp OR aged:ti,ab,kw OR aging:ti,ab,kw OR elder*:ti,ab,kw OR geriatr*:ti,ab,kw OR gerontol*:ti,ab,kw OR old:ti,ab,kw OR older:ti,ab,kw)	1595
Cochrane CENTRAL	<p>#1 MeSH descriptor: [Robotic Surgical Procedures] explode all trees</p> <p>#2 MeSH descriptor: [Robotics] explode all trees</p> <p>#3 (robot* OR Davinci* OR "Da-Vinci*" OR Senhance* OR "Revo-I*" OR Versius* OR Avatera* OR Hinotori*):ti,ab,kw</p> <p>#4 #2 OR #3</p> <p>#5 MeSH descriptor: [] explode all trees and with qualifier(s): [surgery - SU]</p> <p>#6 (surg* OR resect* OR remov* OR excis*):ti,ab,kw</p> <p>#7 #5 OR #6</p> <p>#8 #4 AND #7</p> <p>#9 #1 OR #8</p> <p>#10 MeSH descriptor: [Colorectal Neoplasms] explode all trees</p> <p>#11 (rectum OR rectal OR anus OR anal OR colorect* OR colo-rect* OR anorect* OR ano-rect*):ti,ab,kw</p> <p>#12 (cancer* OR tumor* OR tumour* OR neoplas* OR malignan* OR carcinoma*):ti,ab,kw</p> <p>#13 #11 AND #12</p> <p>#14 #10 OR #13</p> <p>#15 MeSH descriptor: [Aged] explode all trees</p> <p>#16 MeSH descriptor: [Aged] explode all trees</p> <p>#17 (aged OR aging OR elder* OR geriatr* OR gerontol* OR old OR older):ti,ab,kw</p> <p>#18 #15 OR #16 OR #17</p> <p>#19 #9 AND #14 AND #18</p>	89

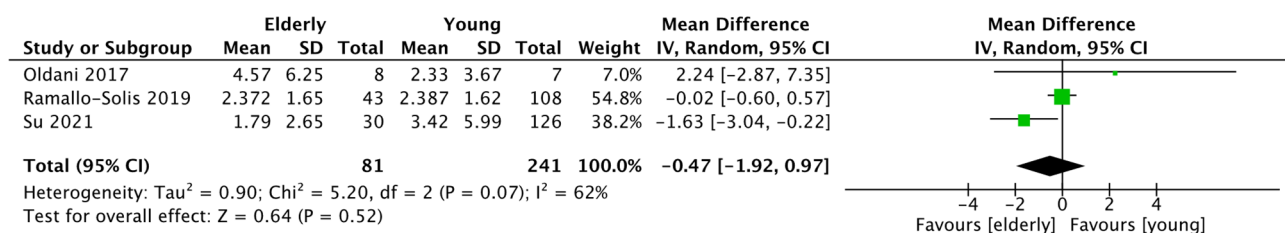


Figure 1. Distal Margin Forest Plot.

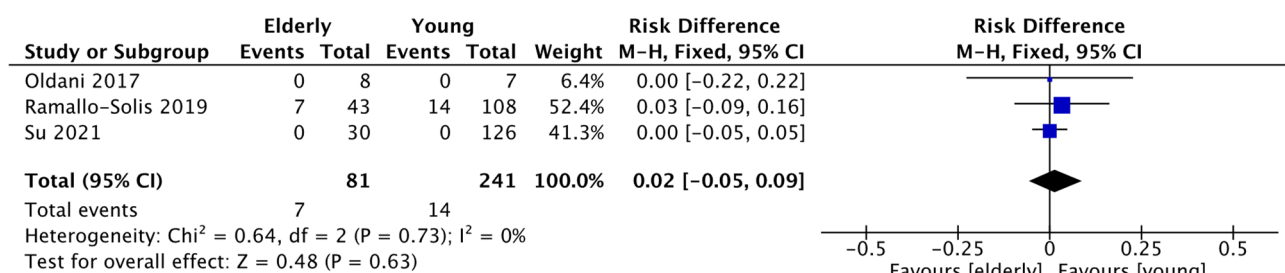


Figure 2. Conversion Rate Forest Plot.

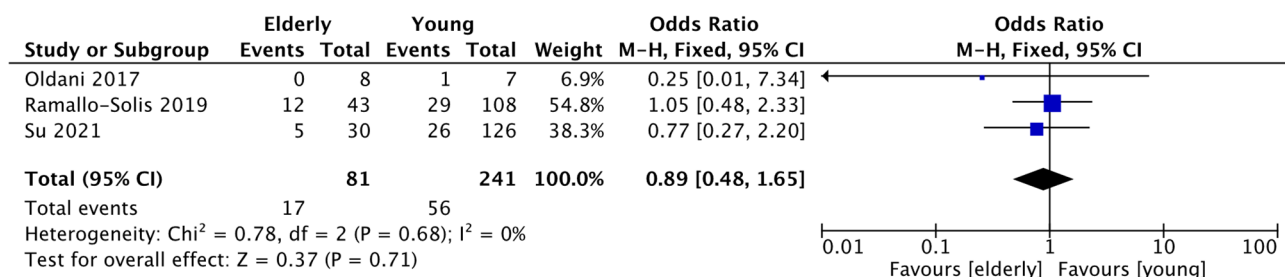


Figure 1. Complications Forest Plot.