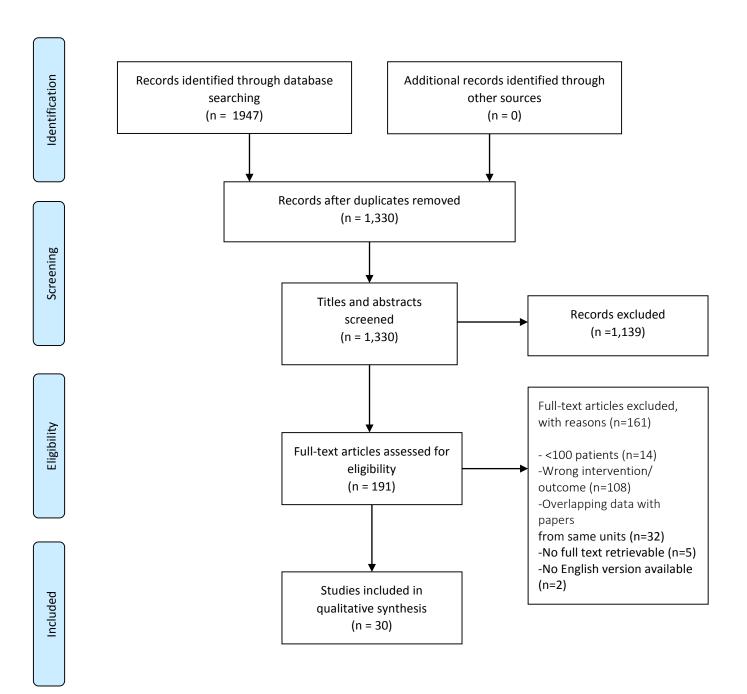
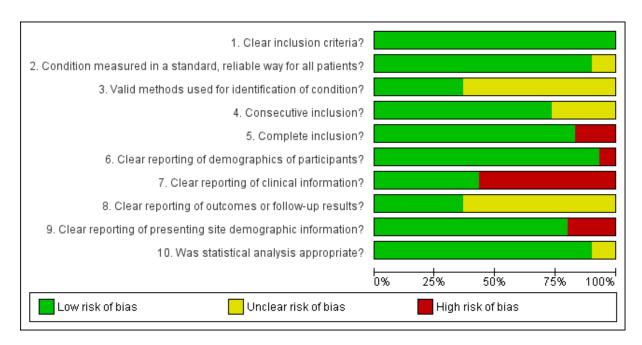
Supplementary figures



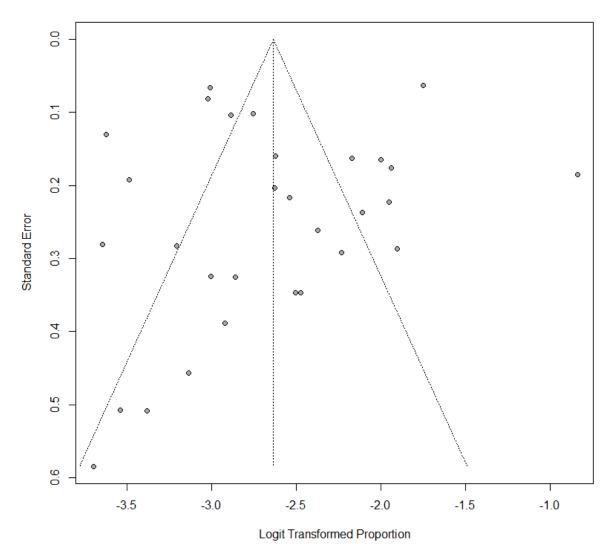
Supplementary Figure 1. PRISMA flowchart of study selection



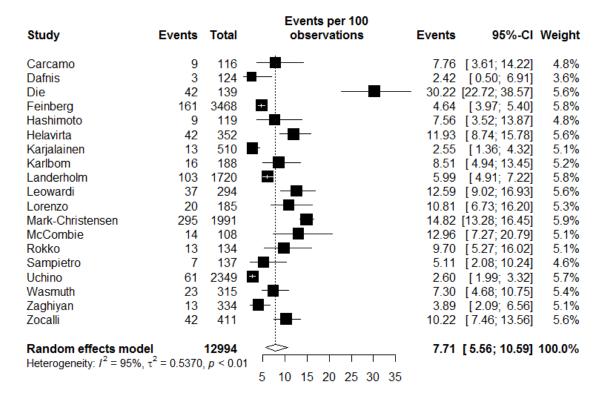
Supplementary Figure 2. Risk of Bias graph demonstrating the overall risk of bias for each item of the JBI checklist across all included studies.

	1. Clear inclusion criteria?	2. Condition measured in a standard, reliable way for all patients?	3. Valid methods used for identification of condition?	4. Consecutive inclusion?	5. Complete inclusion?	6. Clear reporting of demographics of participants?	7. Clear reporting of clinical information?	8. Clear reporting of outcomes or follow-up results?	9. Clear reporting of presenting site demographic information?	10. Was statistical analysis appropriate?
Carcamo 2020	•	•	?	•	•	•	•	?	•	•
Cataneo 2019	•	•	?	•	•	•	•	?	•	•
Dafnis 2016	•	•	?	•	•	•	•	?	•	•
Die 2020	•	•	?	?	•	•	•	?	•	•
Feinberg 2020	•	•	•	•	•	•	•	•	•	•
Hashimoto 2013	•	•	•	•	•	•	•	•	•	•
Helavirta 2016	•	•	?	•	•	•	•	?	•	•
lkeuchi 2010	•	•	?	•	•	•	•	?	•	•
Karjalainen 2019	•	•	•	•	•	•	•	?	•	•
Karlbom 2011	•	•	•	•	•	•	•	•	•	•
Kayal 2019	•	•	•	•	•	•	•	•	•	•
Landerholm 2017	•	•	•	•	•	•	•	•	•	•
Lee 2019	•	•	?	?	•	•	•	?	•	•
Leowardi 2010	•	•	?	•	•	•	•	•	•	•
Lightner 2017	•	?	?	?	•	•	•	?	•	•
Lorenzo 2016	•	•	•	?	•	•	•	•	•	•
Mark-Christensen 2017	•	•	•	?	•	•	•	•	•	•
McCombie 2016	•	?	?	•	•	•	•	?	•	•
Mege 2016	•	•	?	•	•	•	•	?	•	•
Mennigen 2011	•	•	?	•	•	•	•	?	•	•
Rokke 2011	•	•	?	•	•	•	•	?	•	•
Sahami 2016	•	•	?	•	•	•	•	•	•	•
Sampietro 2018	•	•	?	•	•	•	•	?	•	?
Tan 2015	•	•	?	•	•	•	•	•	•	?
Uchino 2017	•	•	•	?	•	•	•	•	•	•
Wasmuth 2010	•	•	?	•	•	•	•	?	•	•
Wibmer 2010	•	•	?	•	•	•	•	?	•	•
Worley 2017	•	•	?	?	•	•	•	?	•	?
Zaghiyan 2016	•	?	•	?	•	•	•	?	•	•
Zocalli 2019	•	•	•	•	•	•	•	?	•	•

Supplementary Figure 3. Risk of bias graph demonstrating the risk of bias for each item of the JBI checklist per individual study.



Supplementary figure 4. Funnel plot of standard error by logit transformed proportion for pouch failure.



Supplementary figure 5: Plot of the individual studies with a median follow-up of ≥5 years presenting pouch failure rates with 95% confidence intervals (CI) and the overall incidence of pouch failure with 95% CI.

Study	Events	Total	Events per 100 observations	Events	95%-CI	Weight
Carcamo	9	116		7.76	[3.61; 14.22]	8.0%
Dafnis	3	124	-	2.42	[0.50; 6.91]	5.5%
Die	42	139		30.22	[22.72; 38.57]	9.9%
Karlbom	16	188		8.51	[4.94; 13.45]	9.1%
Landerholm	103	1720		5.99	[4.91; 7.22]	10.5%
Leowardi	37	294		12.59	[9.02; 16.93]	10.0%
Lorenzo	20	185		10.81	[6.73; 16.20]	9.3%
Mark-Christensen	295	1991		14.82	[13.28; 16.45]	10.7%
McCombie	14	108		12.96	[7.27; 20.79]	8.8%
Rokko	13	134		9.70	[5.27; 16.02]	8.7%
Wasmuth	23	315		7.30	[4.68; 10.75]	9.6%
Random effects mode Heterogeneity: $I^2 = 92\%$,		5314 , $p < 0$.	01	10.25	[7.24; 14.30]	100.0%
			0 10 10 20 20 00 00			

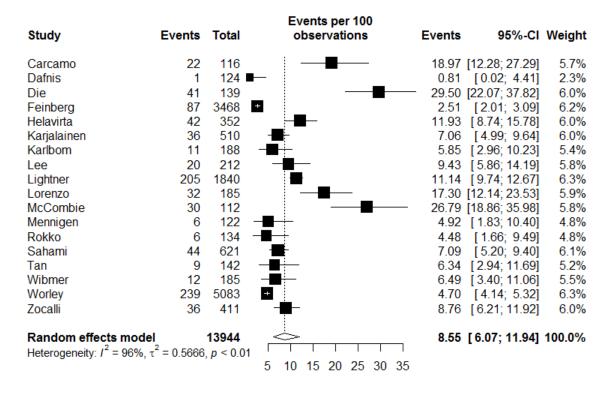
Supplementary figure 6: Plot of the individual studies with a median follow-up of ≥10 years presenting pouch failure rates with 95% confidence intervals (CI) and the overall incidence of pouch failure with 95% CI.

			Eve	nts per	100				
Study	Events	Total	obs	servatio	ns	E	Events	95%-CI	Weight
Cataneo	6	176	-				3.41	[1.26; 7.27]	5.4%
Dafnis	1	124 -	■				0.81	[0.02; 4.41]	2.3%
Feinberg	122	3468	==				3.52	[2.93; 4.19]	7.3%
Helavirta	44	352					12.50	[9.23; 16.42]	7.0%
Karjalainen	28	510	_	-			5.49	[3.68; 7.84]	6.9%
Karlbom	12	188					6.38	[3.34; 10.88]	6.2%
Lee	15	212	_	 			7.08	[4.01; 11.40]	6.4%
Mege	26	185					14.05	[9.39; 19.91]	6.8%
Rokko	6	134	-				4.48	[1.66; 9.49]	5.4%
Sahami	105	621					16.91	[14.04; 20.09]	7.3%
Sampietro	8	150					5.33	[2.33; 10.24]	5.8%
Uchino	176	2376	-	-			7.41	[6.39; 8.53]	7.3%
Wasmuth	29	304	_		_		9.54	[6.48; 13.41]	6.9%
Wibmer	4	185	-				2.16	[0.59; 5.44]	4.8%
Worley	168	5083					3.31	[2.83; 3.83]	7.3%
Zocalli	38	411	-				9.25	[6.63; 12.47]	7.0%
Random effects model Heterogeneity: $I^2 = 95\%$,		14479 , <i>p</i> < 0.01	5	>- 10	15		6.33	[4.50; 8.83]	100.0%

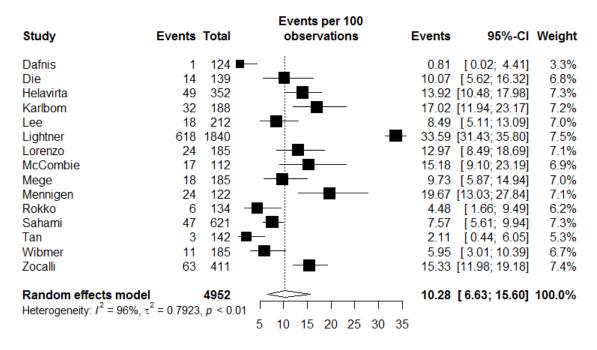
Supplementary figure 7: Plot of the individual studies presenting anastomotic leak rates with 95% confidence intervals (CI) and the overall incidence of anastomotic leakage with 95% CI.

			Events per 100			
Study	Events	Total	observations	Events	95%-CI	Weight
Carcamo	10	116		8 62	[4.21; 15.28]	5.3%
Cataneo	15	176	_ _		[4.85; 13.67]	5.8%
Die	17	139			[7.29; 18.86]	5.9%
Feinberg	188	3468	_		[4.69; 6.23]	7.0%
Helavirta	61	352			[13.52; 21.70]	6.7%
Ikeuchi	21	944	-		[1.38; 3.38]	6.2%
Karjalainen	37	510		7.25	[5.16; 9.86]	6.5%
Karlbom	25	188			[8.79; 19.00]	6.2%
Lee	37	212		17.45	[12.60; 23.24]	6.5%
Lightner	73	1508		4.84	[3.81; 6.05]	6.8%
Mark-Christensen	244	1456	-	16.76	[14.87; 18.78]	7.1%
McCombie	9	121		7.44	[3.46; 13.65]	5.1%
Mennigen	11	122		9.02	[4.59; 15.56]	5.4%
Wasmuth	39	304	———	12.83	[9.28; 17.12]	6.5%
Wibmer	17	185		9.19	[5.44; 14.30]	5.9%
Worley	478	5083		9.40	[8.62; 10.24]	7.1%
			<u> </u>			
Random effects model		14884		9.18	[7.05; 11.87]	100.0%
Heterogeneity: $I^2 = 95\%$, τ	~= 0.2993	, <i>p</i> < 0.01	5 40 45 00			
			5 10 15 20			

Supplementary figure 8: Plot of the individual studies presenting pelvic sepsis with 95% confidence intervals (CI) and the overall incidence of pelvic sepsis with 95% CI.



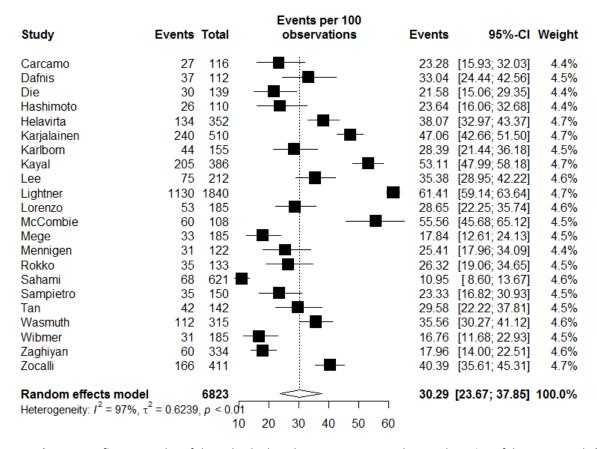
Supplementary figure 9: Plot of the individual studies presenting fistula with 95% confidence intervals (CI) and the overall incidence of fistula with 95% CI.



Supplementary figure 10: Plot of the individual studies presenting stricture with 95% confidence intervals (CI) and the overall incidence of stricture with 95% CI.

			Events per 100			
Study	Events	Total	observations	Events	95%-CI	Weight
Carcamo	9	116	∔	7.76	[3.61; 14.22]	9.4%
Die	7	139			[2.05; 10.10]	9.3%
lkeuchi	12	944	-	1.27	[0.66; 2.21]	9.7%
Karlbom	2	188 -	-	1.06	[0.13; 3.79]	7.6%
Kayal	46	386	—	11.92	[8.86; 15.57]	10.1%
Leowardi	0	294	•	0.00	[0.00; 1.25]	4.2%
Lightner	46	1840		2.50	[1.84; 3.32]	10.1%
Lorenzo	13	185		7.03	[3.79; 11.72]	9.7%
Uchino	16	2376 +	1	0.67	[0.39; 1.09]	9.8%
Zaghiyan	42	236		- 17.80	[13.14; 23.28]	10.0%
Zocalli	60	411	—■—	14.60	[11.33; 18.39]	10.1%
Random effects mode Heterogeneity: I ² = 96%,				3.98	[1.93; 8.04]	100.0%
		0	5 10 15 20			

Supplementary figure 11: Plot of the individual studies presenting CD of the pouch with 95% confidence intervals (CI) and the overall incidence of CD of the pouch with 95% CI.



Supplementary figure 12: Plot of the individual studies presenting pouchitis with 95% confidence intervals (CI) and the overall incidence of pouchitis with 95% CI.