

Table 3 Results of Primary + Secondary Endpoints (FAS)

	Stapler N=165	Hand suture N=163	Total N=328	p-value
Primary endpoint				
Bowel obstruction within 30 days	17 (10.3%)	27 (16.6%)	44 (13.4%)	0,10*
95 % confidence interval	[6.1%; 16.0%]	[11.2%; 23.2%]		
Odds ratio			1.72 [0.89; 3.11]	
Secondary endpoints				
Time needed to perform the procedure (mean +/- SD)	76.5 (+/-29.3)	91.5 (+/-43.7)	83.9 (+/-37.8)	<0.001†
median (minimum/maximum), min	73.5 (29/214)	87.0 (25/450)	78.0 (25/450)	
Wound infection within 30 days	25 (15.2%)	19 (11.7%)	44 (13.5%)	0.364*
If wound infection				
- SSI	17 (70.8%)	14 (73.7%)	31 (72.1%)	
- DSI	7 (29.2%)	5 (26.3%)	12 (27.9%)	
Reoperation due to anastomotic leakage (Visit 4)	5 (3.0%)	3 (1.8%)	8 (2.4%)	0.485*
Time to first bowel movement (mean +/- SD), d	2.8 +/-1.7	3.2 +/-2.1	3.0 +/-1.9	0.082†
Length of postoperative hospital stay (mean +/- SD), d	8.3 +/-7.9	8.5 +/-4.9	8.4 +/-6.6	0.789†
30-day mortality after ileostomy closure	0 (0%)	1 (0.7%)	1 (0.4%)	0.315*
Costs of the surgical procedure (mean +/- SD) median (min/max), €	1103.8 +/-437.4 990.5 (234.2/2935.3)	1116.5 +/-606.8 1012.9 (190/4505)	1110.1 +/-527.9 1007.9 (190/4505)	0.852†

Data are number (% of group total), unless otherwise indicated.

SSI indicates superficial incisional surgical site infections; DSI, deep surgical site infections.

* chi²-Test

† t-Test

Table 4 Influence of Surgical Skill and Center on Primary Endpoint (FAS)

Influence factor	No. Patients	Bowel Obstruction	p-value (chi ² -Test)	Odds ratio (Confidence interval)
Certified surgeon	204	21 (10.2%)	0.033	1.98 (1.05;3.76)
Noncertified surgeon	124	23 (19%)		
Total	328	44 (13.4%)		
Certified surgeon + stapler	104	9 (9%)	0.4317	
Certified surgeon + hand suture	100	12 (12%)		
Noncertified surgeon + stapler	61	8 (13%)		
Noncertified surgeon + hand suture	63	15 (24%)	0.1256	
Center ≤ 20 patients	166	23 (14%)	0.8126	
Center > 20 patients	162	21 (13%)		
University hospital	73	10 (14%)	0.9356	
Nonuniversity hospital	255	34 (13%)		