

Figure 1. Kaplan-Meier analysis of postoperative mortality in (A) all patients with acute incisional hernia incarceration and (B) in patients stratified by age.

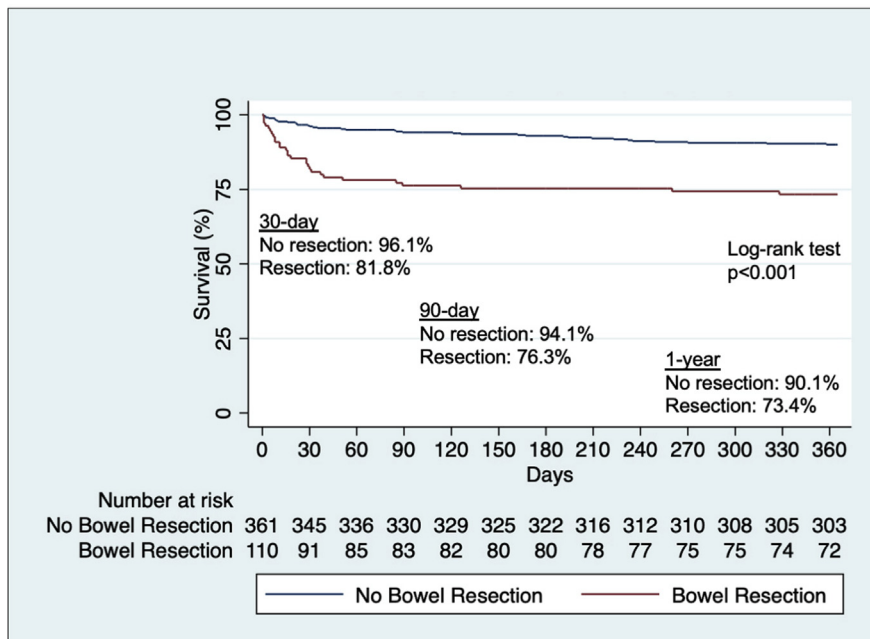


Figure 2. Kaplan-Meier analysis of postoperative mortality in patients with acute incisional hernia incarceration, stratified by the need for bowel resection.

eTable 1. Univariate Analysis of the Need for Bowel Resection (Baseline and Perioperative Characteristics)

Characteristic	No bowel resection (n = 371)	Bowel resection (n = 112)	p Value
Baseline			
Patient			
Age, y, mean (SD)	61.7 (14.9)	64.2 (13.7)	0.12
Female sex, n (%)	280 (75.5)	73 (65.2)	0.031
Race/ethnicity, n (%)			0.54
Caucasian	316 (85.2)	96 (85.7)	
Black	51 (13.8)	16 (14.3)	
Hispanic	4 (1.1)	0	
BMI, kg/m ² , mean (SD)	38.1 (10.5)	35.5 (9.7)	0.012
Smoking status, n (%)			0.92
Never	131 (35.3)	42 (37.5)	
Current	110 (29.7)	34 (30.4)	
Former	112 (30.2)	32 (28.6)	
Unspecified	18 (4.9)	4 (3.6)	
Hernia, n (%)			
Symptoms	219 (59.0)	59 (52.7)	0.23
Incision type			0.20
Midline	253 (68.2)	82 (73.2)	
Pfannenstiel	21 (5.7)	5 (4.46)	
Laparoscopic	64 (17.3)	16 (14.3)	
Old stoma	17 (4.6)	7 (6.3)	
Chevron	2 (0.5)	2 (1.8)	
Other	14 (3.8)	0	
Earlier hernia repair	112 (30.2)	47 (42.3)	0.017
Earlier mesh placement	58 (15.6)	24 (21.6)	0.14
Comorbidity, n (%)			
COPD	65 (17.5)	23 (20.5)	0.47
End-stage renal disease	13 (3.5)	8 (7.1)	0.098
Cirrhosis	19 (5.1)	9 (8.0)	0.25
Diabetes	134 (36.1)	44 (39.3)	0.54
Active cancer	29 (7.8)	13 (11.6)	0.21
Immunosuppression	34 (9.2)	10 (8.9)	0.94
Perioperative			
Vital sign, mean (SD)			
Maximum temperature, °C	36.9 (3.2)	36.9 (0.5)	0.022
Heart rate, beats/min	86.0 (16.9)	89.9 (17.8)	0.074
Mean arterial pressure, mmHg	98.1 (17.5)	97.3 (20.5)	0.72
Laboratory values at presentation, mean (SD)			
WBC count, ×10 ³ cells/mL	10.4 (5.0)	12.5 (7.2)	< 0.001
Neutrophil to lymphocyte ratio	7.7 (8.6)	28.4 (135.9)	0.008
Hematocrit, %	39.0 (6.2)	39.8 (7.3)	0.77
Creatinine, mg/dL	1.2 (1.3)	1.6 (1.7)	0.013
Bicarbonate, mEq/L	26.9 (5.3)	25.5 (4.1)	0.011
Operative details			
ASA classification, mean (SD)	3.1 (0.6)	3.4 (0.7)	< 0.001
Case duration, min, median (IQR)	153 (106–208)	186 (140–249)	< 0.001
Procedure detail, n (%)			
Repair with mesh	156 (56.9)	16 (20.0)	< 0.001

(Continued)

eTable 1. Continued

Characteristic	No bowel resection (n = 371)	Bowel resection (n = 112)	p Value
Length of stay, d, median (IQR)			
Total	6 (4–9)	10 (7–16)	< 0.001
ICU	0 (0–1)	2 (0–6)	< 0.001
Disposition, n (%)			
Home	288 (77.6)	43 (47.3)	< 0.001
Facility	74 (20.0)	39 (34.8)	
Inpatient death	9 (2.4)	20 (17.9)	
Mortality, n (%)			
30 d	24 (6.5)	22 (19.6)	0.43
90 d	31 (8.4)	28 (25.0)	0.100
1 y	44 (11.9)	31 (27.7)	0.018

IQR, interquartile range.

eTable 2. Additional Hernia-Related Complications after Acute Incisional Hernia Incarceration

Variable	Incarceration cohort (n = 483)	
	n	%
Surgical site infection	23	4.75
Hernia-related additional operation	109	22.52
Hernia-related readmission	92	19.01
Mesh complication*	20	4.14

Data refer to any complication that occurred within the study period.

*Includes mesh infection, enterocutaneous fistula, and need for mesh explantation.

eTable 3. Characteristics of Patients Undergoing Elective Repair and among Those with Acute Incisional Hernia Incarceration

Variable	Before matching			After matching		
	Elective repair cohort (n = 8,708)	Incarceration cohort (n = 483)	p Value	Elective repair cohort (n = 469)	Incarceration cohort (n = 469)	SMD
Age, y, mean (SD)	55.79 (14.08)	62.30 (14.68)	< 0.001	61.38 (13.28)	61.39 (14.68)	0.001
Sex, n (%)			< 0.001			0.021
Male	3,695 (42.43)	130 (26.92)		133 (28.36)	137 (29.21)	
Female	5,013 (57.57)	353 (73.08)		336 (71.64)	332 (70.79)	
Race/ethnicity, n (%)			< 0.001			0.014
Caucasian	7,895 (90.66)	412 (85.30)		415 (88.49)	399 (85.07)	
African American	641 (7.36)	67 (13.87)		44 (9.38)	65 (13.86)	
Hispanic	22 (0.25)	4 (0.83)		1 (0.21)	5 (1.07)	
Smoking, n (%)			0.034			0.043
Never	3,036 (34.86)	168 (34.78)		164 (34.97)	163 (34.75)	
Current	2,337 (26.84)	143 (29.61)		122 (26.01)	139 (29.64)	
Former	2,565 (29.46)	146 (30.23)		157 (33.48)	144 (30.70)	
Unknown	770 (8.84)	26 (5.38)		26 (5.54)	22 (4.69)	
Heart disease, n (%)	1,406 (16.15)	185 (38.30)	< 0.001	183 (39.02)	177 (37.74)	0.024
COPD, n (%)	998 (11.46)	144 (29.81)	< 0.001	140 (29.85)	138 (29.42)	0.007
Diabetes, n (%)	1,936 (22.23)	207 (42.86)	< 0.001	200 (42.64)	199 (42.43)	0.005
ESRD, n (%)	108 (1.24)	24 (4.97)	< 0.001	13 (2.77)	18 (3.84)	0.055
Cirrhosis, n (%)	215 (2.47)	29 (6.00)	< 0.001	26 (5.54)	28 (5.97)	0.021

ESRD, end-stage renal disease; SMD, standardized mean difference.