

Supplemental table 1 overview of missing data

| Variable | Primary hernia | | Incisional hernia | |
|---|------------------|--------------|-------------------|--------------|
| | Not incarcerated | Incarcerated | Not incarcerated | Incarcerated |
| | N (%) | N (%) | N (%) | N (%) |
| Total N | 2352 (100) | 83 (3.5) | 2041 (100) | 79 (3.9) |
| Patient baseline characteristics | | | | |
| Age | 8 (0.4) | 1 (1.2) | 10 (0.5) | 0 (0) |
| BMI | 22 (1.0) | 1 (1.2) | 18 (0.9) | 4 (5.1) |
| Sex = female | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Current smoking | 41 (1.8) | 4 (4.8) | 104 (5.1) | 5 (6.3) |
| Diabetes mellitus | 23 (1.0) | 0 (0) | 38 (1.9) | 3 (3.8) |
| Corticosteroid use | 23 (1.0) | 0 (0) | 38 (1.9) | 3 (3.8) |
| Radiotherapy | 23 (1.0) | 0 (0) | 38 (1.9) | 3 (3.8) |
| Chemotherapy | 23 (1.0) | 0 (0) | 38 (1.9) | 3 (3.8) |
| History of AAA | 12 (0.5) | 0 (0) | 11 (0.5) | 1 (1.3) |
| Collagen disorder | 12 (0.5) | 0 (0) | 11 (0.5) | 1 (1.3) |
| Anticoagulant use | 23 (1.0) | 0 (0) | 38 (1.9) | 3 (3.8) |
| History of abdominal wall hernia | 12 (0.5) | 0 (0) | 11 (0.5) | 1 (1.3) |
| History of inguinal hernia | 12 (0.5) | 0 (0) | 11 (0.5) | 1 (1.3) |
| History of primary ventral hernia | 12 (0.5) | 0 (0) | 11 (0.5) | 1 (1.3) |
| History of incisional hernia | 12 (0.5) | 0 (0) | 11 (0.5) | 1 (1.3) |
| Family history of abdominal hernia | 12 (0.5) | 0 (0) | 11 (0.5) | 1 (1.3) |
| ASA-score | 17 (0.7) | 1 (1.2) | 6 (0.3) | 3 (3.8) |
| Primary surgery | | | | |
| Gastro-intestinal | NA | NA | 25 (1.2) | 3 (3.8) |
| Gynaecologic | NA | NA | 25 (1.2) | 3 (3.8) |
| Other surgery | NA | NA | 25 (1.2) | 3 (3.8) |
| Factors related to intraabdominal pressure | | | | |
| Ascites | 17 (0.7) | 1 (1.2) | 20 (1.0) | 2 (2.5) |
| Chronic cough | 17 (0.7) | 1 (1.2) | 24 (1.2) | 2 (2.5) |
| Constipation | 17 (0.7) | 1 (1.2) | 24 (1.2) | 2 (2.5) |
| Heavy lifting | 17 (0.7) | 1 (1.2) | 24 (1.2) | 2 (2.5) |
| Recurrent hernia | NA | NA | 32 (1.6) | 4 (5.1) |
| Previous surgery with mesh | NA | NA | 25 (1.2) | 4 (5.1) |
| Defect location | | | | |
| Supra-umbilical | 37 (1.6) | 0 (0) | 414 (20.3) | 20 (25.3) |
| Peri- and infra-umbilical | 37 (1.6) | 0 (0) | 414 (20.3) | 20 (25.3) |
| Lateral | 37 (1.6) | 0 (0) | 414 (20.3) | 20 (25.3) |
| Defect Size (cm) | | | | |
| 0 - 2 | 15 (0.7) | 0 (0) | 60 (2.9) | 4 (5.1) |
| 3 - 4 | 15 (0.7) | 0 (0) | 60 (2.9) | 4 (5.1) |
| 5 - 10 | 15 (0.7) | 0 (0) | 60 (2.9) | 4 (5.1) |
| > 10 cm | 15 (0.7) | 0 (0) | 60 (2.9) | 4 (5.1) |
| Postoperative outcomes | | | | |
| Admission (days) | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Emergency surgery | 5 (0.2) | 1 (1.2) | 9 (0.4) | 1 (1.3) |
| Any complication | 80 (3.5) | 3 (3.6) | 50 (2.4) | 2 (2.5) |
| Wound complication | 62 (2.7) | 3 (3.6) | 33 (1.6) | 1 (1.3) |
| Surgical complication | 77 (3.4) | 2 (2.4) | 41 (2.0) | 2 (2.5) |
| Medical complication | 56 (2.5) | 2 (2.4) | 36 (1.8) | 2 (2.5) |
| Clavien Dindo | 102 (4.5) | 3 (3.6) | 105 (5.1) | 7 (8.9) |

Legend: BMI: body mass index; AAA: abdominal aortic aneurysm; ASA-score: American society of anesthesiologists score; NA: not applicable