**SUPPLEMENTARY APPENDIX**

**Supplement to manuscript:**

**Short- and long-term outcomes of a disruption and disconnection of the pancreatic duct in necrotizing pancreatitis: a multicenter cohort study in 896 patients**

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| **Table S1. Definitions** | |
| Pancreatic necrosis | Diffuse or focal area(s) of non-enhancing pancreatic parenchyma as detected on contrast enhanced CT (CECT) |
| Extrapancreatic necrosis | Persistent peripancreatic fluid collections on CECT in the absence of pancreatic parenchymal non-enhancement |
| Infected necrosis | One of the following: a) gas configurations on contrast-enhanced CT or b) positive culture from either a fine needle aspiration or the first drainage procedure from the (peri)pancreatic collection/walled-off necrosis |
| Pancreas intervention | All interventions for (peri)pancreatic collections and/or necrosis (e.g. percutaneous catheter drainage, endoscopic transluminal drainage, surgical or endoscopic necrosectomy), without ascites drainage, ERCP or decompression laparotomies |
| Follow-up intervention | All pancreatic interventions required more than three months after the removal of the last drain removal |
| Confirmed DPD | Confirmed partial or complete DPD was defined as one or more of the following: 1) (radiological) confirmation by: A) ERCP; i) extravasation of contrast medium from the ductal system; or ii) a cut-off or blowout of the pancreatic duct with inability to demonstrate the upstream pancreatic duct; B) MRI/MRCP: an interruption of pancreatic ductal continuity; or C) fluoroscopic fistulography: a connection between the pancreatic duct and the external environment; or 2) functional confirmation: an amylase level in external drain fluid, more than one day after placement of the percutaneous catheter drain, exceeding three times the upper limit of normal amylase serum level. No distinction could be made between a partial disruption or circumferential disconnection with the current data. |
| Possible DPD | Possible DPD was defined as one or more of the following criteria (i.e. without meeting the criteria for confirmed DPD): 1) morphological signs on imaging, defined as central or subtotal pancreatic necrosis, 2) amylase or lipase levels exceeding three times the upper limit of normal in fluid obtained during endoscopic drainage (i.e. not from percutaneous catheter drain fluid), 3) the presence of other types of internal pancreatic fistula defined as a connection between the pancreas and any other organ depending on the site of the fistula (pleural and common bile duct) and/or 4) need for long-term (≥90 days) percutaneous catheter drainage without an amylase measurement in drain fluid. |
| Resolution of DPD | When no follow-up intervention is required or the percutaneous catheter drain can be removed. |
| Pancreatic fistula | A connection between the pancreas and any other organ depending on the site of the fistula |
| Pancreatic cutaneous fistula | A connection between the pancreas and the cutis, confirmed with either an amylase content level in drain fluid exceeding three times the upper limit of normal amylase serum level or confirmed with imaging or during surgery |
| Pancreatic pleural fistula | A connection between the pancreas and the pleura, confirmed with either an amylase content level in pleural fluid exceeding three times the upper limit of normal amylase serum level or confirmed with imaging or during surgery |
| Pancreatic common-bile duct fistula | A connection between the pancreas and the common-bile duct confirmed with any (imaging) modality |
| Gastrointestinal complication | Perforation, fistula or ischemia/necrosis of the gastrointestinal tract, either spontaneous or iatrogenic |
| Enterocutaneous fistula | Enterocutaneous fistula is defined as secretion of content from the gastrointestinal tract from a percutaneous drain, drainage canal after removal of drains, or from a surgical wound, either from small or large bowel; confirmed by imaging or during surgery |
| Organ failure | No organ failure is assumed in the absence of lab and/or information in the discharge letter and/or notes.Definitions are adapted from the Atlanta classification and the same as previously used in the PANTER and TENSION trial. |
| Cardiovascular | Systolic blood pressure < 90 mmHg despite adequate fluid resuscitation or need for vasopressor support |
| Pulmonary | PaO2 < 60 mmHg despite FiO2 30%, or the need for mechanical ventilation |
| Renal | Serum creatinine >177 mmol/L after rehydration or need for hemofiltration or hemodialysis |
| Early organ failure | Occurrence of organ failure within the first seven days after admission |
| Multiple organ failure | Failure of 2 or more organ systems on the same day |
| Pancreatic exocrine insufficiency | Exocrine insufficiency is defined as an abnormal fecal elastase test (<200 mg/g feces) (not present before onset pancreatitis) |
| Pancreatic endocrine insufficiency | Endocrine insufficiency is defined as needing insulin or oral antidiabetic drugs(not present before onset pancreatitis) |
| Recurrent pancreatitis | Recurrent pancreatitis was diagnosed according to the revised Atlanta classification, i.e. at least two out of three of the following criteria: 1) clinical presentation with abdominal pain, 2) serum amylase or lipase levels exceeding three times the upper limit of normal and/or 3) abdominal imaging confirmed diagnosis of acute pancreatitis. |
| Chronic pancreatitis (definite) | Defined according to the M-ANNHEIM criteria for definite chronic pancreatitis |
| Abbreviations: *CT* computed tomography, *ERCP* endoscopic retrograde cholangio pancreaticography, *DPD* disrupted or disconnected pancreatic duct, *MRI* magnetic resonance imaging, *MRCP* magnetic resonance cholangio-pancreatography | |

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| **Table S2. Patient and disease characteristics in 896 patients with necrotizing pancreatitis** | | | | | |
|  | | | **Confirmed DPD** | |  |
|  | **Overall**  **N = 896** | **Possible DPD**  **N = 415** | **Yes**  **N = 243** | **No**  **N = 653** | **P value** |
| Age (years) | 58 (47 – 69) | 59 (48 – 69) | 58 (46 – 68) | 59 (47 – 70) | 0.12 |
| Male sex | 571 (64%) | 282 (69%) | 169 (70%) | 402 (62%) | **0.03** |
| Etiology |  |  |  |  |  |
| Biliary | 432 (48%) | 196 (47%) | 112 (46%) | 320 (49%) | 0.45 |
| Alcohol | 159 (18%) | 69 (17%) | 39 (16%) | 120 (18%) | 0.43 |
| Post-ERCP | 31 (4%) | 7 (2%) | 5 (2%) | 26 (4%) | 0.22 |
| Idiopathic | 180 (20%) | 98 (24%) | 58 (24%) | 122 (19%) | 0.09 |
| Other | 94 (11%) | 45 (11%) | 29 (12%) | 65 (10%) | 0.39 |
| Medical history |  |  |  |  |  |
| Cardiovascular | 377 (42%)a | 166 (40%)k | 96 (40%)t | 281 (43%)cc | 0.36 |
| Pulmonary | 91 (10%)b | 40 (10%)l | 26 (11%)u | 65 (10%)dd | 0.71 |
| Chronic renal | 28 (3%)c | 13 (3%)m | 7 (3%)v | 21 (3%)ee | 1.00 |
| Diabetes mellitus | 108 (12%)d | 49 (12%)n | 27 (11%)w | 81 (12%)ff | 0.65 |
| ASA |  |  |  |  |  |
| 1 | 298 (33%) | 131 (32%) | 75 (31%) | 223 (34%) | 0.38 |
| 2 | 471 (53%) | 233 (56%) | 135 (56%) | 336 (52%) | 0.29 |
| 3 | 123 (14%) | 49 (12%) | 32 (13%) | 91 (14%) | 0.83 |
| 4 | 4 (1%) | 2 (0.5%) | 1 (0.4%) | 3 (1%) | 1.00 |
| Smoking, yes | 130 (15%)e | 64 (15%)o | 43 (18%)x | 87 (13%)gg | 0.13 |
| Alcohol use, yes | 357 (67%) | 167 (67%) | 102 (68%) | 255 (67%) | 0.84 |
| BMI | 27.1 (25 – 30.7)f | 27.7 (25.2 – 30.9)p | 27.4 (25.1 – 30.8)y | 26.9 (25 – 30.7)hh | 0.68 |
| Laboratory values |  |  |  |  |  |
| Leucocytes (109/l) | 18.2 (14.4 – 22.2)g | 18.3 (14.8 – 22.7)q | 18.6 (14.8 – 23)z | 18 (14.3 – 21.9)ii | 0.09 |
| CRP (mg/l) | 297 (216 – 377)h | 321 (237 – 400)r | 334 (239 – 425)aa | 289 (201 – 359)jj | **<0.01** |
| Imaging severity |  |  |  |  |  |
| CT severity index | 6 (4 -8)i | 8 (6 – 10) | 8 (6 – 10) | 5 (4 – 6)kk | **<0.01** |
| Parenchymal necrosisj | 542 (60%) | 371 (89%) | 212 (87%) | 330 (51%) | **<0.01** |
| Right | 15 (2%) | 7 (2%) | 4 (2%) | 11 (2%) | 1.00 |
| Left | 52 (6%) | 15 (4%) | 9 (4%) | 43 (7%) | 0.11 |
| Central | 233 (26%) | 233 (56%) | 129 (53%) | 104 (16%) | **<0.01** |
| Subtotal | 76 (8%) | 76 (18%) | 42 (17%) | 34 (5%) | **<0.01** |
| Diffuse | 161 (18%) | 36 (9%) | 25 (10%) | 136 (21%) | **<0.01** |
| Extent of necrosisj |  | s | bb |  |  |
| <30% | 259 (29%) | 122 (29%) | 73 (34%) | 186 (56%) | 0.68 |
| 30-50% | 132 (15%) | 105 (25%) | 56 (26%) | 76 (23%) | **<0.01** |
| >50% | 150 (17%) | 143 (35%) | 82 (39%) | 68 (21%) | **<0.01** |
| Extrapancreatic necrosis only | 354 (40%) | 44 (11%) | 31 (13%) | 323 (49%) | **<0.01** |
| Follow-up | 75 (41 – 151) | 69 (37 – 146) | 72 (40 – 150) | 76 (41 – 151) | 0.62 |
| Data are presented as n (%) or median (interquartile range: P25 – P75).  Missing patients: a=3, b=3, c=3, d=2, e=477, f=494, g=82, h=125, i=8, j=1 missing data on pattern and extent of parenchymal necrosis, k=2, l=2, m=2, n=2, o=167, p=217, q=39, r=52, s=1, t=1, u=1, v=1, w=1, x=126, y=130, z=26, aa=34, bb=1, cc=2, dd=2, ee=2, ff=1, gg=351, hh=364, ii=56, jj=91, kk=1  Abbreviations: *N* number, *DPD* disruption or disconnection of the pancreatic duct, *ERCP* endoscopic retrograde cholangiopancreaticography, *ASA* American Society of Anesthesiologists, *BMI* body mass index, *CRP* c-reactive protein, *CT* computed tomography | | | | | |

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| **Table S3. Used modalities for diagnosing a confirmed disrupted or disconnected pancreatic duct** | | | | |
|  | **Imaging** | **Imaging + functional\*** | **Functional** | **Total** |
| **Confirmed DPD** | **48** | **55** | **140** | **243** |
| *CT* | *NA* | *3 (6%)* |  | 3 (1%) |
| *MRI/MRCP* | *27 (56%)* | *10 (18%)* |  | 37 (15%) |
| MRCP + CT | 2 (4%) | NA |  | 2 (0.8%) |
| MRI/MRCP + ERCP | 3 (6%) | 17 (31%) |  | 20 (8%) |
| MRI/MRCP + ERCP + CT | 1 (2%) | NA |  | 1 (0.4%) |
| MRI/MRCP + EUS | 2 (4%) | 1 (2%) |  | 3 (1%) |
| *ERCP* | *9 (19%)* | *17 (31%)* |  | 26 (25%) |
| ERCP + CT | NA | 1 (2%) |  | 1 (0.4%) |
| ERCP + EUS | 1 (2%) | NA |  | 1 (0.4%) |
| ERCP + fistulography | NA | 1 (2%) |  | 1 (0.4%) |
| *Fistulography* | *2 (4%)* | *1 (2%)* |  | 3 (1%) |
| *EUS* | *1 (2%)* | *4 (7%)* |  | 5 (2%) |
| Only functional confirmed DPD | NA | NA | 140 (100%) | 140 (58%) |
| Data are presented as n (%).  \*DPD is functionally confirmed when amylase level in drain fluids exceeds 3 times the upper limit of normal amylase level  Abbreviations: *DPD* disrupted or disconnected pancreatic duct, *CT* computed tomography, *MRI* magnetic resonance imaging, *MRCP* magnetic resonance cholangio-pancreatography, *ERCP* endoscopic retrograde cholangiopancreatography, *EUS* endoscopic ultrasound | | | | |

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| **Table S4. Univariate comparison of clinical outcomes, interventions and long-term complications in patients with and without a possible or confirmed DPD occurring 7 days after admission** | | | | | | | |
|  |  | **Possible DPD** | |  | **Confirmed DPD** | |  |
|  | **Overall (N = 896)** | **No (N = 481)** | **Yes (N = 415)** | **p-value** | **No (N = 653)** | **Yes (N = 243)** | **p-value$** |
| Death pancreatitis related | 98 (11%) | 33 (7%) | 65 (16%) | **<0.001** | 62 (10%) | 36 (15%) | 0.031 |
| Death after 7 days | 98 (11%) | 33 (7%) | 65 (16%) | **<0.001** | 62 (10%) | 36 (15%) | 0.031 |
| ICU-admission |  |  |  |  |  |  |  |
| Ongoing | 231 (31%)c | 72 (17%)b | 159 (51%)a | **<0.001** | 132 (23%)i | 99 (56%)c | **<0.001** |
| New onset | 218 (25%)d | 11 (16%)b | 46 (29%)a | **<0.001** | 27 (21%)i | 30 (31%)c | **<0.001** |
| Organ failure |  |  |  |  |  |  |  |
| New onset | 204 (56%)a | 60 (13%)n | 144 (35%)c | **<0.001** | 109 (17%)b | 95 (40%)i | **<0.001** |
| MOF | 142 (71%)e | 37 (63%)b | 105 (74%)d | **<0.001** | 74 (69%)i | 68 (74%)bb | **<0.001** |
| Ongoing | 173 (48%)e | 50 (11%)d | 123 (30%)b | **<0.001** | 95 (15%)t | 78 (32%)n | **<0.001** |
| MOF | 115 (71%)f | 25 (53%) | 90 (78%) | **<0.001** | 57 (63%) | 58 (79%) | **<0.001** |
| Infected necrosis | 442 (50%)a | 125 (27%)n | 317 (78%)c | **<0.001** | 245 (38%)c | 197 (81%)n | **<0.001** |
| Abdominal compartment syndrome | 24 (3%) | 5 (1%) | 19 (5%) | **0.001** | 10 (2%) | 14 (6%) | **0.002** |
| Gastrointestinal complications^ | 123 (14%)a | 24 (5%)b | 99 (24%)i | **<0.001** | 51 (8%)i | 72 (30%)b | **<0.001** |
| ***Interventions*** |  |  |  |  |  |  |  |
| Pancreatic intervention | 459 (52%) | 106 (22%) | 353 (99%) | **<0.001** | 238 (99%) | 221 (98%) | **<0.001** |
| Overall drainages, *no.* | 2 (1-4) | 1 (1-2) | 2 (1-4) | **<0.001** | 1 (1-3) | 3 (1-5) | **<0.001** |
| Percutaneous catheter drainage | 319 (36%) | 69 (14%) | 250 (61%) | **<0.001** | 141 (22%) | 178 (73%) | **<0.001** |
| ≥4 PCD | 100 (31%) | 11 (16%) | 89 (36%) | **0.002** | 31 (22%) | 69 (39%) | **0.002** |
| Length of PCD | 78 (47 – 143)h | 55 (32-75)o | 92 (55-158)u | **<0.001** | 59 (33-83)u | 109 (66-183)o | **<0.001** |
| Endoscopic transluminal drainage | 181 (20%) | 36 (8%) | 145 (35%) | **<0.001** | 105 (16%) | 76 (31%) | **<0.001** |
| Necrosectomy | 269 (30%) | 49 (10%) | 220 (54%) | **<0.001** | 131 (20%) | 138 (57%) | **<0.001** |
| Endoscopic | 79 (29%) | 15 (31%) | 64 (29%) | **<0.001** | 55 (42%) | 24 (17%) | 0.512 |
| Surgical | 198 (74%) | 34 (69%) | 164 (75%) | **<0.001** | 81 (62%) | 117 (85%) | **<0.001** |
| Need for additional intervention | 355 (77%) | 66 (63%) | 289 (81%) | **<0.001** | 161 (68%) | 194 (86%) | **<0.001** |
| Follow-up intervention | 83 (18%) | 10 (9%) | 73 (20%) | **<0.001** | 22 (9%) | 61 (27%) | **<0.001** |
| Ascites drainages | 77 (9%)o | 7 (1%) | 70 (17%)i | **<0.001** | 26 (4%)n | 51 (21%)b | **<0.001** |
| ***Readmission*** |  |  |  |  |  |  |  |
| Readmission | 601 (68%) | 289 (61%) | 312 (76%) | **<0.001** | 403 (62%) | 198 (81%) | **<0.001** |
| For re-intervention | 118 (20%) | 12 (4%) | 106 (34%) | **<0.001** | 38 (9%) | 80 (40%) | **<0.001** |
| Hospital stay length, overall | 30 (16-69) | 20 (13-37) | 89 (55-134) | **<0.001** | 38 (19-71) | 107 (75-158) | **<0.001** |
| Initial | 53 (24-101) | 12 (3-25) | 57 (24-100) | **<0.001** | 22 (14-46) | 71 (32-112) | **<0.001** |
| Readmission | 21 (7-47) | 30 (17-56) | 32 (14-66) | **<0.001** | 15 (4-32) | 36 (17-75) | **<0.001** |
| ***Long-term complications*** |  |  |  |  |  |  |  |
| Recurrent pancreatitis | 196 (25%)j | 95 (21%)p | 101 (29%)v | **0.016** | 124 (21%)z | 72 (30%)cc | **<0.001** |
| Chronic pancreatitis | 84 (11%)k | 26 (6%)q | 58 (17%)w | **<0.001** | 42 (7%)aa | 42 (17%)dd | **<0.001** |
| Endocrine pancreatic insufficiency | 241 (30%)l | 75 (17%)r | 166 (47%)x | **<0.001** | 130 (23%)aa | 111 (46%)ee | **<0.001** |
| Exocrine pancreatic insufficiency | 160 (20%)m | 43 (10%)s | 117 (33%)y | **<0.001** | 86 (15%)aa | 74 (34%)ff | **<0.001** |
| Data are presented as n (%) or median (interquartile range: P25 – P75). All patients (n=8) who died in the first week were excluded. $After the Bonferroni correction was applied, the p-value considered statistically significant was <0.0025. The statistically significant p-values are stated in bold.  Missing patient: a=5, b=2, c=4, d=7, e=9, f=17, g=10, h=183, i=3, j=105, k=109, l=102 patients died within the first year and were therefore excluded, m=103 patients died within the first year and were therefore excluded , n=1, o=12, p=38, q=40, r=40, s=41, t=8, u=23, v=67, w=69, x=62, y=63, z=73, aa=75, bb=6, cc=32, dd=33, ee=26, ff=28  Abbreviations: *N* number, *DPD* disrupted or disconnected pancreatic duct, *RR* Relative Risk, *CI* Confidence Interval, *ICU* intensive care unit, *SOF* single organ failure, *MOF* multiple organ failure, *PCD* percutaneous catheter drainage | | | | | | | |

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| **Table S5. Multivariate comparison of clinical outcome, interventions and long-term complications occurring more than 7 days after admission in patients with and without possible or confirmed DPD** | | | | | |
|  |  | **Possible or confirmed DPD** | |  |  |
|  | **Overall**  **N = 896** | **No**  **N = 481** | **Yes**  **N = 415** | **OR (95% CI)\*** | **p-value$** |
| Death pancreatitis related |  |  |  |  |  |
| Death after 7 days | 98 (11%) | 33 (7%) | 65 (16%) | 2.49 (1.37 – 4.57) | 0.003 |
| Death after 21 days | 85 (10%) | 24 (5%) | 61 (15%) | 3.90 (2.02 – 7.84) | **<0.001** |
| ICU-admission |  |  |  |  |  |
| Ongoing | 231 (31%)c | 72 (17%)b | 159 (51%)a | 20.00 (6.46 – 65.32) | **<0.001** |
| New onset | 218 (25%)d | 11 (16%)b | 46 (29%)a | 4.90 (2.67 – 9.01) | **<0.001** |
| Organ failure |  |  |  |  |  |
| Ongoing | 173 (48%)e | 50 (11%)d | 123 (30%)b | 8.15 (4.23 – 1.59) | **<0.001** |
| Ongoing MOF | 115 (71%)f | 25 (53%) | 90 (78%) | 8.00 (3.75 – 17.04) | **<0.001** |
| New onset | 204 (56%)a | 60 (13%)n | 144 (35%)c | 3.74 (1.96 – 7.11) | **<0.001** |
| New onset MOF | 142 (71%)e | 37 (63%)b | 105 (74%)d | 6.46 (3.12 – 13.36) | **<0.001** |
| Infected necrosis | 442 (50%)a | 125 (27%)n | 317 (78%)c | 8.10 (4.47 – 15.28) | **<0.001** |
| Gastrointestinal complications^ | 123 (14%)a | 24 (5%)b | 99 (24%)i | 4.81 (2.45 – 9.55) | **<0.001** |
| *Interventions* |  |  |  |  |  |
| Pancreatic intervention | 459 (52%) | 106 (22%) | 353 (99%) | 12.12 (6.25 – 2.46) | **<0.001** |
| Percutaneous catheter drainage | 319 (36%) | 69 (14%) | 250 (61%) | 9.13 (5.19 – 16.41) | **<0.001** |
| Need for additional intervention | 355 (77%) | 66 (63%) | 289 (81%) | 2.86 (1.41 – 6.09) | 0.005 |
| Follow-up intervention | 83 (18%) | 10 (9%) | 73 (20%) | 10.92 (5.19 – 24.98) | **<0.001** |
| Ascites drainage | 77 (9%) | 7 (1%) | 70 (17%)i | 14.37 (6.16 – 37.94) | **<0.001** |
| *Readmission* |  |  |  |  |  |
| Readmission | 601 (68%) | 289 (61%) | 312 (76%) | 4.33 (2.46 – 7.92) | **<0.001** |
| For re-intervention | 118 (20%) | 12 (4%) | 106 (34%) | 3.79 (1.89 – 8.13) | **<0.001** |
| *Long-term complications* |  |  |  |  |  |
| Recurrent pancreatitis | 196 (25%)j | 95 (21%)p | 101 (29%)v | 1.72 (0.97 – 3.03) | 0.062 |
| Chronic pancreatitis | 84 (11%)k | 26 (6%)q | 58 (17%)w | 3.64 (1.67 – 7.90) | **0.001** |
| Endocrine pancreatic insufficiency | 241 (30%)l | 75 (17%)r | 166 (47%)x | 1.11 (0.60 – 2.01) | 0.739 |
| Exocrine pancreatic insufficiency | 160 (20%)m | 43 (10%)q | 117 (33%)y | 1.33 (0.66 – 2.61) | 0.414 |
| Data are presented as n (%) or median (interquartile range).\*Binomial regression (binary data): patients (n=8) who died in the first week after admission were excluded for analysis. $After the Bonferroni correction was applied, the p-value considered statistically significant was <0.0025. The statistically significant p-values are stated in bold.  Missing patient: a=5, b=2, c=4, d=7, e=9, f=17, g=10, h=183, i=3, j=105, k=109, l=102 patients excluded within one year after admission and therefore excluded in case potential outcome was not reached yet, m=103 patients excluded within one year after admission and therefore excluded in case potential outcome was not reached yet, n=1, o=12, p=38, q=40, r=40, s=41, t=8, u=23, v=67, w=69, x=62, y=63, z=73, aa=76, bb=6, cc=32, dd=33, ee=26, ff=28  Abbreviations: *N* number, *DPD* disrupted or disconnected pancreatic duct, *OR* Odds Ratio, *CI* Confidence Interval, *ICU* intensive care unit, *SOF* single organ failure, *MOF* multiple organ failure | | | | | |

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| **Table S6. Univariate comparison of clinical outcome, interventions and long-term complications occurring more than 7 days after admission in patients with and without confirmed DPD and in patients with and without confirmed functional DPD** | | | | | | |
|  | **Confirmed DPD** | | | **Only functional confirmed DPD** | | |
|  | **No (N = 653)** | **Yes (N = 243)** | **p-value** | **No (N = 653)** | **Yes (N = 140)** | **p-value$** |
| Death pancreatitis related | 62 (10%) | 36 (15%) | **0.031** | 62 (10%) | 30 (21%) | **<0.001** |
| Death after 7 days | 62 (10%) | 36 (15%) | **0.031** | 62 (10%) | 30 (21%) | **<0.001** |
| Death after 21 days |  |  |  | 49 (8%) | 30 (21%) | **<0.001** |
| ICU-admission |  |  |  |  |  |  |
| Ongoing | 132 (23%) | 99 (56%) | **<0.001** | 131 (23%) | 68 (68%) | **<0.001** |
| New onset | 27 (21% | 30 (31%) | **<0.001** | 27 (21%) | 21 (31%) | **<0.001** |
| Organ failure |  |  |  |  |  |  |
| Ongoing | 95 (15%) | 78 (32%) | **<0.001** | 95 (15%) | 59 (42%) | **<0.001** |
| Ongoing MOF | 57 (63%) | 58 (79%) | **<0.001** | 57 (63%) | 42 (76%) | **<0.001** |
| New onset | 109 (17%) | 95 (40%) | **<0.001** | 109 (17%) | 62 (45%) | **<0.001** |
| New onset MOF | 74 (69%) | 68 (74%) | **<0.001** | 74 (69%) | 44 (75%) | **<0.001** |
| Infected necrosis | 245 (38%) | 197 (81%) | **<0.001** | 245 (38%) | 125 (90%) | **<0.001** |
| Abdominal compartment syndrome | 10 (2%) | 14 (6%) | **0.002** | 10 (2%) | 12 (9%) | **<0.001** |
| Gastrointestinal complications^ | 51 (8%) | 72 (30%) | **<0.001** | 51 (8%) | 49 (36%) | **<0.001** |
| *Interventions* |  |  |  |  |  |  |
| Pancreatic intervention | 238 (99%) | 221 (98%) | **<0.001** | 238 (99%) | 132 (97%) | **<0.001** |
| Percutaneous catheter drainage | 141 (22%) | 178 (73%) | **<0.001** | 141 (22%) | 116 (83%) | **<0.001** |
| ≥4 PCD | 31 (22%) | 69 (39%) | **0.002** | 31 (22%) | 48 (41%) | **0.001** |
| Endoscopic transluminal drainage | 105 (16%) | 76 (31%) | **<0.001** | 105 (16%) | 27 (19%) | 0.385 |
| Necrosectomy | 131 (20%) | 138 (57%) | **<0.001** | 131 (20%) | 88 (63%) | **<0.001** |
| Endoscopic | 55 (42%) | 24 (17%) | 0.512 | 55 (42%) | 5 (6%) | 0.052 |
| Surgical | 81 (62%) | 117 (85%) | **<0.001** | 81 (62%) | 85 (97%) | **<0.001** |
| Need for additional intervention | 161 (68%) | 194 (86%) | **<0.001** | 161 (68%) | 117 (86%) | **<0.001** |
| Follow-up intervention | 22 (9%) | 61 (27%) | **<0.001** | 22 (9%) | 21 (15%) | **<0.001** |
| Ascites drainage | 26 (4%)n | 51 (21%)b | **<0.001** | 26 (4%) | 38 (28%) | **<0.001** |
| *Readmission* |  |  |  |  |  |  |
| Readmission | 403 (62%) | 198 (81%) | **<0.001** | 403 (62%) | 103 (74%) | 0.015 |
| For re-intervention | 38 (9%) | 80 (40%) | **<0.001** | 39 (9%) | 38 (37%) | **<0.001** |
| *Long-term complications* |  |  |  |  |  |  |
| Recurrent pancreatitis | 124 (21%) | 72 (30%) | **<0.001** | 124 (21%) | 24 (22%) | 1.000 |
| Chronic pancreatitis | 42 (7%) | 42 (17%) | **<0.001** | 42 (7%) | 10 (9%) | 0.554 |
| Endocrine pancreatic insufficiency | 130 (23%) | 111 (46%) | **<0.001** | 130 (23%) | 55 (48%) | **<0.001** |
| Exocrine pancreatic insufficiency | 120 (21%) | 99 (41%) | **<0.001** | 120 (21%) | 52 (46%) | **<0.001** |
| Data are presented as n (%) or median (interquartile range).\*Binomial regression (binary data): patients (n=8) who died in the first week after admission were excluded for analysis. \*Patients excluded within one year after admission and therefore excluded in case potential outcome was not reached yet. $After the Bonferroni correction was applied, the p-value considered statistically significant was <0.0025. The statistically significant p-values are stated in bold.  Abbreviations: *N* number, *DPD* disrupted or disconnected pancreatic duct, *RR* Relative Risk, *CI* Confidence Interval, *ICU* intensive care unit, *SOF* single organ failure, *MOF* multiple organ failure, *PCD* percutaneous catheter drainage | | | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table S7. Univariate comparison of clinical outcome, interventions and long-term complications occurring more than 7 days after admission in patients with and without functional DPD and clinical** | | | | |
|  |  | **Functional DPD** | |  |
|  | **Overall**  **N = 243** | **No**  **N = 103** | **Yes**  **N = 140** | **p-value$** |
| Death pancreatitis related |  |  |  |  |
| Death after 7 days | 36 (15%) | 6 (6%) | 30 (21%) | **0.001** |
| ICU-admission |  |  |  |  |
| Ongoing | 99 (56%)a | 31 (40%)o | 68 (68%)v | **<0.001** |
| New onset | 101 (42%)b | 9 (29%)p | 21 (31%)w | 0.065 |
| Organ failure |  |  |  |  |
| Ongoing | 78 (49%)c | 19 (18%) | 59 (42%)x | **<0.001** |
| Ongoing MOF | 58 (79%)d | 16 (89%)q | 42 (76%)y | 0.009 |
| New onset | 95 (61%)e | 33 (32%)q | 62 (45%)z | 0.061 |
| New onset MOF | 68 (74%)f | 24 (73%)q | 44 (75%)aa | 0.148 |
| Infected necrosis | 197 (81%)g | 72 (70%) | 125 (90%) | **<0.001** |
| Gastrointestinal complications^ | 72 (30%)h | 23 (22%) | 49 (36%)bb | 0.033 |
| *Interventions* |  |  |  |  |
| Pancreatic intervention | 221 (91%) | 89 (86%) | 132 (94%) | 0.042 |
| Percutaneous catheter drainage | 178 (73%) | 62 (60%) | 116 (83%) | **<0.001** |
| Need for additional intervention | 194 (86%)i | 77 (87%)r | 117 (86%)cc | 1.000 |
| Follow-up intervention | 61 (72%) | 40 (45%) | 21 (15%) | **<0.001** |
| Ascites drainage | 51 (21%)j | 13 (13%) | 38 (28%)dd | 0.006 |
| *Readmission* |  |  |  |  |
| Readmission | 198 (81%) | 95 (92%) | 103 (74%) | **<0.001** |
| For re-intervention | 80 (40%) | 42 (44%) | 38 (37%) | 0.028 |
| *Long-term complications* |  |  |  |  |
| Recurrent pancreatitis | 72 (34%)k | 48 (48%)s | 24 (22%)ee | **<0.001** |
| Chronic pancreatitis | 42 (20%)l | 32 (32%)s | 10 (9%)ff | **<0.001** |
| Endocrine pancreatic insufficiency | 111 (51%)m | 56 (55%)t | 55 (48%)gg | 0.342 |
| Exocrine pancreatic insufficiency | 74 (34%)n | 36 (36%)u | 38 (36%)hh | 1.000 |
| Data are presented as n (%) or median (interquartile range).$After the Bonferroni correction was applied, the p-value considered statistically significant was <0.0025.  Missing patients: a=66, b=4, c=1, d=5, e=3, f=6, g=1, h=2, i=17, j=2, k=32, l=33, m=26, n=28, o=26, p=1, q=1, r=14, s=3, t=1, u=2, v=40, w=3, x=1, y=4, z=2, aa=5, bb=2, cc=3, dd=2, ee=29, ff=30, gg=25, hh=26  Abbreviations: *N* number, *DPD* disrupted or disconnected pancreatic duct, *ICU* intensive care unit, *MOF* multiple organ failure | | | | |