
Supplementary Table 1: Patient Characteristics of 335 benchmark-patients (Benchmark centers, n=16)

Patient specific parameters

Age (years), median (IQR)	57 (43-69)
Male gender, n (%)	127 (37)
BMI (kg/m ²), median (IQR)	24.7 (21.5-27.5)
ASA Class, n (%)	
I	52 (15)
II	293 (85)
Diabetes mellitus, n (%)	36 (10)
ASS, n (%)	7 (2)
Smoking status, n (%)	
Current smoker	35 (10)
Former smoker	50 (15)
No smoker	240 (70)
Neoadjuvant Chemotherapy, n (%)	6 (2)
Size of the lesion on preoperative imaging (mm)	30 (19 – 50)
CA 19-9, preoperative (U/ml), median (IQR)	19 (10 – 60)
Size of pancreatic duct on imaging	
< 3mm	144 (75)
3 – 10mm	46 (24)
> 10mm	3 (2)
Splenic preservation, n (%)	131 (38)
Bloodloss (ml), median (IQR)	100 (50-200)
Intraoperative placement of drain, n (%)	317 (92)
Duration of surgery (min), median (IQR)	239 (190 – 300)
Final pathological diagnosis, n (%)	
Pancreatic ductal adenocarcinoma, n (%)	62 (18)
Neuroendocrine neoplasm, n (%)	100 (29)
Benign cystic lesion, n (%)	148 (43)

Chronic pancreatitis, n (%)	16 (5)
Other malign, n (%)	11 (3)
Other benign, n (%)	8 (2)
T-Stage, n (%)	
pT1	64 (36)
pT2	56 (31)
pT3	59 (33)
pT4	1 (1)
TNM – N-Stage, n (%)	
N0	113 (63)
N1/2	52 (29)
NX	15 (8)
Lymph nodes retrieved, median (IQR)	15 (5.5-24)
Lymph nodes positive, median (IQR)	0 (0-1)
Grading, n (%)	
G1, low grade	46 (26)
G2, intermediate grade	69 (38)
G3, high grade	14 (8)
GX	51 (28)
Final surgical margin status, n (%)	
R0	160 (89)
R1	20 (11)
Lymphatic vessel invasion (L), n (%)	29 (16)
Perineural invasion (Pn), n (%)	36 (20)
Vascular invasion (V), n (%)	16 (9)
ICU stay (days), median (IQR)	0 (0-1)
Length of Stay (days), median (IQR)	7 (5-10)
CCI® at discharge, median (IQR)	0 (0-8.7)
CCI® at 3 months, median (IQR)	0 (0-10.5)
CCI® at 6 months, median (IQR)	0 (0-12.2)
Any complication, n (%)	158 (46)
More than 1 complication, n (%)	37 (11)

Major complications ($\geq 3^\circ$), n (%)	52 (13)
90d-Mortality	0 (0)
Conversion to open surgery, n (%)	10 (3)
Reoperation, n (%)	10 (3)
Pancreatic leak, n (%)	136 (42)
Biochemical leak, n (%)	71 (22)
Grade B, n (%)	63 (19)
Grade C, n (%)	2 (1)
ERCP and stent for fistula, n (%)	10 (3)
Percutaneous/image-guided drain placement, n (%)	19 (6)
Delayed gastric emptying, n (%)	12
Grade A, n (%)	6 (2)
Grade B, n (%)	6 (2)
Grade C, n (%)	0 (0)
Postoperative hemorrhage, n (%)	
Grade A, n (%)	1 (1)
Grade B, n (%)	4 (1)
Grade C, n (%)	5 (2)
Readmissions (3 months), n (%)	47 (14)

Oncologic outcome for patients with PDAC

Survival, (%)	
1 Year-Survival	88
2 Year-Survival	71
3 Year-Survival	58
5-Year-Survival	53
Disease-free Survival (DSF), (%)	
1-Year-DSF	77
2-Year-DSF	66
3-Year-DSF	63
5-Year-DSF	53
Recurrence Status, n (%)	
No Recurrence	317 (92)

Locoregional recurrence	8 (2)
Liver	11 (3)
Other recurrence or w/o known location	9 (3)
Follow-Up-Time (months), (median; IQR)	24 (12-58)

Supplementary Table 2: Center specific caseload.

Center	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pancreatic resections /year (n)	150	90	230	60	n.a.	250	50	110	230	700	60	250	40	150	400	140
Distal resections /year (n)	56	25	40	20	n.a.	75	12	30	50	160	25	45	10	40	150	30
Robotic distal resections /year (n)	12	14	20	15	n.a.	30	10	10	20	40	23	10	10	25	50	8
Surgeons performing robotic DP (n)	3	2	2	2	n.a.	2	2	2	2	7	2	1	1	3	5	2