

**Supplementary Table 2.** Baseline and perioperative variables between patients with and without postoperative non-steroidal anti-inflammatory drugs (NSAIDs) use before and after inverse probability of treatment weighting (IPTW) in the subgroup with intermediate to high risk of CR-POPF

Characteristics	Before weighting			After weighting		
	No NSAID group (n=1,569)	NSAID group (n=191)	SMD	No NSAID group (n=1,760)	NSAID group (n=1,546)	SMD
<b>Demographic data</b>						
Age, years	65 (58–71)	63 (57–70)	0.144	64 (58–71)	66 (58–71)	0.011
Female (vs. male)	626 (39.9)	77 (40.3)	0.008	704 (40.0)	637 (41.2)	0.025
BMI, kg/m <sup>2</sup>	23.3 (21.4–25.4)	23.7 (21.6–25.6)	0.057	23.3 (21.4–25.4)	23.5 (21.4–25.4)	<0.001
Current smoker	222 (14.1)	25 (13.1)	0.031	252 (14.3)	181 (11.7)	0.077
<b>Background medical status</b>						
ASA physical status I/II/III/IV	314 (20.0)/132 (72.1)/123 (7.8)/0	35 (18.3)/142 (74.3)/14 (7.3)/0	0.050	350 (19.9)/1273 (72.3)/137 (7.8)/0	279 (18.0)/1122 (72.6)/145 (9.4)	0.068
Pathology			0.057			0.132
Pancreatic cancer	508 (32.4)	59 (30.9)		570 (32.4)	456 (29.5)	
Distal CBD cancer	373 (23.8)	48 (25.1)		417 (23.7)	412 (26.7)	
AoV cancer	332 (21.2)	41 (21.5)		371 (21.1)	368 (23.8)	
Duodenal cancer	47 (3.0)	7 (3.7)		53 (3.0)	54 (3.5)	
Neuroendocrine tumor	132 (8.4)	15 (7.9)		150 (8.5)	110 (7.1)	
Benign diseases	84 (5.4)	10 (5.2)		94 (5.3)	76 (4.9)	
Others	93 (5.9)	11 (5.8)		106 (6.0)	70 (4.5)	
Preoperative albumin (g/dL)						
Preoperative bilirubin (mg/dL)						
Pancreatic adenocarcinoma or pancreatitis	336 (21.4)	45 (23.6)	0.051	381 (21.6)	337 (21.8)	0.004

(vs. all others)

Neoadjuvant radiation therapy	47 (3.0)	6 (3.1)	0.008	50 (2.9)	79 (5.1)	0.115
Neoadjuvant chemotherapy	110 (7.0)	7 (3.7)	0.149	117 (6.7)	88 (5.7)	0.041
Preoperative biliary drainage	190 (12.1)	26 (13.6)	0.045			

**Operation and anesthesia related**

PPPD (vs. Whipple’s operation)	1,194 (76.1)	145 (75.9)	0.004	1,343 (76.3)	1,171 (75.8)	0.014
Robot-assisted (vs. open)	166 (10.6)	26 (13.6)	0.093	193 (10.9)	165 (10.6)	0.010
Pancreatic stent			0.146			0.067
None	51 (3.3)	10 (5.2)		61 (3.5)	61 (4.0)	
External stent	63 (42.3)	89 (46.6)		752 (42.7)	703 (45.5)	
Internal stent	855 (54.5)	92 (48.2)		947 (53.8)	1,231 (79.7)	
Soft pancreas (vs. firm)	1,230 (78.4)	153 (80.1)	0.042	1,383 (78.6)	1,231 (79.7)	0.026
Pancreatic duct size, mm	3 (2–3)	2 (2–3)	0.073	2 (2–3)	2 (2–3)	0.025
Estimated blood loss, 100mL	400 (250–600)	400 (200–585)	0.049	400 (250–600)	400 (200–563)	0.032
Fistula risk score	5 ( 4–6)	6 ( 4–6)	0.078	5 (4 -6)	6 (4–6)	0.015
Operation time, min	310 (257–370)	315 (273–375)	0.091	312 (258–374)	315 (264–370)	0.008
Total intravenous anesthesia (vs. inhalation anesthesia)	259 (16.5)	29 (15.2)	0.036	286 (16.3)	254 (16.4)	0.004
Intraoperative vasopressor use	1,278 (81.5)	155 (81.2)	0.008	1,432 (81.4)	1,254 (81.1)	0.007
Crystalloid administration, mL	2,500 (1900–3250)	2,650 (2125–3375)	0.153	2,500 (1950–3250)	2,590 (2000–3300)	0.049
Colloid administration, mL	0 (0–500)	0 (0–500)	0.032	0 (0–500)	0 (0–500)	0.049
pRBC transfusion, n	251 (16.0)	25 (13.1)	0.083	281 (15.9)	193 (12.5)	0.100
Epidural patient controlled analgesia	19 (1.2)	5 (2.6)	0.103	21 (1.2)	34 (2.2)	0.077

The values are presented as the median (interquartile range) or number (%). BMI, Body mass index; AoV, Ampulla of Vater; ASA, American Society of Anesthesiologists; CBD, Common bile duct; PPPD, pylorus-preserving pancreaticoduodenectomy; pRBC, packed red blood cell; SMD, standardize mean difference.