

1 **Supplementary Material**
 2 **Supplementary table 1. Comparison of clinical characteristics of IPN and sterile**
 3 **necrotizing pancreatitis**

Variable	Sterile necrotizing pancreatitis (n=423)	IPN (n=117)	P value
Demographic data			
Age	45 (35–58)	47 (37–58)	0.763
Gender (M/F)	275/148	77/40	0.959
Etiology			
Biliary	157 (37.1)	39 (33.3)	0.584
Hyperlipidemic	174 (41.1)	48 (41.0)	
Alcoholic	52 (12.3)	14 (12.0)	
Severity and complications			
APACHE II scores	9 (5–12)	11 (8–15)	<0.001
Marshall scores	0 (0–1)	0 (0–2)	0.580
SOFA scores	2 (0–3)	2 (1–4)	<0.001
BISAP scores	1 (0–2)	2 (2–3)	<0.001
SIRS	224 (53.0)	69 (59.0)	0.293
Cardiovascular failure	36 (8.5)	40 (34.2)	<0.001
Renal failure	54 (12.8)	22 (18.8)	0.131
ARDS	44 (10.4)	43 (36.8)	<0.001
Length of ICU stay, day	0 (0–8)	14 (3–28)	<0.001
Length of hospital stay, day	14 (10–22)	35 (20–57)	<0.001
SAP	213 (50.4)	99 (84.6)	<0.001
Death	15 (3.5)	19 (16.2)	<0.001
Baseline vital sign and laboratory examinations			
Temperature, °C	37.0 (36.5–37.7)	37.4 (36.7–38.1)	<0.001
Heart rate, beats/min	101 (86–116)	117 (100–128)	<0.001

Respiratory rate, times/min	20 (20–26)	24 (20–30)	0.013
SBP, mmHg	128 (115–141)	124 (108–139)	0.079
WBC, $\times 10^9/L$	13.3 (9.7–17.3)	12.8 (10.0–17.0)	1.000
Blood platelet count, $\times 10^9/L$	201.0 (152.5–254.5)	188.0 (133.0–234.0)	0.033
hematocrit	41.6 (37.0–46.5)	42.8 (37.2–50.3)	0.029
Na, mmol/L	136.3 (133.3–139.5)	136.9 (132.1–140.0)	0.673
K, mmol/L	4.0 (3.7–4.4)	4.2 (3.7–5.0)	<0.001
Serum total calcium, mmol/L	2.04 (1.81–2.22)	1.75 (1.51–2.08)	<0.001
Serum creatinine, $\mu\text{mol/L}$	67.5 (53.0–96.6)	94.8 (66.0–215.9)	<0.001
BUN, mmol/L	5.40 (3.90–8.00)	8.40 (5.60–13.40)	<0.001
Serum glucose level, mmol/L	9.3 (7.2–13.0)	12.5 (8.6–18.7)	<0.001
GCS score below 15	25 (5.9)	20 (17.1)	<0.001
Positive peritoneal irritation signs	84 (19.9)	42 (35.9)	<0.001
Treatment			
Endoscopic or interventional drainage	27 (6.4)	82 (70.1)	<0.001
Surgery	2 (0.4)	14 (12.0)	<0.001

4 Values are median (25th percentile–75th percentile) for continuous variables and
5 number (%) for categorical variables.

6 AP, acute pancreatitis; ARDS, acute respiratory distress syndrome; BUN, blood urea
7 nitrogen; GCS, Glasgow coma score; IPN, Infected pancreatic necrosis; ICU, intensive
8 care unit; K, serum potassium ion concentration; Na, serum sodium ion concentration;
9 SAP, severe AP; SBP, systolic blood pressure; SIRS, systemic inflammatory response
10 syndrome; WBC, white blood cell count.

11 **Supplementary table 2. Clinical characteristics comparison between derivation set**
 12 **and validation set.**

Variable	Derivation set (n=2103)	Validation set (n=902)	P value
Demographic data			
Age	48 (36–62)	48 (36–61)	0.573
Gender (M/F)	1360/743	564/338	0.280
Etiology			
Biliary	885 (42.1)	361(40.0)	
Hyperlipidemic	739 (35.1)	323 (35.8)	0.687
Alcoholic	198 (9.4)	86 (9.5)	
Severity and complications			
BISAP scores	1 (0–2)	1 (0–2)	0.893
APACHE II scores	8 (5–11)	8 (5–12)	0.120
SOFA scores	2 (0–3)	2 (0–3)	0.373
Marshall scores	0 (0–1)	0 (0–1)	0.219
Length of ICU stay, day	0 (0–0)	0 (0–0)	0.001
Length of hospital stay, day	8 (5–14)	9 (6–15)	0.001
SAP	494 (23.5)	236 (26.2)	0.022
Death	42 (2.0)	12 (1.3)	0.267
SIRS	671 (31.9)	339 (37.6)	0.003
Cardiovascular failure	78 (3.7)	38 (4.2)	0.580
Renal failure	124 (5.9)	54 (6.0)	0.991
ARDS	112 (5.3)	61 (6.8)	0.143
APFC	585 (27.8)	255 (28.3)	0.834
ANC	355 (16.9)	185 (20.5)	0.020
IPN	113 (5.4)	63 (7.0)	0.101
Treatment			
Endoscopic or interventional	123 (5.9)	66 (7.3)	0.151

drainage

Surgery	68 (3.2)	25 (2.8)	0.579
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13 Values are median (25th percentile–75th percentile) for continuous variables and
14 number (%) for categorical variables.

15 ANC, acute necrotic collection; AP, acute pancreatitis; APFC, acute peripancreatic fluid
16 collection; ARDS, acute respiratory distress syndrome; BISAP: Beside Index for
17 Severity in Acute Pancreatitis; IPN, Infected pancreatic necrosis; ICU, intensive care
18 unit; SAP, severe AP; SIRS, systemic inflammatory response syndrome.