

Supplementary Table 1. Patient diagnoses in duodenum-preserving pancreatic head resection and pancreaticoduodenectomy groups, *n*.

Diagnoses	DPPHR	PD
SCN	8	12
MCN	0	4
IPMN	1	5
CP	17	18
SPTP	1	7
PPC	0	2
pNETs	0	8
Pancreatic trauma	1	1
Pancreas divisum	1	0

DPPHR: duodenum-preserving pancreatic head resection; PD: pancreaticoduodenectomy; SCN: serous cystic neoplasm; MCN: mucinous cystic neoplasm; IPMN: intraductal papillary mucinous neoplasm; CP: chronic pancreatitis; SPTP: solid- pseudopapillary tumor of pancreas; PPC: pancreatic pseudocysts; pNETs: pancreatic neuroendocrine tumors.

Supplementary Table 2. Postoperative follow-up (≥ 3 months after surgery) data in duodenum-preserving pancreatic head resection and pancreaticoduodenectomy groups.

Items	DPPHR ($n=29$)	PD ($n=57$)	Statistics	<i>P</i>
New-onset diabetes	5 (17.2)	4 (7.0)	1.192*	0.275
Pancreatic exocrine insufficiency	2 (6.9)	21 (36.8)	7.336*	0.007
Postoperative fatty liver	3 (10.3)	18 (31.6)	3.616*	0.057
Cumulative long-term complications	10 (34.5)	37 (64.9)	7.181*	0.007
Weight change (kg)	3.00 (-6.00–13.00)	0.00 (-4.00–8.00)	-3.112 [†]	0.002
Re-operation	1 (3.4)	7 (12.3)	0.885*	0.347
Re-admission	3 (10.3)	7 (12.3)	0.000*	1.000
NRS score ≥ 3				
≥ 3 months, <6 month after surgery	4 (13.8)	9 (15.8)	0.000*	1.000
≥ 6 months, ≤ 1 year after surgery	0 (0.0)	1 (1.8)	—	1.000 [‡]
> 1 year after surgery	0 (0.0)	1 (1.8)	—	1.000 [‡]

Data are shown as *n* (%), mean $\pm$ standard deviation or median (range). **t* value; [†]*Z* value;

[‡]Fisher's exact test. —: Not applicable. DPPHR: duodenum-preserving pancreatic head resection; PD: pancreaticoduodenectomy; NRS: nutrition risk screening.

Supplementary Table 3. Quality-of-life evaluation according to the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire C30 at 1 year after surgery.

Items	DPPHR	PD	χ^2 value	<i>P</i>
Physical functioning	96.55±8.66	95.79±6.62	0.454	0.651
Role functioning	98.85±6.19	100.00±0.00	1.000	0.326
Emotional functioning	86.21±10.51	84.21±10.53	0.832	0.408
Cognitive functioning	96.55±15.67	97.37±8.79	0.310	0.757
Social functioning	97.70±5.85	98.83±4.30	0.921	0.362
Overall health status	94.54±7.14	88.45±10.77	3.127	0.002

Data are shown as mean ± standard deviation. Scores range from 0 to 100. Higher score for functional scales or health status represents higher level of functioning or better health status.

DPPHR: duodenum-preserving pancreatic head resection; PD: pancreaticoduodenectomy.