

**Supplementary Table I. Univariable cox regression model of DFS and DSS for patients with SPNP in our cohort**

Prognostic factors	$\beta$	Hazard ratio (95%CI)	P value
<b>DFS (n=66)</b>			
Age ( $\geq 40$ y)	-0.234	0.79 (0.14-4.39)	0.788
Gender (male)	0.432	1.54 (0.18-13.23)	0.694
Location (Head/Neck)	-0.387	0.68 (0.12-3.71)	0.655
Tumor size ( $\geq 7$ cm)	2.517	12.39 (1.44-106.50)	<b>0.003</b>
*Ki67 ( $\geq 5\%$ )	2.292	9.90 (1.07-91.78)	<b>0.044</b>
*PR (negative)	3.176	23.95 (2.17-264.31)	<b>0.001</b>
<b>DSS (n=66)</b>			
Age ( $\geq 40$ y)	-0.883	0.41 (0.46-3.70)	0.430
Gender (male)	0.152	1.16 (0.13-10.42)	0.892
Location (Head/Neck)	-0.045	0.96 (0.16-5.73)	0.961
Tumor size ( $\geq 7$ cm)	2.440	11.47 (1.28-102.95)	<b>0.006</b>
*Ki67 ( $\geq 5\%$ )	-3.039	0.06 (0.01-198.30)	0.748
*PR (negative)	3.847	46.85 (2.93-750.91)	<0.001

\* Number of SPN patients with Ki67 and PR results are 61 and 59 respectively

# Factors such as presence of symptom, tumor markers and other immunohistochemical parameters did not show significantly correlation with DFS and DSS (Data not shown)

**Supplementary Table II. Demographic and clinicopathological characteristics of 214 patients with SPNP in literature review**

Characteristics	Parameters	
<b>Age (<math>\Sigma=214</math>)</b>	Mean (y, $\pm$ SD)	24.84 $\pm$ 15.04
	Median (y, range)	18 (7-79)
<b>Gender (<math>\Sigma=214</math>)</b>	Male (%)	17 (7.9%)
	Female (%)	197 (92.1%)
<b>Race (<math>\Sigma=214</math>)</b>	Caucasoid (%)	136 (63.6%)
	Mongoloid (%)	74 (34.6%)
	Black (%)	4 (1.9%)
<b>Location (<math>\Sigma=208</math>)</b>	Head/Neck (%)	95 (45.7%)
	Body/Tail (%)	113 (54.3%)
<b>Tumor size (<math>\Sigma=190</math>)</b>	Mean (cm, $\pm$ SD)	6.62 $\pm$ 3.49
	Median (cm, range)	6 (1-18)
<b>Symptom (<math>\Sigma=144</math>)</b>	Abdominal pain (%)	66 (45.8%)
	Asymptomatic (%)	32 (22.2%)
	Mass (%)	27 (18.8%)
	Other (%)	19 (13.2%)
<b>Immunohistochemistry</b>	Vim (Positive, %)	35 (100.0%)
$\Sigma 35$	PR (Positive, %)	17 (70.8%)
$\Sigma 24$	Syn (Positive, %)	12 (27.9%)
$\Sigma 43$	CD10 (Positive, %)	13 (86.7%)
$\Sigma 15$	Ki67 (Low proliferation activity, %)	5 (45.5%)
$\Sigma 11$	$\beta$ -catenin (Positive, %)	9 (100.0%)
$\Sigma 9$	CgA (Negative, %)	32 (82.1%)
$\Sigma 39$		
<b>Operation Method (<math>\Sigma=204</math>)</b>	Pancreaticoduodenectomy (%)	61 (29.9%)
	Duodenum preserving pancreatic head resection (%)	10 (4.9%)
	Total pancreatectomy (%)	4 (2.0%)
	Enucleation (%)	17 (8.3%)
	Central pancreatectomy (%)	19 (9.3%)
	Distal pancreatectomy (%)	50 (24.5%)
	Distal pancreatectomy with splenectomy (%)	43 (21.1%)
<b>Follow-up (<math>\Sigma=214</math>)</b>	Mean (mo, $\pm$ SD)	51.92 $\pm$ 48.87
	Median (mo, range)	36 (1-205)

<b>Recurrence/metastasis</b> ( $\Sigma=214$ )	17 (7.9%)
<b>Disease related mortality</b> ( $\Sigma=214$ )	5 (2.3%)