

SUPPLEMENTARY MATERIALS

Prediction Of Early Distant Recurrence In Upfront Resectable Pancreatic Adenocarcinoma: A Multidisciplinary, Machine Learning-Based Approach

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Table S1. Pathological variables selected for collection.

Tumor size	absolute value (mm)	PATHOLOGICAL DATA
Final R status	0 - R0; 1 - R1; 2 - R2	
Lamina (PV/SMA margin)	0 - Negative; 1 - Positive	
Lymphovascular Invasion	0 - No; 1 - Yes	
Perineural Invasion	0 - No; 1 - Yes	
Peripancreatic Fat Invasion	0 - No; 1 - Yes	
Grading	1 - well; 2 - mod; 3 - scarcely; 4 - anaplastic	
T	AJCC 8 ed*	
N	AJCC 8 ed*	
LN Harvested	absolute value	
LN Positive	absolute value	
LNR	absolute value	

LNR, lymphnode ratio; LN, lymphnode, PV, portal vein, SMA, superior mesenteric artery
*Chun, Y.S., Pawlik, T.M. & Vauthey, J.N. 8th Edition of the AJCC Cancer Staging Manual: Pancreas and Hepatobiliary Cancers. Ann Surg Oncol 25, 845–847 (2018).

Table S2. Clinical variables selected for collection.

Ca 19.9	U/mL	CLINICAL VARIABLES
Age at diagnosis	years	
Sex	0 - Male; 1 - Female	
Adjuvant treatment	Adjuvant chemoterapy (0 - No; 1 - Yes)	
	Type of treatment	
	Adjuvant radioterapy (0 - No; 1 - Yes)	

Table S3. Radiological variables selected for collection.

Tumor Density (HU)	Basal HU (absolute value)	RADIOLOGICAL VARIABLES
	Arterial HU (absolute value)	
	Venous HU (absolute value)	
	Arterial/basal HU ratio (absolute value)	
	Venous/basal HU ratio (absolute value)	
	Location (Head vs. uncinate process)	
General		

Vascular invasion*	Size (absolute value, mm)
	Necrosis (0 - No; 1 - Yes)
	Peripheral enhancement (0 - No; 1 - Yes)
	Capsulated (0 - No; 1 - Yes)
	Hypodense on arterial phase (0 - No; 1 - Yes)
	Isodense on arterial phase (0 - No; 1 - Yes)
	Hyperdense on arterial phase (0 - No; 1 - Yes)
	Hypodense on venous phase (0 - No; 1 - Yes)
	Isodense on venous phase (0 - No; 1 - Yes)
	Hyperdense on venous phase (0 - No; 1 - Yes)
	Lymphadenopathies (0 - No; 1 - Yes)
	Fat stranding (0 - No; 1 - Yes)
	SMA contact (0 - No; 1 - Yes)
	Celiac Axis Contact (0 - <180 °; 1 - >180 °)
	CHA Contact (0 - <180 °; 1 - >180 °)
	Extension to the celiac axis (0 - <180 °; 1 - >180 °)
	Extension to the bifurcation of right/left hepatic artery (0 - No; 1 - Yes)
	Arterial Variant (0 - No; 1 - Yes)
	MPV Contact (0 - <180 °; 1 - >180 °)
	SMV Contact (0 - <180 °; 1 - >180 °)
Extrapancreatic extension	Extension to the most proximal veins draining into the SMV (0 - No; 1 - Yes)
	Thrombus within vein (0 - No; 1 - Yes)
	Venous collaterals (0 - No; 1 - Yes)
	Duodenal invasion (0 - No; 1 - Yes)
	Biliary invasion (0 - No; 1 - Yes)
	Retroperitoneal lamina invasion (0 - No; 1 - Yes)
	Portal invasion (0 - No; 1 - Yes)
Perineural invasion	Arterial invasion (0 - No; 1 - Yes)
	Invasion of nearby parenchymal organs (0 - No; 1 - Yes)
	1st plexus capitalis (0 - No; 1 - Yes)
	2nd plexus capitalis (0 - No; 1 - Yes)
	Anterior pathway (0 - No; 1 - Yes)
	Root of mesentery pathway (0 - No; 1 - Yes)
	Number of plexi involved

PV, portal vein; *SMA*, superior mesenteric artery; *CHA*, common hepatic artery; *MPV*, mesenteric portal vein; *SMV*, superior mesenteric vein; *CA*, celiac axis
 **NCCN*.
NCCN Clinical Practice Guidelines in Oncology. Pancreatic Adenocarcinoma. NCCN Guidelines. (2019).

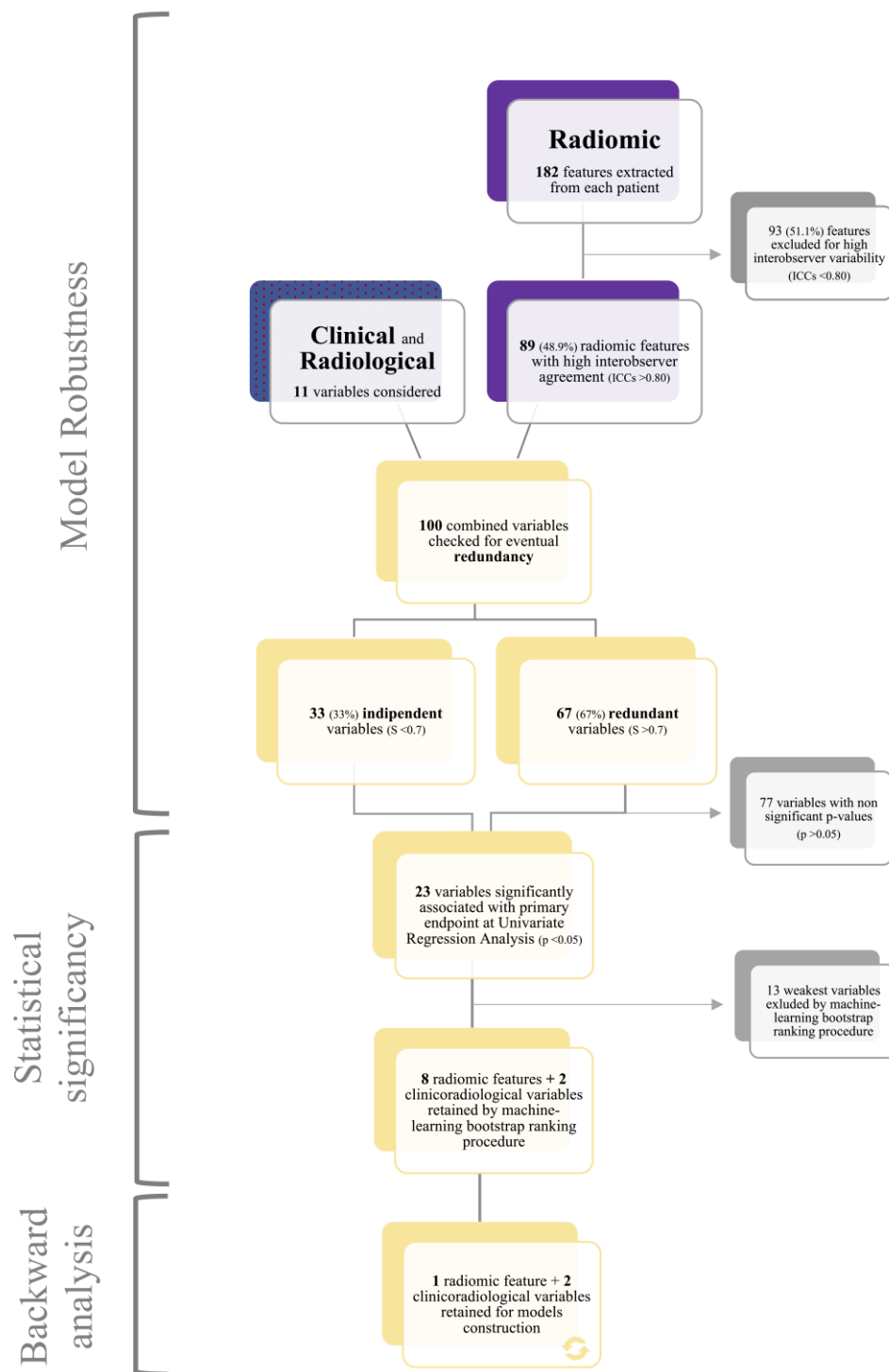


Figure S1. Variables selection workflow.