

Supplementary Materials: Predictive Modeling for Voxel-based Quantification of Imaging-based Subtypes of Pancreatic Ductal Adenocarcinoma (PDAC): A Multi-Institutional study

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$$\begin{aligned} \text{linear combination of response level (lin)} &= 2.45 + [-0.85 \times \text{PV-NPP}] + [-0.41 \times \text{AR-NPP}] \\ \text{probability of high q-delta} &= 1 / (1 + \text{Exp}(-\text{lin})) \\ \text{probability of low q-delta} &= 1 / (1 + \text{Exp}(\text{lin})) \end{aligned}$$

Figure 1. The probability equation used to classify the response level into high versus low q-delta. Abbreviations: AR NPP: enhancement at arterial phase normalized to normal pancreas parenchyma; PV NPP: enhancement at portovenous phase normalized to normal pancreas parenchyma.

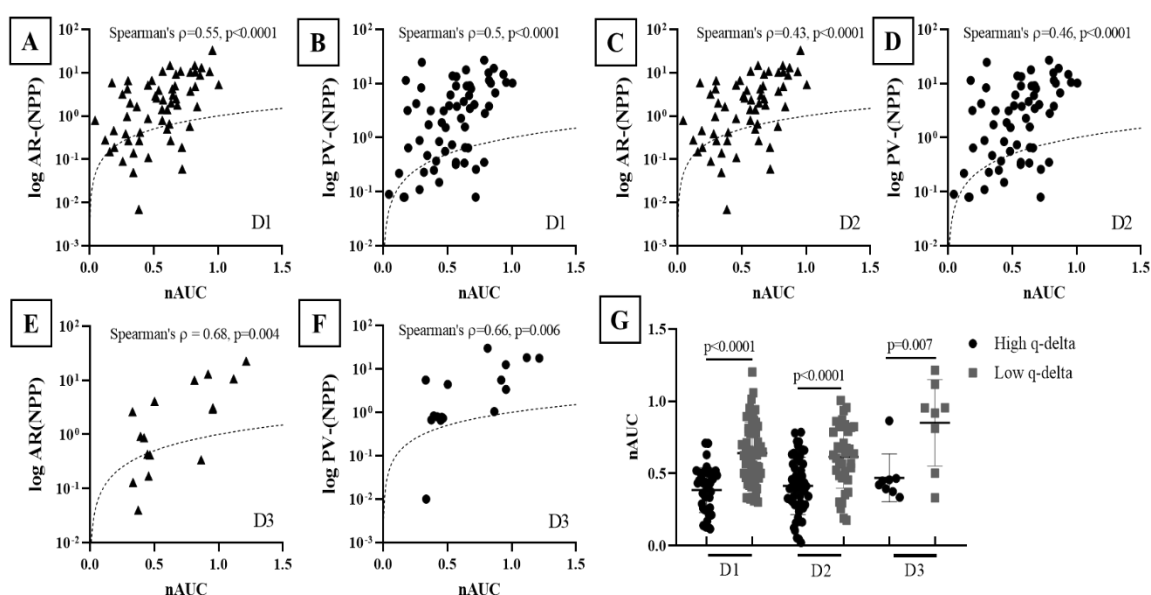


Figure 2. The association between nAUC and tumor enhancement in D1: training set (A,B), D2: internal validation set (C,D) and D3: external validation set (E-F). The association between nAUC and q-delta in the three studied cohorts (G). Abbreviations: (AR)-NPP: enhancement at arterial phase normalized to normal pancreas parenchyma; nAUC: normalized area under the curve; (PV)-NPP: enhancement at portovenous phase normalized to normal pancreas parenchyma.

Table S1. Intra- and inter-rater agreement of DSC and ICC in 30 patients.

Variable			Average	Lower 95%CI	Upper 95%CI	Agreement Interpretation
Dice similarity coefficient (DSC)	Intra-observer	All	0.9	0.88	0.92	Good
		High q-delta	0.93	0.9	0.96	Good
		Low q-delta	0.87	0.85	0.89	Good
	Inter-observer	All	0.86	0.82	0.89	Good
		High q-delta	0.89	0.82	0.95	Good
		Low q-delta	0.83	0.80	0.86	Good
Intraclass Correlation Coefficient (ICC)	Intrarater (AR-NPP)		0.95	0.92	0.97	Excellent
	Interrater (AR-NPP)		0.84	0.71	0.91	Good
	Intrarater (PV-NPP)		0.93	0.87	0.96	Excellent
	Interrater (PV-NPP)		0.90	0.82	0.95	Excellent

AR: Arterial phase ; PV: Portovenous phase; NPP: Normal pancreatic parenchyma.



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