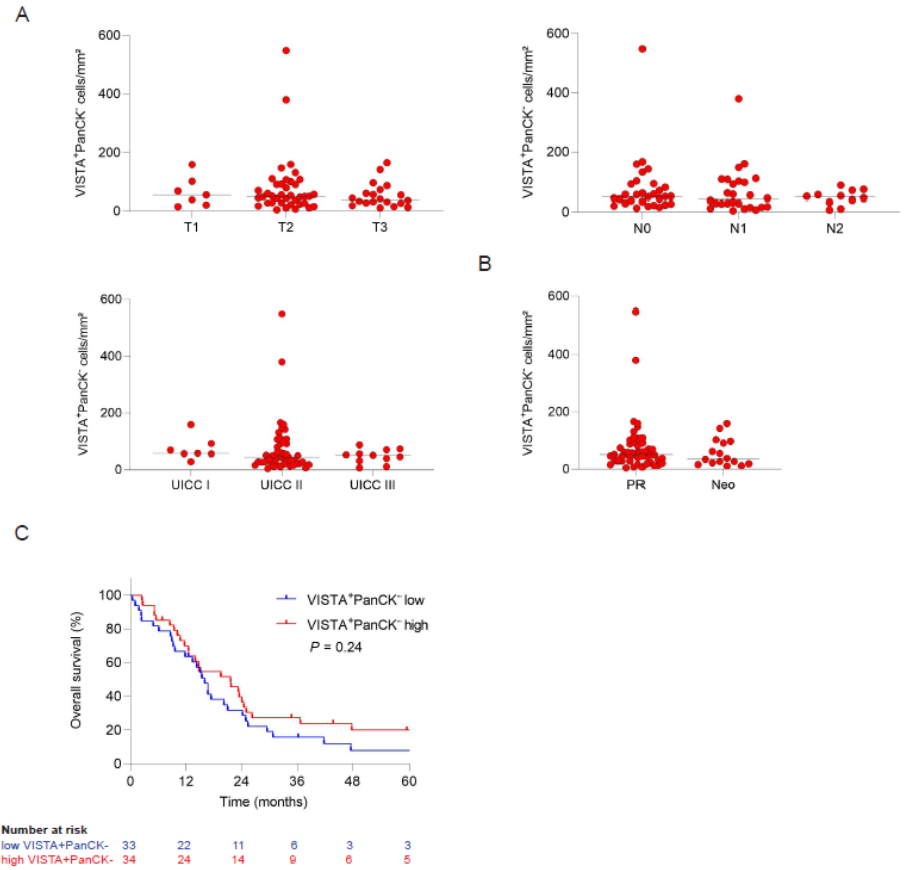
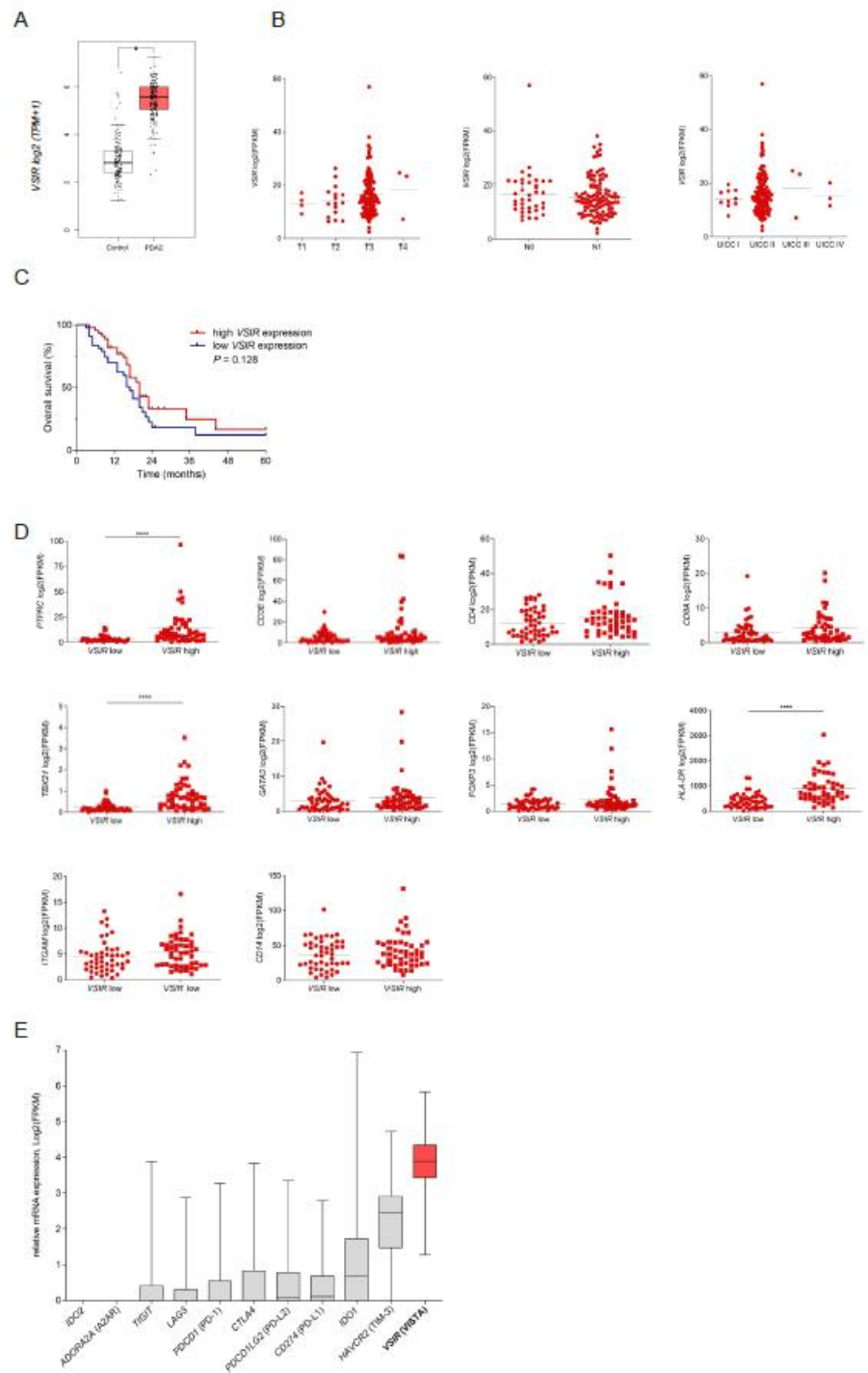


**Figure S1. Impact of VISTA expression on clinicopathologic feature.** **A** VISTA expression on PanCK<sup>+</sup> was not associated with tumor size, lymph node metastasis, or UICC stage (n = 67; Kruskal-Wallis test with Dunn's statistics). **B** Neoadjuvant therapy did not influence VISTA expression (n = 67; Mann-Whitney test). **C** Survival analysis of PDAC patients according to their VISTA<sup>+</sup> PanCK<sup>+</sup> expression (median) shown as Kaplan Meier curves (n = 67; overall survival:  $P = 0.24$ ; Log-rank test).



**Figure S2. VSIR expression plays an important role in human pancreatic ductal adenocarcinoma.** **A** PDAC patients (n = 179) showed a higher VSIR expression compared to normal pancreatic tissue (n = 171;  $P < 0.001$ ; one-way ANOVA). **B** VSIR expression was not associated with tumor size, lymph node metastasis, or UICC stage (n = 145; Kruskal-Wallis test with Dunn's statistics or Mann-Whitney test). **C** Kaplan Meier plots of the correlation between VSIR mRNA expression (1<sup>st</sup> and 3<sup>rd</sup> tercile) and patient survival (n = 91; overall survival:  $P = 0.128$ ; Log-rank test). **D** Association between high and low terciles of VSIR mRNA expression and leukocyte marker *PTPRC* (CD45;  $P < 0.001$ ), T cell markers *CD3E* ( $P = 0.086$ ), *CD4* ( $P = 0.102$ ), *CD8A* ( $P = 0.099$ ), *FOXP3* ( $P = 0.199$ ), *GATA3* ( $P = 0.184$ ), *TBX21* ( $P < 0.001$ ), marker of APCs *HLA-DRA* ( $P < 0.001$ ) and macrophages/monocytes *ITGAM/CD14* ( $P = 0.073$ ;  $P = 0.577$ ; Mann-Whitney test; n = 96). **E** Boxplot of mRNA expression of immune checkpoints *IDO2*, *ADORA2A*, *TIGIT*, *LAG3*, *PDCD1* (PD-1), *CTLA4*, *PDCD1LG2* (PD-L2), *CD274* (PD-L1), *IDO1*, *HAVCR2* (TIM-3) and VSIR (VISTA) in PDAC (n = 144).



**Supplementary Table S1.**  
List of antibodies used for flow cytometry

Name	Reference
CD11b anti-human AF-700	Biolegend, # 101222
CD14 anti-human V500	BD Biosciences, # 561391
CD19 anti-human PE-Cy7	BD Biosciences, # 557835
CD3 anti-human APC-H7	BD Biosciences, # 560176
CD3 anti-human PE-Cy7	BD Biosciences, # 557851
CD4 anti-human PB	BD Biosciences, # 558116

CD45 anti-human APC	BD Biosciences, # 555485
CD45 anti-human BV605	BD Biosciences, # 564047
CD56 anti-human PE-Cy7	BD Biosciences, # 557747
CD8 anti-human V500	BD Biosciences, # 561618
Hamster IgG	Biolegend, # 400922
IFN $\gamma$ anti-human BV711	BD Biosciences, # 564793
Mouse IgG1, $\kappa$ BV711	BD Biosciences, # 563044
Mouse IgG1, $\kappa$ FITC	Biolegend, # 400110
Mouse IgG2B PE	R&D Systems, # 133303
TCR $\gamma\delta$ anti-human PE-Cy7	Biolegend, # 331221
TNF $\alpha$ anti-human FITC	BD Biosciences, # 554512
VISTA anti-human PE	R&D Systems, # 730804

### Supplementary Table S2.

Clinicopathologic characteristics of mIF PDAC cohort

	VISTA low		VISTA high		P-value
	years		years		
<b>Mean age</b>	67		66		0.82 <sup>a</sup>
<b>Age range</b>	47 - 77		36 - 79		
	n (%)		n (%)		P-value
<b>Gender</b>					
Female	21	(61.76)	15	(42.86)	0.116 <sup>b</sup>
Male	13	(38.24)	20	(57.14)	
<b>pT Stage</b>					
1	6	(17.65)	1	(2.86)	0.062 <sup>b</sup>
2	15	(44.12)	24	(68.57)	
3	11	(32.35)	10	(28.57)	
4	0	(0.00)	0	(0.00)	
Unknown	2	(5.88)	0	(0.00)	
<b>pN Stage</b>					
0	16	(47.06)	16	(45.71)	0.492 <sup>b</sup>
1	11	(32.35)	15	(42.86)	
2	7	(20.59)	4	(11.43)	
<b>pM Stage</b>					
0	34	(100.00)	34	(97.14)	0.321 <sup>b</sup>
1	0	(0.00)	1	(2.86)	
<b>UICC Stage</b>					
I	3	(8.82)	4	(11.43)	0.567 <sup>b</sup>
II	24	(70.59)	26	(74.28)	
III	7	(20.59)	4	(11.43)	
IV	0	(0.00)	1	(2.86)	
<b>Neoadjuvant Treatment</b>					

Yes	9	(26.47)	8	(22.86)	0.728 <sup>b</sup>
No	25	(73.53)	27	(77.14)	

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<sup>a</sup> t-test

<sup>b</sup> Chi-squared test