Supplementary Material

A Preliminary Report:

Radical Surgery and Stem Cell Transplantation for the treatment of patients with pancreatic cancer

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Supplementary Tables and Figures

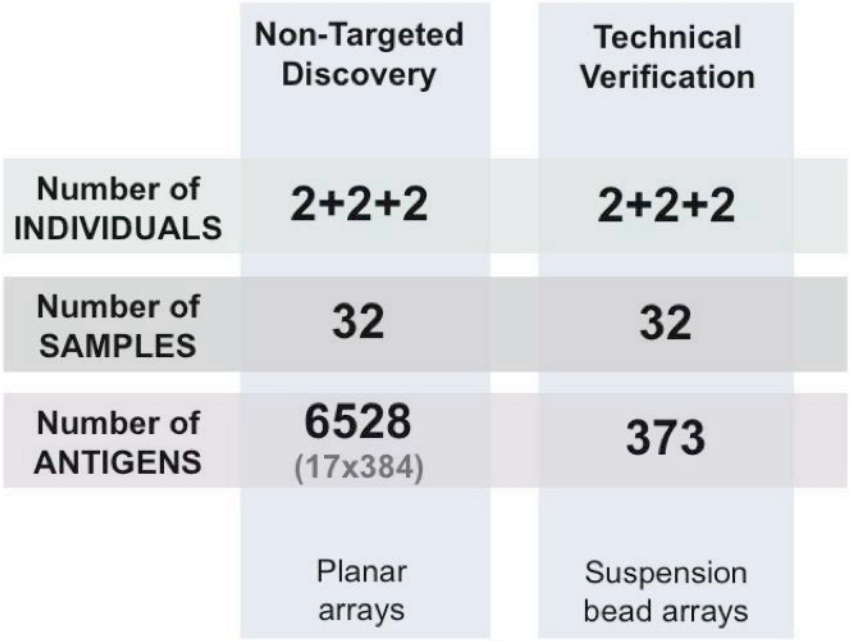
Supplementary Table S1 - Primary antibodies: identifiers, dilutions and positive controls.

Gene	Antibody*	Antigen sequence	Dilution	Positive control
AGPAT4	HPA053287	VTEIDKGSAYGNSDSKQKLND	1:1200	internal
UCHL-3	HPA057054	EESVSMSPEERARYLENYDAIRVTHETSAHEGQTE APSIDEKVDLHFIALVHVDGHL	1:1000	colon
CLIP1	HPA055292	EELQLKLTKANENASFLQKSIEDMTVKAEQSQQEA AKKHEEEKKELERKLSDLEKKMETSHNQCQELKAR YERATSETKTKHEEILQNLQKTLLD	1:400	placenta
MED9	HPA056415	MASAGVAAGRQAEDVLPPTSDQPLPDTKPLPPP	1:1200	colon
INO-80E	HPA043146	LPRKLKMAVGPPDCPVGGPLTFPGRGSGAGVGT TLTPLPPPKMPPPTILSTVPRQMFSDAGSGDDAL DGDDD	1:1200	internal

*All antibodies were produced by the Human Protein Atlas project

Supplementary Table S2 - Overview of sampling times for PDAC patients and non-PAC controls with and without GvHD.

Patient ID	Sample before HSCT	Samples after HSCT					
Pancreatic Cancer		**1 month**	**4-6 months**	**1 year**	**2 years**	**3 years**	**5 years**
1215	**S1-1:** 20070326	**S1-2:** 20070423	**S1-3:** 20070806	**S1-4:** 20080318	**S1-5:** 20090313	**S1-6:** 20100225	**S1-7:** 20120419
1221	**S2-1:** 20070423	**S2-2:** 20070521	**S2-3:** 20071016	**S2-4:** 20080418	**S2-5:** 20090409	**S2-6:** 20100429	**S2-7:** 20120417
Chronic GVHD							
1284	**S3-1:** 20080519	**S3-2:** 20080602	**S3-3:** 20081103	**S3-4:** 20090520	**S3-5:** 20100426	-	-
1289	**S4-1:** 20080604	**S4-2:** 20080630	-	**S4-3:** 20090601	-	**S4-4:** 20110523	-
No GVHD							
1280	**S5-1:** 20080428	**S5-2:** 20080512	-	**S5-3:** 20090505	**S5-4:** 20100511	**S5-5:** 20110707	-
1315	**S6-1:** 20081103	**S6-2:** 20081117	**S6-3:** 20090205	**S6-4:** 20091130	-	-	-

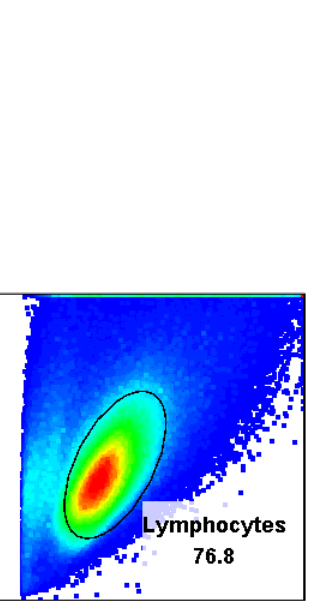


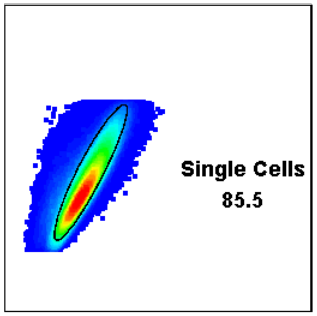
Supplementary Figure S1 - Overview of study: Number of individuals, samples and antigens employed in the discovery and verification stages are shown for the two complementary antigen array platforms.

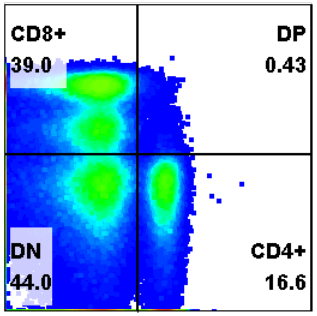
Supplementary Figure S2A

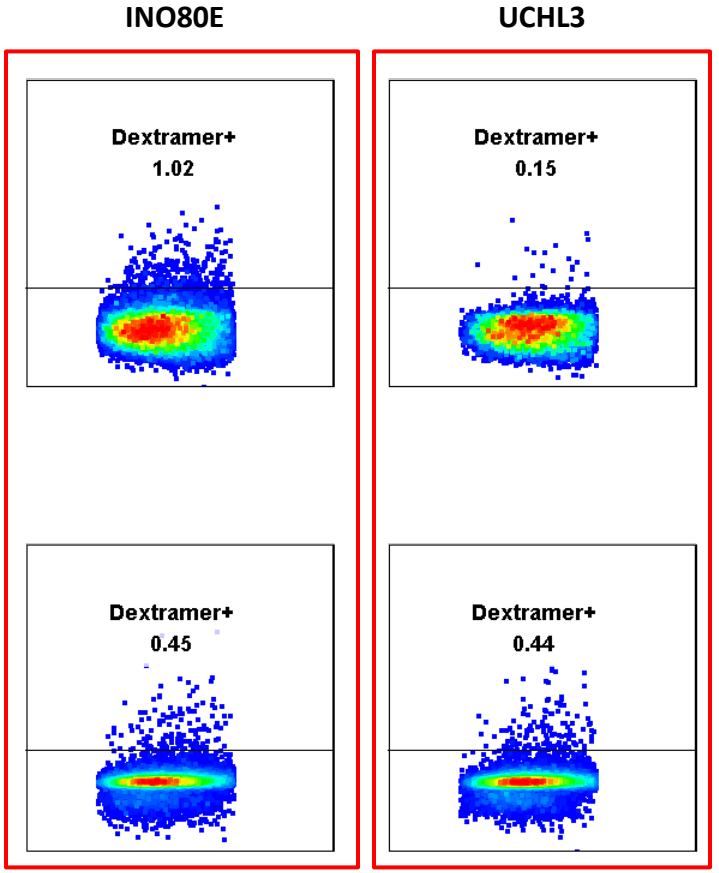
PBMCs from patients after HSCT

HSCT Patient	1		2		3	
HLA-A1 Dextramer	INO80E	UCHL3	INO80E	UCHL3	INO80E	UCHL3
CD3+CD4-CD8+	39.0	32.1	40.0	27.4	36.3	34.2
Dextramer+	0.3	0.1	1.0	0.2	1.1	0.1
CD3+CD4-CD8-	44.0	58.7	42.4	62.7	7.5	10.3
Dextramer+	0.1	0.1	0.5	0.4	0.2	0.1





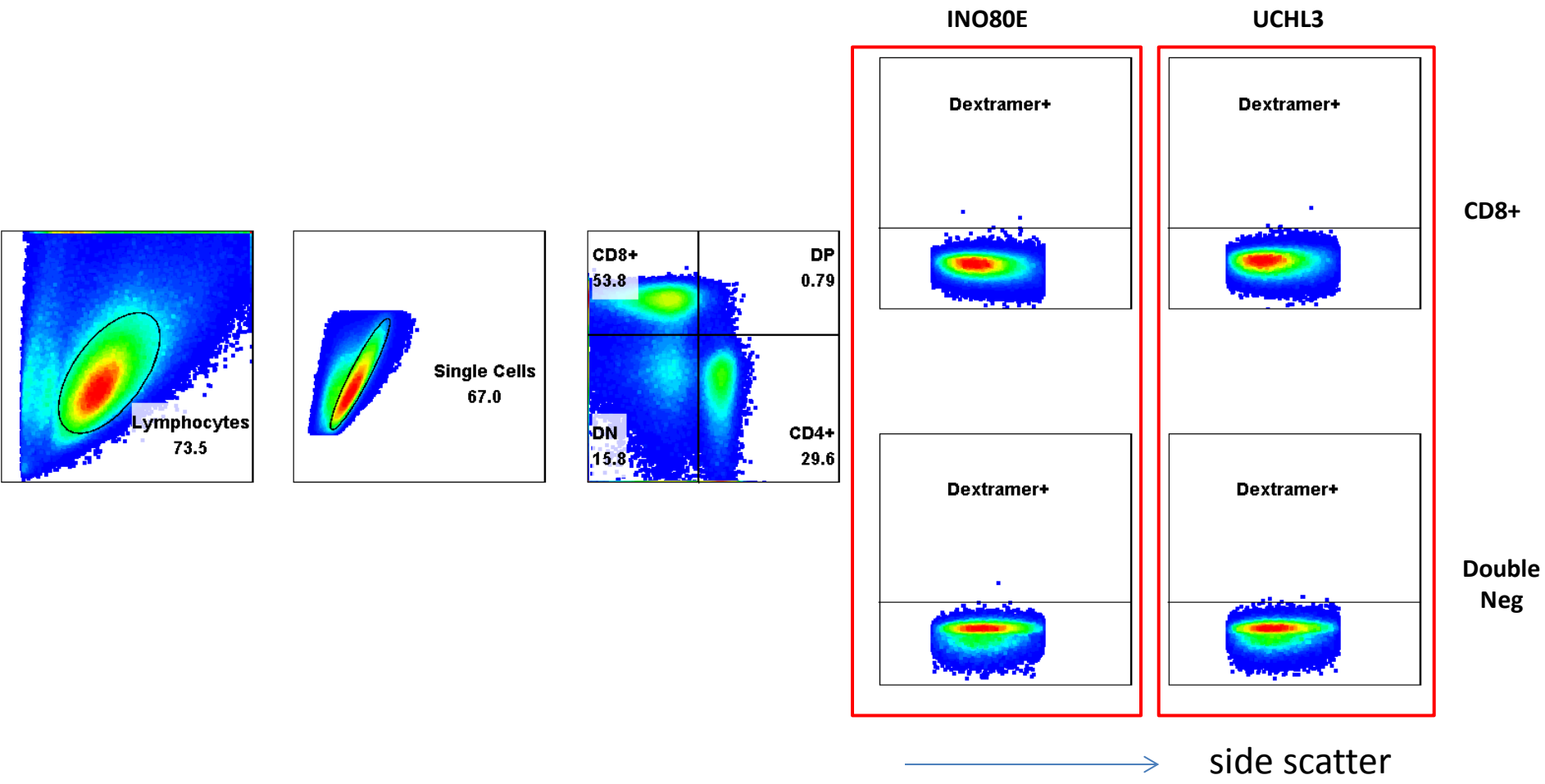




Supplementary Figure S2B

PBMCs from patients with pancreatic cancer

Pancreatic Cancer Patient	1		2		3		4		5	
HLA-A1 Dextramer	INO80E	UCHL3	INO80E	UCHL3	INO80E	UCHL3	INO80E	UCHL3	INO80E	UCHL3
CD3+CD4-CD8+	35.5	41.9	35.6	39.5	28.0	27.7	34.5	34.0	53.8	48.5
Dextramer+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CD3+CD4-CD8-	55.9	50.7	13.6	12.5	62.8	61.0	60.4	61.7	15.8	28.8
Dextramer+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



PBMCs were harvested from patients (treated for hematological malignancies) after HSCT (figure S2A, n= 3 patients) who underwent the identical conditioning regimen as the 2 individuals who underwent HSCT after the whipple procedure reported in the current manuscript, or (figure S2B) from individuals diagnosed with pancreatic cancer who did not receive HSCT. These control groups (either HSCT, yet no pancreatic cancer, or patients with pancreatic cancer, yet no HSCT), were MHC typed. HLA-A*0101 + individuals were selected for analysis of PBMCs using the HLA-A1 – peptide complexes, .e. LSSLASSRY from INO-80E and GQDVTSSVY from UCHL-3. Blood was obtained from HSCT patients (no pancreatic cancer) 6 month after transplantation (a time point associated with high INO-80E or UCHL-3 frequency in blood from patients with pancreatic cancer after HSCT, see figure 3) and from patients with pancreatic cancer (6 month after the whipple procecure, yet no HSCT). Top panel: table summarizing the frequency of INO-80E or UCHL-3 – specific T-cells in blood from patients with HSCT, i.e. up to 1% in individual patients. Lower panel: representative flow cytometry analysis. In contrast, PBMCs from five (HLA-A1+) patients after whipple surgery did not exhibit INO-80E or UCHL-3 reactivity (S2B, see table, top panel, a representative example for the flow cytometric analysis is provided in the bottom panel. Frequency of tetramer – positive events is reported in CD3+CD8+ T-cells (top panel) and in the CD3+ CD8-CD4- (double negative, DN) T-cells.