

**Supplementary Table 1.** Cohort of NSCLC patients from Clinica Universidad de Navarra (n=116) used to study the expression of YES1, PDL1, FOXP3, CD4, CD8, CD31 and F4/80 without neo- or adjuvant chemo- or radiotherapy. Three patients were not evaluated due to technical issues.

**Clinica Universidad de Navarra Cohort (n=116)**

<b>Age (years)</b>	<b>n (%)</b>
≤65	61 (53)
<65	55 (47)
<b>Gender</b>	
Female	22 (19)
Male	94 (81)
<b>Stage</b>	
I	107 (92)
II	6 (5)
III	3 (3)
<b>Histology</b>	
Adenocarcinoma	55 (47)
Squamous cell carcinoma	49 (42)
Other	12 (11)
<b>Smoking status</b>	
Non-smoker	10 (9)
Former smoker	79 (68)
Current smoker	27 (23)

**Supplementary Table 2.** Antibodies and conditions used for multispectral immunophenotyping in mouse 393P tumors and NSCLC patients.

<b>Antibody (Ref)</b>	<b>Dilution</b>	<b>Antigen retrieval</b>	<b>Opal /Dilution</b>
Foxp3 (CST, 12653)	1:600	Citrate buffer, pH6	540 / 1:500
CK (CST, 4279)	1:100	TrisEDTA buffer, pH9	690 / 1:100
CD31 (CST, 77699)	1:400	Citrate buffer, pH6	570 / 1:600
CD4 (CST, 25229)	1:400	Citrate buffer, pH6	520 / 1:300
CD8 (CST, 98941)	1:500	Citrate buffer, pH6	620 / 1:100
F4/80 (CST, 70076)	1:400	Citrate buffer, pH6	650/1:600
CD8 (Thermo, C8/14bb)	1:400	PerkinElmer reagent, pH6	570
CD4(Dako, 4B12)	Ready to use	Dako reagent, pH9	650
FOXP3 (PE, OP7TL1001KT)	1:300	PerkinElmer reagent, pH6	620

**Supplementary Table 3.** Sequences of the primers employed for RT-qPCR analysis.

<b>Gene</b>	<b>Forward sequence (5'→3')</b>	<b>Reverse sequence (5'→3')</b>
GAPDH	ACTTTGTCAAGCTCATTTC	TGCAGCGAACTTTATTGATG
YES1	GTAAGCCCAAGTGCCAGTCATT	GGAAGAGGTCGGGGCAACT
SRC	AGGCTTCAACTCCTCGGAC	CTCATAGTCATAGAGGGCCACA
FYN	GGGTGTGAACTCCTCCTCTC	TCCGTCCGTGCTTCATAGT
LYN	TGTGAGAGATCCAACGTCCA	TGTTTTGAAATCTCTGTCCTGGT
IL10	GGACAACATACTGCTAACCG	AATCACTCTTCACCTGCTCC

**Supplementary Table 4.** Antibodies and conditions used for Western blot analysis.

<b>Antibody (anti-) (Ref)</b>	<b>Dilution</b>	<b>Manufacturer</b>
YES1 (PA5-72233)	1:2000	ThermoFisher
pSFKs/pLCK (D49G4)	1:1000	Cell Signaling
β actin	1:10000	Sigma
pSTAT3 (Y705) (#9131)	1:1000	Cell Signaling
STAT3 (#9139)	1:1000	Cell Signaling
pMAPK (#9101)	1:1000	Cell Signaling
MAPK (#9102)	1:1000	Cell Signaling
pAKT (#4060)	1:1000	Cell Signaling
AKT (#9272)	1:1000	Cell Signaling
pSMAD3 (#8769)	1:1000	Cell Signaling
SMAD3 (#5678)	1:1000	Cell Signaling
LCK (#2752)	1:1000	Cell Signaling
pSTAT5 (#4322)	1:1000	Cell Signaling
STAT5 (#9420)	1:1000	Cell Signaling

**Supplementary Table 5.** Antibodies and conditions used for the immunophenotyping of 393P tumors by flow cytometry.

<b>Antibody (anti-)</b>	<b>Dilution</b>	<b>Clone</b>	<b>Manufacturer</b>
CD45	1:1000	30-F11	BioLegend
CD8a	1:400	53-6.7	BioLegend
CD4	1:800	RM4-5	BioLegend
CD19c	1:400	6D5	BioLegend
NK1.1	1:20	PK136	BioLegend

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CD25	1:100	PC61	BioLegend
F4/80	1:200	BM8	BioLegend
CD11b	1:400	M1/70	BioLegend
Ly6C	1:400	HK1.4	BioLegend
Ly6G	1:400	1A8	BioLegend
LAG3	1:200	C9B7W	BioLegend
PD-1	1:160	29F.1A12	BioLegend
GITR	1:200	DTA-1	BioLegend
PDL1	1:80	10F.9G2	BioLegend
FOXP3	1:160	3G3	Abcam

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