

## Combined modality radiation therapy promotes tolerogenic myeloid cell populations and STAT3-related gene expression in head and neck cancer patients

### SUPPLEMENTARY MATERIALS

**Supplementary Table 1: Protocol schema**

Pre-treatment	Radiation with concurrent chemotherapy or cetuximab							Follow-up period	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 13	Week 19
B, N	B	B, N		B		B	B	B	B

Abbreviations: B, blood collection; N, lymph node biopsy.

Supplementary Table 2: Differential expression: week 2/baseline (Cytokine probe set)

Probe label	Log2 fold change	P-value
NOD2	1.31	0.000655
SPP1	4.07	0.00123
VEGFA	2.67	0.00264
IL2RB	-0.477	0.00343
IL6R	1.25	0.00393
JAK3	-1.13	0.00486
IL1RN	3.98	0.0049
IL12RB2	-0.795	0.00689
CCR5	1.35	0.00929
FLT3LG	-1	0.00956
TYK2	-0.701	0.00987
TNFSF14	2.05	0.0152
CCR1	1.62	0.0197
IL10	2.42	0.0221
IL8	2.22	0.0234
TNFSF8	1.42	0.0246
IFNL1	-0.519	0.03
HLA-DOB	-1.15	0.0303
TGFB1	0.8	0.0367
IL5	0.862	0.0393
LTB	-1.11	0.0397
IL4R	0.68	0.0404
CCR4	0.745	0.0408
IL1A	3.65	0.0446
IL1B	2.56	0.05

Supplementary Table 3: Differential expression: week 2/baseline (Chemokine probe set)

Gene	Log2 fold change	P-value
KLRB1	-1.01	0.000678
CX3CR1	-2.26	0.00237
CXCR2	-1.15	0.0032
TNFRSF1A	1.03	0.00336
TNFSF12	-1.23	0.00353
IL11RA	-1.17	0.00582
TNFRSF1B	1.19	0.00824
CCL7	6.01	0.00838
IL32	-1.75	0.00901
CCRL2	2.6	0.0113
CXCL16	0.956	0.0125
CCL2	5.35	0.0147
CCR3	2.3	0.0154
C1QBP	-0.578	0.0157
CCR1	1.62	0.0197
IFIT1	2.93	0.0208
STAT3	0.559	0.021
CXCL2	3.01	0.0232
IL8	2.22	0.0234
CCL20	3.68	0.0235
CXCL3	4.22	0.0265
CCL22	1.75	0.0407
CCR4	0.745	0.0408
CMKLR1	-1.06	0.0408
IFIT2	2.96	0.0446
CCR7	1	0.045
CCL8	2.79	0.0491
TNFSF15	2.24	0.0499

Supplementary Table 4: Differential expression: wk 2/baseline (T cell function probe set)

Gene	Log2 fold change	P-value
IL18RAP	-1.05	0.000281
TP53	-0.883	0.000321
EGR1	-1.61	0.00554
CD86	0.794	0.00617
IL12RB2	-0.795	0.00689
LCK	-1.44	0.00694
CCR5	1.35	0.00929
DPP4	-1.42	0.00941
TNFSF14	2.05	0.0152
CD3E	-1.34	0.0176
CD1C	-1.45	0.0184
CCR1	1.62	0.0197
CD27	-1.35	0.0244
TBX21	-0.825	0.0298
MS4A1	-1.06	0.0301
IL18R1	-0.787	0.0319
IL5	0.862	0.0393
IL4R	0.68	0.0404
CCR4	0.745	0.0408

Supplementary Table 5: Differential expression: Wk 2/baseline (NK cell function)

Gene	Log2 fold change	P-value
IL18RAP	-1.05	0.000281
KLRB1	-1.01	0.000678
KLRF1	-1.63	0.000734
IL12RB2	-0.795	0.00689
KLRK1	-0.839	0.0163
CCR1	1.62	0.0197
NCR1	-0.743	0.0214
KLRC2	-0.807	0.0246
KLRG1	-1.38	0.0309
IL18R1	-0.787	0.0319

**Supplementary Table 6: House keeping genes used for normalization of gene expression**

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**Gene Name**

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Eef1g

Ppia

Rpl19

Abcf1

Sf3a3

Polr2a

Gusb

Oaz1

Sdha

Nubp1

Sap130

Hdac3

Alas1

G6pdx

Tubb5

Eif2b4

Polr1b

Edc3

Hprt

Tbp

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