

Supplemental Table 1. CD44 signaling. Differentially expressed ($p \leq 0.01$ and 1.5-fold) at a minimum of one time point in UT14 xenografts after radiation. Bold is upregulated after XRT; red, downregulated.

Day 4 vs Controls		Day 7 vs Controls		Day 12 vs Controls		Day 21 vs Controls	
ICAM1	2.58	TIMP3	2.44	IL8	6.00	HAS2	4.82
LYN	2.02	TIMP2	2.39	HAS2	5.35	LYN	2.19
SOD2	1.79	IGHMBP2	2.36	ICAM1	3.51	KHDRBS3	1.78
CTNNB1	1.63	MMP3	1.99	PLAUR	3.32	LAMA5	-1.55
CREB1	1.55	KHDRBS3	1.98	LIF	3.13	NOTCH1	-1.69
BCAM	-1.77	TGFA	1.91	LYN	3.07	HRAS	-1.71
IGFBP5	-1.85	WIPF1	1.90	TIMP2	2.92	FASN	-1.74
FASN	-2.06	PTGES	1.86	MMP9	2.82		
		PLAUR	1.84	HBEGF	2.76		
		CTSB	1.83	CXCL16	2.64		
		MET	1.76	SLC7A11	2.38		
		VANGL1	1.76	MME	2.17		
		CD59	1.73	EPCAM	2.10		
		FYN	1.72	CTSS	2.09		
		ANGPTL4	1.69	PLAU	2.02		
		VCAN	1.69	TGFBR2	1.97		
		SMAD2	1.56	FAP	1.91		
		MAPK8	1.55	SOD2	1.87		
		CREB1	1.53	MET	1.86		
		ADRB2	1.53	CEACAM1	1.85		
		BDKRB2	-1.52	TLR2	1.85		
		PRKCA	-1.53	CSF1	1.83		
		C1QBP	-1.60	TGFA	1.73		

	HRAS	-1.61	BIRC3	1.62
	SLC9A3R1	-1.79	IL6	1.61
	LAMA5	-1.90	CSF2	1.57
	DNMT1	-1.93	SPP1	1.56
	TFRC	-2.02	CD59	1.56
	FASN	-2.54	BDKRB2	-1.58
	EGR1	-2.55	SDC1	-1.70
	PTTG1	-3.08	HRAS	-1.77
	IGFBP5	-3.40	LAMA5	-1.78
			LRP1	-1.80
			FASN	-1.88
			LDB1	-2.00
			CSPG4	-2.09
			NOTCH1	-2.11
			BCAM	-2.29
			IGFBP5	-2.55

Supplemental Table 2. c-Met signaling. Differentially expressed ($p \leq 0.01$ and 1.5-fold) at a minimum of one time point in UT14 xenografts after radiation. Bold is upregulated after XRT; red, downregulated.

Day 4 vs Controls		Day 7 vs Controls		Day 12 vs Controls		Day 21 vs Controls	
ICAM1	2.58	WNT7A	2.46	LCN2	10.0	LYN	2.19
LYN	2.02	TIMP3	2.44	IL8	6.00	SNX2	1.83
PIK3R1	1.76	TIMP2	2.39	ICAM1	3.51	PIK3R1	1.59
CTNNB1	1.63	MMP3	1.99	PLAUR	3.32	CDK6	1.54
CDK6	1.61	TGFA	1.91	LIF	3.13	IRS1	-1.66
RICTOR	1.56	PLAUR	1.84	LYN	3.07	NOTCH1	-1.69
CREB1	1.55	CDH13	1.80	TIMP2	2.92	HRAS	-1.71
FASN	-2.06	MET	1.76	MMP9	2.82	FASN	-1.74
		FYN	1.72	HBEGF	2.76	FGFR3	-2.20
		VCAN	1.69	WNT7A	2.25		
		ATF6	1.67	CTSS	2.09		
		RICTOR	1.59	PLAU	2.02		
		SMAD2	1.56	TGFBR2	1.97		
		MAPK8	1.55	SH3KBP1	1.91		
		CREB1	1.53	C1GALT1	1.89		
		SH3KBP1	1.50	MET	1.86		
		PRKCA	-1.53	IRF1	1.84		
		MIR31	-1.55	SNX2	1.82		
		HRAS	-1.61	TGFA	1.73		
		IRS1	-1.64	ATF6	1.73		
		PLXNB1	-1.85	ESM1	1.72		
		CASP1	-1.87	PIK3R1	1.61		
		FASN	-2.54	IL6	1.61		

	EGR1	-2.55	CSF2	1.57	
			SPP1	1.56	
			MIR31	-1.56	
			SDC1	-1.70	
			HRAS	-1.77	
			IRS1	-1.84	
			FASN	-1.88	
			PLXNB1	-1.99	
			CSPG4	-2.09	
			NOTCH1	-2.11	
			FGFR3	-2.72	

Supplemental Table 3. Notch signaling. Differentially expressed ($p \leq 0.01$ and 1.5-fold) at a minimum of one time point in UT14 xenografts after radiation. Bold is upregulated after XRT; red, downregulated.

Day 4 vs Controls		Day 7 vs Controls		Day 12 vs Controls		Day 21 vs Controls	
ICAM1	2.58	WNT7A	2.46	IL8	6.00	CDK6	1.54
APEX1	1.75	FHL1	2.45	ICAM1	3.51	EFNB1	-1.52
IRAK2	1.72	TIMP3	2.44	PLAUR	3.32	ZBTB7A	-1.66
CTNNB1	1.63	TIMP2	2.39	LIF	3.13	NOTCH1	-1.69
CDK6	1.61	FTL	2.21	TIMP2	2.92	HRAS	-1.71
RICTOR	1.56	NFATC2	2.04	MMP9	2.82		
CREB1	1.55	ENO2	2.03	HBEGF	2.76		
DACH1	-1.59	MMP3	1.99	IL1RL1	2.50		
LRP8	-1.65	TGFA	1.91	WNT7A	2.25		
IGFBP5	-1.85	PLAUR	1.84	FHL1	2.22		
PTHLH	-2.17	DLG1	1.81	IL6ST	2.11		
		TP53BP2	1.81	TRIB3	2.10		
		MET	1.76	PMAIP1	2.04		
		FYN	1.72	RIPK2	2.04		
		RIPK2	1.68	PLAU	2.02		
		RICTOR	1.59	TGFBR2	1.97		
		SMAD2	1.56	MET	1.86		
		MAPK8	1.55	TLR2	1.85		
		CREB1	1.53	IRF1	1.84		
		MIR31	-1.55	HS3ST1	1.83		
		DACH1	-1.56	CSF1	1.83		
		Trib2	-1.59	TGFA	1.73		
		HRAS	-1.61	ESM1	1.72		

JAG2	-1.63	BIRC3	1.62
MCM6	-1.63	IL6	1.61
CNTN1	-1.84	CSF2	1.57
PTHLH	-1.87	SPP1	1.56
DNMT1	-1.93	BMI1	1.53
KAT2A	-1.95	BMP6	1.51
TFRC	-2.02	STAT6	-1.53
MKI67	-2.33	ID3	-1.54
LRP8	-2.40	MIR31	-1.56
IGFBP5	-3.40	LRP8	-1.63
		HRAS	-1.77
		LRP1	-1.80
		JAG2	-1.83
		PTHLH	-1.96
		NOTCH1	-2.11
		HEY1	-2.32
		IGFBP5	-2.55

Supplemental Table 4. Aldehyde dehydrogenase signaling. Differentially expressed ($p \leq 0.01$ and 1.5-fold) at a minimum of one time point in UT14 xenografts after radiation. Bold is upregulated after XRT; red, downregulated.

Day 4 vs Controls		Day 7 vs Controls		Day 12 vs Controls		Day 21 vs Controls	
XDH	2.06	ALDH1A3	2.18	IL8	6.00	ALDH1A3	2.75
CTNNB1	1.63	SPG21	1.64	ALDH1A3	4.18	NOTCH1	-1.69
SPG21	1.57	PSIP1	-1.70	EPCAM	2.10		
		ALDH1B1	-2.09	CSF2	1.57		
		CBR1	-2.22	NOTCH1	-2.11		

Supplemental Table 5. BMI1 signaling. Differentially expressed ($p \leq 0.01$ and 1.5-fold) at a minimum of one time point in UT14 xenografts after radiation. Bold is upregulated after XRT; red, downregulated.

Day 4 vs Controls		Day 7 vs Controls		Day 12 vs Controls		Day 21 vs Controls	
CTNNB1	1.63	WNT7A	2.46	MMP9	2.82	NOTCH1	-1.69
		SMAD2	1.56	WNT7A	2.25		
		MEN1	-1.54	PMAIP1	2.04		
		DNMT1	-1.93	IL6	1.61		
		UHRF1	-2.12	SPP1	1.56		
		PLK1	-2.20	BMI1	1.53		
		MKI67	-2.33	NOTCH1	-2.11		
		PRC1	-2.37				
		EGR1	-2.55				

Supplemental Table 6. CD133 (PROM1) signaling. Differentially expressed ($p \leq 0.01$ and 1.5-fold) at a minimum of one time point in UT14 xenografts after radiation. Bold is upregulated after XRT; red, downregulated.

Day 4 vs Controls		Day 7 vs Controls		Day 12 vs Controls		Day 21 vs Controls	
CTNNB1	1.63	TIMP2	2.39	IL8	6.00	IL6R	-1.55
MMP28	1.52	CTSB	1.83	CXCL1	3.16	NOTCH1	-1.69
FASN	-2.06	MAPK8	1.55	TIMP2	2.92	FASN	-1.74
		SLC9A3R1	-1.79	MMP9	2.82		
		CNTN1	-1.84	HBEGF	2.76		
		TFRC	-2.02	EPCAM	2.10		
		FASN	-2.54	IL6	1.61		
				CSF2	1.57		
				BMI1	1.53		
				LRP1	-1.80		
				FASN	-1.88		
				NOTCH1	-2.11		

Supplemental Table 7. NANOG signaling. Differentially expressed ($p \leq 0.01$ and 1.5-fold) at a minimum of one time point in UT14 xenografts after radiation. Bold is upregulated after XRT; red, downregulated.

Day 4 vs Controls		Day 7 vs Controls		Day 12 vs Controls		Day 21 vs Controls	
TOR1AIP2	3.50	TOR1AIP2	4.27	IL8	6.00	LYN	2.19
ICAM1	2.58	PMP22	3.32	TOR1AIP2	3.75	PMP22	1.95
LYN	2.02	NFATC2	2.04	ICAM1	3.51	TFCP2L1	1.94
CTNNB1	1.63	TGFA	1.91	LIF	3.13	CDK6	1.54
CDK6	1.61	SEMA6A	1.90	LYN	3.07	KLF6	-1.54
DACH1	-1.59	MET	1.76	PMP22	3.02	ARID3A	-1.57
IGFBP5	-1.85	SMAD2	1.56	MMP9	2.82	NOTCH1	-1.69
		DACH1	-1.56	IL6ST	2.11		
		JAG2	-1.63	EPCAM	2.10		
		DNMT1	-1.93	TGFBR2	1.97		
		IGFBP5	-3.40	MET	1.86		
				TGFA	1.73		
				IL6	1.61		
				BMI1	1.53		
				BMP6	1.51		
				JAG2	-1.83		
				LDB1	-2.00		
				NOTCH1	-2.11		
				IGFBP5	-2.55		

Supplemental Table 8. POU5F1 (Oct3/4) signaling. Genes differentially expressed ($p \leq 0.01$ and 1.5-fold) at a minimum of one time point in UT14 xenografts after radiation. Bold is upregulated after XRT; red, downregulated.

Day 4 vs Controls		Day 7 vs Controls		Day 12 vs Controls		Day 21 vs Controls	
TOR1AIP2	3.50	TOR1AIP2	4.27	IL8	6.00	IGFBP7	2.21
ICAM1	2.58	NFATC2	2.04	TOR1AIP2	3.75	TFCP2L1	1.94
CTNNB1	1.63	IGFBP7	1.96	ICAM1	3.51	IL32	1.89
CDK6	1.61	TGFA	1.91	LIF	3.13	CDK6	1.54
KPNA1	1.55	SEMA6A	1.90	MMP9	2.82	ARID3A	-1.57
PPIA	1.54	GADD45A	1.85	HBEGF	2.76	IRS1	-1.66
DACH1	-1.59	MET	1.76	IL32	2.67	NOTCH1	-1.69
		JMJD1C	1.63	IGFBP7	2.37	AHCY	-1.71
		SMAD2	1.56	IL6ST	2.11		
		MAPK8	1.55	EPCAM	2.10		
		DACH1	-1.56	TGFBR2	1.97		
		JAG2	-1.63	MET	1.86		
		IRS1	-1.64	TGFA	1.73		
		DNMT1	-1.93	GADD45A	1.62		
		MKI67	-2.33	IL6	1.61		
				CSF2	1.57		
				SPP1	1.56		
				BMI1	1.53		
				JAG2	-1.83		
				IRS1	-1.84		
				LDB1	-2.00		
				NOTCH1	-2.11		

Supplemental Table 9. SOX2 signaling. Genes differentially expressed ($p \leq 0.01$ and 1.5-fold) at a minimum of one time point in UT14 xenografts after radiation. Bold is upregulated after XRT; red, downregulated.

Day 4 vs Controls		Day 7 vs Controls		Day 12 vs Controls		Day 21 vs Controls	
ICAM1	2.58	MMP3	1.99	IL8	6.00	TFCP2L1	1.94
CTNNB1	1.63	TGFA	1.91	ICAM1	3.51	ARID3A	-1.57
KPNA1	1.55	SEMA6A	1.90	LIF	3.13	NOTCH1	-1.69
DACH1	-1.59	SMURF1	1.80	MMP9	2.82		
		HDAC9	1.79	HDAC9	2.19		
		MET	1.76	EPCAM	2.10		
		SMAD2	1.56	TGFBR2	1.97		
		MAPK8	1.55	MET	1.86		
		SRRT	-1.51	TGFA	1.73		
		DACH1	-1.56	SPP1	1.56		
		PLK1	-2.20	BMI1	1.53		
		MKI67	-2.33	BMP6	1.51		
		PTTG1	-3.08	STAT6	-1.53		
				NOTCH1	-2.11		
				HEY1	-2.32		

Supplemental Table 10. Epithelial to mesenchymal transition (EMT) related signaling. Genes differentially expressed ($p \leq 0.01$ and 1.5-fold) at a minimum of one time point in UT14 xenografts after radiation. Bold is upregulated after XRT; red, downregulated.

Day 4 vs Controls		Day 7 vs Controls		Day 12 vs Controls		Day 21 vs Controls	
C3	6.77	TIMP3	2.44	LCN2	10.0	C3	5.02
ICAM1	2.58	TIMP2	2.39	C3	6.38	HAS2	4.82
XDH	2.06	DAB2	2.12	IL8	6.00	DAB2	2.29
LYN	2.02	NFATC2	2.04	HAS2	5.35	LYN	2.19
SOD2	1.79	MMP3	1.99	CEACAM6	4.80	CDH11	1.85
DAB2	1.77	TGFA	1.91	DAB2	4.24	CDK6	1.54
CTNNB1	1.63	PTGES	1.86	ICAM1	3.51	KLF6	-1.54
CDK6	1.61	GADD45A	1.85	PLAUR	3.32	IL6R	-1.55
RICTOR	1.56	PLAUR	1.84	LIF	3.13	MTSS1	-1.57
CREB1	1.55	CDH13	1.80	LYN	3.07	PVRL1	-1.59
CCNG1	1.55	SMURF1	1.80	TIMP2	2.92	ZBTB7A	-1.66
ZFPM2	-1.59	BCAR3	1.80	MMP9	2.82	IRS1	-1.66
IGFBP5	-1.85	MET	1.76	HBEGF	2.76	NOTCH1	-1.69
FASN	-2.06	FYN	1.72	CXCL16	2.64	HRAS	-1.71
PTHLH	-2.17	TRAF6	1.70	MME	2.17	FASN	-1.74
		ANGPTL4	1.69	TRIB3	2.10	TNS4	-1.76
		VCAN	1.69	EPCAM	2.10		
		RICTOR	1.59	PMEPA1	2.05		
		GALNT3	1.56	PLAU	2.02		
		SMAD2	1.56	SEMA7A	1.99		
		NRAS	1.55	TGFBR2	1.97		
		MAPK8	1.55	FAP	1.91		
		CREB1	1.53	SOD2	1.87		

ADRB2	1.53	MET	1.86
MIR31	-1.55	CEACAM1	1.85
HRAS	-1.61	CDH11	1.83
JAG2	-1.63	GDF15	1.82
IRS1	-1.64	TGFA	1.73
SLC9A3R1	-1.79	ESM1	1.72
PTHLH	-1.87	STC2	1.71
DNMT1	-1.93	BCAR3	1.66
UHRF1	-2.12	GADD45A	1.62
CBR1	-2.22	IL6	1.61
FASN	-2.54	TRAF6	1.58
EGR1	-2.55	CSF2	1.57
PTTG1	-3.08	SPP1	1.56
IGFBP5	-3.40	BMI1	1.53
		BMP6	1.51
		ID3	-1.54
		MIR31	-1.56
		MTSS1	-1.58
		IDH2	-1.58
		SEMA4C	-1.61
		PVRL1	-1.66
		MAP3K4	-1.68
		SDC1	-1.70
		HRAS	-1.77
		JAG2	-1.83
		IRS1	-1.84
		FASN	-1.88
		PTHLH	-1.96

		CSPG4	-2.09	
		NOTCH1	-2.11	
		PTPRZ1	-2.12	
		HEY1	-2.32	
		IGFBP5	-2.55	