

**Supplemental Table 1:** ROC Analysis of changes of different imaging parameters to predict poor survival (PFS or OS < median)

	<b>Survival parameter</b>	<b>AUC</b>	<b>p-value</b>	<b>Best cut-point</b>	<b>Sensitivity (%)</b>	<b>Specificity (%)</b>	<b>95% CI</b>
<b>TBR<sub>max</sub> FET-2 vs. FET-1</b>	PFS	0.72	0.06	-10%	50	92	0.50–0.94
<b>TBR<sub>max</sub> FET-2 vs. FET-1</b>	OS	0.75	0.04	-20%	83	67	0.54–0.95
<b>TBR<sub>max</sub> FET-3 vs. FET-1</b>	PFS	0.71	0.08	-15%	64	75	0.50–0.93
<b>TBR<sub>mean</sub> FET-2 vs. FET-1</b>	PFS	0.71	0.08	-5%	67	75	0.51–0.93
<b>TBR<sub>mean</sub> FET-2 vs. FET-1</b>	OS	0.72	0.07	-5%	67	75	0.50–0.94

AUC = Area under curve

**Supplemental Table 2:** Prognostic impact of TBR<sub>max</sub> and TBR<sub>mean</sub> on survival tested at different cut-off values

		FET-2 versus FET-1				FET-3 versus FET-1			
		PFS [months]	p-value	OS [months]	p-value	PFS [months]	p-value	OS [months]	p-value
<b>TBR<sub>max</sub></b>	Responder ≤ -10%	9.3 (n=17)	0.002*	15.4 (n=17)	<0.001*	8.3 (n=17)	0.14	15.4 (n=17)	0.02*
	Non-Responder > -10%	4.7 (n=6)		8.5 (n=6)		5.2 (n=7)		9.3 (n=7)	
<b>TBR<sub>max</sub></b>	Responder ≤ -15%	9.3 (n=15)	0.05*	16.1 (n=15)	0.001*	7.8 (n=12)	0.53	15.4 (n=12)	0.27
	Non-Responder > -15%	5.1 (n=8)		9.3 (n=8)		5.5 (n=12)		9.3 (n=12)	
<b>TBR<sub>max</sub></b>	Responder ≤ -20%	9.3 (n=10)	0.54	16.1 (n=10)	0.02*	7.8 (n=8)	0.87	14.8 (n=8)	0.45
	Non-Responder > -20%	5.8 (n=13)		9.3 (n=13)		5.8 (n=16)		9.9 (n=16)	
<b>TBR<sub>mean</sub></b>	Responder ≤ 0%	7.8 (n=18)	0.017*	14.8 (n=18)	0.004*	7.8 (n=13)	0.75	14.8 (n=13)	0.8
	Non-Responder > 0%	5.1 (n=5)		9.3 (n=5)		5.5 (n=11)		14.3 (n=11)	

<b>TBR<sub>mean</sub></b>	Responder ≤ -5%	10.3 (n=14)	<0.001*	16.1 (n=14)	<0.001*	7.2 (n=11)	0.76	16.1 (n=11)	0.54
	Non-Responder > -5%	5.1 (n=9)		9.3 (n=9)		8.3 (n=13)		14.3 (n=13)	
<b>TBR<sub>mean</sub></b>	Responder ≤ -10%	10.3 (n=8)	0.013*	20.9 (n=8)	0.011*	7.8 (n=8)	0.33	16.1 (n=8)	0.5
	Non-Responder > -10%	5.8 (n=15)		9.8 (n=15)		5.8 (n=16)		13.8 (n=16)	

**Supplemental Table 3:** Prognostic impact of  $T_{vol 1.6}$  on survival tested at different cut-off values

		FET-2 versus FET-1				FET-3 versus FET-1			
		PFS [months]	p- value	OS [months]	p- value	PFS [months]	p- value	OS [months]	p- value
$T_{vol 1.6}$	Responder $\leq 0\%$	9.3 (n=16)	0.04*	14.8 (n=15)	0.39	9.4 (n=15)	0.002*	16.1 (n=15)	0.06
	Non-Responder $> 0\%$	5.8 (n=8)		9.8 (n=8)		5.1 (n=10)		9.9 (n=10)	
$T_{vol 1.6}$	Responder $< 0\%$	6.6 (n=12)	0.37	14.8 (n=12)	0.39	7.8 (n=10)	0.58	14.8 (n=10)	0.57
	Non-Responder $\geq 0\%$	7.2 (n=12)		9.9 (n=12)		5.8 (n=15)		13.8 (n=15)	

**Supplemental Table 4:** Prognostic impact of Gd-Volume on survival tested at different cut-off values

		MRI-2 versus MRI-1				MRI-3 versus MRI-1			
		PFS [months]	p-value	OS [months]	p-value	PFS [months]	p-value	OS [months]	p-value
<b>Gd-Volume</b>	Responder $\leq 0\%$	6.6 (n=14)		14.3 (n=14)		10.3 (n=10)		14.8 (n=10)	
	Non-Responder $> 0\%$	8.3 (n=7)	0.65	16.1 (n=7)	0.83	7.2 (n=11)	0.23	14.3 (n=11)	0.38
<b>Gd-Volume</b>	Responder $\leq -25\%$	6.6 (n=11)		15.4 (n=11)		12.9 (n=6)		22.8 (n=6)	
	Non-Responder $> -25\%$	7.8 (n=10)	0.97	13.8 (n=10)	0.65	7.2 (n=15)	0.1	14.3 (n=15)	0.06