



Supplemental Figure 1

Kaplan Meier curves for PET/CT parameter SUV<sub>max</sub> for developing distant metastases or death (a, b) are stratified by quartiles.

A) Distant mets by SUVmax

B) Overall survival by SUVmax

**Supplemental Table 1.** PET parameters for primary tumor and nodal disease by neck level

	SUV max		MTV (cm3)		TLG	
	Median (SD)	Range	Median (SD)	Range	Median (SD)	Range
Primary tumor (n=176)	13.6 (5.5)	3.4 – 28.2	9.7 (12.9)	1.2 –113.0	81.4 (192.0)	5.4 – 1,964
Level I (n = 10)	6.0 (2.3)	2.8 – 9.7	2.0 (9.5)	1.1 – 32	8.6 (35.2)	2.9 - 118.4
Level II (n = 153)	8.8 (5.2)	2.4 – 33.3	6.7 (8.8)	0.79 – 60.8	321.1 (77.7)	4.6 - 442.7
Level III (n = 69)	7.8 (3.9)	2.4 – 18.6	4.0 (8.0)	0.6 – 42.0	16.3 (68.4)	3.3 - 427.3
Level IV (n = 19)	7.5 (2.9)	3.4 – 14.5	3.1 (4.9)	0.9 – 19.4	10.5 (24.5)	6.1 - 92.0
Level V (n = 16)	7.5 (3.9)	3.0 – 15.1	2.2 (3.2)	0.5 – 12.6	11.8 (14.3)	2.7 - 49.3
Level VI (n = 1)	7.3		0.9		4.1	

**Supplemental table 2.** Spearman correlation between SUV<sub>max</sub>, TLG and MTV

Spearman correlation between PET variables

	SUVmax	TLG	MTV
SUVmax	1	0.69571	0.36395
TLG	0.69571	1	0.90613
MTV	0.36395	0.90613	1