

Supplemental Table 1. Hypothesis Testing of Mean Differences and Inter-observer Reproducibility of SUV_{bw} max for the 20 Most and 20 Least Metabolically Active Lesions

	Mean SUV _{bw} max ± Standard Deviation (95% C.I.)		Coefficient of Variation [mean ± standard deviation]		Intraclass Correlation Coefficient (95% C.I., Precision)	
	Pre-treatment Scan	Post-treatment Scan	Pre-treatment Scan	Post-treatment Scan	Pre-treatment Scan	Post-treatment Scan
Highest 20	15.81 ± 5.38 (14.61-17.01)	6.76 ± 4.83* (5.69-7.84)	7.7 ± 15.8%†	17.1 ± 25.6%	0.86 (0.75-0.93, ±9%)	0.98 (0.97-0.99, ±1%)
Lowest 20	4.32 ± 1.26 (4.05-4.59)	2.51 ± 1.47* (2.19-2.82)	4.1 ± 6.4%†‡	22.3 ± 29.7%¥	0.94 (0.88-0.97, ±5%)	0.88 (0.78-0.94, ±8)

*p < 0.001 for pre-treatment versus post-treatment scan

†p=0.009 and p=0.01 compared to post-treatment scan for the highest 20 and lowest 20, respectively.

‡ No differences in CV of SUV_{bw}max for the 20 lesions with the highest versus the lowest metabolic were found within pre-treatment (p=0.82) and post-treatment scans (p=0.28).

Supplemental Table 2. Hypothesis Testing of Mean Differences and Inter-observer Reproducibility of CT Size Parameters for the 20 Largest and Smallest Lesions

	Mean Size ± Standard Deviation (95% C.I.)		Coefficient of Variation [mean ± standard deviation]		Intraclass Correlation Coefficient (95% C.I., Precision)	
	Pre-treatment Scan	Post-treatment Scan*	Pre-treatment Scan	Post-treatment Scan	Pre-treatment Scan	Post-treatment Scan
Longest CT size (RECIST)						
Largest 20 (mm)	34.99 ± 11.92 (32.43-37.54)	28.45 ± 13.34* (2.55-31.34)	15.7 ± 25.5%†	29.6 ± 41.8%	0.40 (0.18-0.65, ±24)	0.81 (0.65-0.91, ±13)
Smallest 20 (mm)	15.85 ± 4.07 (14.94-16.76)	11.36 ± 6.86* (9.82-12.89)	16.1 ± 8.3%†	42.4 ± 49.0%	0.36 (0.13-0.62, ±25)	0.73 (0.55-0.87, ±16)
Two-dimensional CT size (WHO)						
Largest 20 (mm ²)	976.06 ± 733.10 (815.99-1136.4)	731.21 ± 883.30* (534.64-927.77)	18.9 ± 25.9%†	44.1 ± 50.1%	0.39 (0.18-0.64, ±23)	0.32 (0.08-0.60, ±26)
Smallest 20 (mm ²)	180.81 ± 85.86 (161.70-199.91)	123.13 ± 97.04* (101.53-144.72)	30.1 ± 15.6%†	56.9 ± 47.1%	0.43 (0.21-0.66, ±23)	0.62 (0.41-0.81, ±20)

*p ≤ 0.03 for pre-treatment versus post-treatment scans

†p=0.01 for largest 20 and p=0.02 for smallest 20 versus post-treatment for longest CT size; p=0.004 for largest 20 and p=0.001 for smallest 20 for two-dimensional CT size
For both CT size parameters, no significant differences were found comparing CV for the largest 20 vs. the smallest 20 lesions within pre-treatment and post-treatment scans.