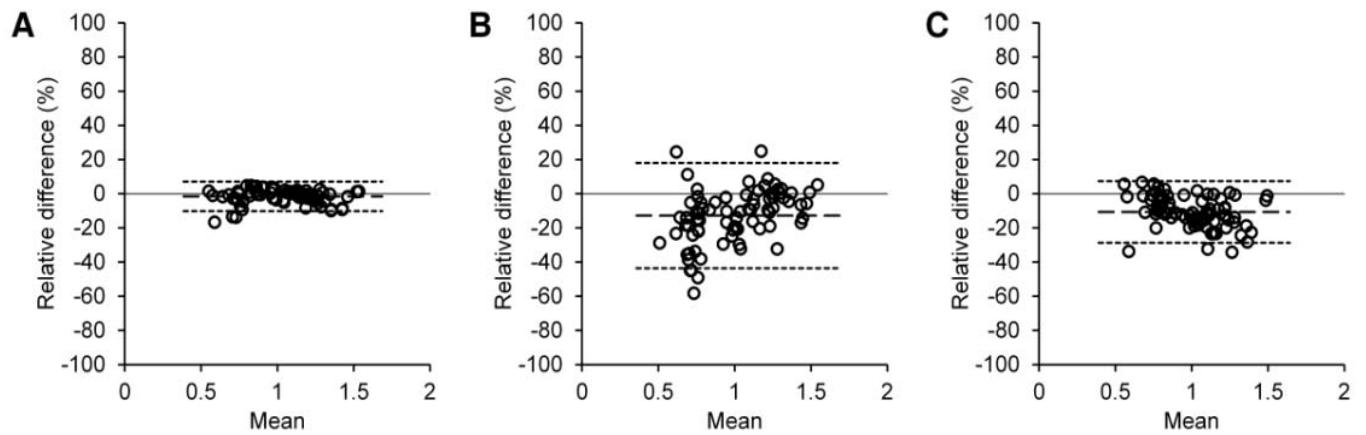
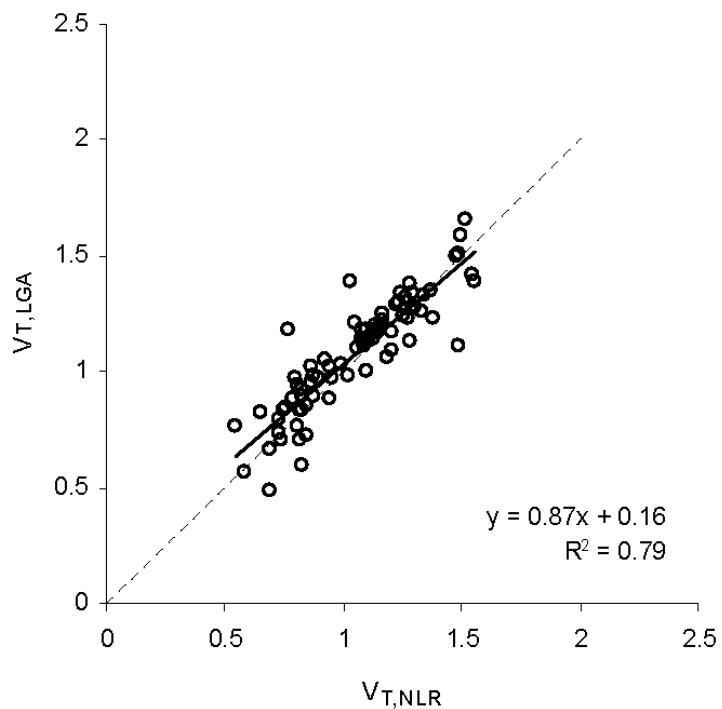


SUPPLEMENTAL FIGURE 1. Regional V_T for all tumor VOI obtained from Logan graphical analysis ($V_{T,LGA}$) (A), SUVr (B) and spectral analysis ($V_{T,SA}$) (C) as function of V_T derived with non-linear regression analysis ($V_{T,NLR}$). (D) Difference in V_T derived from spectral analysis and Logan graphical analysis {percentage relative difference was calculated as $\{(V_{T,LGA}-V_{T,SA})/(V_{T,LGA}+V_{T,SA})\}*200\}$ } as function of V_B derived with non-linear regression analysis. Solid line = regression line through all data points. Dashed line = line of identity. Star = suspected outlier.



SUPPLEMENTAL FIGURE 2. Bland Altman plots of each method: Logan graphical analysis (A), spectral analysis (B) and SUVR (C) {percentage relative difference was calculated as $[(V_T - V_{T,NLR}) / (V_T + V_{T,NLR}) * 200]$ }.



SUPPLEMENTAL FIGURE 3. Regional V_T for all tumor VOI obtained with Logan graphical analysis for start time 40 min p.i. ($V_{T,LGA}$) as function of V_T derived with non-linear regression analysis ($V_{T,NLR}$).

SUPPLEMENTAL TABLE 1. Comparison of Logan graphical analysis with NLR derived V_T values.

Start time (min)	Slope	Intercept	R^2
10	0.74	0.18	0.81
20	0.82	0.13	0.86
30	0.87	0.10	0.88
40	0.87	0.16	0.79

SUPPLEMENTAL TABLE 2. Comparison of spectral analysis with NLR derived V_T values.

Exponents (β) of the 30 basis functions distributed with exponentially increasing intervals between values:	Slope	Intercept	R^2
0.001 – 0.9	5.16	-2.46	0.43
0.005 – 0.9	1.67	-0.55	0.62
0.01 – 0.5	1.04	-0.25	0.65
0.01 – 0.7	1.12	-0.26	0.69
0.01 – 0.9	1.21	-0.30	0.72
0.01 – 1.1	1.25	-0.30	0.76
0.01 – 1.3	1.28	-0.29	0.79
0.01 – 1.5	1.30	-0.28	0.81
0.01 – 1.9	1.33	-0.27	0.84
0.01 – 2.2	1.34	-0.25	0.85
0.01 – 3.0	1.38	-0.23	0.87
0.0125 – 1.925	1.16	-0.20	0.76
0.015 – 1.9	1.08	-0.16	0.78
0.015 – 1.95	1.08	-0.16	0.78
0.0175 – 1.9	1.01	-0.12	0.79
0.0175 – 3.0	1.13	-0.16	0.79
0.02 – 2.0	0.97	-0.09	0.79
0.025 – 1.9	0.89	-0.06	0.79
0.05 – 0.5	0.51	0.00	0.54
0.05 – 0.7	0.59	0.03	0.69
0.05 – 0.9	0.64	0.03	0.74
0.05 – 1.9	0.68	0.09	0.77
0.1 – 0.5	0.41	0.02	0.45
0.1 – 0.7	0.43	0.08	0.60
0.1 – 0.9	0.46	0.11	0.63
0.1 – 1.9	0.49	0.19	0.58
0.2 – 3.0	0.40	0.17	0.42
0.25 – 0.5	0.42	0.00	0.46
0.25 – 0.7	0.40	0.05	0.57
0.25 – 0.9	0.38	0.09	0.59