

## Supplemental Data

### 1. ROC Analysis with $\Delta$ SUV Values

**Supplemental Table 1. Results of ROC analysis with  $\Delta$  SUV values between pre and interim FLT-PET scans**

	Progression-free survival		Overall survival	
	$\Delta$ SUVmax (%)	$\Delta$ SUVmean (%)	$\Delta$ SUVmax (%)	$\Delta$ SUVmean (%)
AUC	0.774	0.745	0.742	0.701
p-value	0.001	0.003	0.006	0.023
Cut-off value	65.3%	72.2%	50.6%	73.1%
Sensitivity	82.4%	82.4%	64.3%	78.6%
Specificity	70.5%	70.5%	78.7%	61.7%
PPV	51.9%	51.9%	47.4%	37.9%
NPV	91.2%	91.2%	88.1%	90.6%

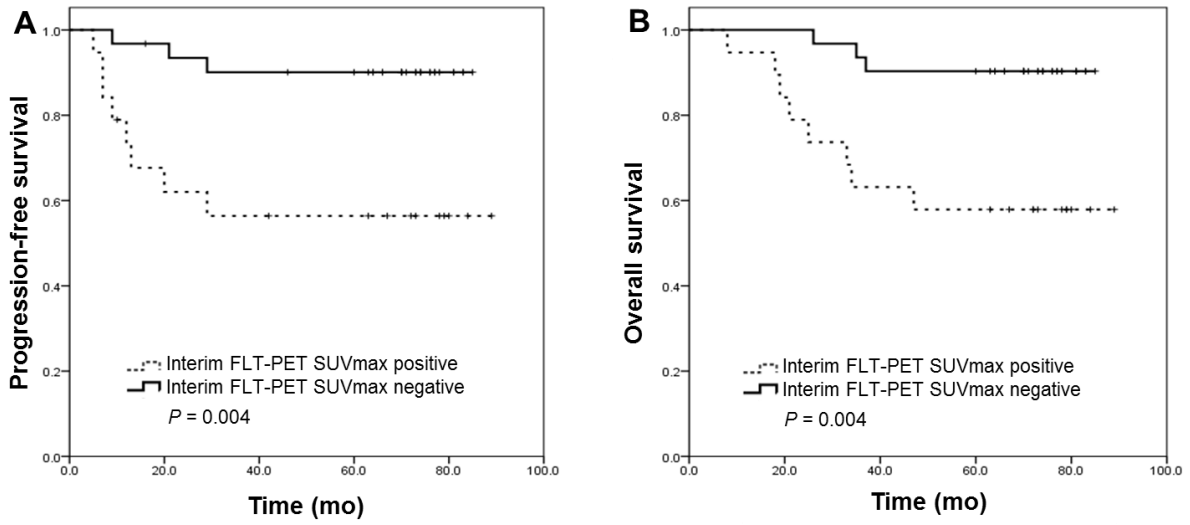
**Supplemental Table 2. Results of ROC analysis with  $\Delta$  SUV values between pre and final FLT-PET scans**

	Progression-free survival		Overall survival	
	$\Delta$ SUVmax (%)	$\Delta$ SUVmean (%)	$\Delta$ SUVmax (%)	$\Delta$ SUVmean (%)
AUC	0.672	0.666	0.609	0.598
p-value	0.038	0.090	0.220	0.269
Cut-off value	52.4%	34.0%	35.4%	64.9%
Sensitivity	52.9%	35.3%	35.7%	50.0%
Specificity	84.1%	93.2%	93.6%	70.2%
PPV	56.3%	66.7%	62.5%	33.3%
NPV	82.2%	78.9%	83.0%	82.5%

## 2. Subgroup Analysis Data

### Subgroup Analysis in Patients with DLBL (*n*=50)

ROC curve analysis of SUVmax for prediction of disease progression and death showed the highest area under the curve (AUC) in interim FLT-PET (AUC 0.814 for PFS and AUC 0.841 for OS with a cut-off of 1.87;  $p < 0.001$ ) compared with pre and final FLT-PET scans. SUVmean in interim FLT-PET also showed better prediction (AUC 0.802 for PFS and AUC 0.825 for OS with a cut-off value of 1.67;  $p < 0.001$ ) compared with pre and final FLT-PET scans. Patients with interim FLT-PET SUVmax more than 1.87, who were defined as the interim PET-positive group, were associated with worse 5-year PFS and OS rates than the interim PET-negative group (for PFS: 56.4% vs. 90.1%, respectively;  $p = 0.004$ ; for OS: 57.9% vs. 90.3%, respectively;  $p = 0.004$ ) (Supplemental Fig. 1). By multivariable analysis, the prognostic value of interim FLT-PET positivity by SUVmax remained significant after adjustment with other prognostic factors (for PFS: HR 14.75, 95% CI 2.53-86.07,  $p = 0.003$ ; for OS: HR 10.76, 95% CI 2.31-50.03,  $p = 0.003$ ).



**Supplemental Figure 1.** Kaplan-Meier estimates of progression-free survival (A) and overall survival (B) according to interim FLT-PET response analysis using an SUV max cut-off value. There were significant differences in PFS and OS between FLT-PET SUVmax negative versus positive patients.