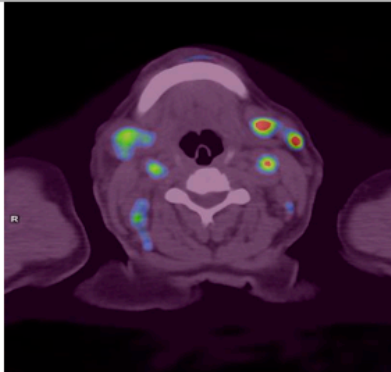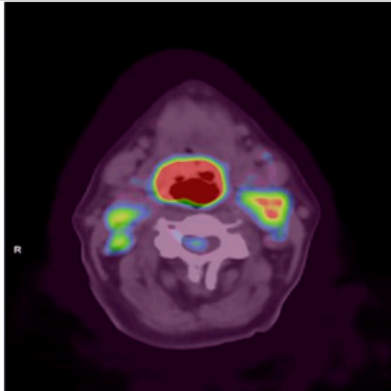*Article*

Prognostic Significance of PET/CT in Patients with Chronic Lymphocytic Leukemia (CLL) Treated with Frontline Chemoimmunotherapy

Marika Porrazzo, Emanuele Nicolai, Mara Riminucci, Candida Vitale, Marta Coscia, Lorenzo De Paoli, Angela Rago, Giulia Buscicchio, Giacomo Maestrini, Silvio Ligia, Alessio Di Prima, Alessandro Corsi, Roberto Caronna, Gianluca Gaidano and Francesca Romana Mauro

Supplementary Materials:

Figure S1. Two representative cases with different SUV$_{max}$ values.

45 patients with CLL requiring front-line therapy performed PET/TC followed by the biopsy of the involved lymph node or other tissue

40 patients diagnosed with CLL included in the study

3 patients diagnosed with Richter syndrome
2 patients diagnosed with second malignancy excluded from the study

$SUV_{max} \geq 5$ = 13 patients

$SUV_{max} < 5$ = 27 patients

CLL progression=3

Richter syndrome=4

CLL progression=14

Richter syndrome=1
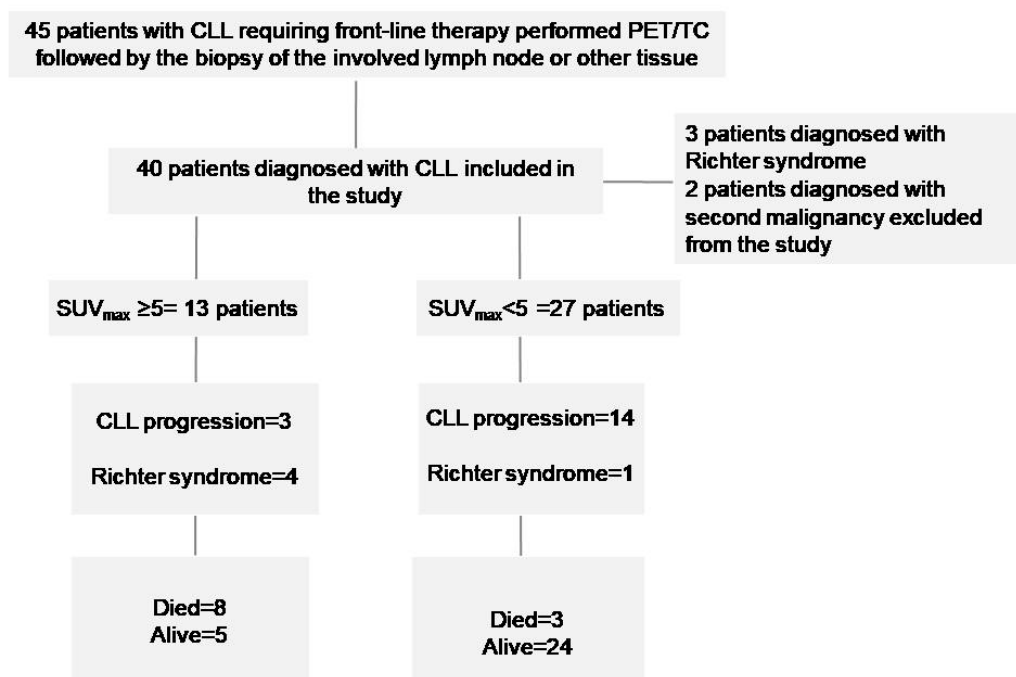
Died=8
Alive=5

Died=3
Alive=24

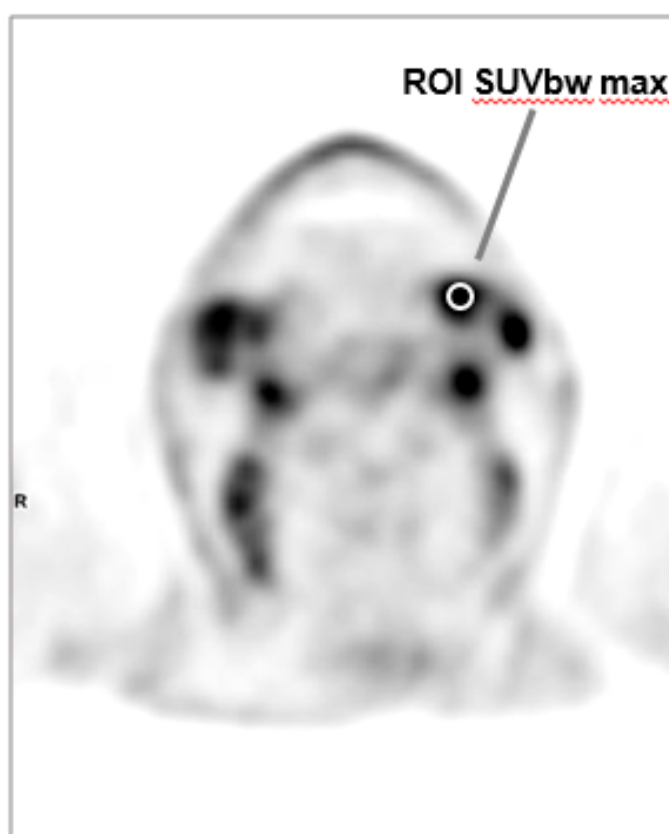**Figure S2.** Consort diagram-trial profile.

Figure S3. Example of ROI positioning.

Table S1. Response to treatment, CLL progression, Richter syndrome according to the SUV_{max} values.

	All Patients	SUV$_{max}$ ≥ 5	SUV$_{max}$ < 5	*p* Value
No patients (%)	40 (100)	13 (33)	27 (67)	-
Response to treament				
Yes	36 (90)	11 (85)	25 (93)	0.43
No	4 (10)	2 (15)	2 (7)	
CLL progression[a]				
Yes	17 (49)	3 (33)	14 (54)	0.28
No	18 (51)	6 (67)	12 (46)	
Richter syndrome				
Yes	5 (13)	4(31)	1 (4)	0.015
No	35 (87)	9 (69)	26 (96)	

Table S2. Multivariable Cox regression model for PFS and OS.

	PFS			**OS**	
Tested Variables	**HR (95%CI)**	***p*-Value**	**Tested Variables**	**HR (95%CI)**	***p*-Value**
Large and confluent PCs present vs. absent	0.17 (0.03-0.94)	0.04	Large and confluent PCs present vs. absent	0.14 (0.02–0.7)	0.02
Del(11q) present vs. absent	0.28 (0.08-0.99)	0.05	Del(11q) present vs. absent	2.54 (0.22–29.19)	0.34
Ki67 ≥30% vs. Ki67 <30%	1.45 (0.31 -6.8)	0.63	Ki67 ≥30% vs. <30%	1.50 (0.08–28.53)	0.94
			IGHV unmutated vs. mutated	0.53 (0.08–3.66)	0.36
			SUV$_{max}$ ≥ 5 vs. x < 5	6.48 (1.42–29.58)	0.02