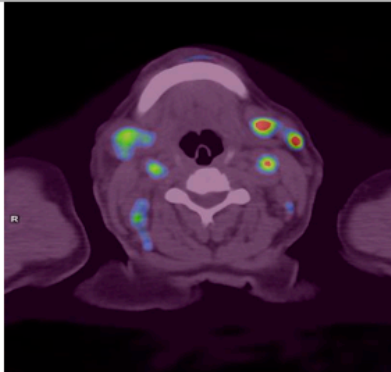
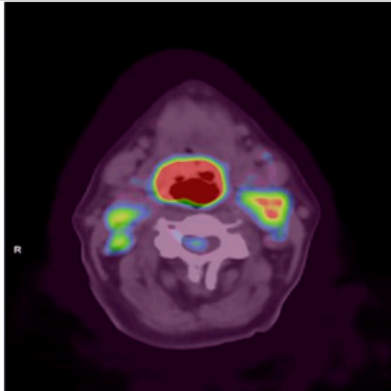


Article

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

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Supplementary Materials:

<p>CASE #1 - Female , 75 years.</p> <p>Biologic profile: IGHV, mutated; FISH, no aberrations; TP53, no mutation.</p> <p>^{18}F-FDG uptake: SUV_{max} value=3.4 (submandibular enlarged lymph nodes)</p> <p>Histology: CLL/SLL; no large and confluent PCs; Ki67+ cells 15%.</p> <p>Therapy: FCR. Response: CR.</p> <p>Alive, stable disease (+54 months).</p>	
<p>CASE #2 - Male , 62 years.</p> <p>Biologic profile: IGHV, unmutated; FISH, del(11q); complex karyotype, TP53, no mutation.</p> <p>^{18}F-FDG uptake: SUV_{max} value=7.8 (submandibular enlarged lymph nodes)</p> <p>Histology: CLL/SLL; large and confluent PCs; Ki67+ cells 30%.</p> <p>Therapy :FCR. Response: PR.</p> <p>Died due to Richter transformation (= 32 months).</p>	

Abbreviations: CLL, chronic lymphocytic leukemia; CR, complete response; FCR, fludarabine, cyclophosphamide, rituximab; ^{18}F -FDG, ^{18}F fluorodeoxyglucose ; FISH, fluorescence in situ hybridisation; PCs, proliferation centers; PR, partial response; SUV, Standardized Uptake Value.

Figure S1. Two representative cases with different SUV_{max} values.

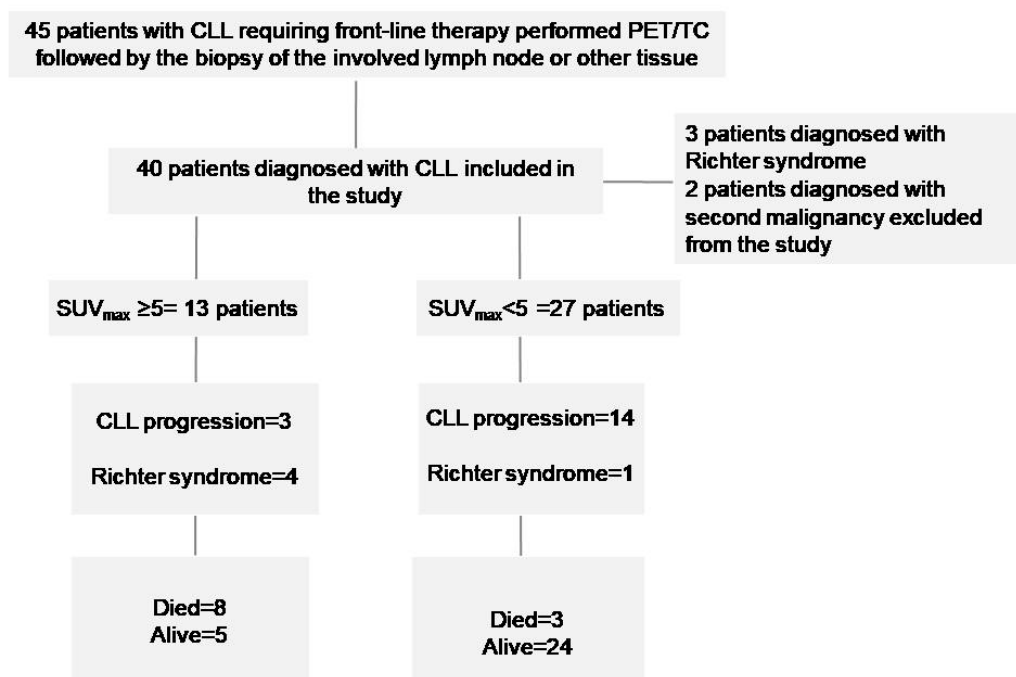


Figure S2. Consort diagram-trial profile.

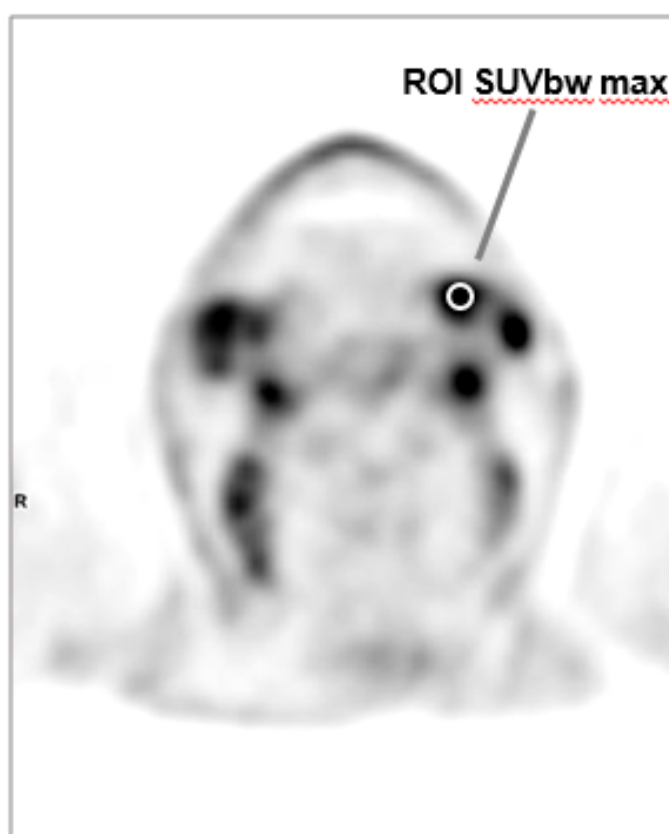


Figure S3. Example of ROI positioning.

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 treatment				
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



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