Angioimmunoblastic T-cell lymphoma is the most common T-cell lymphoma in two distinct French information data sets

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Supplemental data

Supplemental methods: *Tenomic* database

Pathological review. All *Tenomic* cases are reviewed by at least two expert hematopathologists and classified according to the 2008 WHO criteria. Discordances between the submitted diagnosis and the final expert diagnosis were recorded. For AITL the morphological criteria (polymorphic background, aborizing vessels, blastic cells, sinus sign and presence of clear cells) were recorded, and immunophenotypic features (based on immunostains for CD20, CD3, CD10, CXCL13, PD1, BCL6, and follicular dendritic (FDC) markers (CD21 and/or CD23)), as well as EBV assessment (by EBER in situ hybridization) were semi-quantitatively scored.

Follicular helper T-cell (T_{FH}) markers (PD1, CXCL13, BCL6 and CD10) were evaluated as follows: score 0: <10% positive tumour cells, score 1: 10-30% positive tumour cells, score 2: 30-50% positive tumour cells, score 3: >50% positive tumour cells.

FDC distribution evaluated by CD21 and/or CD23 immunostains, was scored as: 0 when restricted to germinal centers (GC), 1 in case of perifollicular expansion, 2 in case of perifollicular and perivascular expansion, or 3 to denote diffuse expansion. The status of EBV in large lymphoid cells was based on counting EBER-positive large cells scored as follows**:** score 0: absence of large EBV-positive cells, score 1: up to 5 large EBV-positive cells per high power fields (hpf), score 2 : 5 to 50 per hpf and score 3 : > 50 per hpf , or sheets or aggregates of large EBV-positive cells.(adapted from [16]) Scores 1, 2 and 3 were considered as positive.

Clinical features.

The recorded clinical characteristics of the *Tenomic* patients included sex, age at diagnosis, performance status (PS), B symptoms, Ann Arbor stage, number of extranodal sites. Laboratory data included hemoglobin, white blood cell, absolute neutrophil, lymphocyte and platelet counts, lactate dehydrogenase level, gammaglobulin levels, Coombs test, serological tests for EBV, HTLV-1, HIV, HBV and HCV at diagnosis. International prognosis index (IPI) and prognosis index for PTCL (PIT) were calculated.

First-line treatment including date of initiation and best response, date of progression or relapse, date and status at last information were recorded.

Supplemental Table S1: Immunohistochemical results and EBV studies in the 263 AITL cases from the Tenomic collection with detailed pathological annotations

	CD10	CXCL13	PD1	BCL6	FDC	EBV
Score 0	33 (13%)	8 (3%)	2 (1%)	38 (15%)	10 (4%)	48 (18%)
Score 1	114 **(43%)**	81 (31%)	42 (16%)	79 (30%)	50 (19%)	114 **(44%)**
Score 2-3	105 (40%)	119 **(45%)**	162 **(62%)**	85 **(32%)**	194 **(74%)**	87 (33%)
NI	11 (4%)	55 (21%)	57 (21%)	59 (23%)	9 (3%)	14 (5%)

Supplemental Table S2

Treatment characteristics of 216* AITL patients from the Tenomic series

Type of treatment	Treatment protocoles	Number of patients	% of analysed 216 patients with information
CHOP-like regimen	CHOP 14/21 R CHOP 14/21	115	53%
High dose regimen	ACVBP	29	13.5%
Attenuated regimen	Low-dose CHOP regimen CVP Alkylating agents Fludarabine	55	25.5%
Steroids or no treatment	Corticosteroids alone or no treatment	17	8%

*characteristics were unknown for 30 patients with follow-up data.

R: rituximab

CHOP: cyclophosphamide, Adriamycin, oncovin, prednisone

ACVBP: doxorubicin, cyclophosphamide, vindesine, bleomycin, prednisone

CVP: cyclophosphamide, vincristine, prednisone

Supplemental Table S3: Immunohistochemical of 43 Tenomic cases initially diagnosed as PTCL, NOS and reclassified as AITL after expert review.

	CD10	CXCL13	PD1	BCL6	FDC	EBV
Score 0	6/43 (14%)	1/43 (2%)	0/43 (0%)	8/43 (18,5%)	2/43 (5%)	4/43 (10%)
Score 1	19/43 (44%)	11/43 (26%)	6/43 (14%)	8/43 (18,5%)	8/43 (18%)	17/43 (40%)
Score 2-3	12/43 (28%)	**19/43 (44%)**	**23/43 (53,5%)**	**11/43 (26%)**	**29/43 (67%)**	17/43 (40%)
NI	1/43 (2%)	10/43 23%	8/43 18,5%	8/43 (18,5%)	2/43 (5%)	0/35 (0%)
ND	5/43 (12 %)	2/43 (5%)	6/43 (14%)	8/43 (18,5%)	2/43 (5%)	4/43 (10%)

Supplemental Table S4: Clinical features in 36 reclassified AITL (discordant diagnoses) in comparison with the rest of the cohort (n=210) (concordant diagnoses)

	Concordant diagnoses	Discordant diagnoses	P value
n=	210	36	
Age	67	65	
B Symptoms	64% (119/185)	61%(20/33)	0.6823
Stade III - IV	98% (200/205)	100% (36/36)	1
Bone marrow	41% (78/188)	42% (13/31)	0.9628
Splenomegaly	26% (49/185)	23% (7/31)	0.6461
Hepatomegaly	16% (31/199)	13% (4/32)	0.7946
Anemia	60%(114/189)	68% (21/31)	0.4313
Coombs positivity	58% (80/138)	50% (8/16)	0.2155
Increased LDH levels	71% (140/198)	73% (24/33)	0.8128
IPI score ≥ 2:	95% (186/196)	94% (31/33)	0.6854
PIT score ≥2	77% (142/184)	86% (25/29)	0.3382

Supplemental Figure S1

Overall survival (OS) of 246 AITL patients from the *Tenomic* series.

OS was defined as time from diagnosis to death resulting from any cause with surviving patient follow-up censored at the last contact date. At the time of this analysis in August 2013, 138 (56%) patients had died (13 in complete remission and 125 with stable disease, partial remission or in progression), 68 patients were alive free of disease, 14 patients were alive with disease, and the status regarding lymphoma was unknown for 26 patients..