Check for updates





Blood 142 (2023) 6299-6300

The 65th ASH Annual Meeting Abstracts

# ONLINE PUBLICATION ONLY

## 627.AGGRESSIVE LYMPHOMAS: CLINICAL AND EPIDEMIOLOGICAL

### Treatment Pattern and Survival of Human Immunodeficiency Virus Infection-Related Lymphoma in China 2008-2021

Jun Liu<sup>1</sup>, Chaoyu Wang<sup>1</sup>, Tao Yang<sup>1</sup>, Yan Wu<sup>2</sup>, Haiyan Min<sup>3</sup>, Yunhong Huang<sup>4</sup>, Guo Wei<sup>5</sup>, Wei Zhang<sup>6</sup>, Min Wang<sup>7</sup>, Xiaoqiong Tang<sup>8</sup>, Hui Zhou<sup>9</sup>, Yao Liu, PhD MD<sup>1</sup>

<sup>1</sup> Department of Hematology-Oncology, Chongqing University Cancer Hospital, Chongqing, China

<sup>2</sup>Henan Infectious Disease Hospital, The Sixth People's Hospital of Zhengzhou, Zhengzhou, China

<sup>3</sup>The Second Affiliated Hospital of Kunming Medical University, Kunming, China

<sup>4</sup>The Affiliated Cancer Hospital of Guizhou Medical University, Guiyang, China

<sup>5</sup> public health clinical center of Chengdu, Chengdu, China

<sup>6</sup>Department of Hematology, Peking Union Medical College Hospital, Beijing, China, Beijing, China

<sup>7</sup>The First Hospital of Changsha, Changsha, China

<sup>8</sup>Department of Hematology, The First Affiliated Hospital of Chongqing Medical University, Chongqing, China

<sup>9</sup>Hunan Cancer Hospital, Changsha, China

### Background

Over the past few decades, little has been known about HIV-related lymphoma, and there has been a lack of treatment. However, with the development of cART therapy in the 1990s, the survival of HIV-related lymphoma patients has been significantly improved, but there is still a lack of large-scale data reports on HIV-related lymphoma patients in China.Therefore, we performed a multi-center study to analyze the clinical characteristics and outcomes of HIV-related lymphoma patients in China.

Methods

We retrospectively analyzed the data of 443 patients with human immunodeficiency virus infection-related lymphoma from eleven large academic centers in China from 2008 to 2021.

Results

In the entire cohort, the median age was 47 years (range, 18-90) at lymphoma diagnosis, and 364 patients were male (82.2%). More than half of the patients came from public health treatment centers. The most common type of pathology was DLBCL (61.6%) and BL (10.6%). Most patients had elevated lactate dehydrogenase (56.2%), bulky tumor(30.7%), B symptoms(39.3%), extranodal involvement(52.8%), and advanced Ann Arbor stage (60.3%) at diagnosis. High international prognostic index (IPI) score (3-5) at diagnosis was found in 58.7% of patients. The number of patients with CD4 cell count below 200/ $\mu$ l was 244, accounting for 55.1% of the total. The percentage of patients who gave up chemotherapy was as high as 15.6%.

The median follow-up of our cohort was 10.1 (0.1-160) months. The overall 1-year OS rates 70.2%. Cox univariate analysis showed that education level(HR=0.682, 95%CI 0.468-0.994; p=0.046),B symptoms(HR=0.730, 95%CI 0.562-0.948; p=0.018),PLR(ratio of the number of platelets to the number of lymphocytes)(HR=1.000, 95%CI 1.000-1.001; p=0.044),elevated LDH(HR=0.607, 95%CI 0.463-0.769; p=0.000),extranodal involvement(HR=1.498, 95%CI 1.141-1.968; p=0.004) were independent risk factor for adverse prognosis based on overall survival (OS). The overall 1-year PFS rates was 67.4%. Cox univariate analysis showed that age  $\geq$  60(HR=1.819, 95%CI 1.197-2.763; p=0.005),anemia(Hb < 120g/L)(HR=1.564, 95%CI 1.099-2.226; p=0.013),LDH(HR=3.646, 95%CI 2.115-6.286; p=0.000),CNS involvement(HR=2.209, 95%CI 1.384-3.524; p=0.001) were independent risk factor for adverse prognosis based on progression-free survival(PFS). Conclusion

This is the largest retrospective study of HIV-associated lymphoma in China to date. Our results show that the proportion of men with HIV infection is much higher than that of women, which is positively correlated with the proportion of HIV infection. Patients with HIV-associated lymphoma have more risk factors at first diagnosis, including late stage, high risk layer, elevated LDH, extranodal involvement, and low CD4 cell count.

**Disclosures** No relevant conflicts of interest to declare.

#### ONLINE PUBLICATION ONLY

Session (	627
-----------	-----

	Numbers	Percentage (%)		Parameter	Standard	-	2.5	2.23	
Fender	443		Fector	Estimate	Error	×2		HR	93%0
Male	364	82.2	dender	-0.268	0.159	2.833	0.092	0.765	(0.359,1.045)
Female	79	17.8	Age .	0.220	0.191	1.325	0.250	1.246	(0.837,1.813)
Age, y			Education level	-0.383	0.192	3.974	0.046	0.682	(0.468,0.994)
Median(range)	47(18-90)		Ann Arbor stage	-0.234	0.164	2.048	0.152	0.791	(0.374,1.090)
<60	373	\$4.2	Disease risk	0.210	0.140	2.241	0.134	1.234	(0.937,1.624)
≥60	60	15.8	E symptoms	-0.315	0.134	5.56	0.018	0.730	(0.562,0.948)
Education level			COS positive	0.040	0.185	0.048	0.827	1.041	(0.723,1.496)
Above high school	135	30.5	HD	0.068	0.129	0.277	0.399	1.070	(0.831,1.378)
Below high school	75	16.9	NUR	0.006	0.005	1.376	0.241	1.006	(0.996,1.105)
Unknow	233	52.6	PLA .	0.0003	0.0002	4.058	0.044	1.000	(1.000,1.001)
Ann Arbor stare			LOAK	0.001	0.010	0.003	0.955	1.001	(0.981,1.020)
1	19	43	CD4+ T DEI	-0.114	0.114	0.733	0.592	0.692	(0.688,1.159)
17	42	15.3	E.U.M	0.499	0.100	11.039	0.000	0.007	(orearior seal)
	00	20.3	Exclander .	0.404	0.139	8.452	0.004	1.498	(1.141,1.968)
	122	10.0	Chill Incomentation	-0.003	0.245	0.0003	0.000	0.007	
10		40.0	Bully Summer	-0.022	0.136	0.024	0.873	0.978	(0 749 1 277)
Unknow	29	20.1	CAST IDATADA	-0.029	0.214	0.018	0.893	0.972	(0.638 1.477)
visease risk					0.444	0.018	0.000	0.074	(construction)
Lowrisk	24	5.4	Tebres PFS Cox unit	ariate analysi					
Low-medium risk	110	24.8		Parameter	Standard				
Medium-high risk	115	26.0	Fector	Estimate	Error	x		HR	95%0
High risk	145	32.7	Gender	0.818	0.248	1.587	0.208	1.367	(0.841,2.228)
Unknow	49	11.1	Age	0.598	0.218	7.851	0.005	1.819	(1.197,2.763)
xtranodal involvement			Education level	0.261	0.242	1.145	0.281	1.298	(0.808.2.083)
Yes	234	52.8	Ann Arbor stage	0.270	0.240	1.265	0.261	1.310	(0.818.2.096)
No	209	47.2	Disease risk	0.332	0.209	2.535	0.111	1.394	(0.926,2.097)
halles manar			8 symptoms	-0.014	0.187	0.006	0.940	0.986	(0.684,1.422)
No.	176	20.2	CO3 positive	-0.090	0.277	0.105	0.746	0.914	(0.531,1.574)
105	130	30.7	HD	0.448	0.180	6.185	0.013	1.764	(1.099,2.226)
200	307	08.3	NUR	0.009	0.007	1.452	0.228	1.009	(0.994,1.024)
symptoms			PUR	0.0002	0.0003	0.3391	0.360	1.000	(1.000,1.001)
Yes	174	39.3	LMR	0.008	0.006	1.685	0.194	1.008	(0.996,1.020)
No	214	48.3	CD4+ T cell	-0.331	0.193	2.951	0.086	0.718	(0.493,1.048)
Unknow	55	12.4	LOH	1.294	0.278	21.678	0.000	3.646	(2.115,6.286)
.ymphoma subtype			Extranodal	0.199	0.187	1.181	0.289	1.221	(0.845,1.763)
Hodzkin lymphoma	19	43	involvement						
DLBCL	273	61.6	Ch3 involvement	0.792	0.258	11.048	0.001	2.209	(1.884,8.524)
BL	47	10.6	Burky burnor	-0.028	0.190	0.015	0.902	0.977	(0.671,1.418)
PRI	11	25	CART therepy	-0.301	0.253	1.410	0.235	0.740	(0.451,1.216)
PTC1.	15	3.4							Aug. 10
Others	78	17.6	Stata — Al						Stata 🚽 H
fadical institution									
dedical instruction	100	10.4				1000			
Oucoro Ex center	150	40.0				144.16			
Public health center	263	59.4				×	-		
D4+T cell		4				1		-	
<200/ul	244	55.1	51			Z 75%			~
2+200/ul	157	35.4		_	-	2			
Unknow	42	9.5				õ			
DHlevel			5		_	0. 50%			
Abnormal	249	56.2				-			
Normal	132	29.8				3			
Unknow	62	14.0				3			
hemotherapy						3 .02.			
Yes	374	\$4.4				00			
No	69	15.6							
IV.RNA			\$1			05-			
Abnormal	105	24.4	0 6	12	18			-	in .
Normal	00	10.5		1. A	~			0	12
1 min our	263	523	une						time
DTrhamer	255	31.4							
ARL therapy	201								
100		00.4	Fig1 support site	ation of C	S		Fin	2 surviv	al situation of P
200	90	20.3	rigi.survival situ	auonoro	5		rig	2.501111	a studion of f

Figure 1

https://doi.org/10.1182/blood-2023-182535