



Santiago de Chile

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Advances in Malignant lymphomas:

**The case of extranodal
and T-cell lymphomas**

Anaplastic Large Cell Lymphoma

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International Peripheral T-cell lymphoma Study

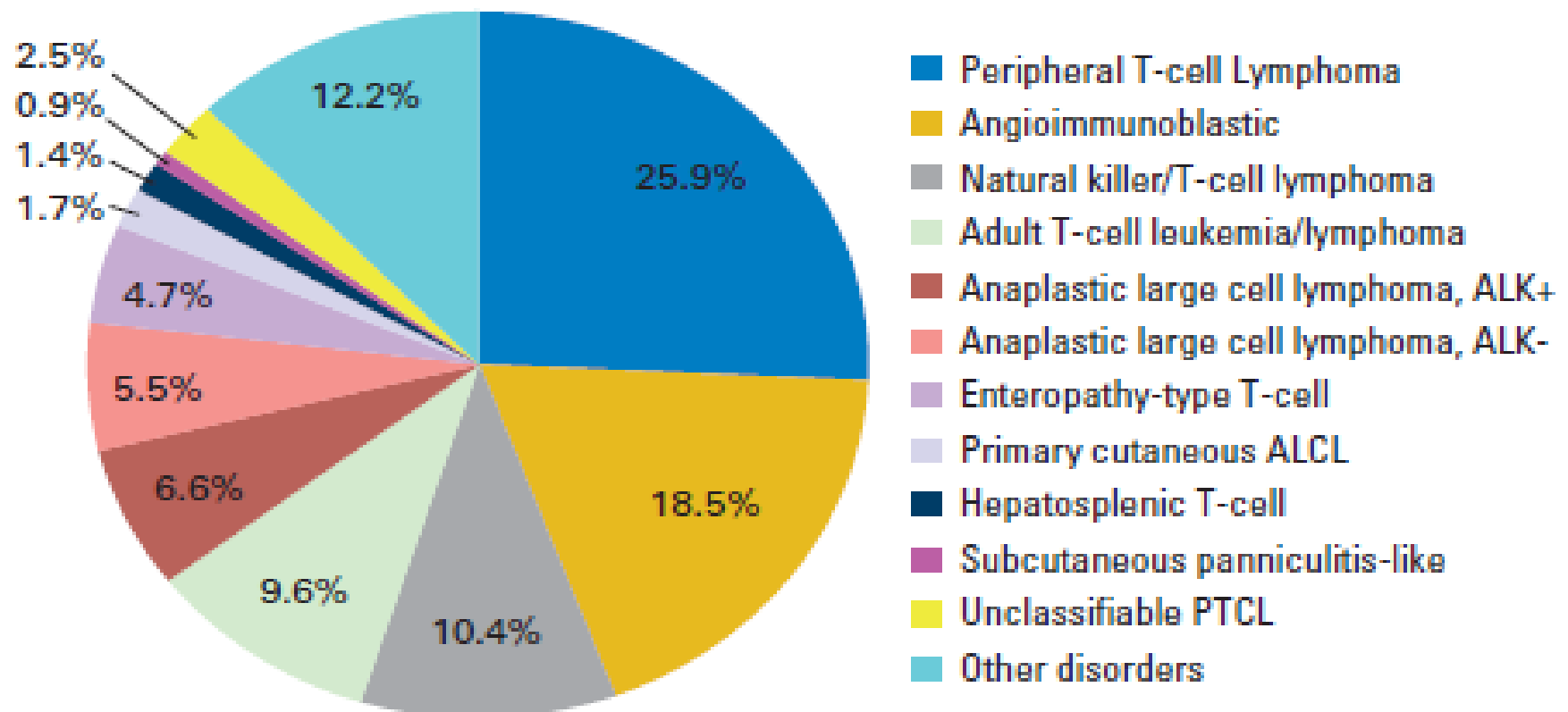


Fig 1. Distribution of 1,314 cases by consensus diagnosis. NOS, not otherwise specified; ALCL, anaplastic large-cell lymphoma; PTCL, peripheral T-cell lymphoma.

Vose, J, et al. J Clin Oncol 2008;26:4124-30.

Clinical features of ALK+ and ALK- ALCL

	Alk positive	Alk negative
Age at diagnosis	25-35 y	55-60 y
Stage at diagnosis	III-IV	III-IV
Extranodal involvement	60 %	20 %
Extranodal sites	Bone, soft tissue, BM,	Skin, liver, GI tract
Clinical course	More indolent	More aggressive
5 yr OS	70%	49%

Institutions & Patients

Data as of March 15, 2016

	Inst	Pts	%
Recruiting	74	1499	100
Active, Not Yet Recruiting	5	-	-

USA

8 328 22%

MSKCC
MDACC
UNMC
Stanford
CCF
FHCRC
WUSTL
Yale

Europe

56 649 45%

* active, not yet recruiting

Italy (39 + 1*)
UK (4)
Switzerland (3)
Slovakia (1)
Spain (8 + 3*)
France (1)

Middle/Far East

3 182 13%

SMC-South Korea
QMH-Hong Kong
Sheba Medical Center-Israel
Sourasky Medical Center-Israel*

South America

7 290 20%

Argentina (3)
Brazil (2)
Chile (1)
Uruguay (1)

data as of March 15, 2016

- 1.499 cases with PTCL or NK/T cell lymphoma (110 excluded so far; 1.389 analyzed)
- Newly diagnosed 2006-2016
- 74 sites globally
- Expert Hematopathology review
- Correlation with clinical outcomes

Histologic distribution

according to LOCAL/CENTRAL DIAGNOSIS

if review not possible or not yet done local diagnosis is reported

PTCL-NOS	504	(36%)
AITL	249	(18%)
ALCL, ALK-	208	(15%)
ALCL, ALK +	116	(8%)
NK/T	154	(11%)

Enteropathy type	62 (5%)
Hepatosplenic	26 (2%)
Subcutaneous pan-like	20 (1%)
Peripheral $\gamma\delta$	13 (1%)
Unclassifiable T-cell	37 (3%)



Anaplastic Large Cell
Lymphoma (*ALCL*)
N=324

ALCL by geographic area and by South American Countries (N=324)

Subtype	South America (N=89)		USA (N=72)		Europe (N=147)		Asia (N=16)	
	N	%	N	%	N	%	N	%
ALCL, ALK pos [n=116]	20	7,7	30	9,3	58	9,2	8	4,6
ALCL, ALK neg [n=208]	69	26,4	42	13,2	89	14,1	8	4,6



Subtype	Chile (N=141)	Brazil (N=64)	Argentina (N=38)	Uruguay (N=18)
	%	%	%	%
ALCL, ALK pos	5,0	12,5	13,2	0
ALCL, ALK neg	29,1	23,4	26,3	16,7

Patients characteristics (%)

	Subtype	Alk- (n=208)	Alk+ (n=116)
Median age (yrs, range)		55 (18-89)	37 (19-84)
Age ≥60 yrs		38	9
Gender (Male)		66	55
ECOG >1		20	24
B-symptoms		37	60
IPI LOW-LOW/INT	0-2	69	84
PIT LOW-LOW/INT	0-1	67	80
IPI INT/HIGH-HIGH	3-5	31	15
PIT INT/HIGH-HIGH	2-4	33	20

Patients characteristics (%)

Subtype	Alk- (n=208)	Alk+ (n=116)
Stage III-IV	59	74
Nodal only disease	30	40
Bulky disease ≥ 10 cm	8	13
BM involvement	6	8
LDH > ULN	44	33
HB ≤ 11 g/dl	27	26
Platelets $\leq 150K/mm^3$	11	4
Lymphocytes $\leq 1000/mm^3$	41	18
Monocytes > 800/mm ³	35	28
B2-micro > ULN [N=69/51]	55	28

Treatment details (%)

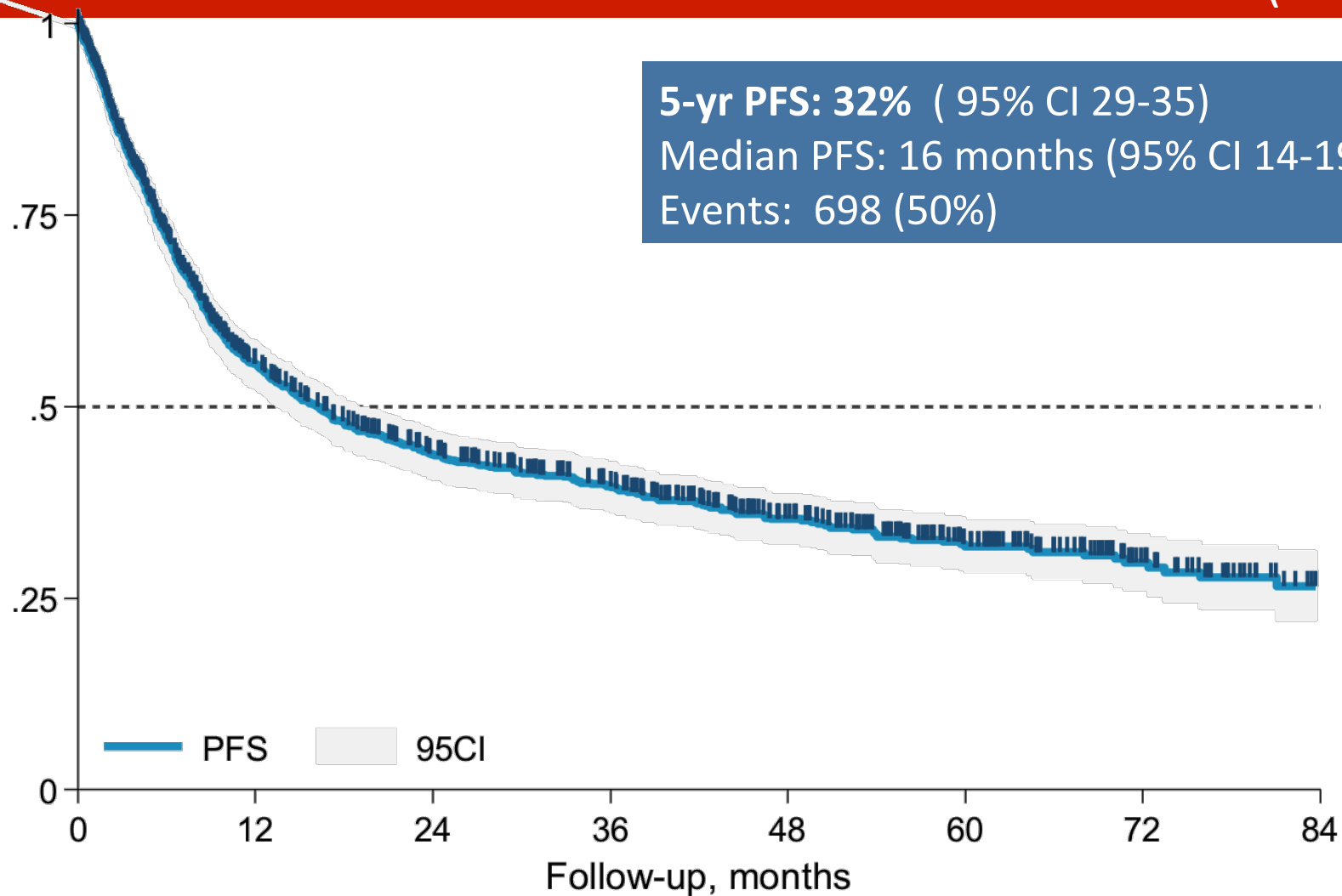
Alk- (n=151), Alk+ (n=78)

N	South America		USA		Europe		Asia	
	58	16	21	14	65	42	7	6
Subtype	Alk-	Alk+	Alk-	Alk+	Alk-	Alk+	Alk-	Alk+
Induction therapy								
No Tx/Best supportive care	15	6	9	0	0	0	0	0
RT alone	2	0	0	0	1	0	0	0
CHT alone	64	75	76	100	85	83	100	100
CHT/RT combined	19	19	14	0	14	17	0	0
Type of induction CHT								
Anthracycline	94	73	63	79	87	86	86	83
Anthracycline + Etoposide	4	20	32	21	8	9	14	17
Transplant use								
as consolidation in 1 st line	0	6	5	7	14	5	14	0
as salvage treatment	5	12	24	0	14	19	43	17

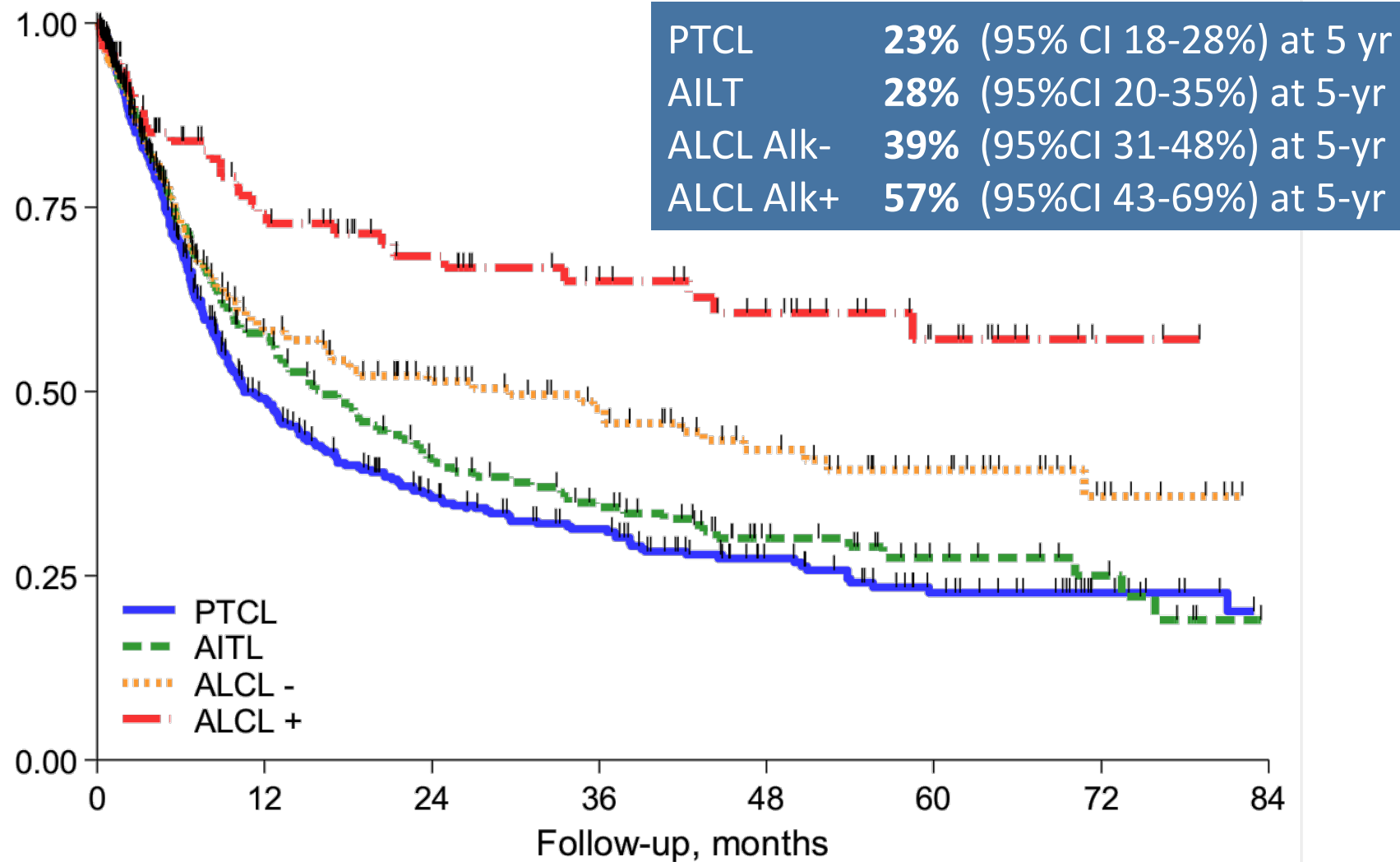
Response to initial Therapy (%): Alk- (n=151), Alk+ (n=78)

Subtype	n	South America		USA		Europe		Asia	
		Alk-	Alk+	Alk-	Alk+	Alk-	Alk+	Alk-	Alk+
Evaluable patients	n	43	14	16	14	64	42	7	6
CR/CRu		60	57	81	100	50	64	86	83
PR		9	7	6	0	27	19	14	0
NR/PD		30	36	12	0	23	17	0	17
Not Evaluable		10	6	14	0	1	0	0	0

Progression Free Survival T-cell lymphomas (n=1.389)

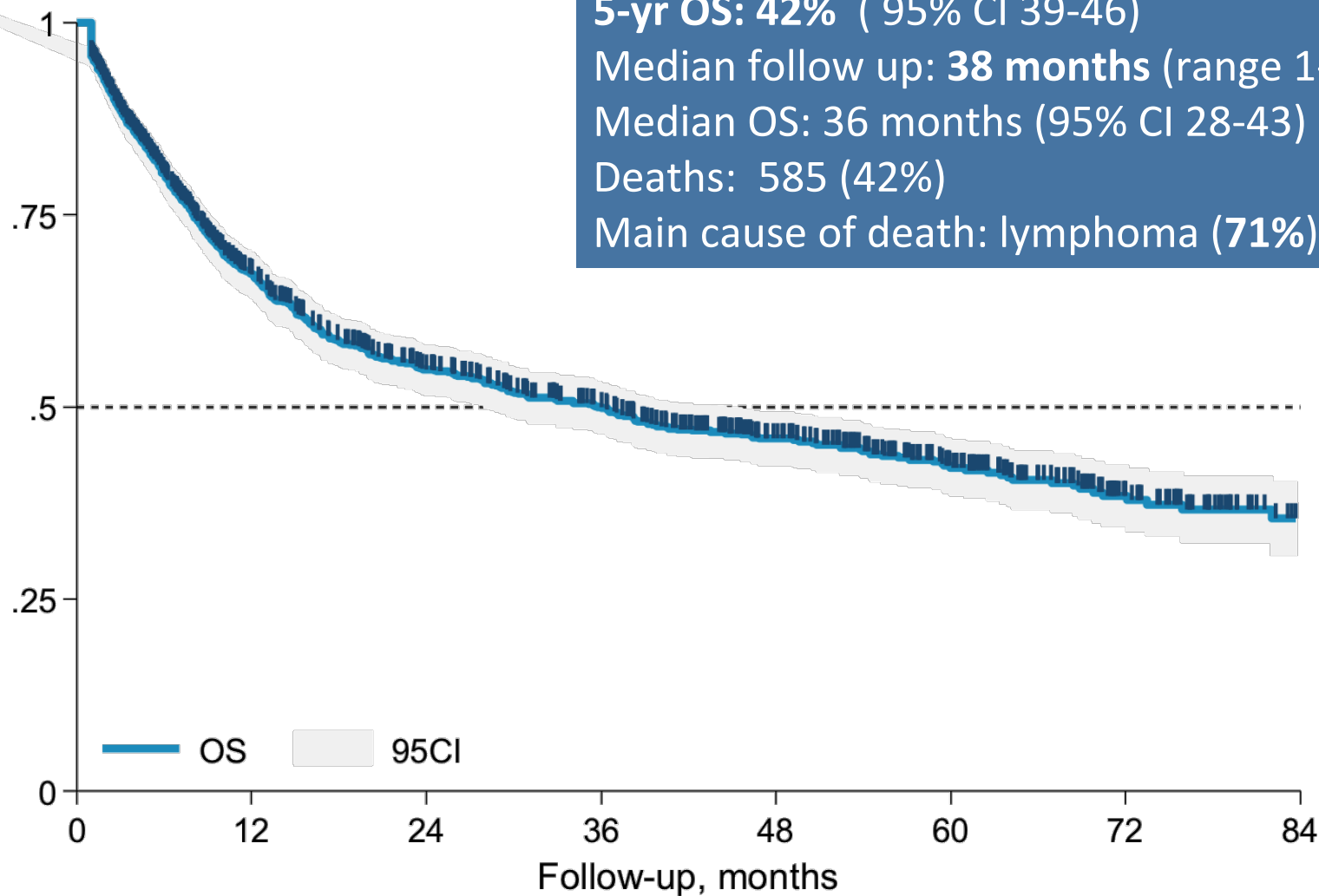


Progression free survival according to subtype (n=1.077)

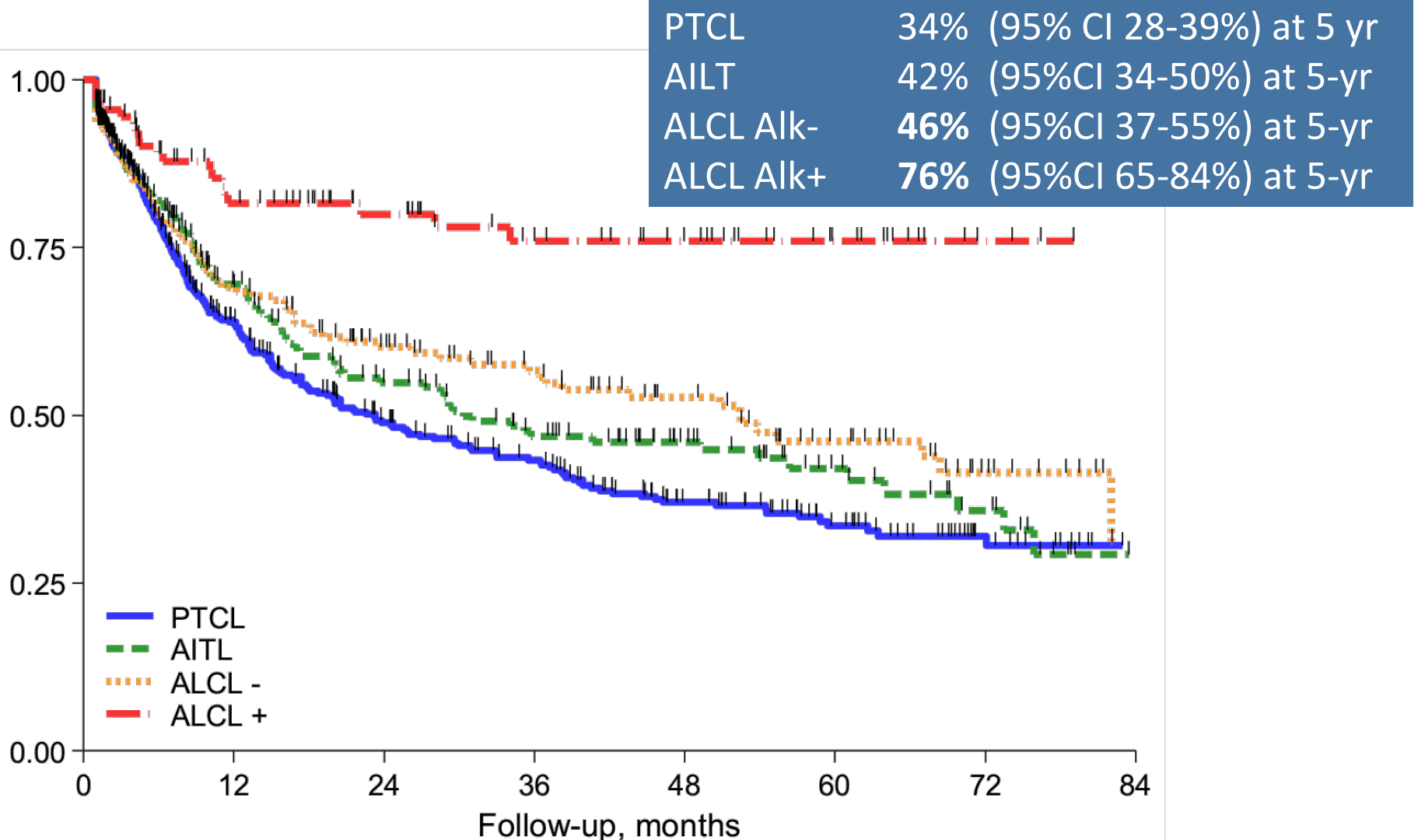


Overall survival all T-cell lymphomas (n=1.389)

5-yr OS: 42% (95% CI 39-46)
 Median follow up: **38 months** (range 1-112)
 Median OS: 36 months (95% CI 28-43)
 Deaths: 585 (42%)
 Main cause of death: lymphoma (**71%**)



Overall survival according to subtype (n=1.077)



Main Patients characteristics & Treatment by South American Country (%): Alk- (n=69) Alk+ (n=20)

	All S.A. 69 20		Chile 41 7		Brazil 15 8		Argentina 10 5		Uruguay 3 -	
	Alk-	Alk+	Alk-	Alk+	Alk-	Alk+	Alk-	Alk+	Alk-	Alk+
Median age (yr)	52	33	50	40	55	28	51	33	61	-
Age ≥60 yr	33	5	27	14	47	0	30	0	67	-
Sex (Male)	59	40	68	43	47	25	50	60	33	-
Stage III-IV	47	75	43	71	47	86	50	50	100	-
Therapy with curative intent	84	94	78	86	90	100	100	100	100	-
Chemotherapy +/- RT	83	94	78	86	80	100	100	100	100	-
<i>Anthracycline</i>	94	73	100	83	100	67	70	67	100	
<i>Etoposide</i>	2	0	0	0	0	0	10	0	0	
<i>Both</i>	4	20	0	17	0	33	20	0	0	
HDT consolidation/salvage	0/5	6/12	0/0	0/0	0/10	0/33	0/20	33/0	0/0	-/-

Conclusion

- Anaplastic Large Cell Lymphoma represents **23%** of all T-cell NHL, second most common to PTCL.
- ALCL, ALK (-) is more common than ALK (+): 15% vs 8%, mainly in South America and specially in Chile.
- ALCL, ALK (+) presents at younger age and lower IPI/PIT.
- 5 yr PFS for ALCL, ALK (+) and (-) were 57% vs 39%, respectively.
- 5 yr OS for ALCL, ALK (+) and (-), were 76% vs 46%, respectively.



**Gracias a todos los colegas que
han colaborado en el registro de
estos infrecuentes linfomas**