



Advances in Malignant lymphomas:
**The case of extranodal
and T-cell lymphomas**

Santiago de Chile

April 5-6, 2016

*Auditorio Dr. Lucas Sierra
Hospital del Salvador
Av. Providencia 364*

Presidents:

Maria Elena Cabrera
Carlos Sergio Chiattone
Massimo Federico

*The International
T-Cell Projects: from
retrospective analysis to
prospective data collection*

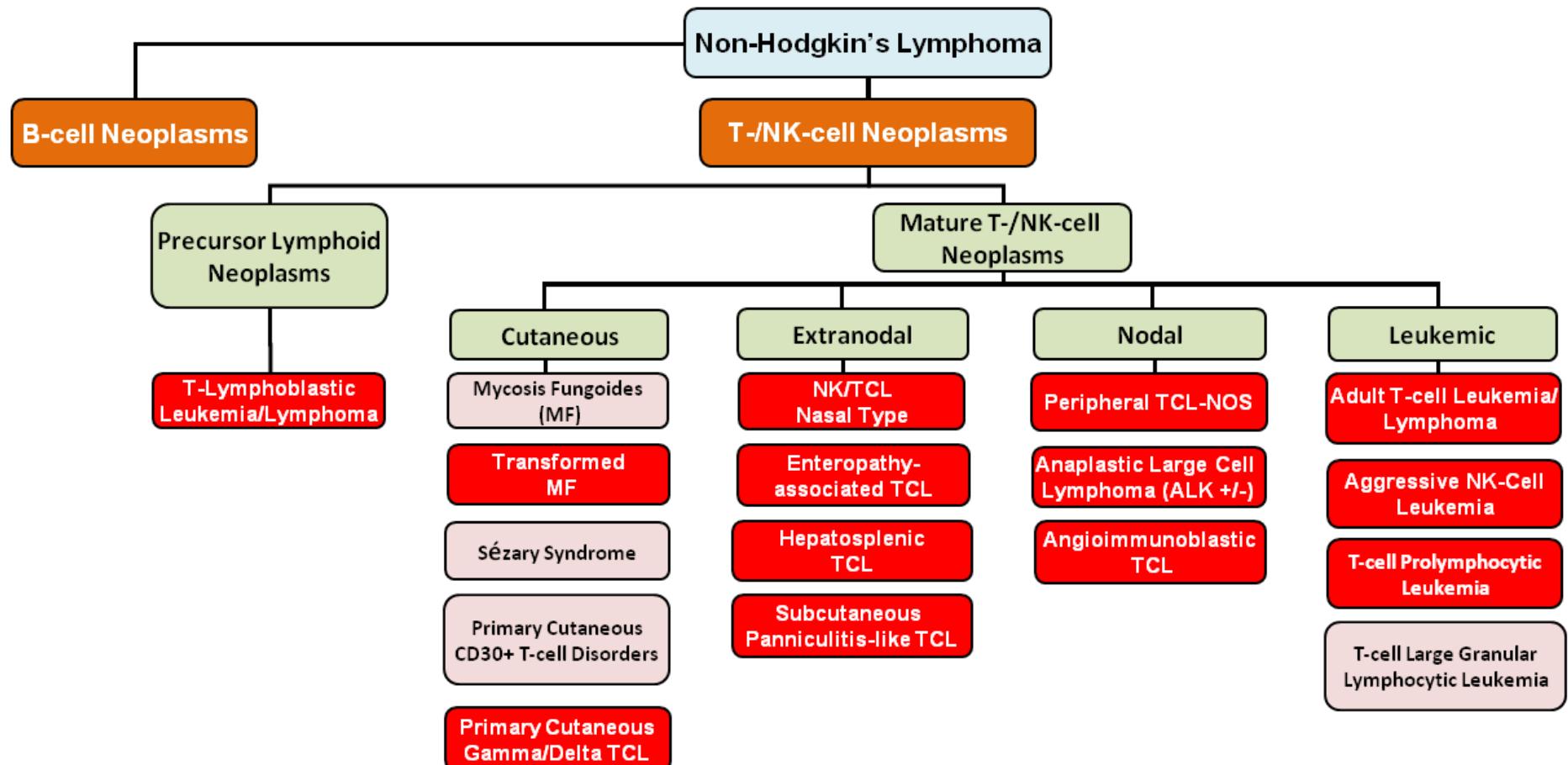
Monica Bellei

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Peripheral T-cell lymphomas (PTCLs)

- clinically and biologically heterogeneous group of mature T-cell and NK-cell neoplasms arising via oncogenic transformation of post-thymic T- and NK cells in peripheral lymphoid organs
- classification relies on
 - ✓ Morphology
 - ✓ Immunophenotype
 - ✓ Clinical/anatomical presentation
- limited recurrent genetic or molecular lesions, most lacking disease specificity
- Expert hematopathology review essential

WHO 2008 Classification of PTCLs



Adapted from Swerdlow SH, et al. *WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues*. 2008

Aggressive

Indolent

PTCLs: Epidemiology

- accounts for ~ 10% to 15% of all NHL
- rare in Western populations, prevalence slightly higher in Asia and Central–South America
- unique geographic distribution of different subtypes
- by some estimates, the incidence of PTCLs is growing significantly
 - ✓ may be driven by an aging population
 - ✓ improvements in diagnosis techniques may also be driving the apparent growth in incidence

International T-cell Project



Vose et al.
2008

International T-Cell Lymphoma Project

- 1,314 cases with PTCL or NK/T cell lymphoma
(161 excluded; 1,153 analyzed)
- Newly diagnosed 1990-2002
- 22 sites globally
- Expert Hematopathology review
- Correlation with clinical outcomes

International Peripheral T-Cell and Natural Killer/T-Cell Lymphoma Study: Pathology Findings and Clinical Outcomes

International T-Cell Lymphoma Project

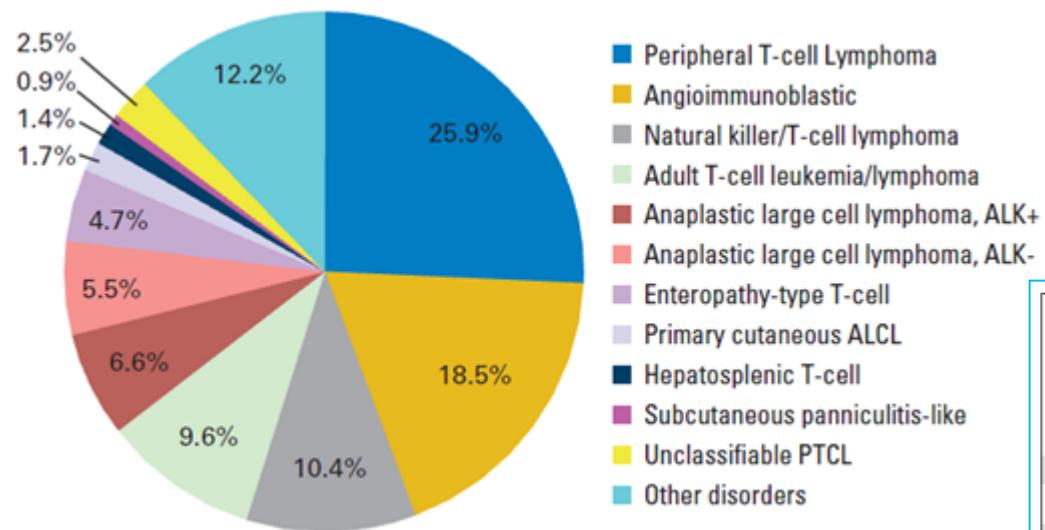


Fig 1. Distribution of 1,314 cases by consensus diagnosis.

Subtypes distribution among regions

Table 1. Major Lymphoma Subtypes by Geographic Region

| Subtype | North America | Europe | Asia |
|--------------------------------|---------------|--------|------|
| PTCL-NOS | 34.4 | 34.3 | 22.4 |
| Angioimmunoblastic | 16.0 | 28.7 | 17.9 |
| ALCL, ALK positive | 16.0 | 6.4 | 3.2 |
| ALCL, ALK negative | 7.8 | 9.4 | 2.6 |
| NKTCL | 5.1 | 4.3 | 22.4 |
| ATLL | 2.0 | 1.0 | 25.0 |
| Enteropathy-type | 5.8 | 9.1 | 1.9 |
| Hepatosplenic | 3.0 | 2.3 | 0.2 |
| Primary cutaneous ALCL | 5.4 | 0.8 | 0.7 |
| Subcutaneous panniculitis-like | 1.3 | 0.5 | 1.3 |
| Unclassifiable T-cell | 2.3 | 3.3 | 2.4 |

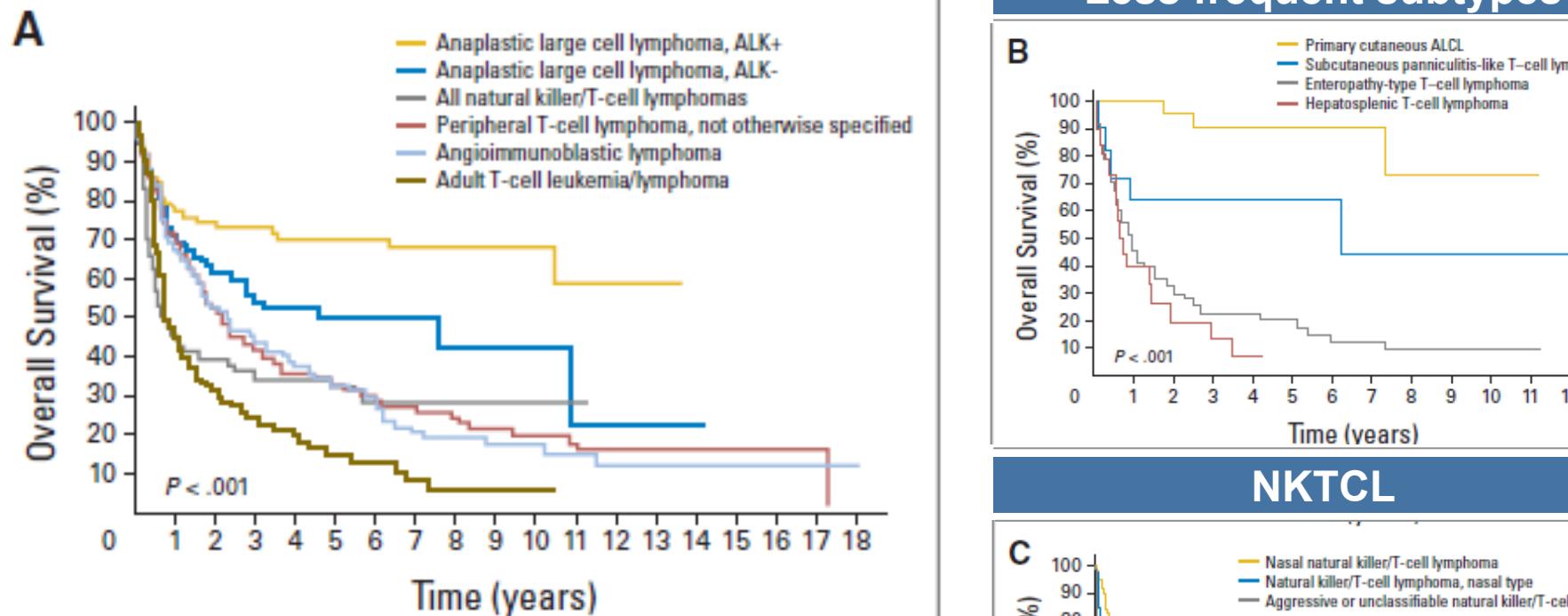
Abbreviations: PTCL, peripheral T-cell lymphoma; NOS, not otherwise specified; ALCL, anaplastic large-cell lymphoma; NKTCL, natural killer/T-cell lymphoma.

Overall survival

Vose et al.
2008



International T-Cell Lymphoma Project



5-yr OS of most frequent subtypes

| ALK+ ALCL | ALK- ALCL | PTCL-NOS | AITL | NKTCL | ATLL |
|-----------|-----------|----------|------|-------|------|
| 70% | 49% | 32% | 32% | 32% | 14% |

Study start: September 1, 2006



Sponsored by International T-cell Lymphoma Project

Monday, 27 September 2010

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PROSPECTIVE COLLECTION OF DATA IN PATIENTS WITH PERIPHERAL T-CELL LYMPHOMA

Peripheral T-Cell lymphoma unspecified
Angioimmunoblastic T-Cell lymphoma
Extranodal NK/T-Cell lymphoma
Enteropathy-type T-Cell lymphoma
Hepatosplenic gamma-delta T-Cell lymphoma
Subcutaneous panniculitis-like T-Cell lymphoma
Anaplastic large-cell lymphoma, T/null cell, primary systemic type



by courtesy of



info@tcellproject.org

Study Protocol Synopsis
(PDF download)

Agreement Form
(online)

Agreement Form
(PDF download)

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Associazione
Angela Serra



Intergruppo
Italiano Linfomi



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Modena

Study design and Aims



- To verify if a **prospective collection** of data would allow to achieve more accurate information **to better define prognosis** of the most frequent subtypes (PTCL,NOS and AITL) and **to improve knowledge on clinical and biological characteristics** and **outcome** of the more uncommon subtypes
- Sample size calculated on PTCL,NOS and AITL
(460 PTCL,NOS + 460 AITL)
- Primary endpoint: **5-yr OS**

Inclusion Criteria (1)

1. Previously-untreated patients with *de novo* diagnosis of peripheral T-cell or NK/T-cell lymphoma:

- ✓ Peripheral T-cell lymphoma NOS
- ✓ Angioimmunoblastic T-cell lymphoma

- Peripheral T-cell lymphoma, lymphoepiteliod variant
- Peripheral T-cell lymphoma, T-zone variant
- Peripheral T-cell lymphoma, parafollicular variant
- Nasal NK/T-cell lymphoma
- NK/T-cell lymphoma, nasal type
- Anaplastic large-cell lymphoma, T/null cell, ALK+, primary systemic type
- Anaplastic large-cell lymphoma, T/null cell, ALK-, primary systemic type
- Anaplastic large cell lymphoma, small cell variant, ALK+
- Anaplastic large cell lymphoma, lymphohistiocytic variant, ALK+
- Enteropathy- type T-cell lymphoma
- Hepatosplenic T-cell lymphoma
- Peripheral gamma-delta T-cell lymphoma
- Subcutaneous panniculitis-like T-cell lymphoma
- Unclassifiable peripheral T-cell Lymphoma
- Unclassifiable NK-cell lymphoma

Inclusion Criteria (2)

- 2. Age over 18**
- 3. Clinical data including baseline information on disease localization and laboratory parameters at staging, features of treatment adopted and assurance of follow-up updating for at least 5 years are requested**
- 4. Tissue biopsies adequate for diagnosis and classification and available for centralized review**
- 5. Diagnosis from September 1, 2006**
- 6. Continuous series of patients from each Institution**

Institutions & Patients

as of March 13, 2016

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

USA 8 328 22%

MSKCC
MDACC
UNMC
Stanford
CCF
FHCRC
WUStL
Yale



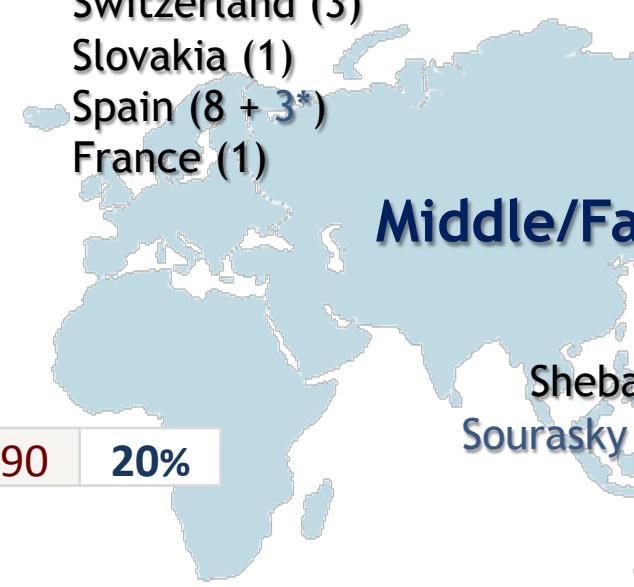
South America

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

7 290 20%

Europe 56 649 45%

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*





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*Analysis of data of patients
registered up to March 15, 2016
and with available data
(N=1,389). Part 1.*

Histotype distribution

according to LOCAL/CENTRAL DIAGNOSIS

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



Enteropathy type 62 5%

Hepatosplenic 26 2%

Subcutaneous pann-like 20 1%

Peripheral $\gamma\delta$ 13 1%

Unclassifiable T-cell 37 3%

Histologic subtypes distribution (%)

Subtype



Vose et al
2008

T-Cell Project

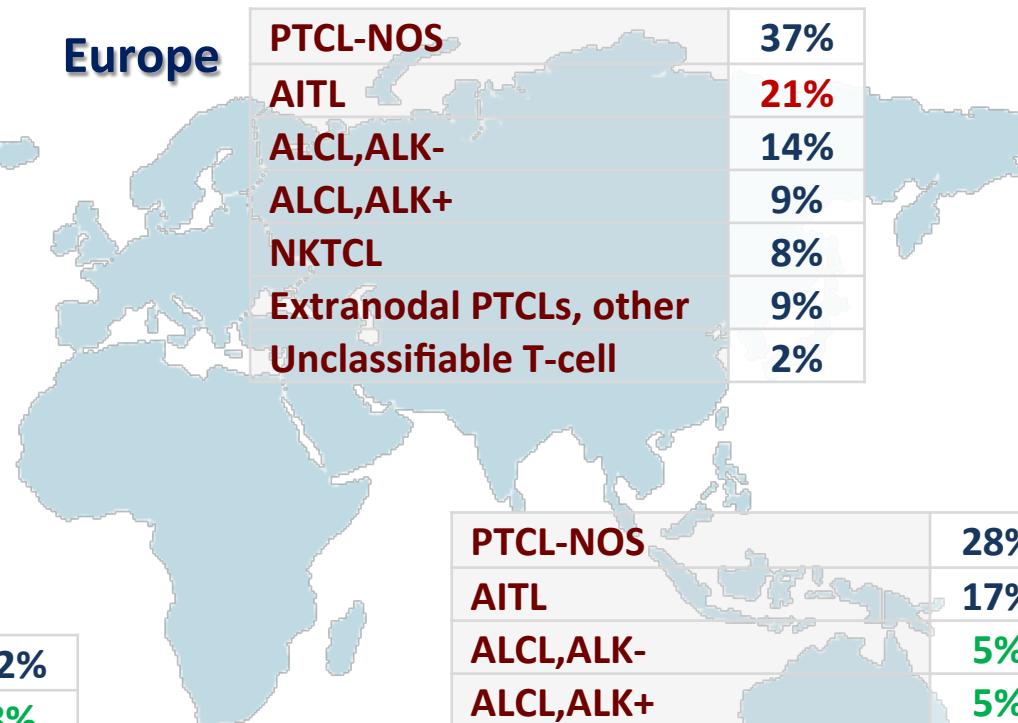
International T-Cell Lymphoma Project

| | N = 1153 | N = 1389 |
|--------------------------------|----------|----------|
| PTCL-NOS | 25.9 | 36.3 |
| AITL | 18.5 | 17.9 |
| ALCL, ALK + | 6.6 | 8.4 |
| ALCL, ALK - | 5.5 | 15.0 |
| ALCL, primary cutaneous | 1.7 | - |
| NK/T-cell lymphoma | 10.4 | 11.1 |
| EATL | 4.7 | 4.5 |
| Hepatosplenic | 1.4 | 1.9 |
| Subcutaneous panniculitis-like | 0.9 | 1.4 |
| Gamma-delta T-cell | < 1 | 0.9 |
| Unclassifiable T-cell | 2.5 | 2.7 |

Subtypes by geographic area



Europe



USA



South America

Asia



Major Lymphoma Subtypes by Geographic Region (%)

| Subtype | North America | | Europe | | Asia | | South America | |
|------------------------|---------------|------|--------|------|-------|------|---------------|------|
| | ITCLP | TCP | ITCLP | TCP | ITCLP | TCP | ITCLP | TCP |
| PTCL-NOS | 34,4 | 35,5 | 34,3 | 36,7 | 22,4 | 28,6 | - | 41,4 |
| Angioimmunoblastic | 16,0 | 20,9 | 28,7 | 20,9 | 17,9 | 16,6 | - | 8,0 |
| ALCL, ALK pos | 16,0 | 9,3 | 6,4 | 9,2 | 3,2 | 4,6 | - | 7,7 |
| ALCL, ALK neg | 7,8 | 13,1 | 9,4 | 14,1 | 2,6 | 4,6 | - | 26,4 |
| NK/T-cell | 5,1 | 8,1 | 4,3 | 7,8 | 22,4 | 30,3 | - | 10,0 |
| ATLL | 2,0 | - | 1,0 | - | 25,0 | - | - | - |
| EATL | 5,8 | 2,5 | 9,1 | 6,2 | 1,9 | 2,9 | - | 3,8 |
| Hepatosplenic | 3,0 | 3,7 | 2,3 | 1,6 | 0,2 | 1,7 | - | 0,4 |
| Primary cutaneous ALCL | 5,4 | - | 0,8 | - | 0,7 | - | - | - |
| Subcutaneous pannicul. | 1,3 | 2,2 | 0,5 | 1,1 | 1,3 | 3,4 | - | - |

Major Lymphoma Subtypes by South American Country (N=261)

| Subtype | South America All (N=261) | | Chile (N=141) | Brazil (N=64) | Argentina (N=38) | Uruguay (N=18) |
|-----------------------|---------------------------|------|---------------|---------------|------------------|----------------|
| | N | % | % | % | % | % |
| PTCL-NOS | 108 | 41,4 | 46,1 | 28,1 | 42,1 | 50,0 |
| Angioimmunoblastic | 21 | 8,0 | 7,1 | 12,5 | 7,9 | 0 |
| ALCL, ALK pos | 20 | 7,7 | 5,0 | 12,5 | 13,2 | 0 |
| ALCL, ALK neg | 69 | 26,4 | 29,1 | 23,4 | 26,3 | 16,7 |
| NKTCL | 26 | 10,0 | 7,1 | 18,8 | 5,3 | 11,1 |
| EATL | 10 | 3,8 | 3,5 | 0 | 2,6 | 22,2 |
| Hepatosplenic | 1 | 0,4 | 0 | 1,6 | 0 | 0 |
| Unclassifiable T-cell | 6 | 2,3 | 2,1 | 3,1 | 2,6 | 2,3 |

Database Completeness

67%



Cases completed

41%

73%

61%

Patients characteristics [1]

| Parameter | N _{TOT} | | |
|----------------------------|------------------|------------|-----|
| | | N | % |
| Median age (yrs) | 1389 | 56 (18-90) | |
| Age ≥60 yrs | 1389 | 616 | 44% |
| Gender (Male) | 1389 | 835 | 60% |
| ECOG >1 | 1201 | 312 | 26% |
| B-symptoms | 1201 | 594 | 49% |
| Discomfort disease-related | 1201 | 868 | 72% |
| IPI | 993 | | |
| LOW-LOW/INTERMEDIATE | 0-2 | 593 | 60% |
| INTERMEDIATE/HIGH-HIGH | 3-5 | 400 | 40% |
| PIT | 933 | | |
| LOW-LOW/INTERMEDIATE | 0-1 | 560 | 60% |
| INTERMEDIATE/HIGH-HIGH | 2-4 | 373 | 40% |

Patients characteristics [2]

| Parameter | N _{TOT} | N | % |
|-------------------------------|------------------|-----|-----|
| Stage III-IV | 1058 | 710 | 67% |
| Nodal only disease | 1058 | 266 | 25% |
| Bulky disease (≥ 10 cm) | 1058 | 65 | 6% |
| Number of extranodal sites >1 | 1058 | 320 | 30% |
| BM involvement | 951 | 198 | 21% |
| LDH > ULN | 1010 | 492 | 49% |
| HB ≤ 11 g/dL | 1080 | 330 | 31% |
| Platelets $\leq 150K/mm^3$ | 1079 | 196 | 18% |
| Lymphocytes $\leq 1000/mm^3$ | 1047 | 402 | 38% |
| Monocytes $> 800/mm^3$ | 994 | 241 | 24% |
| Beta2-microglobulin > ULN | 591 | 386 | 65% |
| CRP > ULN | 572 | 403 | 70% |

Main Patients characteristics & Treatment by geographic area (N=1,389; Tx N=1,020)

| | South America (N=261) | | USA (N=321) | Europe (N=632) | Asia (N=175) |
|------------------------------|--------------------------|------|----------------|-------------------|-----------------|
| | N | % | % | % | % |
| Median age (yrs) | 53 (18-88) | | 56 (18-88) | 58 (18-90) | 54 (18-89) |
| Age ≥60 yrs | 92 | 35,2 | 45,5 | 50,3 | 34,3 |
| Sex (Male) | 150 | 57,7 | 56,7 | 63,1 | 59,4 |
| ECOG >1 | 115 | 45,6 | 18,1 | 23,8 | 13,9 |
| B-symptoms | 151 | 59,9 | 46,0 | 50,0 | 36,1 |
| Stage III-IV | 134 | 58,3 | 68,2 | 73,2 | 60,0 |
| NES >1 | 60 | 26,1 | 25,6 | 34,3 | 29,7 |
| Therapy with curative intent | 184 | 85,2 | 91,8 | 92,9 | 98,1 |
| Chemotherapy +/- RT | 182 | 84,2 | 89,1 | 91,5 | 95,4 |
| <i>Anthracycline</i> | 159 | 87,4 | 44,2 | 79,6 | 55,8 |
| <i>Etoposide</i> | 3 | 1,6 | 23,9 | 1,4 | 25,9 |
| | 11 | 6,0 | 28,8 | 11,3 | 8,8 |
| <i>Both</i> | | | | | |
| HDT consolidation/salvage | 5/11 | 2/5 | 13/9 | 8/16 | 6/17 |

Main Patients characteristics & Treatment by South American Country (N=261)

| | South America All (N=261) | | Chile (N=141) | Brazil (N=64) | Argentina (N=38) | Uruguay (N=18) |
|------------------------------|------------------------------|------------|------------------|------------------|---------------------|-------------------|
| | N | % | % | % | % | % |
| Median age (yrs) | 53 | 53 (18-88) | 53 (18-83) | 50 (21-88) | 54 (21-88) | 57 (36-81) |
| Age ≥60 yrs | 92 | 35,2 | 34,0 | 31,1 | 42,1 | 44,4 |
| Sex (Male) | 150 | 57,7 | 64,5 | 48,4 | 44,7 | 61,1 |
| ECOG >1 | 115 | 45,6 | 60,3 | 13,6 | 40,0 | 47,1 |
| B-symptoms | 151 | 59,9 | 60,3 | 55,9 | 57,1 | 76,5 |
| Stage III-IV | 134 | 58,3 | 57,9 | 61,1 | 53,1 | 63,6 |
| NES >1 | 60 | 26,1 | 24,1 | 29,6 | 28,1 | 27,3 |
| Therapy with curative intent | 184 | 85,2 | 80,8 | 93,5 | 93,9 | 75,0 |
| Chemotherapy +/- RT | 182 | 84,2 | 80,8 | 89,1 | 94,0 | 75,0 |
| <i>Anthracycline</i> | 159 | | 97,0 | 78,0 | 71,0 | 77,8 |
| <i>Etoposide</i> | 3 | | 0 | 4,9 | 3,2 | 0 |
| | 11 | | 2,0 | 12,2 | 9,7 | 11,1 |
| <i>Both</i> | | | | | | |
| HDT consolidation/salvage | 5/11 | 2/5 | 0/0 | 4/17 | 9/6 | 0/8 |

PTCL-NOS: Main patient characteristics

Parameter



Vose et al
2008

International T-Cell Lymphoma Project



| | N=340 | N= 504 |
|--------------------|----------|-----------------|
| Median Age (years) | 60 years | 59 years |
| Male Gender | 66 % | 60 % |
| Stage III/IV | 69 % | 77 % |
| Marrow positive | 22 % | 23 % |
| IPI 0/1 | 28 % | 23 % |
| IPI 2/3 | 57% | 59 % |
| IPI 4/5 | 15 % | 18 % |

AITL: Main patient characteristics

Parameter



Vose et al
2008

International T-Cell Lymphoma Project

T-Cell Project

| | N=243 | N=249 |
|--------------------|----------|----------|
| Median Age (years) | 65 years | 64 years |
| Male Gender | 56% | 60 % |
| Stage III/IV | 89% | 90% |
| Marrow positive | 29% | 30% |
| IPI 0/1 | 14% | 19% |
| IPI 2/3 | 59% | 54% |
| IPI 4/5 | 28% | 27% |

NKTCL: Main patient characteristics

Parameter



Vose et al
2008

International T-Cell Lymphoma Project



| Parameter | N=127 | | N=142 | |
|--------------------|---------------|----------------|---------------|-----------------|
| | Nasal N=92 | ExtNas N=35 | Nasal N=36 | ExtNas N=106 |
| Median Age (years) | 52 yr | 44 yr | 55 yr | 51 yr |
| Male Gender | 64 % | 68 % | 72 % | 64 % |
| Stage III/IV | 27 % | 69 % | 16 % | 29 % |
| Marrow positive | 10 % | 18 % | 0 % | 7 % |
| IPI 0/1 | 51 % | 26 % | 70 % | 54 % |
| IPI 2/3 | 47 % | 57 % | 30 % | 35 % |
| IPI 4/5 | 2 % | 17 % | 0 % | 7 % |

ALCL: Main patient characteristics

Parameter



Vose et al
2008

International T-Cell Lymphoma Project



| Parameter | N=159 | | N=324 | |
|--------------------|--------------|--------------|---------------|---------------|
| | ALK+ N=87 | ALK- N=72 | ALK+ N=116 | ALK- N=208 |
| Median Age (years) | 34 yr | 58 yr | 38 yr | 54 yr |
| Male Gender | 63 % | 61 % | 58 % | 62 % |
| Stage III/IV | 65 % | 58 % | 73 % | 60 % |
| Marrow positive | 12 % | 7 % | 9 % | 7 % |
| IPI 0/1 | 49 % | 41 % | 47 % | 41 % |
| IPI 2/3 | 37 % | 44 % | 49 % | 44 % |
| IPI 4/5 | 14 % | 15 % | 4 % | 15 % |

EATL: Main patient characteristics

Parameter



Vose et al
2008

International T-Cell Lymphoma Project

T-Cell Project

| | N=62 | N=62 |
|--------------------|----------|----------|
| Median Age (years) | 61 years | 59 years |
| Male Gender | 53 % | 63 % |
| Stage III/IV | 69 % | 59 % |
| Marrow positive | 3 % | 12 % |
| IPI 0/1 | 25 % | 37 % |
| IPI 2/3 | 63 % | 48 % |
| IPI 4/5 | 13 % | 14 % |



**Pitfalls and major issues in the histologic diagnosis of
Peripheral T-cell Lymphomas: results of the central review
of 573 cases from the T-Cell Project, an International,
Cooperative Study.**

Monica Bellei¹, Elena Sabattini², Emanuela Anna Pesce¹, Young-Hyeh Ko³, Won Seog Kim⁴, Maria Elena Cabrera⁵, Virginia Martinez⁶, Ivan Dlouhy⁷, Roberto Pinto Paes⁸, Tomas Barrese⁸, Josè Vassalo⁹, Vittoria Tarantino¹, Julie Vose¹⁰, Dennis Weisenburger¹¹, Thomas Rüdiger¹², Massimo Federico¹, Stefano Pileri^{13,14}.

Pitfalls and major issues in the histologic diagnosis of Peripheral T-cell Lymphomas: results of the central review of 573 cases from the T-Cell Project, an International, Cooperative Study.

- A diagnosis of PTCL or NK/TCL was confirmed in 461 of the cases (80.4%); 49 additional cases (8.5%) were misclassified locally and reclassified by central reviewers with a different subtype among those eligible for the study.
- The subtypes for which the major difficulties in correctly diagnosing and classifying the disease by local pathologists were PTCL-NOS and ALCL, ALK-.

Pitfalls and major issues in the histologic diagnosis of Peripheral T-cell Lymphomas: results of the central review of 573 cases from the T-Cell Project, an International, Cooperative Study.

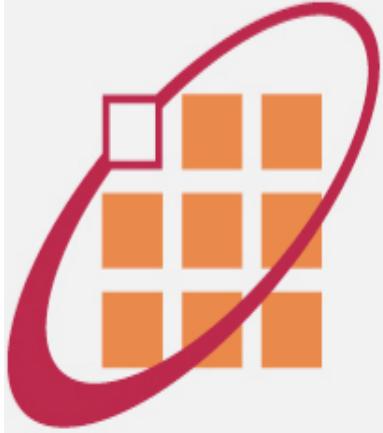
- The results of the review confirm that these neoplasms can be easily misclassified or misdiagnosed in the daily practice, being a correct diagnosis still a very critical issue that needs a painstaking attention.
- The T-Cell project experience highlights that expert hematopathology review with the application of adequate diagnostic algorithms is essential when dealing with these tumors, since a misdiagnosis could have a crucial impact on a correct treatment choice and consequently on patient care.

28-Mar-2016

Dear Dr. Bellei,

Manuscript ID HON-16-0043 entitled "Pitfalls and major issues in the histologic diagnosis of Peripheral T-cell Lymphomas: results of the central review of 573 cases from the T-Cell Project, an International, Cooperative Study." which you submitted to Hematological Oncology, has been reviewed.

The referees have recommended publication, but also suggest some minor revisions to your manuscript.



Comprehensive Oncology Measures for PeripheraL T-cell Lymphoma TrEatment The “COMPLETE” Registry

Prospective, Longitudinal, Multinational Registry
of Patients with Newly Diagnosed Peripheral
T-Cell Lymphoma

T-Cell Project

Monday, 13 July 2009

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PROSPECTIVE COLLECTION OF DATA IN PATIENTS WITH PERIPHERAL T-CELL LYMPHOMA

Peripheral T-Cell lymphoma unspecified
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Extranodal NK/T-Cell lymphoma
Enteropathy-type T-Cell lymphoma
Hepatosplenic gamma-delta T-Cell lymphoma
Subcutaneous panniculitis-like T-Cell lymphoma
Anaplastic large-cell lymphoma, T/null cell, primary systemic type

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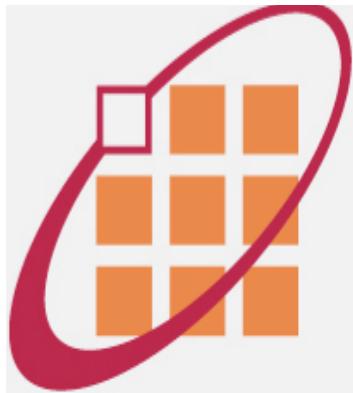
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Modena



Curr Hematol Malig Rep
DOI 10.1007/s11899-015-0291-0



T-CELL AND OTHER LYMPHOPROLIFERATIVE MALIGNANCIES (P PORCU, SECTION EDITOR)

The Value and Relevance of the T Cell Lymphoma Registries and International Collaborations: the Case of COMPLETE and the T-Cell Project

Monica Bellei¹ · Chadi Nabhan² · Emanuela Anna Pesce¹ · Luana Conte³ · Julie M. Vose⁴ · Francine Foss⁵ · Massimo Federico¹



Curr Hematol Malig Rep
DOI 10.1007/s11899-015-0291-0



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COMPLETE & TCP: Sybtypes distribution (%)



13-ICML
13th International Conference on Malignant Lymphoma
Palazzo dei Congressi, Lugano, Switzerland, June 17-20, 2015

Bellei M et al Abs #231
Nabhan C et al Abs # 232



| Diagnosis | 2010-2014 | | | 2006-2014 | | | <i>P</i> | |
|---------------|-------------------|------------|------------------|-----------|-----------|------------|--------------|--|
| | Baseline data (N) | | Therapy data (N) | | | | | |
| | | | | | | | | |
| | ≤ 60 yrs | >60<70 yrs | ≥ 70 yrs | | | | | |
| | 207 | 462 | 100 | 189 | | | | |
| PTCL-NOS | 29 | 32 | 40 | 42 | 38 | 47 | .002* | |
| AITL | 10 | 12 | 25 | 18 | 20 | 28 | | |
| ALCL, ALK pos | 9 | 11 | 4 | 2 | 1 | 1-2 | | |
| ALCL, ALK neg | 11 | 17 | 9 | 15 | 12 | 9 | | |
| NKTCKL | 14 | 14 | 9 | 16 | 5 | 12 | | |
| Other | 27 | 13 | 12 | 13 | 24 | 8 | | |

* PTCL-NOS vs other subtypes

COMPLETE & TCP: Patient characteristics (%)

| | ≤ 60 yrs | | $>60<70$ yrs | | ≥ 70 yrs | | P | |
|-------------------------|---------------|-----|--------------|-----|---------------|-----|---|---|
| | 207 | 462 | 88 | 168 | 100 | 189 |  |  |
| Male gender | 61 | 61 | 65 | 68 | 63 | 57 | .81 | .09 |
| B-symptoms (presence) | 52 | 50 | 42 | 54 | 43 | 44 | .16 | .21 |
| Stage III-IV | 71 | 66 | 72 | 71 | 66 | 75 | .55 | .06 |
| Sites of disease | | | | | | | | |
| Nodal | 60 | 72 | 66 | 74 | 58 | 81 | .51 | .054 |
| Extranodal | 62 | 74 | 56 | 76 | 58 | 72 | .58 | .65 |
| LDH > ULN | <1 | 48 | 0 | 48 | 4 | 48 | .02 | .99 |

COMPLETE & TCP: Treatment characteristics (%)

| | ≤ 60 yrs | | $>60 < 70$ yrs | | ≥ 70 yrs | | P | |
|-------------------------------|---------------|-----|----------------|-----|---------------|-----|---|---|
| | 189 | 426 | 78 | 156 | 94 | 172 |  |  |
| Primary intent of Tx | | | | | | | <.0001 | <.0001 |
| Curative | 94 | 96 | 89 | 90 | 69 | 87 | | |
| Palliation | 6 | 4 | 12 | 10 | 31 | 13 | | |
| First line TX approach | | | | | | | | |
| CHT alone | 58 | 67 | 58 | 73 | 64 | 75 | .58 | .13 |
| CHT +HDT consolidat. | 23 | 10 | 22 | 5 | 3 | 1 | <.0001 | <.0001 |
| CHT + RT consolidat. | 6 | 17 | 8 | 9 | 7 | 9 | .90 | .008 |
| Local RT alone | 1 | 2 | 1 | 3 | 9 | 2 | .002 | .76 |
| Observation /BSC | 2 | 4 | 34 | 10 | 10 | 13 | .02 | .02 |
| Other | 10 | 10 | 9 | 9 | 8 | 8 | | |

COMPLETE & TCP: Type of chemoherapy (%)

| | ≤ 60 yrs | | $>60<70$ yrs | | ≥ 70 yrs | |
|--------------------------|---|---|---|---|---|---|
| | 189 | 426 | 78 | 156 | 94 | 172 |
| |  |  |  |  |  |  |
| CHOP/CHOP-like | 26 | 52 | 34 | 54 | 33 | 54 |
| CHOEP/CHOEP-like | 20 | 9 | 17 | 13 | 13 | 3 |
| Gemcitabine-based | 4 | 0 | 1 | 1 | 8 | 2 |
| Platinum- based | 6 | 3 | 3 | 2 | 1 | 1 |
| Ifosfamide-based | 8 | 6 | 4 | 1 | 0 | 1 |
| Other | 37 | 30 | 41 | 29 | 44 | 39 |

COMPLETE & TCP: Outcome



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13th International Conference on Malignant Lymphoma
Palazzo dei Congressi, Lugano, Switzerland, June 17-20, 2015

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| | ≤ 60 yrs | | $>60<70$ yrs | | ≥ 70 yrs | | <i>P</i> |
|-----------------------|---------------|-----|--------------|-----|---------------|-----|----------|
| | 189 | 426 | 78 | 156 | 94 | 172 | |
| 2-yr OS (%) | | 60 | | 55 | | 40 | |
| 5-yr OS (%) | | 51 | | 38 | | 24 | |
| Median survival (mos) | 45.3 | | 41.9 | | 26.4 | | |

Cox modeling predictors of OS

| | | HR | <i>P</i> | | HR | <i>P</i> |
|--------------------------|--|------------------------|------------------|--|------------------------|-----------------|
| Better survival | | 0.19 | <.0001 | | 0.50 | .01 |
| <i>HDT consolidation</i> | | <i>95%CI 0.09-0.42</i> | | | <i>95%CI 0.29-0.85</i> | |
| Inferior survival | | 3.4 | <.0001 | | 3.0 | <.003 |
| <i>Stage III-IV</i> | | <i>95%CI 1.91-6.20</i> | | | <i>95%CI 1.45-6.22</i> | |
| <i>Age</i> | | | | | 1.12 | <.004 |
| | | | | | <i>95%CI 1.04-1.20</i> | |

Conclusions

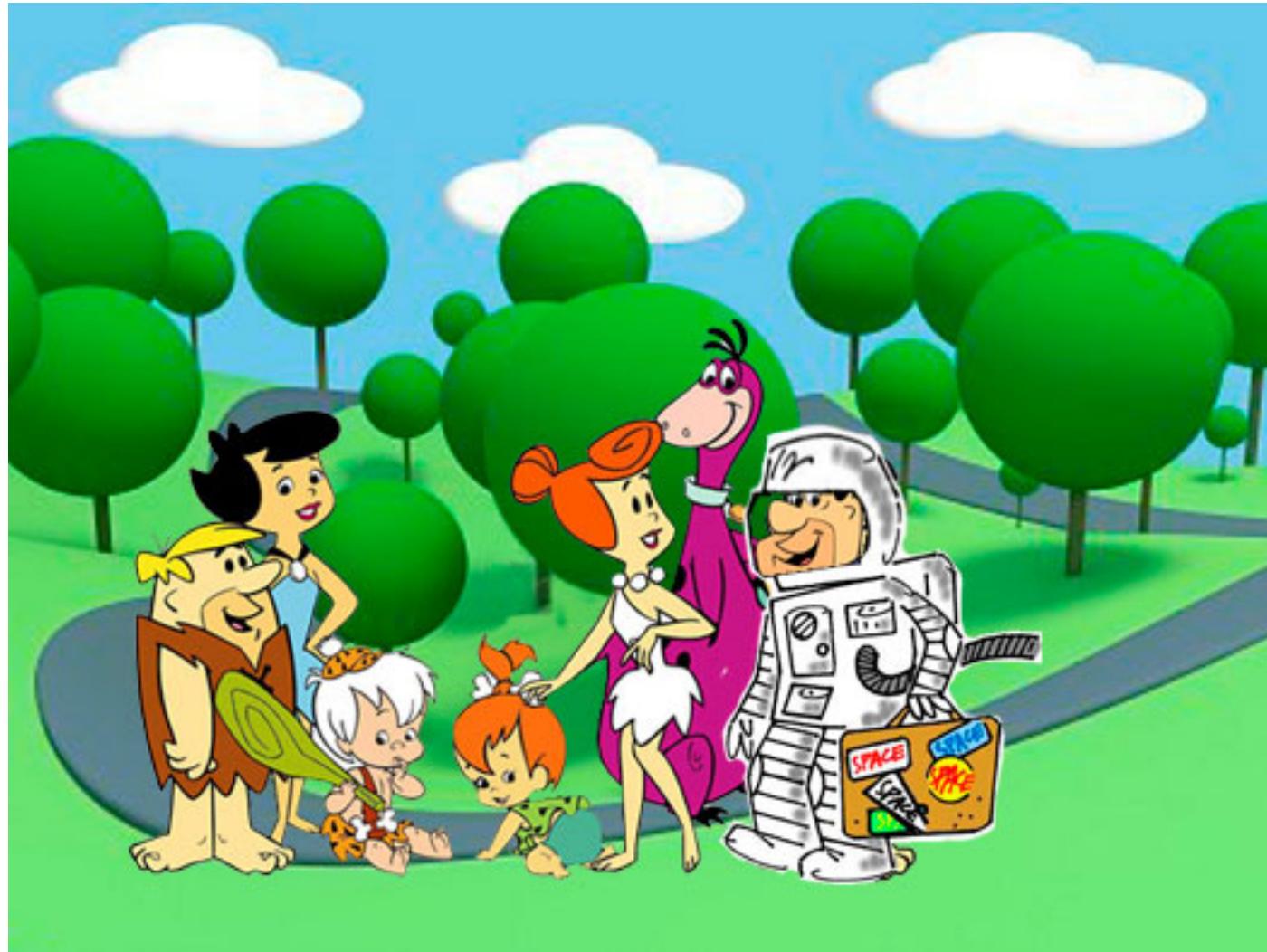


- Patients aged ≥ 70 yrs are more likely to receive non-curative intent TX
- HDT was an independent predictor of better OS
- Stage III-IV (both studies) and Age (TCP) are independent predictor of inferior OS
- Optimal treatment, especially for the elderly subset is still a relevant unmet need, more efforts to define better strategies are urgent

Conclusions

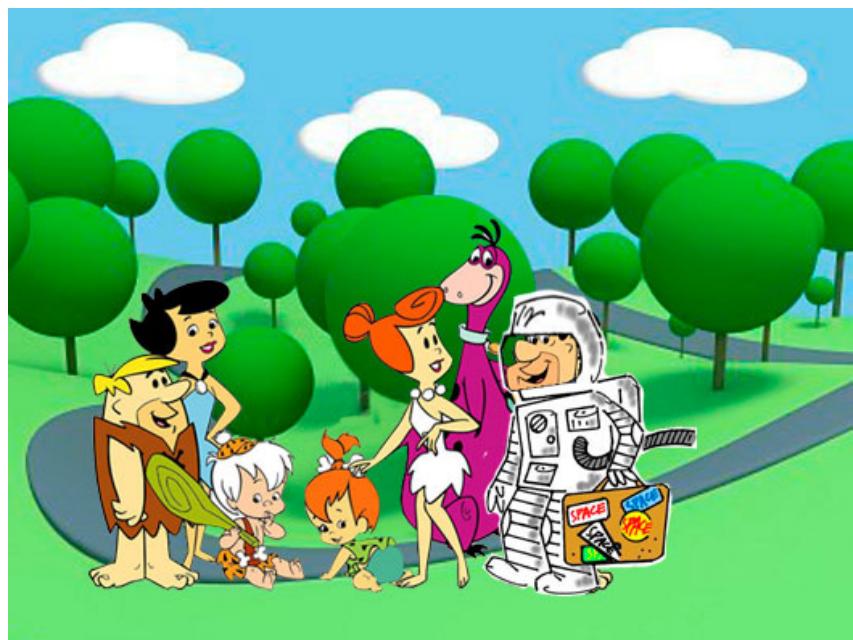
- PTCL is a very heterogeneous lymphoma – many subtypes
- Treatment remains challenging
- Retrospective and prospective information – very similar patient populations
- Looking forward to new information and therapies!

...a step forward...



Next steps

- Continue registration reaching a total of at least 2,000 assessable cases
- Create an international tissue catalogue including FFPE samples as well as frozen tissue, accessible to research groups with a solid reputation in studying PTCLs
- Activate new sites/areas
 - ✓ Concord Hospital, Sidney (Judith Trotman)
 - ✓ AGMT, Austria - Study Group of Medical Tumour Therapy (Richard Greil, Lukas Weiss)
 - ✓ ACHO, Colombia - Colombian Association of Hematology and Oncology (Virginia Abello Polo)



THANK YOU