X ANIVERSARIO

Avances en Linfoma T: Actualización basada en ASH 12

Atlanta

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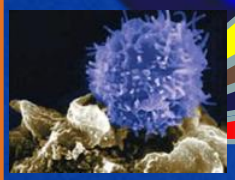
Mapa del Linfoma T

Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

- Neoplasias muy heterogeneas
- Raras: <1 /100.000 h / año.
- En general, terapéuticas insuficientes



TRATAMIENTO

PRONÓSTICO

BIOLOGIA

A. PATOLÓGICA

Crecer

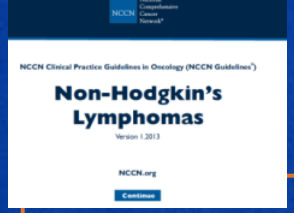
Establecer

Explorar
Definir

Asegurar

AVANZAR

Areas de búsqueda de novedades



Linfoma T: A. Patológica

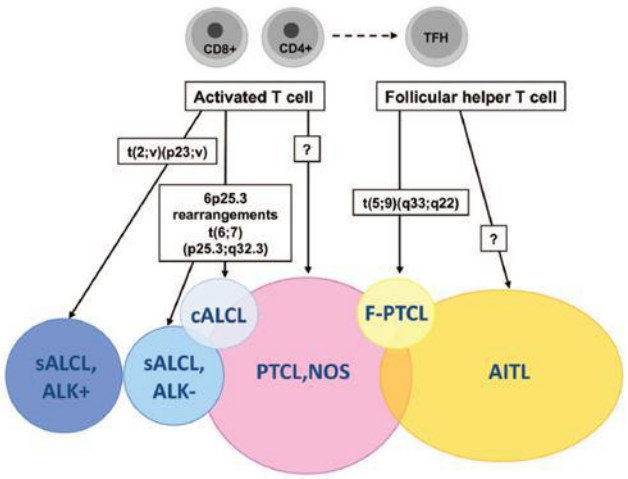
Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

- Difícil diagnóstico

T- or NK/T-cell antigens positive[b,c] (CD2, CD3, CD5, CD7)
[and B-cell antigens ne

- Morphology
  - Anaplastic vs. non-anaplastic
  - Epidermotropic
- Clinical
  - Age (child, adult)
  - Location
    - Cutaneous
    - Extranodal noncutaneous (spe
    - Nodal
- Immunophenotype
  - CD30, ALK*, CD56, βF1, cytotoxic
  - CD4, CD8, CD5, CD7, TCRαβ, TCI
  - Follicular T-cells: CD10, BCL6, CI
  - Viruses: EBV, HTLV1 (clonal)
- Genetic testing
  - ALK, TCR, HTLV1

*Always do ALK if CD30+



- Paneles inmunofen

- IHC panel: CD20, CD3, CD10, BCL6, Ki-67, CD5, CD30, CD2, CD4, CD8, CD7, CD56, CD57 CD21, CD23, EBER-ISH, ALK
  or
- Cell surface marker analysis by flow cytometry: kappa/lambda, CD45, CD3, CD5, CD19, CD10, CD20, CD30, CD4, CD8, CD7, CD2; TCRαβ; TCRγ

WHO 2008 Swerdlow SH et al

Leucémico
T-cell prolymphocytic leukaemia
T-cell large granular lymphocytic leukaemia
Aggressive NK-cell leukaemia
Adult T-cell leukaemia/lymphoma

Chronic lymphoproliferative disorders of NK cells
EBV+ T-cell lymphoproliferative disorders of childhood
cell lymphoproliferative disease of childhood
ne-like lymphoma

lymphoma, nasal type
ed T-cell lymphoma
lymphoma
culitis-like T-cell lymphoma (αβ subtype only)

D30-positive T-cell lymphoproliferative disorders
anaplastic large cell lymphoma
pulosis*

peripheral T-cell lymphomas, rare subtypes
Primary cutaneous gamma-delta T-cell lymphoma
Primary cutaneous CD8 aggressive epidermotropic T-cell lymphoma
Primary cutaneous CD4+ small/medium T-cell lymphoma

Nodal
Peripheral T-cell lymphoma, not otherwise specified
Angioimmunoblastic T-cell lymphoma
Anaplastic large cell lymphoma, ALK+
Anaplastic large cell lymphoma, ALK negative

ASEGURAR

Linfoma T: Diagnóstico AP

Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

- 1545 Diagnostic Accuracy of a Defined Immunophenotypic and molecular Genetic Approach for Peripheral T/NK-Cell Lymphomas: A North American PTCL Study Group Project. Eric D. Hsi, Jonathan Said, William R Macon,…
- 374 casos PTCL revisados x 7 Hematopatólogos
- 4 niveles:
  - Hematoxilina
  - 1 IHC (CD3, CD5, CD10, CD20, CD21, CD30, CD45, PAX5)
  - 2 IHC (CD2, CD4, CD7, CD8, CD23, PD1, CD56, EBER, ALK, TIA1, TCRg,TCRbF1)
  - Estudio reordenamiento genes.

DIAGNOSTICOS REALIZADOS

Nivel 1: 16.3%,
Nivel 2: 36.9%,
Nivel 3: 82.7%,
Nivel 4: 85.9% (un 8% requirieron este nivel para acuerdo)
7.5% de desacuerdo (subtipos)

- 1610 Comparison of Referring and Final Pathology for T-Cell Lymphomas in the NCCN
  Alex F Herrera, Allison Crosby-Thompson, Jonathan W. Friedberg,…

- E. prospectivo: 7 centros
- Periodo 2007-2011: 98 pacientes

- 39% coincidieron diagnóstico
- 61%: discrepancia
- 28% discrepancia con estudios adicionales

- Mejor correlación: ALCL + (73%)
- Correlación media: ALCL – (47%)
- Baja correlación: PTCL (28)
  AITL (28%)

El Linfoma T requiere patólogos expertos y paneles adecuados

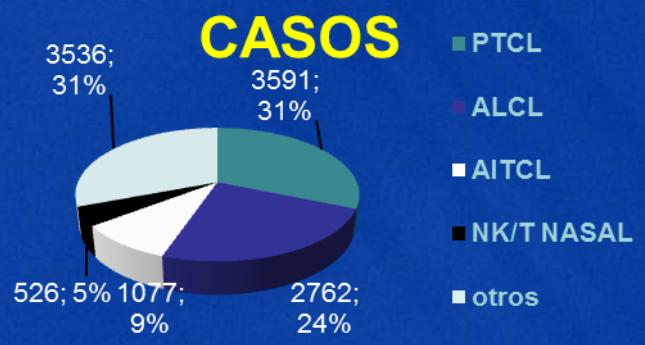
LINFOMAS T: Incidencia

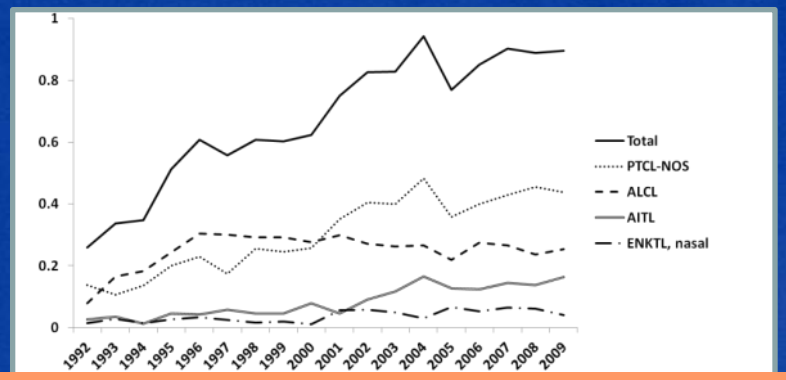
Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

- 4264 Trends in Incidence and Outcome in T-Cell Lymphoma Since 1992: A SEER Database Analysis

AM. Petrich, I Helenowski, R W. Galamaga, and C Nabhan,
Robert H. Lurie Comprehensive Cancer Center, Northwestern University Feinberg School of Medicine, Chicago

- **PERIODO. 1992 – 2008.**
- **Nº total Linfomas T: 11,492**
- **International Classification of Diseases for Oncology (ICD-O) codes**

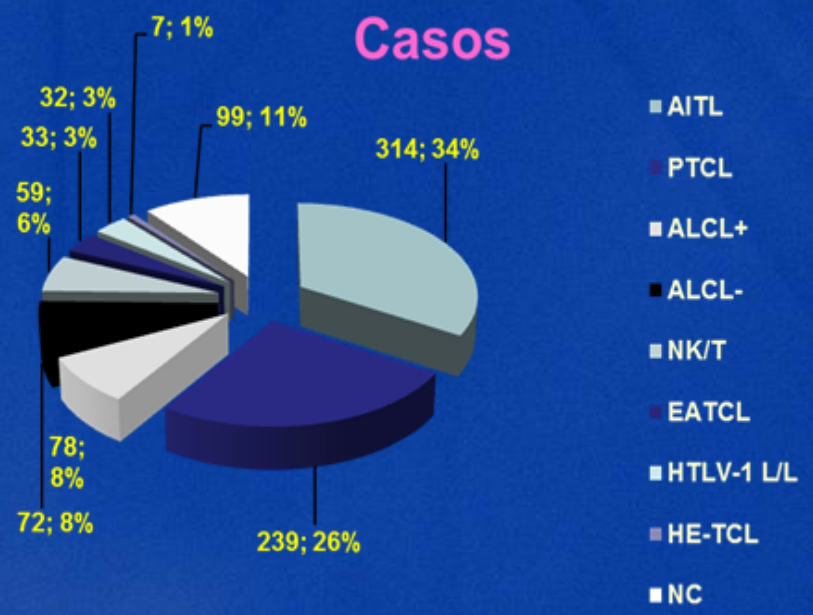




- **1607 Angioimmunoblastic T-Cell Lymphoma (AITL) Is the Most Prevalent T-Cell Lymphoma Entity in Western Europe**

Marie Parrens, MD1*, Antoine Martin, MD2*, Laurence Lamant

E. Prospectivo: network Lymphopath (Francia y limítrofes)
Periodo 2010-2011



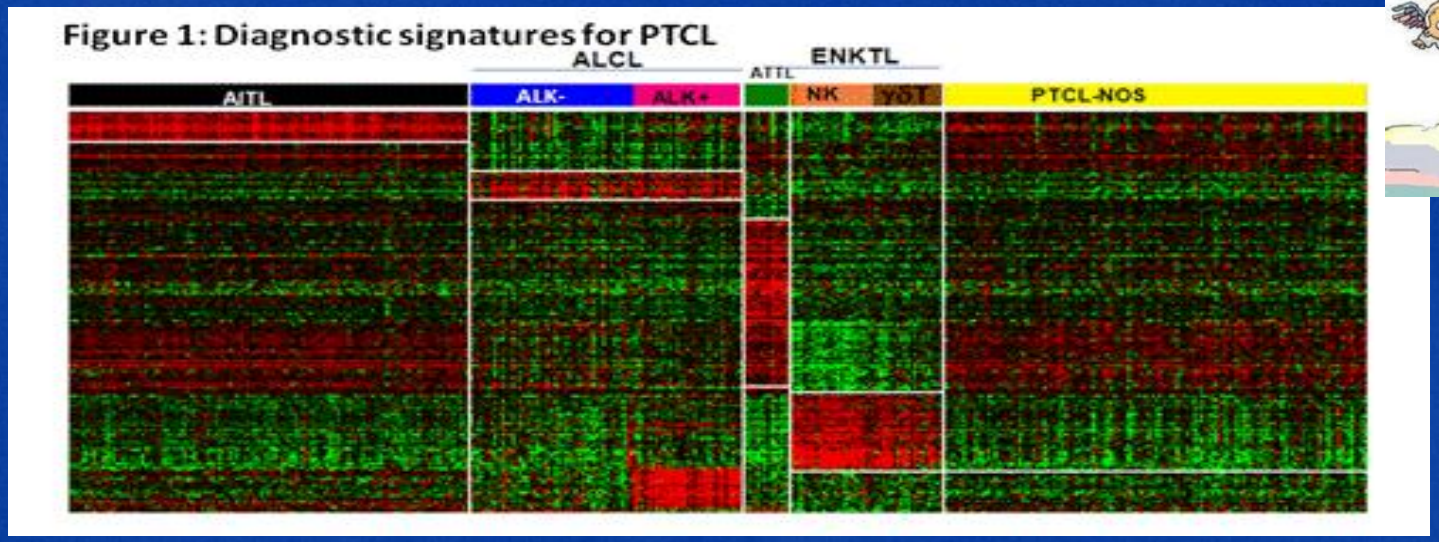
INCIDENCIAS DIFERENTES SEGÚN ÁREAS: OBTENER DATOS PROPIOS

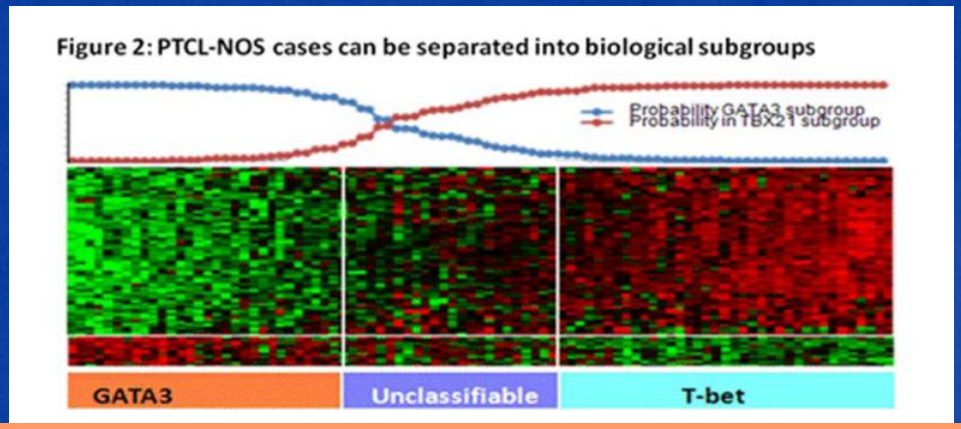
Linfomas T: Biología

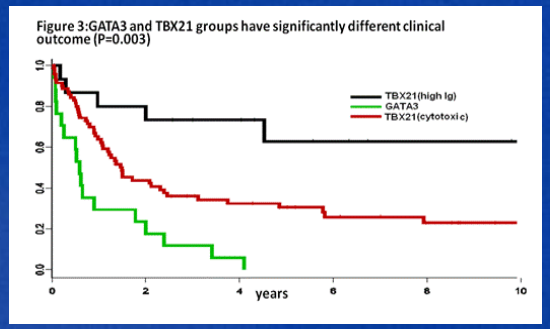
Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

- 679 Gene Expression Signatures That Delineate Biologic and Prognostic Subgroups in Peripheral T-Cell Lymphoma. Lymphoma Leukemia Molecular Profiling Project (LLMPP) , the International Peripheral T-cell Lymphoma Project (IPTCL)

- 372 PTCL y ENKTCL







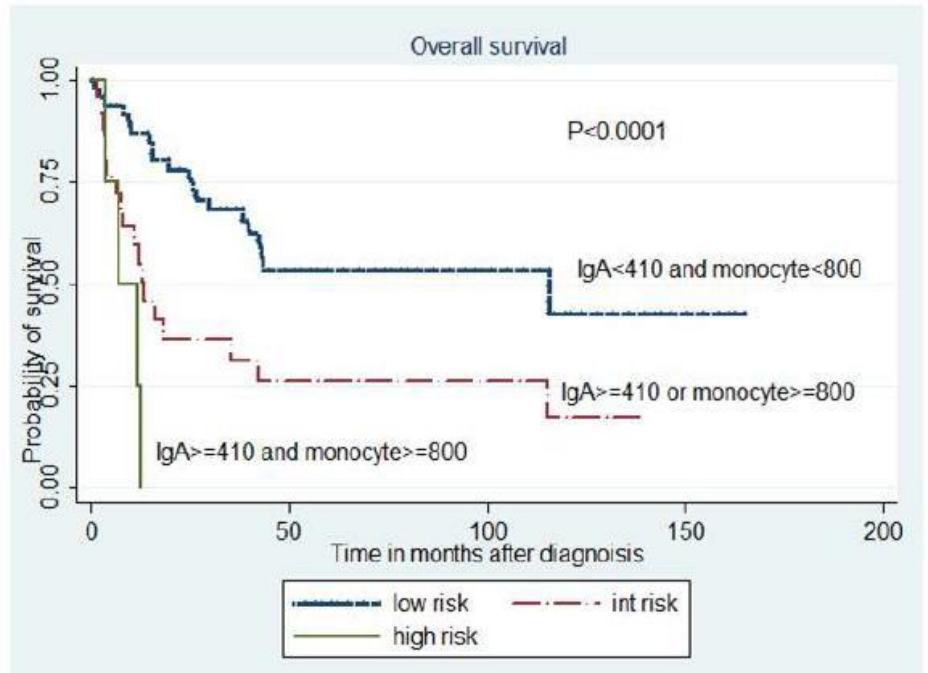
Los genes hablan: nuevos perfiles con riesgos.

Linfoma T: Pronóstico

Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

- 1577 International Prognostic Index, Serum IgA Level, and Monocytes Count Are Independently Associated with Overall Survival in Patients with HTLV-I-Negative Nodal Peripheral T-Cell Lymphoma. Aiko Kato, M.D.

- E. retrospectivo (2004 – 2012)
- 77 pacientes PTCL (HTLV i neg)
  PTCL (50)- AITL (17) – ALCL (10).
- advanced stage, extranodal
- involvement > 1 site,
- bone marrow involvement,
- anemia,
- monocyte ≥ 800 /µL,
- soluble interleukin-2 receptor > 3,000 U/mL,
- serum IgG ≥ 1700 mg/dL,
- serum IgA ≥ 410 mg/dL.
- IPI y TIP

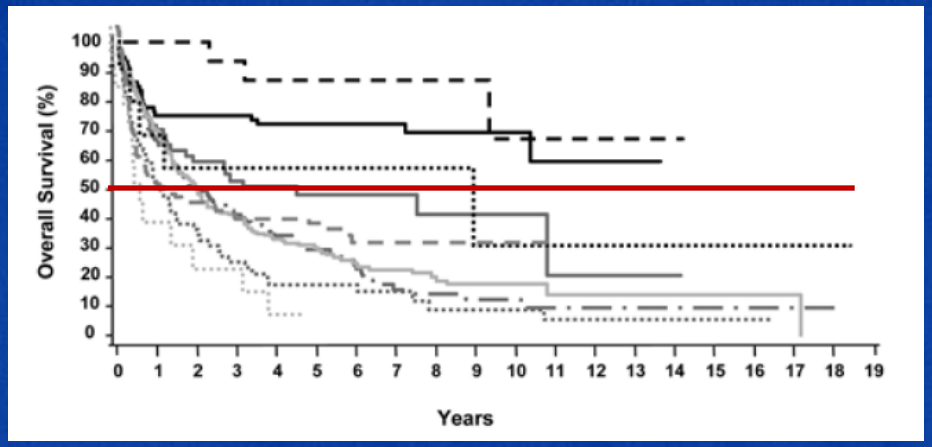


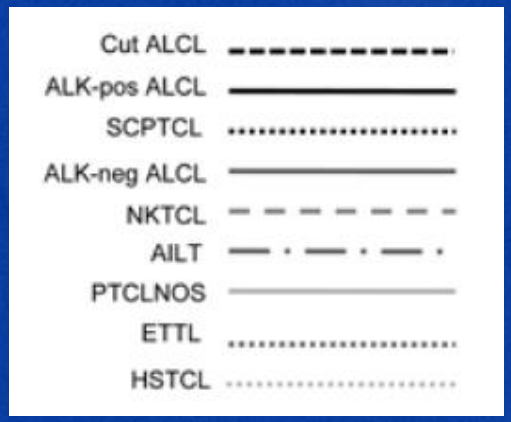
Este modelo es independiente del IPI

Linfoma T: supervivencia.

Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

International Peripheral T-Cell and Natural Killer/T-Cell Lymphoma Study. J Clin Oncol. 2008;26:4124-4130





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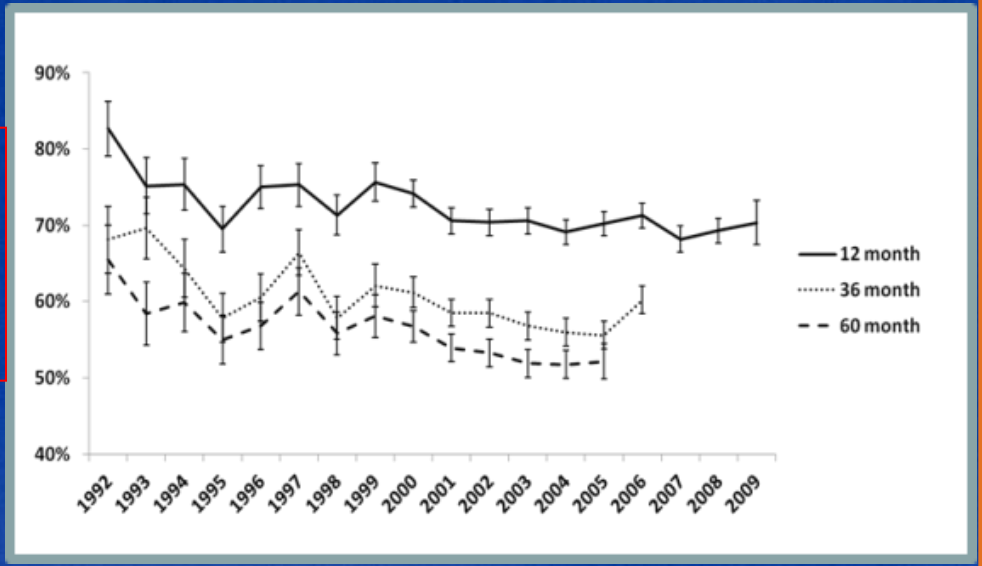


Crecer en supervivencia

Linfomas T: Tratamiento 1ª línea

Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

Table 2. Selected studies of novel CHOP-like or other combinations in the primary treatment of PTCLs

Combination/Study type	Subtype(s)	ORR% (CR%)	EFS/FFS/PFS	OS
VIP/ABVD vs CHOP8 phase 3[6]	PTCL (N = 86)	58 (44) 70 (35)	2-y 45% vs 41%, $p = .70$	Median OS 42 mo for both (median follow-up 110 mo)
CHOP (like) vs CHOP (like) plus etoposide retrospective analysis of phase 3 trials[7]	PTCL-NOS, ALCL, AILT (N = 331; <60 y of age, normal LDH)*	N/A	3-y 71% vs 51%, $p = .004$	3-y 81% vs 75%, $P = .285$ (median follow-up 44 m)
	PTCL-NOS, ALK⁻, AILT		3-y 61% vs 48%, $p = .057$	Not reported
	ALK⁺		3-y 91% vs 82%, $p = .012$	Not reported
CycloBEAP phase 2 (abstract)[8]	PTCL, ALCL, AILT (N = 84)	(92)	5-y 69%	5-y 72% (median follow-up 82 mo)
CHOP-alemtuzumab phase 2[12]	Exclude ALK⁺ (N = 20, 17-65 y)	80 (65)	1-y 43%	1-y 44% (median follow-up ~7 mo)
CHOP-alemtuzumab phase 2[13]	PTCL-NOS, AILT, ALK⁻ (N = 24, 16-70 y)	(71)	2-y 48%	2-y 53% (median follow-up ~17 mo)
CHOP-denileukin diftitox phase 2 (abstract)[17]	All PTCLs (N = 49)	65 (51)	Median PFS 12 mo	2-y 60% (median follow-up not reported)
CHOP and bortezomib phase 2 (abstract)[57]	Exclude ALK⁺ ALCL (N = 46)	76 (65)	Not reported	Not reported
PEGs phase 2 (abstract)[23]	Exclude ALK⁺ (N = 34, 79% newly diagnosed)	Not reported	1-y 38%	Not reported (median follow-up 13 mo)
GIFOX phase 2 (abstract)[24]	Exclude ALCL (N = 21, High-risk IPI 3-5)	86 (67)	5-y 49%	Median survival 30.5 mo (median follow-up not reported)

Survival estimates are rounded off.
*Analysis of patients from BH1and CHOEP trials.

- Revisión hasta 2011: Nuevas opciones 1ª línea

CHOP como tratamiento de referencia + asociaciones.

Linfomas T: CHOP + "otros" ASH12

Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

Abstract	tipo	Tratamiento	subtipo (N)	Nº	ORR (CR%)	PFS / OS	Toxicidades
57	Fase III	CHOP bisemanal +/- Alentuzumab + ATMO (ACT-1) (F. d'Amore)	PTCL sistemicos: 1ª línea	68		1 año: 55% / 78%	leucopenia grado 4 (24% vs 69%)
60	Fase I	Brentuximab + CHP (M A. Fanale)	LT CD30 post / ALCL +/- : 1ª línea	26	100 (88)	ND	>30%: Nausea (58%), Fatiga (50%), Diarrea (50%), Neuropatía periféric (38%). EA graves 5% (TEP 8%)
1617	Fase Ib	Romidepsina + CHOP (J Dupuis)	PTCL: 1ª línea.	18	78 (57)	ND	3 eventos CV graves.

- Estudios sin resultados concluyentes
- Basados en búsqueda de seguridad
- Escaso valor para la toma de decisiones

LINFOMAS T: Tratamiento ASH12

Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

57 First Interim Efficacy and Safety Analysis of an International Phase III Randomized Trial in Newly Diagnosed Systemic Peripheral T-Cell Lymphoma Treated with Chemotherapy with or without Alemtuzumab and Consolidated by High Dose Therapy

Francesco d'Amore, Sirpa Leppä, Maria Gomes da Silva, Thomas Relander, Peter De Nully Brown,…

41 centros. Estudio en marcha (ACT-1, ACT-2). 186 pacientes.

Control: CHOP bisemanal x 6

Experimental: CHOP bisemanal x 4 + Alentuzumab 30 mg (día 1 de cada ciclo):

- **Seguridad en brazo ACT-1 (jovenes).**
- **Primeros 68 pacientes aleatorizados.**
-

Balanceados: Edad, IPI, Estadio, ECOG, LDH, síntomas B, Afect. MO, enf. Voluminosa y subtipo histológico.

	Controles	Alentuzumab
Duración media QMT (70 días esperada)	73	81
Leucopenia grado 4	24%	**69%**
Anemia (grados 3-4)	19%	31%
Trombocitopenia (3-4)	12%	20%
Frecuencia infecciones similar en ambos grupos		
Aumento infecciones virales	10%	**28%** (6 reactivc. CMV)

evaluación 1 año: PFS 54% - OS (78%)

RESULTADOS…2015

LINFOMAS T: Tratamiento ASH12

Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

60 Brentuximab Vedotin Administered Concurrently with Multi-Agent Chemotherapy As Frontline Treatment of ALCL and Other CD30-Positive Mature T-Cell and NK-Cell Lymphomas

Michelle A. Fanale, Andrei R. Shustov, Andres Forero-Torres, Nancy L. Bartlett, et al

11 centros. (EEUU+GB)

Tipo: ALCL alto riesgo y LT CD30 pos.

Brazo 1: Brentuximab (1.8 mg/m2) x 2 ciclos (cada 3 semanas) +CHOP x21 x 6
Brazo 2: Brentuximab (1.8 mg/m2) dia 1 + CHP (cada 3 semanas) x 6 ciclos
Brazo 3: Aplicar modificaciones según toxicidad de brazo 2.
Mantenimiento en 2-3: 8-10 ciclos Brentuximab (en respondedores)

Se extraen los resultados de seguridad respuestas y efectos adversos en Brazo 2

- **26 pacientes:19 ALCL (16 ALK-) + 7 LT CD30 + (2 PTCL, 2AITL, 2 ATCL, 1 EATCL)**

E. ADVERSOS (30%):
- nausea (58%), fatigue (50%), diarrhea (50%), peripheral sensory neuropathy (38%), and alopecia (38%)

E.A. SEVEROS (>grado 3): >5%
- Febrile neutropenia (19%), nausea (8%), neutropenia (8%), and **pulmonary embolism (8%)**

5 (19%) pacientes discontinuaron

RESULTADOS

- **100 % (26) respuesta objetiva**
- **88% (23) respuesta completa (todos los no ACLC)**
- **16 pacientes continúan con mantenimiento.**

Linfomas T: Tratamientos R/R

Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

- Revisión hasta 2011: Nuevas opciones Recaida / Refractario

Table 4. Selected study of novel drugs currently under investigation in the treatment of relapsed/refractory PTCLs

Agent	Subtype	ORR%	(CR%)*	PFS and/or DoR	Main toxicities
Novel chemotherapy					
Gemcitabine phase 2[21]	PTCL-NOS (N = 20)	55	(30)	DoR (median) for CR patients (7 of 9), 34 mo	Neutropenia, thrombocytopenia
Pralatrexate phase 2[42]	PTCL (N = 111)	29	(11)	PFS (median) 3.5 mo, OS (median) 14.5 mo, DoR (median) 10.1 mo	Thrombocytopenia, mucositis, neutropenia
L-asparaginase retrospective[38]	NK/TCL (N = 15)	87	(50)	Not reported	Anti-thrombin deficiency, sepsis, hepatitis
AspaMetDex phase 2[39]	NK/TCL (N = 119)	78	(61)	PFS (median) 12.2 mo, DoR (median) 12 mo	Anti-thrombin deficiency, sepsis, hepatitis, neutropenia
Bendamustine[43]	All PTCL (N = 38)	47	(29)	DoR (median) ~5 mo	Neutropenia, thrombocytopenia, infections
HDAC inhibitors					
Romidepsin	All PTCL	38	(18)	DoR (median) 8.9 mo	Nausea, vomiting, fatigue, thrombocytopenia, neutropenia
Phase 2 (NCI)[46]	(N = 47)	26	(15)	DoR (median) 12 mo	
Phase 2 (abstract)[45]	(N = 131)				
Belinostat Phase 2 (abstract)[47]	PTCL (N = 20)	25	(10)	DoR (median) ~9 mo	Toxicity not detailed in abstract
Antibody-directed therapy					
Brentuximab (SGN-35) Anti-CD30–drug conjugate phase 2 (abstract)[50]	Systemic ALCL (N = 58, ALK⁻, 70%)	87	(57)†	DoR 1-9 mo (median not reached)	Nausea, diarrhea, peripheral neuropathy
Zanolimumab (IHuMax-CD4) phase 2[51]	CD4⁺ PTCL (N = 21, AILT, 43%)	24	(9.5)	Not reported	Rash, infusion reaction, infections
Other targeted therapy					
Lenolidomide phase 2[54]‡	All PTCL (N = 24)	30	(0)	Median PFS ~3 mo	Fatigue, constipation, thrombocytopenia
Aurora A kinase inhibitor phase 1 (abstract)[55]§	B- and T-cell nonHodgkin lymphoma (N = 48; including PTCL, n = 6)	50	(33)	Not reported	Neutropenia, fatigue, diarrhea, alopecia

Nuevos fármacos buscando posición

Linfomas T: Nuevas moléculas ASH12

Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

Abstract	tipo	Tratamiento	subtipo (N)	Nº	ORR (CR%)	PFS / OS	Toxicidades
795	Fase II	Mogamulizumab (KW-0761)(T. Ishida)	PTCL / CTCL CCR4 +: R	35	35 (14)	ND	Linfopenia g3-4 (70%). Neutropenia g3-4 (16%), Trombopenia g3-4 (3%). Rash g 3-4 (8%). Toxicidad infusión (22%)
3688	Fase II	Brentuximab (SGN-35) (M. Duvic)	CTCL (CD30+) y MF CD30+: 1ª línea	46	63 (31.5)	ND	neuropatía (38%), rash (27%), fatiga (34%), alopecia, mialgias, nauseas
2730	Fase II	L-Asparraginasa (Ye Gou)	NK-TCL (nasal): Recaida / refractario	40	82,5 (40)	12.8 m / N.A.	Anemia, Neutropenia, piel (12.5%)
2737	Fase I	Dosis Lenalidomida (N.Uike)	ATL / PTCL: Recaida / refractario	13	NE	NE	
3641	Fase II	Romidepsina GPI-06-0002 Study Update (B. Coiffier)	PTCL recaidos / refractarios	130	25 (15)	mediana RC no alcanzada. Mediana OR 28 m	Nauseas, Fatiga, vómitos, Trombopenia, fiebre
3669	Fase II	Bortezomib + Panobinostat (NCT00901147) (Daryl Tan)	PTCL recaidos / refractarios	11	54.5 (18)	mediana PFS: 6 meses	thrombocytopenia (36%), neutropenia (27%), diarrhoea (18%) and fatigue (9%), peripheral neurophaty (35%)

Linfomas T: Nuevas moléculas ASH12

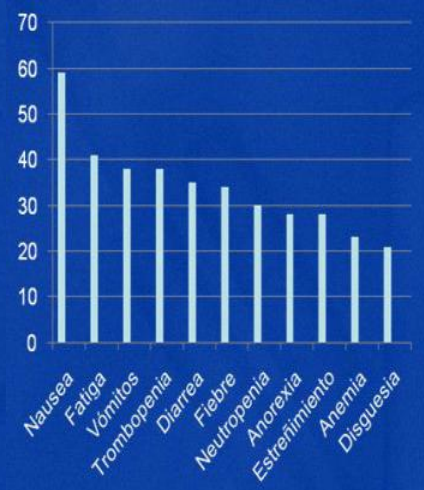
Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

Abstract 114: Final Results From a Pivotal, Multicenter, International, Open-Label, Phase 2 Study of Romidepsin In Progressive or Relapsed Peripheral T-Cell Lymphoma (PTCL) Following Prior Systemic Therapy

Bertrand Coiffier, *Barbara Pro, H. Miles Prince, Francine M Foss,*

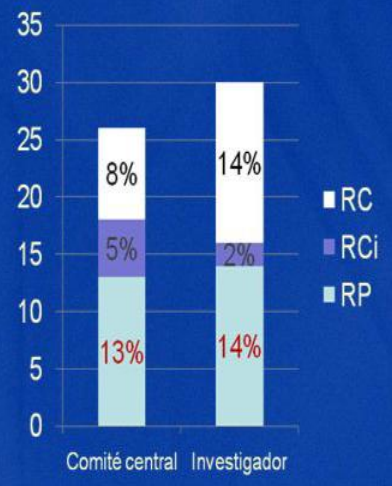
Romidepsina: 14 mg/m^2, IV (4 h), d1, 8 y 15 cada 28 d, hasta 6 ciclos

Efectos adversos >20% (%)



Toxicidad grado 3-4: en 86 pts (66%); eumonia 5%, fiebre 5%, sepsis 5%, vómitos 5%

Respuesta (%)

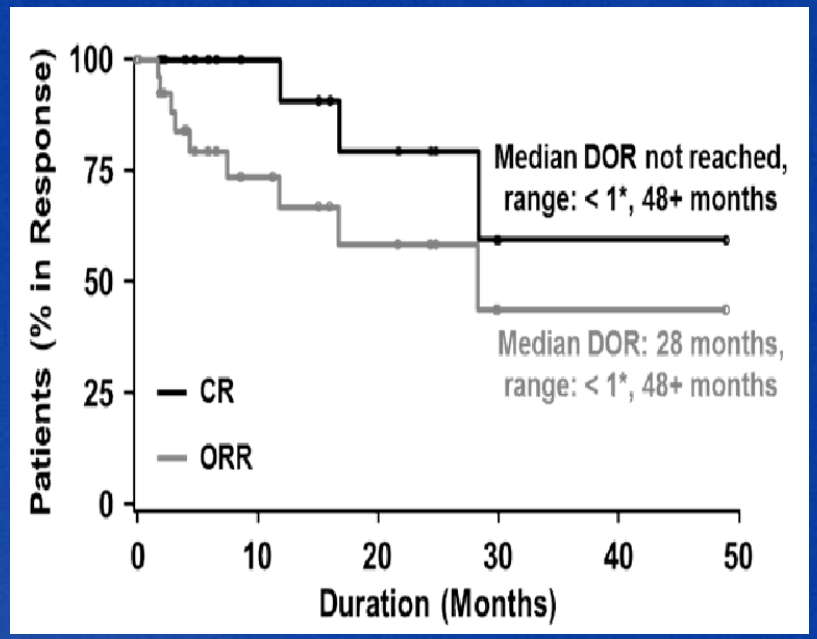


Tiempo respuesta mediana 3,6 m (2-6)
DR mediana 12 m si RG y NA si RC/RCi

3641 Romidepsin Induces Durable Responses in Patients with Peripheral T-Cell Lymphoma: GPI-06-0002 Study Update

Program: Oral and Poster Abstracts
Session: 623. Lymphoma - Chemotherapy, excluding Pre-Clinical Models: Poster III
Monday, December 10, 2012, 6:00 PM-8:00 PM
Hall B1-B2, Level 1, Building B (Georgia World Congress Center)

Bertrand Coiffier, MD, PhD[1], *Barbara Pro, MD*[2], *Miles Prince, MD, FRACP, FRCPA*[3], *Francine M. Foss, MD*[4],



Conseguir definir perfiles de respondedores a Romidepsina

Linfomas T: Nuevas moléculas ASH12

Conclusiones de The American Society of Hematology 54th Annual Meeting and Exposition

2730 L-Asparaginase Monotherapy in Patients with Relapsed or Refractory Extranodal NK/T-Cell Lymphoma, Nasal Type: Results of A Phase II Study

Ye Guo, Xuejun Ma, Zuguang Xia, Kai Xue, Qunling Zhang and Xiaonan Hong
Fudan University Shanghai Cancer Center, Shanghai, China

- L-asparaginase (6000 U/m2 días 1 a 7) cada 3 sem. x 8 ciclos (mínimo).

	No.	%
Total number	40	100
Median age (years, range)	51 (32-69)	
Gender		
Male	26	65
Female	14	35
Performance status		
0	3	7.5
1	36	90
2	1	2.5
B symptoms		
Yes	18	45
No	22	55
Lactate dehydrogenase		
Elevated	13	32.5
Normal	27	67.5
Primary site at first diagnosis		
Upper aerodigestive tract	31	77.5
Non- upper aerodigestive tract	9	22.5
Stage at enrollment		
I_E	12	30
II_E	7	17.5
III_E	1	2.5
IV	20	50
International Prognostic Index		
0-1	28	70
2	8	20
3	4	10
Korean Prognostic Index		
0	4	10
1	18	45
2	13	32.5
3-4	5	12.5
Prior treatment		
Radiotherapy alone	3	7.5
Chemotherapy alone	9	22.5
Chemotherapy and radiotherapy	28	70
Disease status		
Relapsed	16	40
Refractory	24	60

	Any Grade (%)	Grade 3 (%)
Hematologic		
Anemia	90	5
Neutropenia	75	15
Thrombocytopenia	7.5	0
Nonhematologic		
Allergic reaction	12.5	0
Hyperbilirubinemia	32.5	0
ALT elevation	35	0
AST elevation	27.5	0
AKP elevation	30	0
GGT elevation	32.5	2.5
Hypoalbuminemia	85	0
Hyperamylasemia	7.5	0
Hyperglycemia	15	0
Hyponatremia	15	0
Hypokalemia	12.5	0
Hypomagnesemia	10	0
Nausea	50	0
Vomiting	17.5	0
Diarrhea	10	2.5
Constipation	5	0
Mucositis	5	0
Headache	2.5	0
Sensory neuropathy	2.5	0

ORR: 82,5 %

CR: 40%

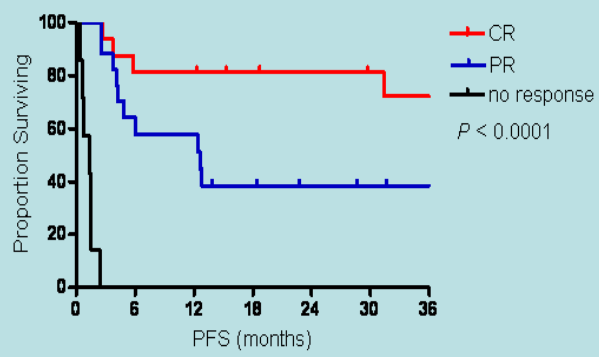


Figure 1: PFS stratified by the response status

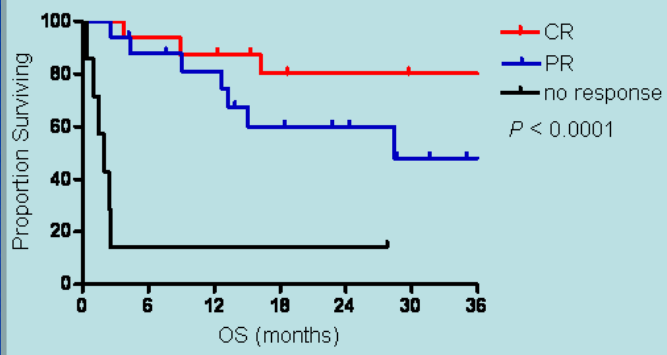


Figure 2: OS stratified by the response status

Linfomas T: Papel del Transplante 2011

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Table 3. Prospective studies of consolidative high dose chemotherapy and autologous stem cell transplant in the primary treatment of PTCL

Study type/author	Subtype N	Chemotherapy phase (HDC)	Transplant rate	ORR%* (CR%)†	EFS/PFS/DFS	OS
Phase 3/Schmitz DSHNHL[7]	Exclude ALK+ (N = 38, IPI > 2)	MegaCHOEP (N = 19) vs CHOEP-14 (N = 19)	N/A	N/A	3-y 32% vs 58%, respectively, *P* = .065	P = .245 (median follow-up N/A
Phase 3 (retrospective analysis)/Mounier[27]	Include lymphoblastic lymphoma non-anaplastic TCL evaluated (N = 56)	ACVB or NCVB vs ACVB/NCVB plus HDC (BEAM or CBV)	N/A	(100)	5-y 38% (chemotherapy) vs 45% (ASCT), *P* = .89	5-y 44 % vs 49%, *P* = .87 (med follow-up 78 mo)
Phase 1/2/Nickelsen DSHNHL[26]	Exclude ALK+ (N = 33, IPI > 2 or increased LDH)	MegaCHOEP	67%	55 (49)	3-y 26%	3-y 45% (median follow-up 53 m
Phase 2/Mercadal[58]	Exclude ALK+ (N = 41)	CHOP and ESHAP (BEAM/BEAC)	42%	59 (49)	4-y 30%	4-y 39% (median follow-up 38 mo)
Phase 2 Corradini[59]‡	All PTCLs (N = 62)	High-dose sequential or MACOPB-MAD§	74%	66 (56)	12-y 30%	12-y 34% (median follow-up 76 mo)
Phase 2/Reimer[60]	Exclude ALK+ (N = 83)	CHOP × 4-6 (dexamethasone, carmustine, melphalan, etoposide, cytarabine or etoposide, methylprednisolone, cytarabine, cisplatin)	66%	79 (39)	3-y 36%	3-y 48% (median follow-up 33 mo)
Phase 2/D'Amore[28]	Exclude ALK+ (N = 160)	CHOEP-14 × 6 (BEAM)	71%	83 (61)	5-y 43%	5-y 50% (median follow-up 45 m

ASH12

Abstract	tipo	Tratamiento	subtipo (N)	Nº	PFS / OS	RESPUESTA	Toxicidades
3105	Retrospectivo	ASCT in EATL **(EBMT: LWP)**	55% 1R/PR.	44	4 a: 54% / 59%	HD-SCT 1RC: 70%; HD-SCT NO 1RC: 43%	mortalidad 2a NR: 7%
3148	Retrospectivo	ASCT in ExtraNodal NK/T **(EBMT)**	43% 1ª R. 18% 2ª..R, 21% PR, 18% RF-P	28	2 a: 40,7% / 52,3%	HD-SCT 1RC: 63,3%; HD-SCT NO 1RC: 25%	mortalidad NR 1 a (11%)-2a (22%)

Requiere pacientes quimiosensibles
Cada vez más definido en la 1ª línea en pacienes de alto riesgo