

# Multidisciplinaire Werkgroep Cutane Lymfomen

**Groep A: onderbouwing kliniek en Pathologie**

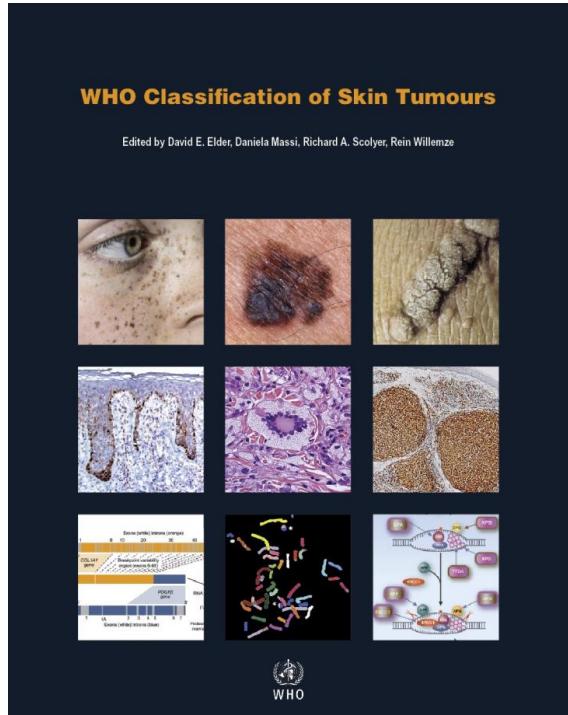
**Patty Jansen**



# Primaire Diagnostiek Cutane Lymfomen

- Onderzoek nodig om de diagnose te stellen omvat:
  - Klinisch onderzoek door dermatoloog met fotografisch vastleggen van efflorescenties
  - histologisch onderzoek door patholoog
  - immuunfenotypering/immuunhistochemie
  - evt. Moleculair/cytogenetisch onderzoek
- Diagnose in principe nooit zonder clinicopathologische correlatie
- Nieuwe patienten: inbrengen in Landelijke Werkgroep Cutane Lymfomen
- Volgens criteria van WHO-EORTC classificatie/Blue Book

# 2018 revision of the WHO-EORTC classification



- 1996 ESDR classification
- 2001 WHO classification (3<sup>rd</sup> edition)
- 2005 WHO-EORTC classification
- 2008 WHO classification (4<sup>th</sup> edition)
- 2017 WHO classification (revised 4<sup>th</sup> ed.)
- 2018 Revised WHO-EORTC classification

# WHO-EORTC classificatie 2005

## Cutaneous T-cell and NK-cell lymphomas

Mycosis fungoides

Mycosis fungoides variants and subtypes

- Folliculotropic MF
- Pagetoid reticulosis
- Granulomatous slack skin

Sézary syndrome

Adult T-cell leukemia/lymphoma

Primary cutaneous CD30-positive lymphoproliferative disorders

- Primary cutaneous anaplastic large cell lymphoma
- Lymphomatoid papulosis

Subcutaneous panniculitis-like T-cell lymphoma

Extranodal NK/T-cell lymphoma, nasal type

Primary cutaneous peripheral T-cell lymphoma, unspecified

- Primary cutaneous aggressive epidermotropic CD8-positive T-cell lymphoma (provisional)
- Cutaneous  $\gamma/\delta$  T-cell lymphoma (provisional)
- Primary cutaneous CD4+ small/medium-sized pleomorphic T-cell lymphoma (provisional)

## Cutaneous B-cell lymphomas

Primary cutaneous marginal zone B-cell lymphoma

Primary cutaneous follicle center lymphoma

Primary cutaneous diffuse large B-cell lymphoma, leg type

Primary cutaneous diffuse large B-cell lymphoma, other

- intravascular large B-cell lymphoma

## Precursor hematologic neoplasm

CD4+/CD56+ hematodermic neoplasm (formerly blastic NK cell lymphoma)

# 2017 revisie van de WHO-EORTC classificatie

## Cutaneous T-cell lymphomas

- Mycosis fungoides & variants of MF
  - Folliculotropic MF
  - Granulomatous slack skin
  - Pagetoid reticulosis
- Sezary syndrome
- Spectrum cutaneous CD30+ LPD
- Subcutaneous panniculitis-like T-cell lymphoma
- Extranodal NK/T-cell lymphoma
- **Hydroa vacciniforme-like LPD (CAEBVI)**
- Primary cutaneous peripheral T-cell lymphoma, NOS + rare subtypes
  - Primary cutaneous  $\gamma/\delta$  T-cell lymphoma
  - Aggressive cytotoxic epidermotropic CD8+ CTCL
  - Primary cutaneous CD4+ small/medium T-cell LPD
  - Primary cutaneous acral CD8+ T-cell lymphoma

## Cutaneous B-cell lymphomas

- Extranodal marginal zone lymphoma/ primary cutaneous MZL.
- Primary cutaneous follicle center lymphoma
- Primary cutaneous DLBCL, leg type
- **EBV-positive mucocutaneous ulcer**
- Intravascular large B-cell lymphoma

# 2017 revisie van de WHO-EORTC classificatie

## Cutaneous T-cell lymphomas

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New variants

## Cutaneous B-cell lymphomas

- Extranodal marginal zone lymphoma/ primary cutaneous MZL.
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- Primary cutaneous DLBCL, leg type
- **EBV-positive mucocutaneous ulcer**
- Intravascular large B-cell lymphoma

## LyP: histologie

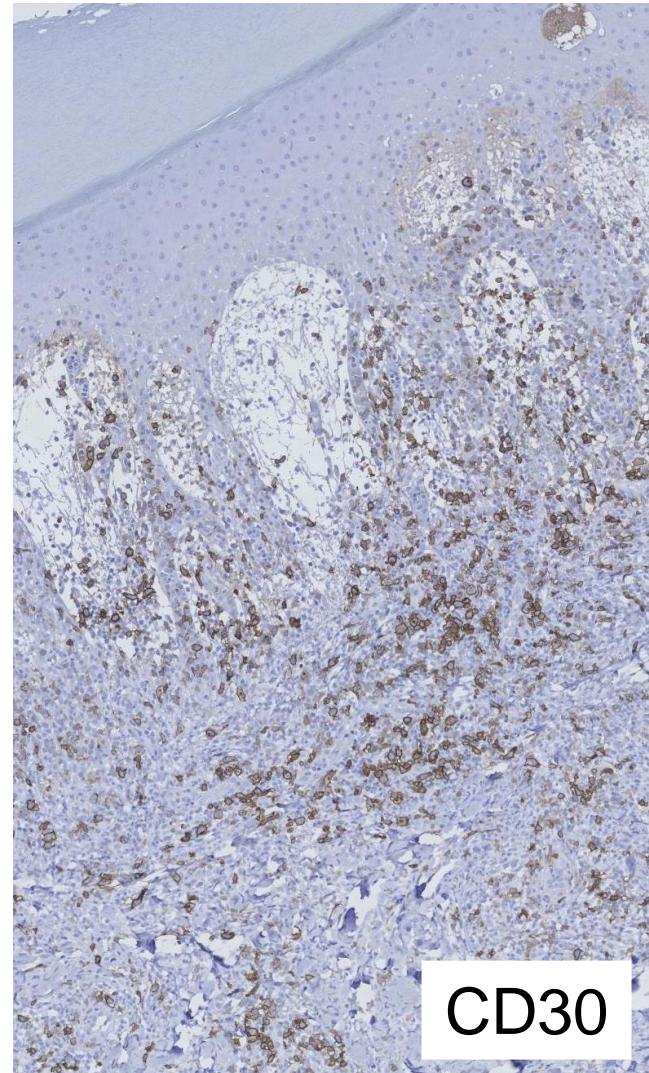
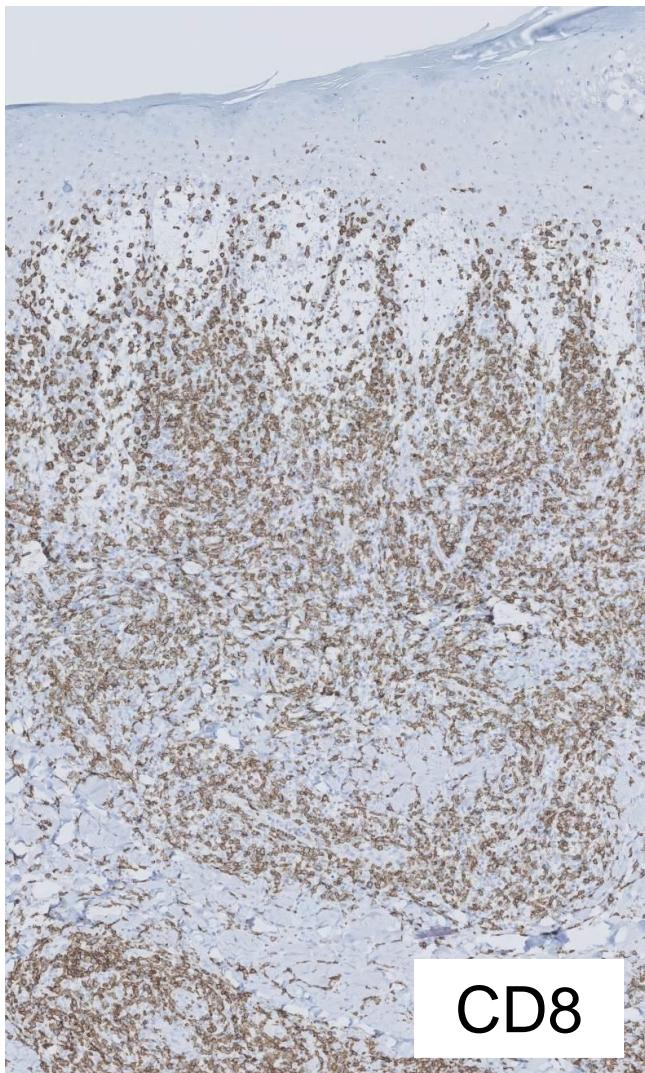
Subtype	Histologic features	
LyP, type A	Scattered CD30+ cells	Willemze, 1982
Lyp, type B	Mimicks MF	Willemze, 1982
LyP, type C	Mimicks ALCL (diffuse CD30)	Willemze, 1994
LyP, type D	Mimicks CD8+ CTCL	Cerroni, 2010
LyP, type E	Angioinvasive	Kempf, 2013
LyP, type F	Follicular	Kempf, 2013
LyP with 6p25.3 rearrangement		Karai, 2013

## Subtypes LyP

Table 4.3 Histological subtypes and differential diagnosis of lymphomatoid papulosis (LyP) {2545}

Histological subtype (relative frequency)	Predominant phenotype	Main differential diagnoses
LyP type A (> 80%)	CD4+, CD8-	Cutaneous anaplastic large cell lymphoma, tumour-stage mycosis fungoides, and Hodgkin lymphoma
LyP type B (< 5%)	CD4+, CD8-	Early-stage (plaque-stage) mycosis fungoides
LyP type C (~10%)	CD4+, CD8-	Cutaneous anaplastic large cell lymphoma and transformed (CD30+) mycosis fungoides
LyP type D (< 5%)	CD4-, CD8+	Primary cutaneous CD8+ aggressive epidermotropic cytotoxic T-cell lymphoma
LyP type E (< 5%)	CD4-, CD8+	Extranodal NK/T-cell lymphoma
LyP with <i>DUSP22-IRF4</i> rearrangement (< 5%)	CD4-, CD8+ or CD4-, CD8-	Transformed mycosis fungoides

# LyP type D (H14-1348)



# **Angioinvasive Lymphomatoid Papulosis**

## *A New Variant Simulating Aggressive Lymphomas*

**E**

*Werner Kempf, MD,\*† Dmitry V. Kazakov, MD, PhD,‡ Leo Schärer, MD,§*

*Arno Rütten, MD,§ Thomas Mentzel, MD,§ Bruno E. Paredes, MD,§*

*Gabriele Palmedo, PhD,§ Renato G. Panizzon, MD,|| and Heinz Kutzner, MD§*

*(Am J Surg Pathol 2013;37:1–13)*

### **DERMATOPATHOLOGY**

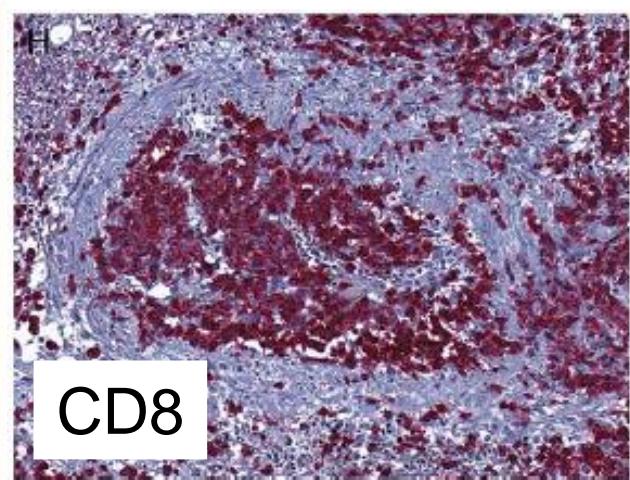
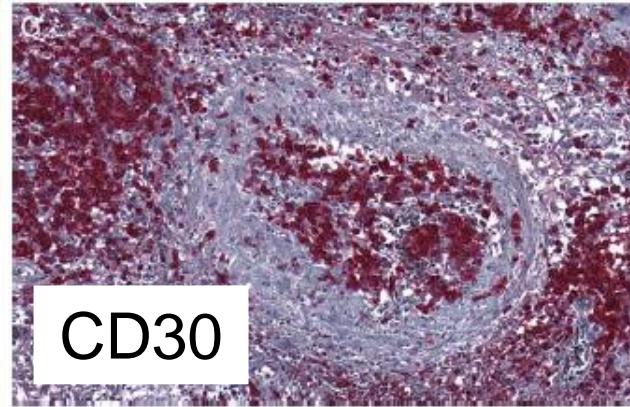
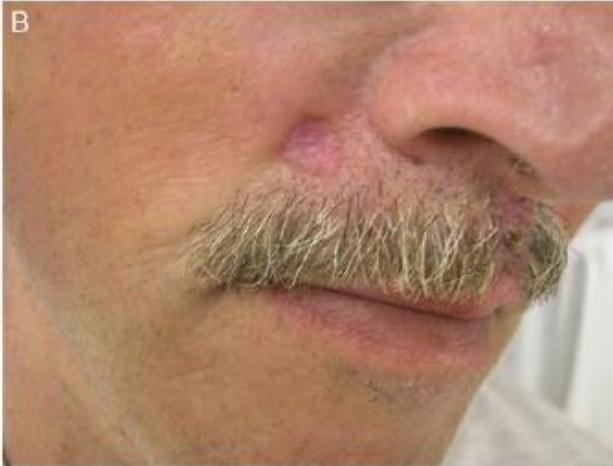
**F**

## **Follicular lymphomatoid papulosis revisited: A study of 11 cases, with new histopathological findings**

*Werner Kempf, MD,<sup>a</sup> Dmitry V. Kazakov, MD, PhD,<sup>b</sup> Hans-Peter Baumgartner, MD,<sup>c</sup> and Heinz Kutzner, MD<sup>d</sup>  
Zürich and Zug, Switzerland; Pilsen and Prague, Czech Republic; and Friedrichshafen, Germany*

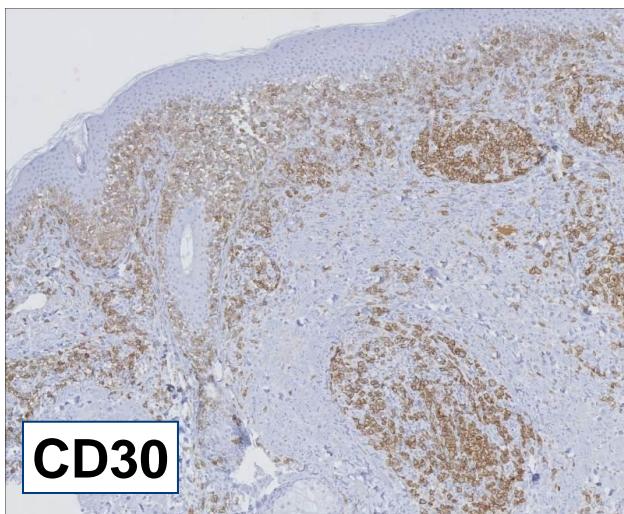
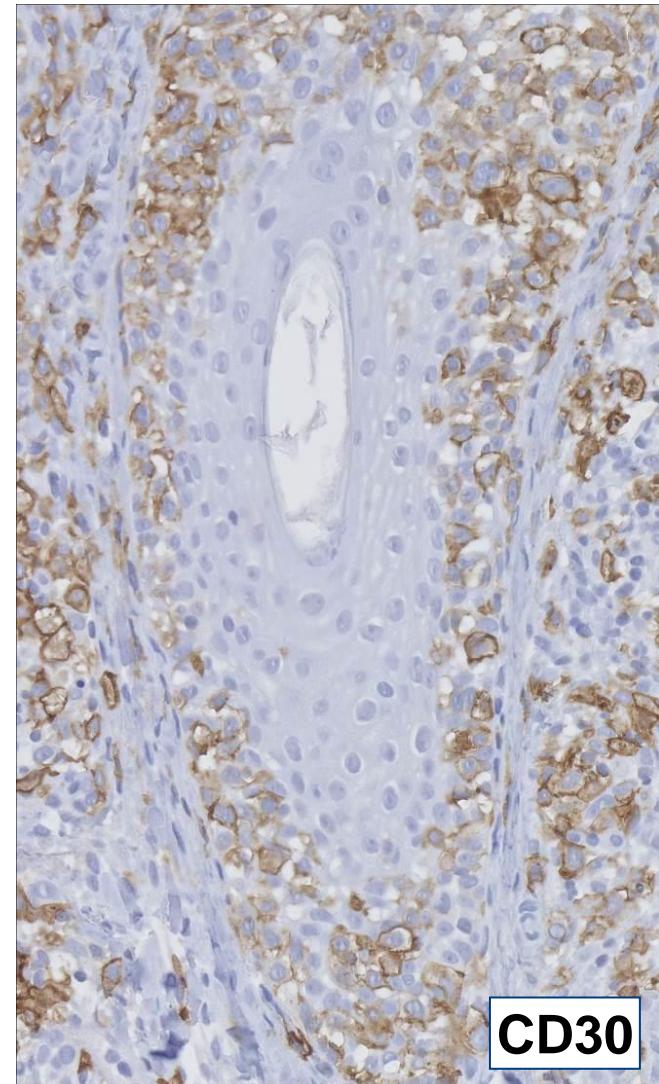
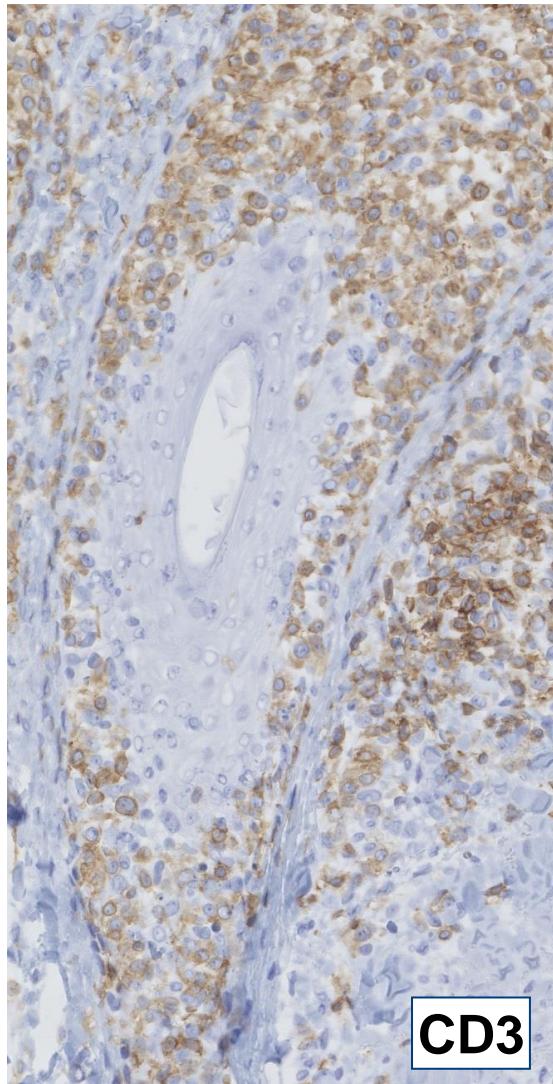
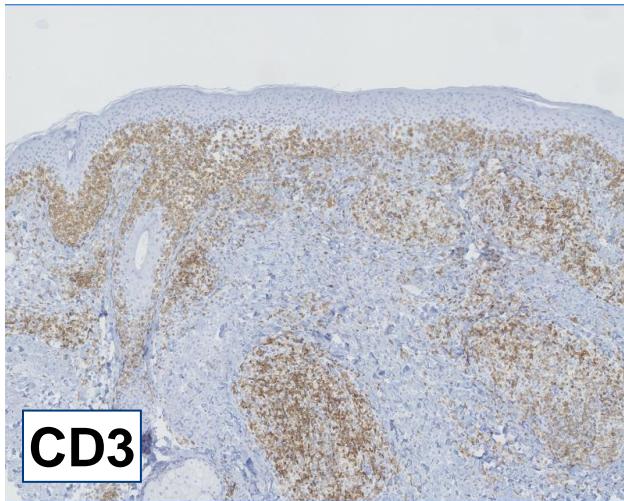
*(J Am Acad Dermatol 2013;68:809–16.)*

## Angioinvasive LyP (type E)



Kempf W et al; Am J Surg Pathol 2012

# LyP type D + F (R11-80706)



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ORIGINAL ARTICLE

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## Chromosomal Rearrangements of 6p25.3 Define a New Subtype of Lymphomatoid Papulosis

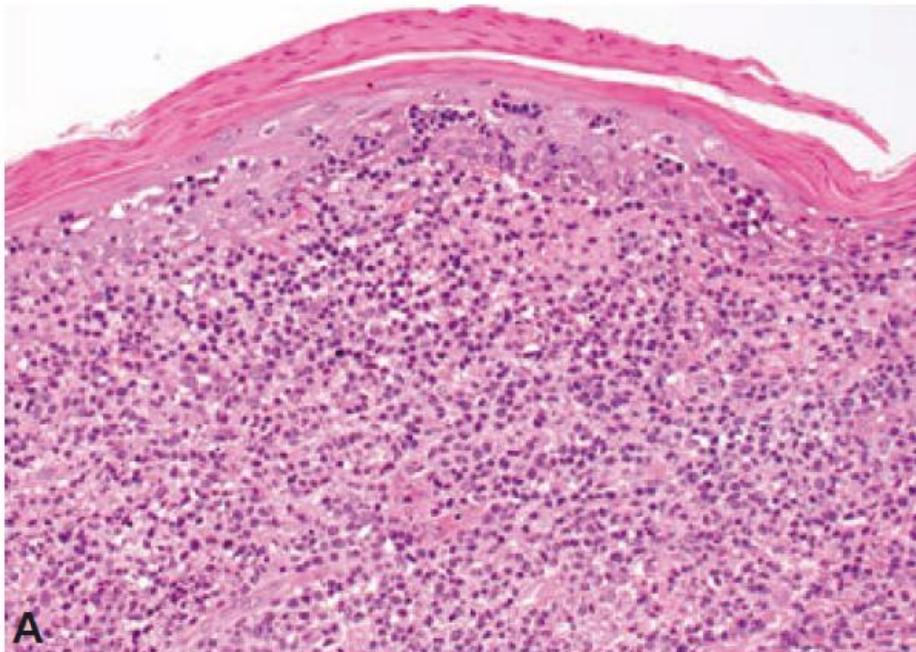
*Laszlo J. Karai, MD,\*† Marshall E. Kadin, MD,‡ Eric D. Hsi, MD,§ Jason C. Sluzevich, MD,|| Rhett P. Ketterling, MD,¶ Ryan A. Knudson, BS,¶ and Andrew L. Feldman, MD¶*

*(Am J Surg Pathol 2013;37:1173–1181)*

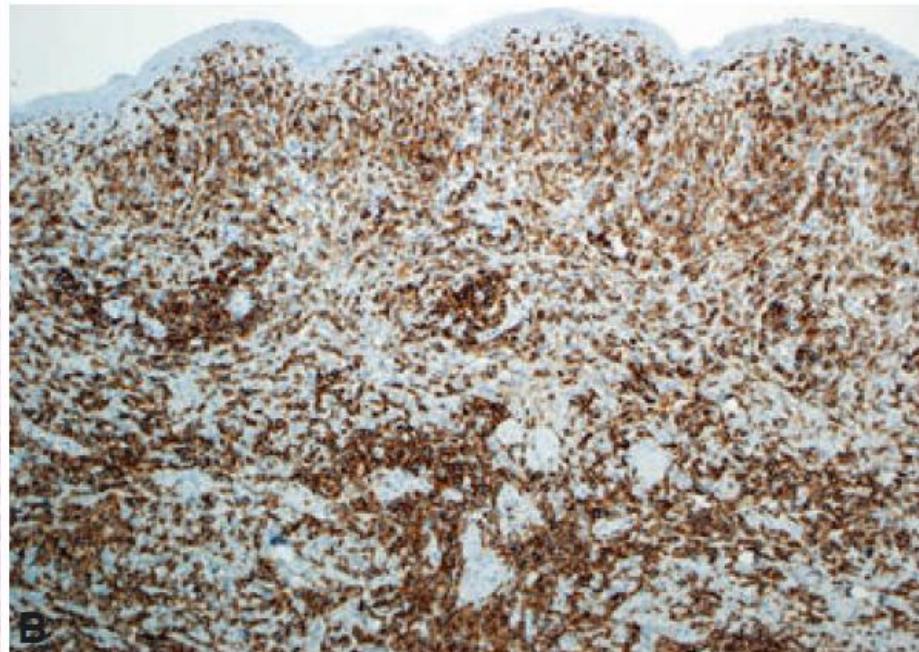
## LyP with 6p25.3 rearrangement

- Chromosomal rearrangement of DUSP22-IRF4 locus on 6p25.3
- Older adults
- Localized skin lesions.
- Small cerebriform cells in the epidermis (weak CD30) and blast cells in dermis (strong CD30) simulating transformed MF.
- Variably CD4 and/or CD8 positive or CD4-/CD8-

# LyP with DUSP22/IRF4 rearrangement



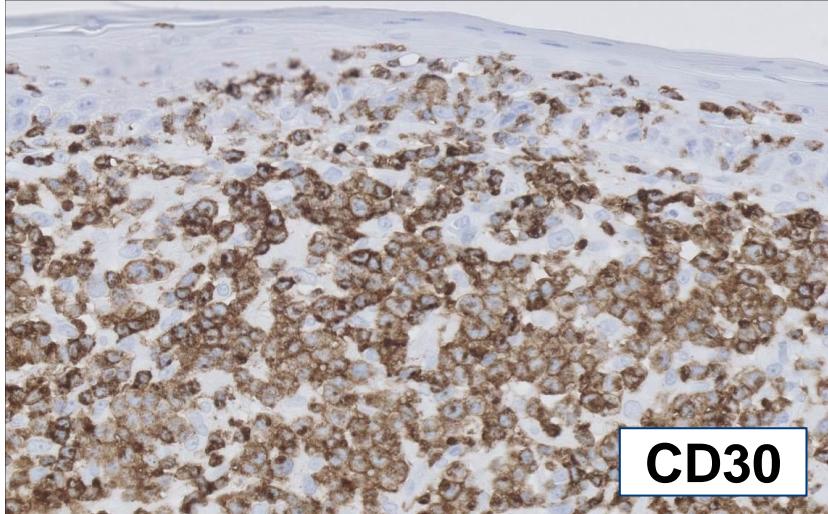
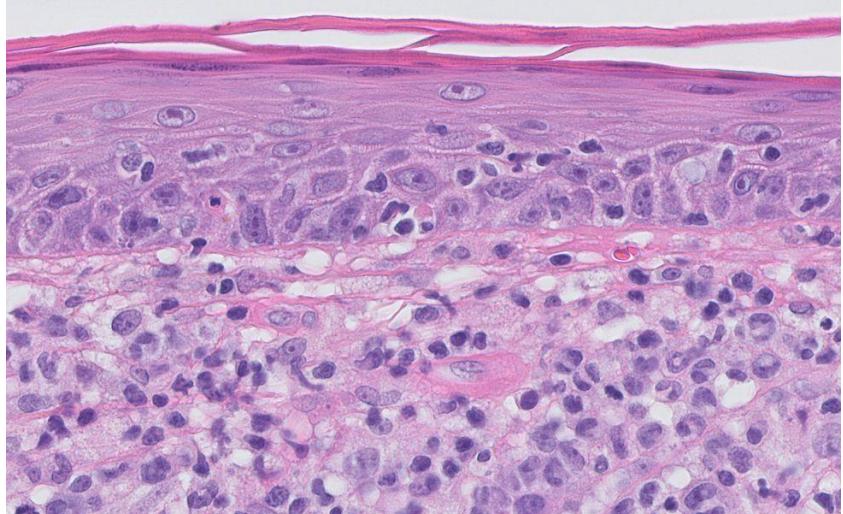
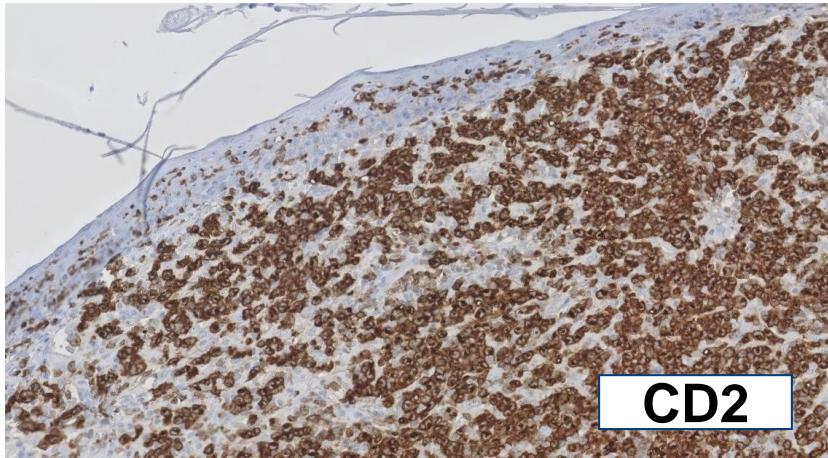
A



B

Fig. 4.28 Lymphomatoid papulosis with *DUSP22-IRF4* rearrangement. A Intraepidermal mycosis fungoides-like small cells and dermal large blastic cells. B CD30 staining is diffusely positive and is stronger in dermal cells with blastic cytology.

# C-ALCL (R13-83444)



- Increasing number of histologic subtypes.
- Different types in one patient or in one lesion (mixed types)
- **Relevance for dermatologist: none**
  - All subtypes have in common a combination of waxing and waning skin lesions and histology of CTCL.
  - No therapeutic or prognostic significance (clinically not useful)
- **Relevance for pathologist**
  - Illustrate the heterogeneous histology of LyP.
  - Important information for differential diagnosis

## Hydroa-vacciniforme-like LPD

### Cutaneous manifestations of chronic active EBV infection

- Hydroa-vacciniforme (HV)-like LPD (cytotoxic T-cell)
- Severe mosquito bite hypersensitivity (NK cell derivation)

Both condition may either run an indolent clinical course or progress to frank lymphoma

## Primary cutaneous PTCL-NOS, rare subtypes

### WHO-EORTC 2018 Revision

- Primary cutaneous gamma/delta-T-cell lymphoma
- Aggressive epidermotropic cytotoxic CD8+ CTCL
- Primary cutaneous CD4+ small/medium T-cell LPD (provisional entity).
- Primary cutaneous acral CD8+ T-cell lymphoma or T-cell LPD (provisional entity).

## Definition:

- Clonal proliferation of small/medium CD4+ pleomorphic T-cells.
- Presentation with a solitary lesion.
- No signs or history of MF or SS.

## WHO- EORTC and WHO 2008:

- Primary cutaneous CD4+ small/medium pleomorphic **T-cell lymphoma**

## WHO 2017 and WHO-EORTC 2018: genuine malignancy ?

- Primary cutaneous CD4+ small/medium pleomorphic **T-cell lymphoproliferative disorder**

# Primary Cutaneous acral CD8+ T-cell lymphoma

## Indolent CD8-positive Lymphoid Proliferation of the Ear A Distinct Primary Cutaneous T-cell Lymphoma?

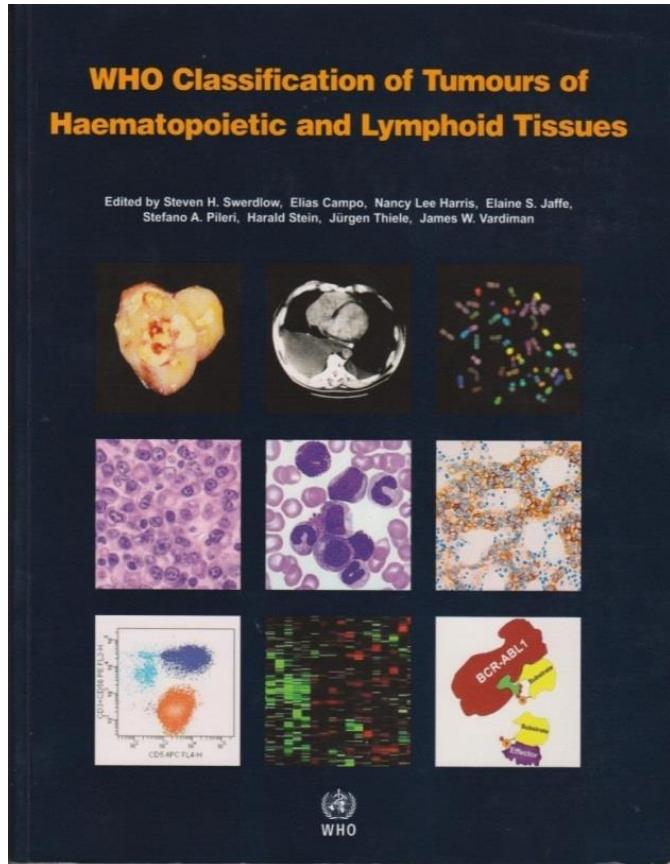
Tony Petrella, MD,\* Eve Maubec, MD,† Pascale Cornillet-Lefebvre, MD,‡ Rein Willemze, MD,§  
Michel Pluot, MD,|| Anne Durlach, MD, PhD,¶ Eduardo Marinho, MD,#  
Jean-Luc Benhamou, MD,\*\* Patty Jansen, MD, PhD,† † Alistair Robson, MRCPath, DipRCPath,††  
and Florent Grange, MD, PhD§§

Petrella T. et al; Am J Surg Pathol 2007;31:1887-1892

Figures 1c&d



# Revised WHO-EORTC classification CBCL



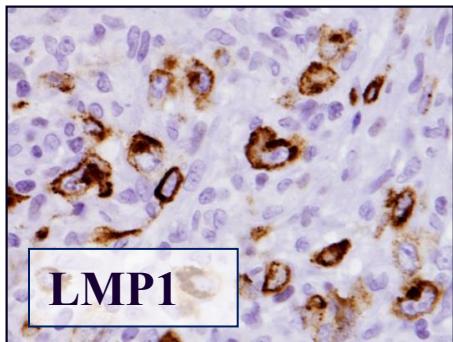
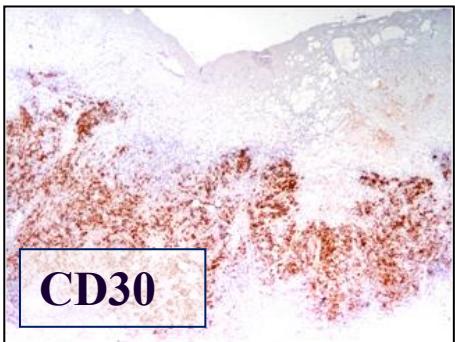
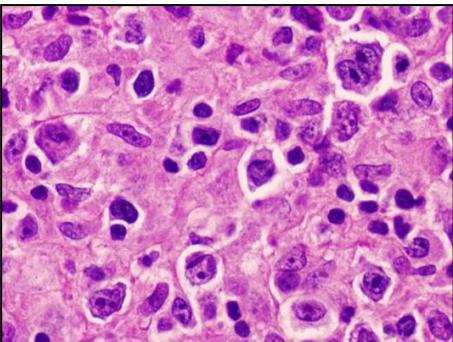
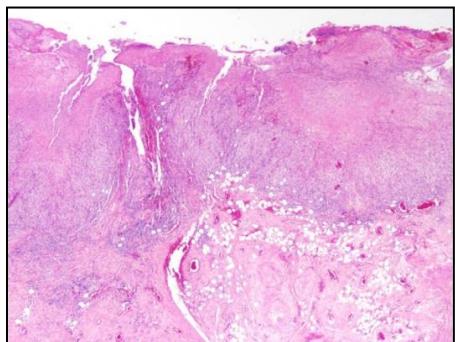
## Cutaneous B-cell lymphomas

- Extranodal marginal zone lymphoma (PCMZL)
- Primary cutaneous follicle center lymphoma
- Primary cutaneous diffuse large B-cell lymphoma, leg type
- Intravascular large B-cell lymphoma
- EBV-positive mucocutaneous ulcer

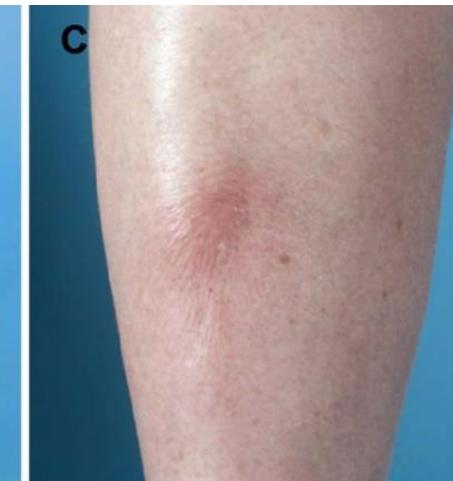
## EBV-positive mucocutaneous ulcer

- Mucosal (mostly oropharyngeal) or cutaneous ulcers.
- Age-related or iatrogenic (MTX !) immunosuppression  
→ defective surveillance for EBV.
- At sites of local trauma or inflammation.
- Usually self-limiting clinical course.
- May resolve spontaneously or with limited therapy (withdrawal of immunosuppression; rituximab).

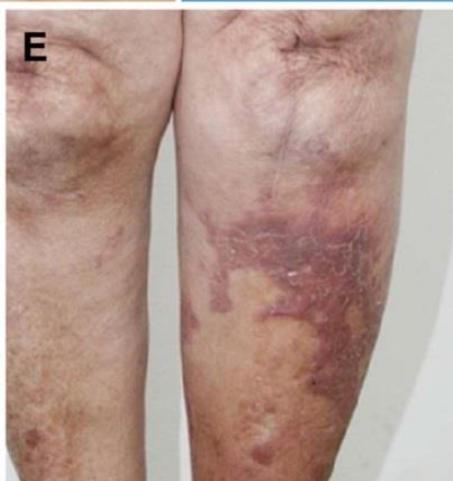
# EBV-positive mucocutaneous ulcer



Spontaneous resolution of MCU in a patient with RA on MTX over the course of 8 weeks following withdrawal of drug (Dojcinov SD et al. Am J Surg Pathol 2011)



**EBV+**



**EBV -**

MTX-associated B-cell lymphoproliferative disorder presenting in the skin: a clinicopathologic and immunophenotypical study of ten cases (Koens L et al; Am J Surg Pathol 2014;38:999-1006)

# WHO-EORTC 2005

<b>Cutaneous T-cell and NK-cell lymphomas</b>	<b>Cutaneous B-cell lymphomas</b>
Mycosis fungoides	Primary cutaneous marginal zone B-cell lymphoma
Mycosis fungoides variants and subtypes	Primary cutaneous follicle center lymphoma
<ul style="list-style-type: none"><li>• Folliculotropic MF</li><li>• Pagetoid reticulosis</li><li>• Granulomatous slack skin</li></ul>	Primary cutaneous diffuse large B-cell lymphoma, leg type
Sézary syndrome	Primary cutaneous diffuse large B-cell lymphoma, other
Adult T-cell leukemia/lymphoma	<ul style="list-style-type: none"><li>• intravascular large B-cell lymphoma</li></ul>
Primary cutaneous CD30-positive lymphoproliferative disorders	<b>Precursor hematologic neoplasm</b>
<ul style="list-style-type: none"><li>• Primary cutaneous anaplastic large cell lymphoma</li><li>• Lymphomatoid papulosis</li></ul>	CD4+/CD56+ hematodermic neoplasm (formerly blastic NK cell lymphoma)
Subcutaneous panniculitis-like T-cell lymphoma	
Extranodal NK/T-cell lymphoma, nasal type	
Primary cutaneous peripheral T-cell lymphoma, unspecified	
<ul style="list-style-type: none"><li>• Primary cutaneous aggressive epidermotropic CD8-positive T-cell lymphoma (provisional)</li><li>• Cutaneous γ/δ T-cell lymphoma (provisional)</li><li>• Primary cutaneous CD4+ small/medium-sized pleomorphic T-cell lymphoma (provisional)</li></ul>	

# Primary DLBCL, other - WHO-EORTC 2018

	<b>WHO Blue Book</b>	<b>WHO-EORTC (Blood)</b>
T-cell rich/histiocyte-rich large B-cell lymphoma	+	+
Plasmablastic lymphoma	+	+
Intravascular large B-cell lymphoma	+	+
PCDLBCL, large transformed cells (BCL2-, BCL6+)	+	-
PCDLBCL, other = non-leg (American Cancer Society)	-	-

# Primaire Diagnostiek Cutane Lymfomen

- Onderzoek nodig om de diagnose te stellen omvat:
  - Klinisch onderzoek door dermatoloog met fotografisch vastleggen van efflorescenties
  - histologisch onderzoek door patholoog
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  - evt. Moleculair/cytogenetisch onderzoek
- Diagnose in principe nooit zonder clinicopathologische correlatie
- Nieuwe patienten: inbrengen in Landelijke Werkgroep Cutane Lymfomen
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# Primaire Diagnostiek Cutane Lymfomen

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    - Klinisch onderzoek door dermatoloog met fotografisch vastleggen van efflorescenties
    - histologisch onderzoek door patholoog
    - immuunfenotypering/immuunhistochemie
    - evt. Moleculair/cytogenetisch onderzoek
- 1. Eén biopt of meerdere biopten, wanneer excisie, vriesmateriaal?**
  - 2. Minimaal standaard panel IHC**
  - 3. Rol voor klonaliteitsanalyse, NGS, FISH**

## Multidisciplinaire Werkgroep Cutane Lymfomen

**Groep B: onderbouwing kliniek en Pathologie**

**Ellen de Haas**



Table 4a

Recommendations for first-line treatment of MF stages IA, IB, and IIA.

Expectant policy (mainly T1a)	Level 4
SDT	
Topical corticosteroids (mainly T1a and T2a)	Level 3
UVB <sup>a</sup> (mainly T1a and T2a)	Level 2
PUVA <sup>b</sup>	Level 2
Localised RT (for localised MF including pagetoid reticulosis)	Level 4
Mechlorethamine <sup>c</sup>	Level 2

#### Recommendations for first-line treatment of MF stage IIB.

Systemic therapies <sup>a</sup>	
Retinoids <sup>b</sup>	Level 2
IFN- $\alpha$	Level 2
TSEB	Level 2
Monochemotherapy	Level 4
(gemcitabine, pegylated liposomal doxorubicine)	
Low dose MTX	Level 4
Localised RT <sup>c</sup>	Level 4

**Table 5b**

Recommendations for second-line treatment of MF stage IIB.

Polychemotherapy <sup>a</sup>	level 3
Allogeneic stem cell transplantation <sup>b</sup>	level 3

<sup>a</sup> CHOP is the most widely used regimen with a number of variants and other combinations available.

<sup>b</sup> Should be restricted to exceptional patients, see text for details.

**Table 6b**

Recommendations for second-line treatment of MF stage IIIA and B.

Monochemotherapy (gemcitabine, pegylated liposomal doxorubicine)	Level 3
Allogeneic stem cell transplantation <sup>a</sup>	Level 3

<sup>a</sup> Should be restricted to exceptional patients, see text for details.

**Table 7**Recommendations for treatment of MF stages IVA and IVB.<sup>a</sup>

Chemotherapy (gemcitabine, pegylated liposomal doxorubicine, CHOP and CHOP-like polychemotherapy) <sup>b</sup>	Level 3
Radiotherapy (TSEB and localised) <sup>c</sup>	Level 4
Alemtuzumab (mainly in B2)	Level 4
Allogeneic stem cell transplantation	Level 3

<sup>a</sup> For treatment of MF stage IVA1 recommendations for SS (Table 8a and b) might apply.

<sup>b</sup> Monochemotherapy should be preferentially used.

<sup>c</sup> Used alone or in combination with systemic therapies.

Table 8a

Recommendations for first-line treatment of SS.

ECP <sup>a</sup>	Level 3
Chlorambucil + prednisone	Level 3
Systemic therapies in combination with ECP or PUVA	
Retinoids <sup>b</sup>	Level 3
IFN- $\alpha$	Level 3
Low dose MTX	Level 4

<sup>a</sup> ECP can be used alone or in combination with skin directed and other systemic therapies.

<sup>b</sup> Including RAR and RXR agonists.

Table 8b

Recommendations for second-line treatment of SS.

Chemotherapy (gemcitabine, pegylated liposomal doxorubicine, CHOP and CHOP-like polychemotherapy)	Level 3
Alemtuzumab	Level 4
Allogeneic stem cell transplantation <sup>a</sup>	Level 3

<sup>a</sup> Should be restricted to exceptional patients, see text for details.

**Table 9**

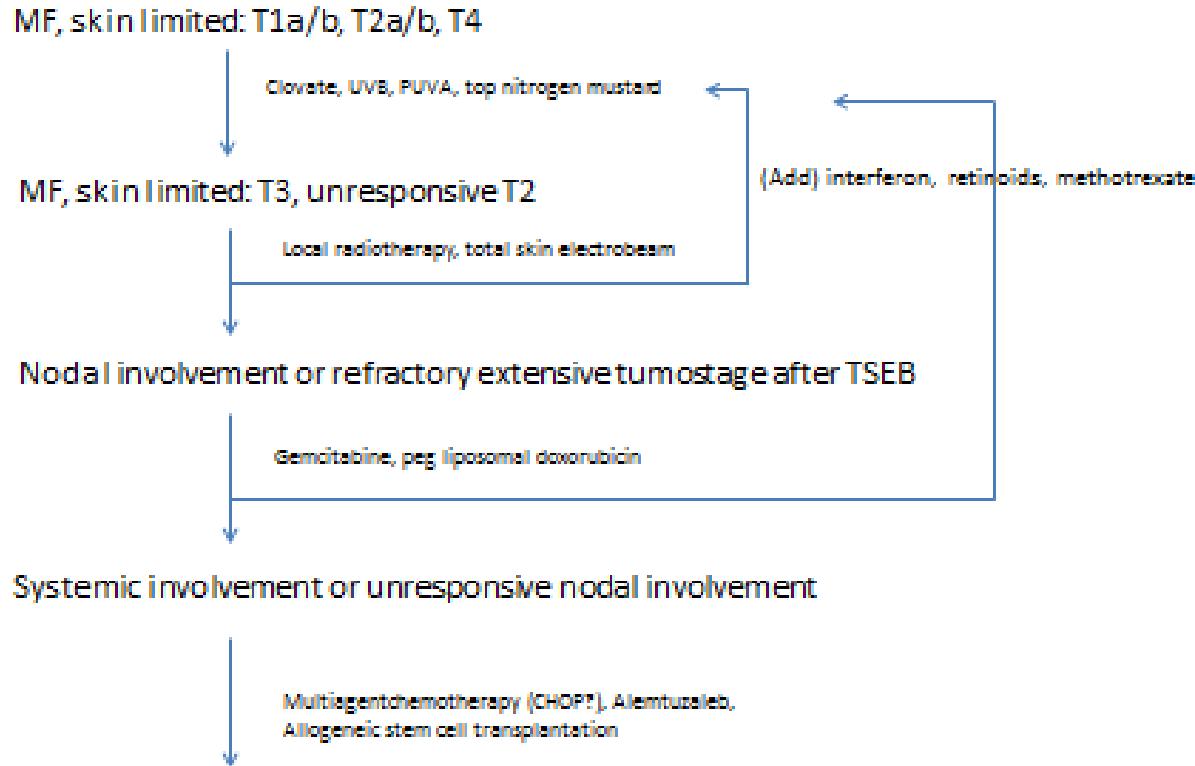
Agents that can be used for maintenance after remission has been achieved in MF and SS.<sup>a</sup>

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ECP
IFN- $\alpha$
Low-dose methotrexate
Mechlorethamine
PUVA
Retinoids
Topical corticosteroids
UVB

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<sup>a</sup> Options are listed alphabetically and should be chosen to be effective, tolerable, easy to use, and efficient. OCEBM levels are generally 5.



## Eenduidige vastlegging

- SWAT = (patch %TBSA × 1) + (plaque %TBSA × 2) + (tumor or ulcer %TBSA × 4).
- The CAILS adding severity score of each of the following categories for up to 5 index lesions: erythema, scaling, plaque elevation, and surface area. Severity was graded from 0 (none) to 8 (severe) for erythema and scaling; 0 to 3 for plaque elevation; and 0 to 9 for surface area
- Fotografische vastlegging
- VAS /Pat Severity Index 0-10

# Multidisciplinaire Werkgroep Cutane Lymfomen

**Groep C: Systemische Therapie**

**Sherida Woei-a-Jin**



## Behandelpad systemische therapie voor gevorderde stadia Mycosis Fungoides en Sézary Syndroom

Sherida Woei-A-Jin, An Bervoets en Annemie Busschots

Dilemma's:

# **DEFINITIES, STADIËRING EN TNMB CLASSIFICATIE**

# Definitie “gevorderd / advanced”?

- Formeel vanaf tumor stadium, ofwel stadium IIB



vs.





## NCI Dictionary of Cancer Terms

The NCI Dictionary of Cancer Terms features **8,270** terms related to cancer and medicine.

We offer a widget that you can add to your website to let users look up cancer-related terms. [Get NCI's Dictionary of Cancer Terms Widget.](#)

Starts with     Contains

*Enter keywords or phrases*

Search

Browse: A B C D E F G H I J K L M N O P Q R S

T U V W X Y Z #

**systemic disease**  (sis-TEH-mik dih-ZEEZ)

Disease that affects the whole body.

# Systemische betrokkenheid?



Cutaan



Dermatopathisch



Visceraal



Hyperprogression

# Interpretatie bloed betrokkenheid?

- Patiënten met stadium IA, IB en IIA kunnen ook bloed betrokkenheid hebben ( $B_{0-1}$ )
- *An sich* is bloed betrokkenheid niet altijd een reden voor opstart systemische therapie en kan skin directed therapy volstaan

# Definitie bloed betrokkenheid

- B0: absoluut aantal CD4+CD7- óf CD4+CD26- T-cellen <250/ $\mu$ L
- B1: absoluut aantal CD4+CD7- óf CD4+CD26- T-cellen: 250/ $\mu$ L – 1000/ $\mu$ L
- B2: Verhoogd CD4-getal met CD4:CD8 ratio >10, óf CD4+CD7- T-cellen>40%, óf CD4+CD26- T-cellen >30%

Behandellijnen therapie bij MF op basis van global response score, of:

# **KEUZE THERAPIE BASEREN OP COMPARTIMENT BETROKKENHEID?**

# Specialismen tijdens behandeltraject

IA  
IB  
IIA  
IIB  
III  
IV-A1  
IV-A2  
IV-B

## Dermatoloog

- Skin-directed therapie
- Fototherapie
- Systeemtherapie

## Radiotherapeut

- Lokale RT
- Total skin
- Concomitant?
- Palliatief?

## Hematoloog/oncoloog

- Systeemtherapie
- Management van toxiciteit en infecties

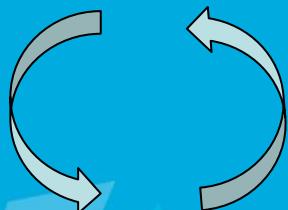
# Compartiment response score óf GRS gestuurde therapie?

- Huid (T): mSWAT, toename >25% = PD
- Lymfeklier (N): sum of product dimensions (SPD), toename >50% = PD
- “Viscera” (M): SPD, toename >50% = PD
- Bloed (B): flowcytometrie, toename >50% én minstens 5000/ $\mu$ L circulerende CTCL cellen
- GRS = PD zodra 1 compartiment PD toont

Systemische therapie

# MYCOSIS FUNGOIDES

## Debulking



## Maintenance therapie



Indien refractair is de vervolg therapie afhankelijk van:

- Betrokken compartiment
- CD30+ grootcellige transformatie?
- Onderscheid cutane transformatie en nodaal?

# Hoe logisch onder te verdelen?

- Lijnen therapie?
- Aangewezen behandeling op basis van betrokken compartimenten?
- Per agens indicatie vermelden?
- Debulkende therapie vs. maintenance?

# Inductie of onderhoudstherapie?

- Interferon alfa
  - Na skin-directed therapie
  - Alle stadia CTCL?
- Bexaroteen bij gevorderde CTCL
  - Na interferon alfa?
  - Plaats van andere retinoiden (alleen bij folliculotrope MF)?
- Methotrexaat
  - Alleen inductie gezien toxiciteit? Maximale dosis?
  - Restricties aan dosis in kader van onderhoudstherapie?
- Therapiepauze ja/nee?
- Duur van onderhoudstherapie

# Evidence voor combinatie therapie?

- IFN $\alpha$  + bexaroteen of retinoide
  - IFN $\alpha$  + MTX
  - MTX + bexaroteen of retinoide
- 
- Welke combinaties met radiotherapie?
  - Welke combinaties met UVB / PUVA?
  - Met name nieuwe compounds?

# Brentuximab-vedotin

- Debulking tumor stadium mycosis fungoides met CD30+ grootcellige transformatie
- In ALCANZA studie alle stadia geïncludeerd!
- Ook effect bij CD30 negatieve CTCL
- Knelpunten voor behandeling in niet-tumorale al dan niet vroegere stadia:
  - Vergoeding Brentuximab voor in totaal 16 cycli (geen restricties in Nederland)?
  - Hoeveel cycli zijn echt nodig?
  - Rationale voor rechallenge met Brentuximab?
  - Plaatsbepaling? 1<sup>e</sup> keus, of ná IFN $\alpha$  en/of bexaroteen?
  - Restricties hogere stadia? Bv. wat als beperkt T3 met B2?

# Overige systeemtherapieën

- Lenalidomide
- Romidepsin
- Bortezomib
- Mogamolizumab
- Pembrolizumab?

Systemische therapie bij erythrodermie en B2  
**SÉZARY SYNDROOM**

# Sézary Syndroom en erythroderme MF

- Systemische corticosteroïden (dosis, duur?)
- Interferon alfa
- Bexaroteen
- ECP (Extracorporele photoferese)
- Total skin electron beam therapie
- Lage dosis alemtuzumab (bij B1-2)
- Chloorambucil +/- prednisolon (bij B2)
  - Pulse therapie of continu
- Lage dosis methotrexaat
- Lenalidomide (off label / medical need)
- Romidepsin (named patient program)

# Sézary Syndroom (vervolg)

- Brentuximab-vedotin indien CD30+
- Respons op conventionele cytostatica?
  - Liposomaal doxorubicine (Caelyx)
  - Gemcitabine
  - Fludarabine +/- interferon alfa (geen cladribine vanwege immuungecompromitteerde status?)
  - CHOP
- Plaats bortezomib, mogamulizumab en pembrolizumab?

Dilemma's bij uitgebreide tumorale huidbetrokkenheid

# **DOSIS RADIOTHERAPIE**

# Maximale dosis radiotherapie?

- Welke dosis voor tumorale stadia?
- Low dose total skin radiotherapie?
- Recall radiatie dermatitis?
- Maximale huidtolerantie? Cumulatief 70 Gy?
- Concomitante chemoradiotherapie?

# Multidisciplinaire Werkgroep Cutane Lymfomen

**Groep D: alloSCT bij CTCL**

**Erik Marijt/Maarten Vermeer**





LUMC results  
(Immuno-)chemotherapy  
Allogeneic stem cell transplantation  
Proposal new alloSCT protocol

Erik Marijt, 7-Nov-2017

# Introductie

CTCL worden naar Hematologie verwezen wanneer lokale of beperkte systemische therapie niet meer werkt:

- Tumoreuze stadia in huid
- Systemische betrokkenheid, meestal lymfadenopathie

Analyze gedaan op een groep van 28 patienten die sinds 2007 naar Hematologie zijn verwezen voor systemische chemotherapie

Deel van de patienten is vervolgens allogeen getransplanteerd

# LUMC results chemo for MF/SS

Therapy	N=22	total per chemo group	Results
CHOP	12		
A-CHOP	2		13x PD
CHOEP	1	17	3x CR
BV-CHEP	2		1x SD
liposomal doxo	1	1	1x SD
Alemtuzumab	3	3	1x SD, 1x PD, 1x PR
MTX/AraC	1	1	1x CR

Evalueerbaar ivm chemotherapie: 22

14x PD	64%
4xCR	18
3x SD	14
1x PR	5

Median months to PD 5

# LUMC results alloSCT for MF/SS

CTL UPN	Diagnosis	Dead	CoD	
8	MF	yes	PD	
9	SS	yes	neurological	
10	MF	yes	PD	
14	MF	no		
15	MF	yes	GVHD	
19	SS	yes	PD	
21	prim aggr cut CD8+ TCL	yes	GVHD	
25	prim aggr cut CD8+ TCL	no		short f-up!
28	MF-HTLV1	no		
		<b>OS 3/9</b>		

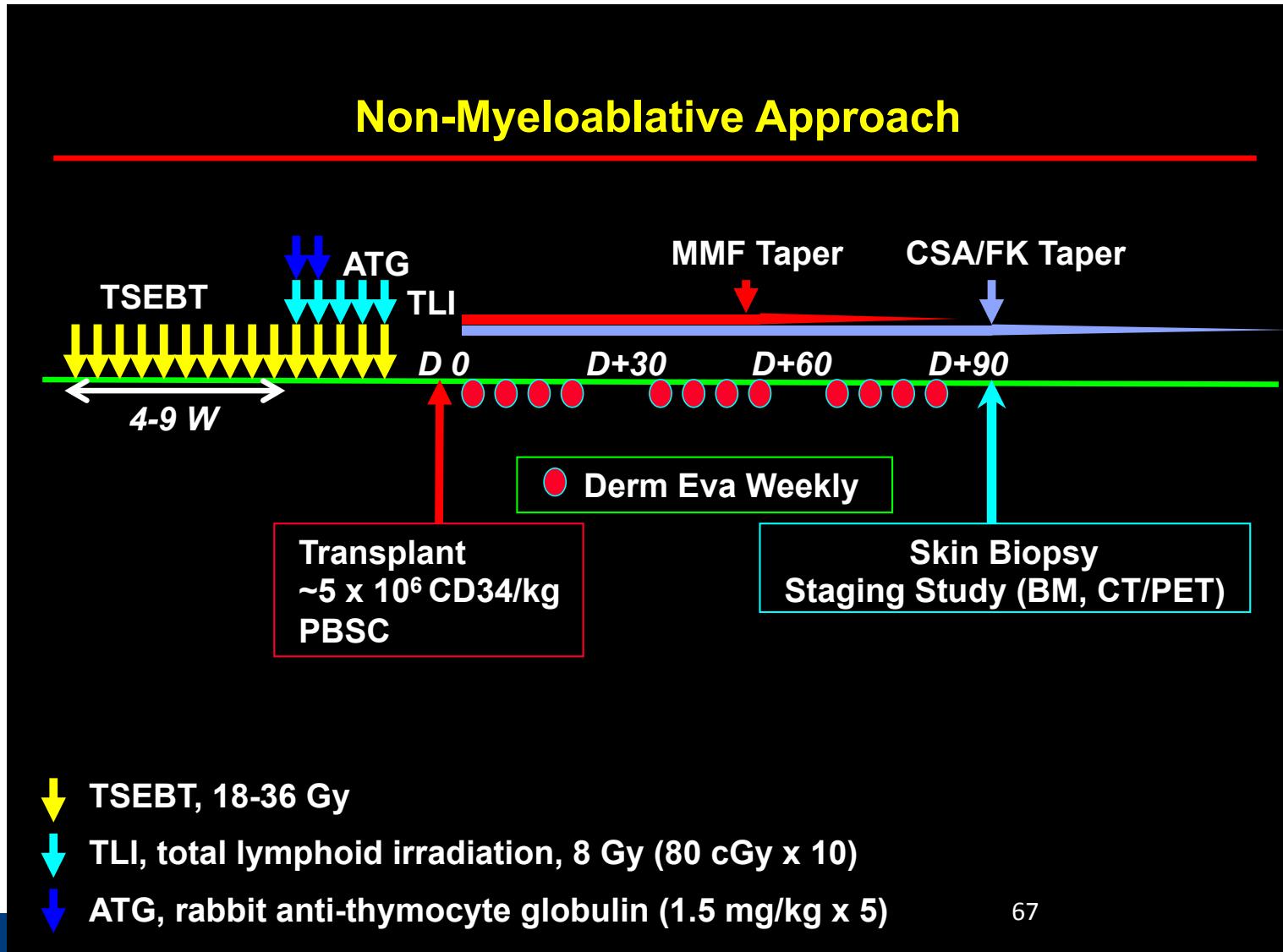
## Conclusion-1

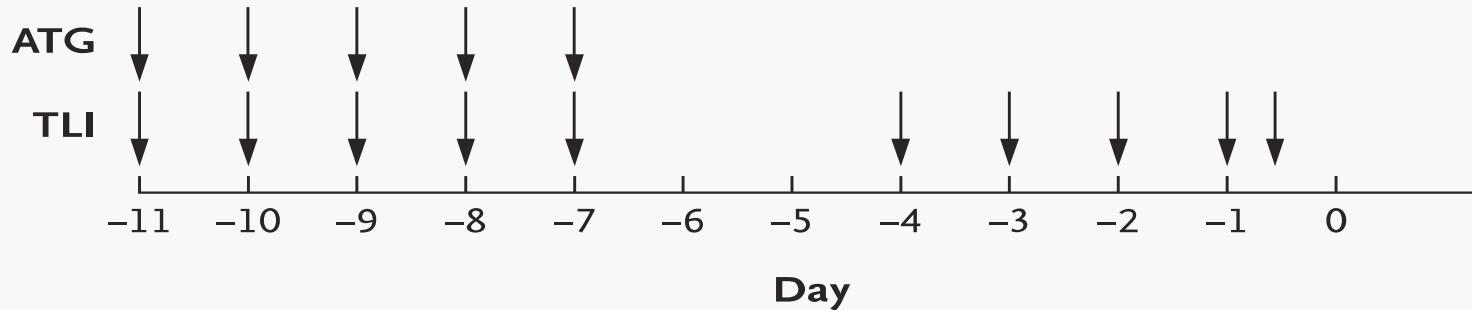
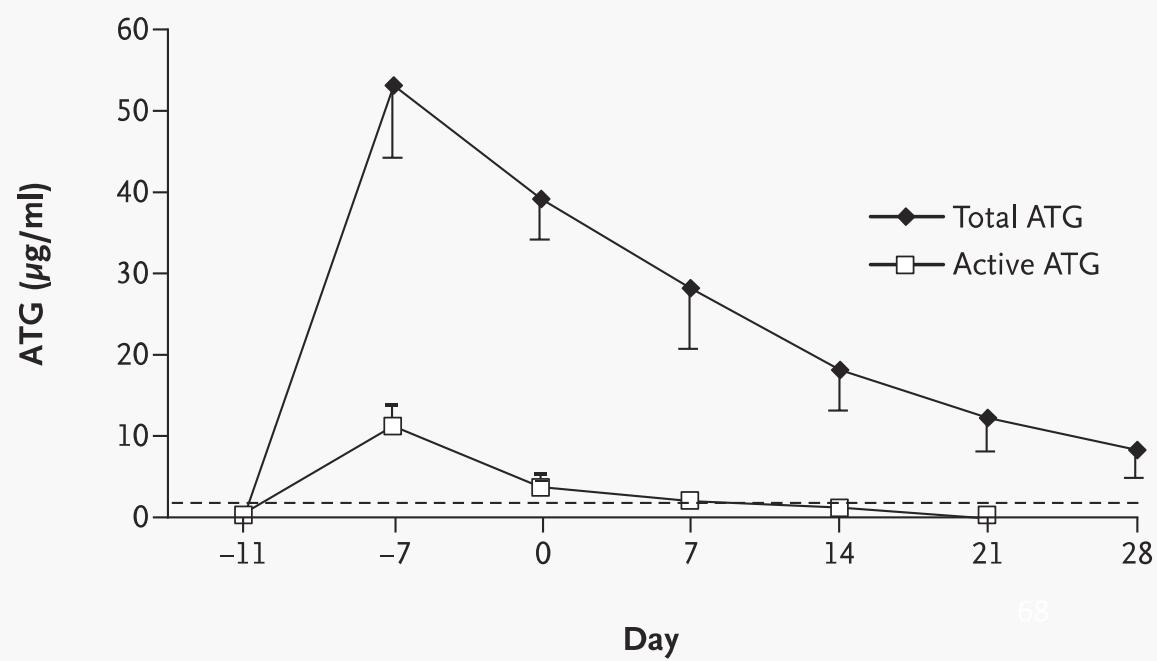
Advanced stage CTCL: slechte resultaten multi-agent CHOP (like) chemotherapie, maar vergelijkbaar met resultaten beschreven in literatuur

Deel van deze patienten kan echter toch worden getransplanteerd >> 9 patienten:

- 3 overlijden alsnog aan PD
- 2 dood tgv GVHD
- 1x dood door onbegrepen neurologisch beeld
- OS 3/9

# TSI+TLI for CTCL (Stanford schema)



**A****D**

## Immunosuppressive therapy after transplantation:

oral cyclosporine: day -3, at a dose of 6.25 mg per kilogram twice per day  
MMF, 15 mg per kilogram twice a day, day +1

MRD:

- cyclosporine was tapered to discontinuation from day 56 to day 180
- MMF was stopped on day 28.

MUD:

- cyclosporine was tapered to discontinuation from day 100 to day 180
- MMF was tapered to discontinuation from day 42 to day 96.

# Sci Transl Med 2013: clinical course after TSI + TLI for CTCL; n=10

**Supplementary Table 1. Clinical Characteristics**

Patient	Age	Stage	Large Cell Transformation	Time from Diagnosis to Transplant (Mo)	No. of Prior Systemic Tx	Last Systemic Treatment	Disease Status at Time of Transplant			Clinical Response at Day+90 Post Transplant	Auto GVHD	Chronic GVHD
							Skin*	Blood	Lymph node			
#1	62	IVB	Yes	27.5	4	Vorinostat	+	+	+	CR <sup>#</sup>	Skin, Grade 2	-
#2	20	IVA	Yes	31.3	2	Doxorubicin Liposome	+	-	-	PR	-	-
#3	73	IVA	no	46.7	9	Romidepsin	-	-	-	CR	-	Oral, Skin, Gut
#4	47	IVA	no	39.6	8	Romidepsin	+	+	+	CR	-	-
#5	63	IVA	Yes	34.8	6	Denileukin Diftitox	+	-	-	CR	-	-
#6	62	IVB	no	60.6	6	Romidepsin	+	+	+	CR	-	-
						Gemcitabine/ Dexamethasone /Cisplatin	-	-	+	CR	-	-
#7	62	IVA	no	151.7	6	Alemtuzumab	+	-	-	CR	-	-
#8	64	IVA	no	22.3	4	Alemtuzumab	+	-	-	CR	-	-
#9	63	IVA	no	10.2	4	Romidepsin	+	+	+	CR	-	-
#10	65	IVA	no	55.6	4					CR	Skin, Grade 3	Skin

\* Skin, + generalized erythroderma/plaque/tumor, confirmed by biopsy

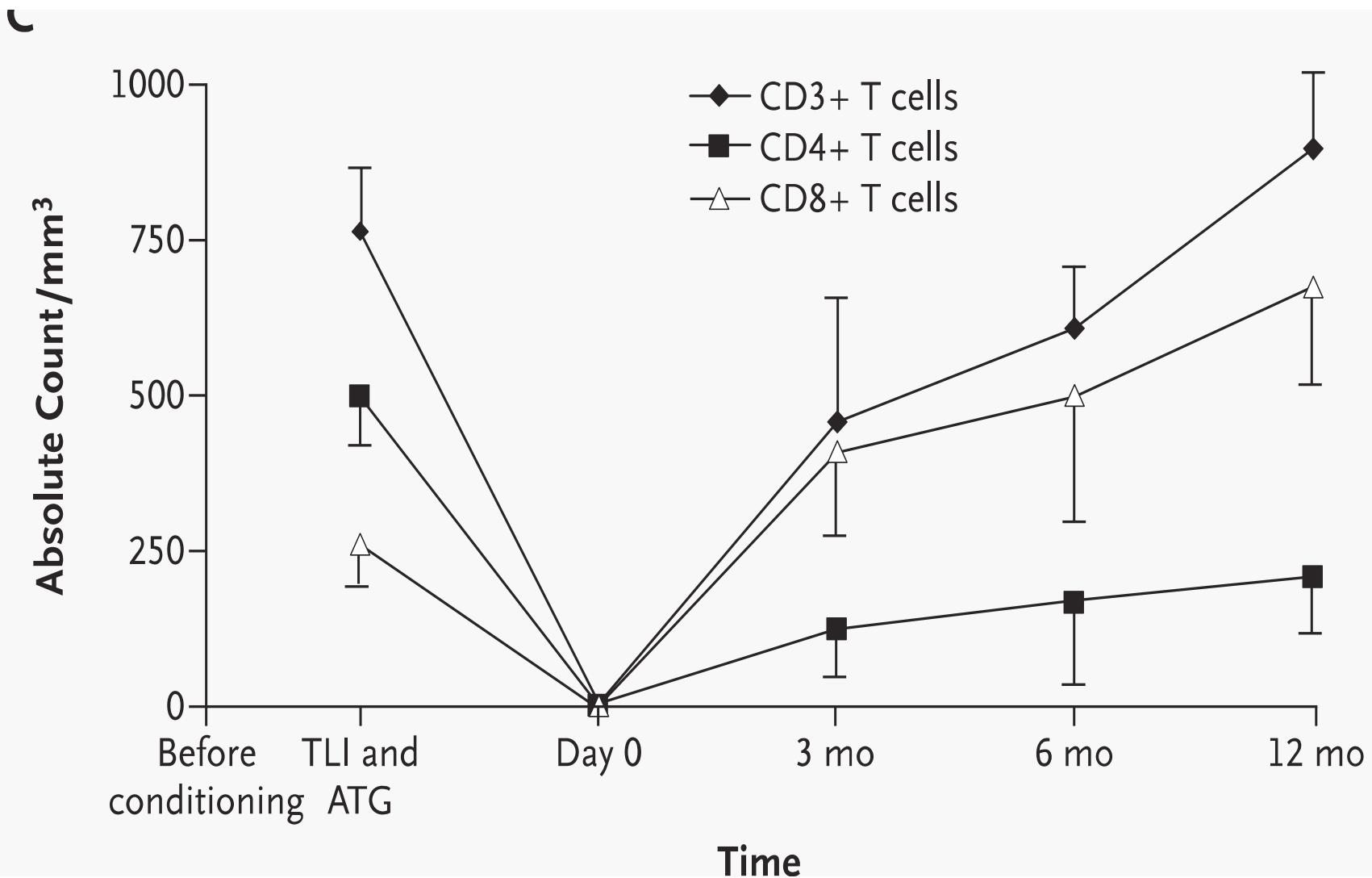
Blood, + determined by multi-parameter flow cytometry and pathologist's review

Lymph node, + by computed tomography/positron emission tomography and biopsy confirmation

# CR, complete clinical response using criteria in Ref 41

PR, partial clinical response

# T cell reconstitution



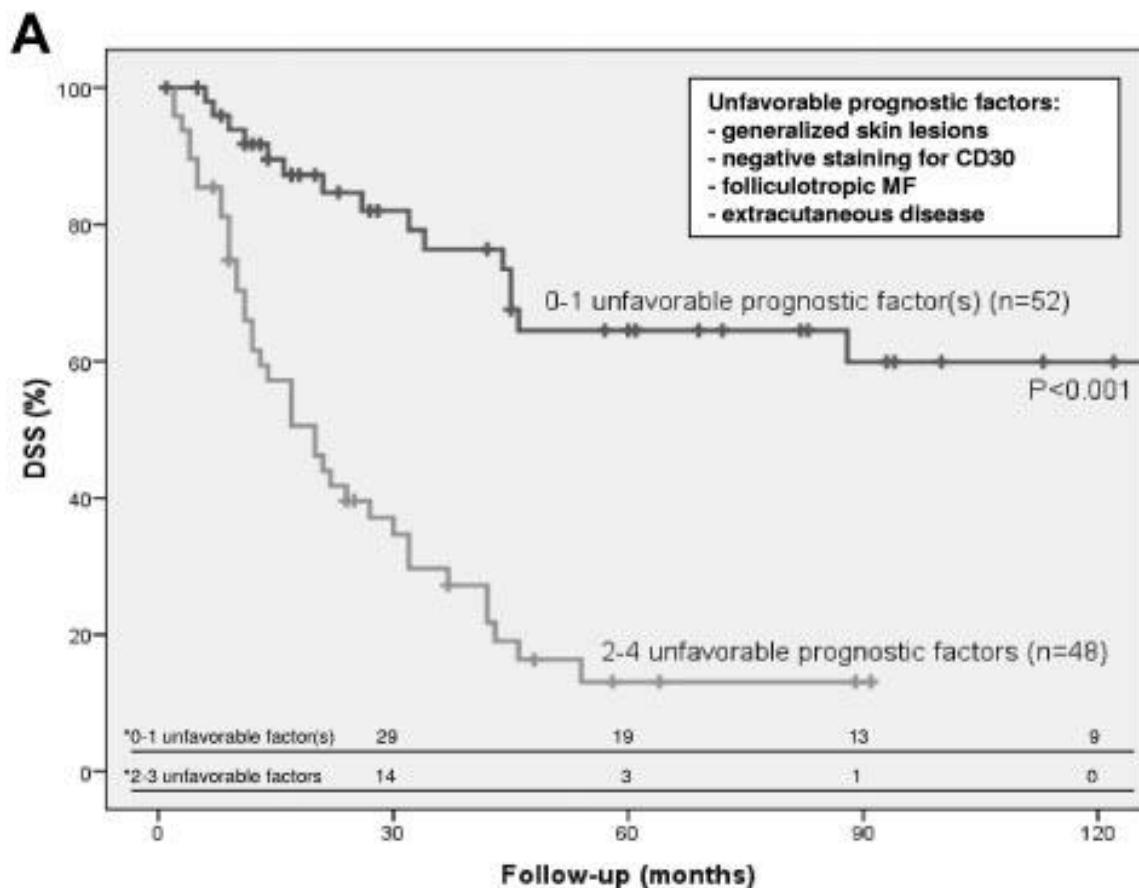
# Inclusie patienten

inclusie van patienten die advanced stage CTCL hebben: stad IIB/IV

bij voorkeur patienten patienten die alleen huidafw. hebben (IIB), maar wel met blastaire transformatie; deze krijgen ook snel LK betrokkenheid (zie studies Vermeer over prognostische factoren voor snelle progressie)

alleen chemotherapeutische voorbehandeling bij LK betrokkenheid?

# fungoides: a retrospective analysis of 100 cases



**Figure 2. Prognostic index indicating differences in DSS.** Prognostic index indicating differences in DSS in total group of patients with transformed MF (n=100; A)

# Vragen aSCT

## Procedure

- Indicatie: welke patiënten?
- Behandeling: welk protocol?
- Monitoring: hoe, wanneer, welke consequentie?
- Waar: academische centra, STZ, combinatie?

## aSCT netwerk voor Cutane Lymfomen

- Indicatiestelling
- Standaard protocol

## Database met follow up

## Biobanking