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Senior Lecturer

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University of Birmingham



UNIVERSITY OF
BIRMINGHAM



University of Birmingham

Chairman

Cutaneous Lymphoma Taskforce
EORTC, Brussels



EORTC HQ, Brussels

‘No conflict of interest’

Would MF/SS fit the model for a prognostic index?

- Wide range of survival within stages¹

IB; 5yr DSS 89%, 10yr 77%

IIB; 5yr OS 47%, 20yr 21%

IIIA; 5yr OS 47%, 20yr 25%

IVA₂; 5yr OS 18%, 20yr 3%



- Variety of poor prognostic variables identified in previous studies ^{2,3}
- No treatment shown improve survival, no cure with the exception BMT is select patients
- Treatment is frequently decided on an individual patient basis dependent on the presence of poor prognostics factors in addition to the staging & management varies between centres

¹Agar NS et al *J Clin Onc.* 2010;28(31):4730-9, ²Benton E et al *Eur J Cancer.* 2013;49(13);2859-68, ³Scarisbrick J et al *J Clin Onc* 2015;33(32):3766-73

Poor Prognostic Markers within Stage¹

Clinical Markers

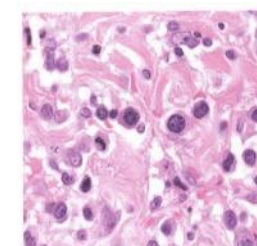
- Age of diagnosis > 60yrs
- Male Sex? Not conclusive, varies between centres
- **Pathological Skin Markers**
 - Folliculotropism
 - CD30 positivity in skin? Not conclusive, varies between centres
 - Large cell transformation (skin)
 - High cell proliferation index (Ki-67, MIB-1) in skin
- **Haematological Markers**
 - Raised lymphocyte count
 - Raised serum LDH
 - Identical clone blood and skin defined by PCR



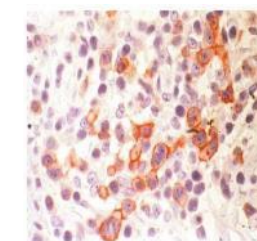
Folliculotropic tumours



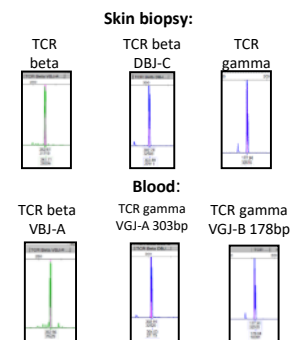
Folliculotropic plaques



Large cell transformation



CD30 positivity



¹Scarbrick J et al. Prognostic Factors, Prognostic Indices and Staging in Mycosis Fungoides and Sézary Syndrome: Where are we now? Br J Dermatol. 2014;170(6):1226-36.

Good Prognostic Markers¹

Clinical Markers

- Age of diagnosis <60yrs
- Duration MF > 10 years
- Patches without plaques
- Poikiloderma
- Hypopigmented variant
- Associated lymphomatoid papulosis

Pathological Markers

- CD8+ variant (hypopigmented, younger age)



Hypopigmented MF



Poikilodermatous MF



Lymphomatoid papulosis lesions

¹Scarlsbrick J et al. Prognostic Factors, Prognostic Indices and Staging in Mycosis Fungoides and Sézary Syndrome: Where are we now? Br J Dermatol. 2014;170(6):1226-36.

Proposed Indices in Cutaneous Lymphoma

- Prognostic Index, MD Anderson, 1999¹
tumours, age >60, LDH
- CTCL-Severity Index (SI), 2005²
blood, lymph node involvement
- Cutaneous Lymphoma International Prognostic Index, London, 2013³
male, age ≥ 60 , $N_{2/3}$, $B_{1/2}$, M_1
- CLIC Retrospective Model, 29 sites, 2015⁴
age >60, LDH, large cell transformation skin, stage IV

1 Diamandidou et al. **Prognostic factor analysis in mycosis fungoides/Sézary syndrome.** 1999 Jun;40(6 Pt 1):914-24

2 Klemke et al. **Prognostic factors and prediction of prognosis by the CTCL Severity Index in mycosis fungoides and Sézary syndrome.** 2005 Jul;153(1):118-24.

3 Benton E et al. **Cutaneous Lymphoma International Prognostic Index (CLIPi) for Mycosis Fungoides & Sezary Syndrome.** *Eur J Cancer.* 2013;49(13);2859-

4 Scarisbrick et al **Cutaneous Lymphoma International Consortium (CLIC) Study of Outcome in Advanced Stages of Mycosis Fungoides & Sézary Syndrome:** *J Clin Oncology.* 2015;33(32):3766-73

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

J Clin Oncology. 2015;33(32):3766-73

Cutaneous Lymphoma International Consortium Study of Outcome in Advanced Stages of Mycosis Fungoides and Sézary Syndrome: Effect of Specific Prognostic Markers on Survival and Development of a Prognostic Model



Julia J. Scarisbrick, H. Miles Prince, Maarten H. Vermeer, Pietro Quaglino, Steven Horwitz, Pierluigi Porcu, Rudolf Stadler, Gary S. Wood, Marie Beylot-Barry, Anne Pham-Ledard, Francine Foss, Michael Girardi, Martine Bagot, Laurence Michel, Maxime Battistella, Joan Guitart, Timothy M. Kuzel, Maria Estela Martinez-Escala, Teresa Estrach, Evangelia Papadavid, Christina Antoniou, Dimitis Rigopoulos, Vassilki Nikolaou, Makoto Sugaya, Tomomitsu Miyagaki, Robert Gniadecki, José Antonio Sanches, Jade Cury-Martins, Denis Miyashiro, Octavio Servitje, Cristina Muniesa, Emilio Berti, Francesco Onida, Laura Corti, Emilia Hodak, Iris Amitay-Laish, Pablo L. Ortiz-Romero, Jose L. Rodríguez-Peralto, Robert Knobler, Stefanie Porkert, Wolfgang Bauer, Nicola Pimpinelli, Vieri Grandi, Richard Cowan, Alain Rook, Ellen Kim, Alessandro Pileri, Annalisa Patrizi, Ramon M. Pujol, Henry Wong, Kelly Tyler, Rene Stranzenbach, Christiane Querfeld, Paolo Fava, Milena Maule, Rein Willemze, Felicity Evison, Stephen Morris, Robert Twigger, Rakhshandra Talpur, Jinah Kim, Grant Ognibene, Shufeng Li, Mahkam Tavallaee, Richard T. Hoppe, Madeleine Duvic, Sean J. Whittaker, and Youn H. Kim

Listen to the podcast by Dr Pinter-Brown at www.jco.org/podcasts

Prognostic Markers¹

¹Scarlsbrick J et al. Prognostic Factors, Prognostic Indices and Staging in Mycosis Fungoides and Sézary Syndrome: Where are we now? Br J Dermatol. 2014;170(6):1226-36.

1. Stage
2. Age (99%)
3. Sex (99%)
4. mSWAT (26%)
5. WCC / lymphocyte count (60%/68%)
6. Folliculotropism (FT) (83%)
7. CD30 positivity % (skin) (50%)
8. Large Cell Transformation (skin) (86%)
9. Cell proliferation index (Ki-67, MIB-1) Skin (37%)
10. Serum LDH (73%)
11. Identical clone blood and skin defined by PCR (57%)

Tested against overall survival

Centre No	Principal Investigator (PI)	Centre Address	No of Patients
E 001	Julia Scarisbrick	University Hospital Birmingham, UK	35
E 002	Pietro Quaglino	University of Turin, Italy	50
E 004	Sean Whittaker	St Thomas' Hospital, London, UK	215
E 005	Maarten Vermeer	Leiden University Medical Centre, The Netherlands	55
E 006	Richard Cowan	Christie Hospital, Manchester UK	11
E 007	Evangelina Papadavid	Athens University Medical School, Greece	40
E 008	Pablo Oritz-Romero	Hospital 12 de Octubre, Madrid, Spain	23
E 009	Martine Bagot	Hospital St Louis, Paris, France	50
E 010	Rudolf Stadler	Johannes Wesling Medical Centre, Minden, Germany	11
E 011	Robert Gniadecki	Bispebjerg Hospital, Copenhagen University, Denmark	33
E 012	Robert Knobler	University of Vienna Medical School, Austria	7
E 018	Nicola Pimpinelli	University of Florence, Italy	22
E019	Octavio Servietje	Hospital Universitari de Bellvitge, Barcelona, Spain	15
E 020	Emmilia Hodak	Rabin Medical Center, Israel	30
E 021	Alessandro Pileri	University of Bologna, Italy	14
E 022	Marie Beylot-Barry	CHU Hospital de Bordeaux, Bordeaux, France	50
E 023	Teresa Estrach	Hospital Clinico, University of Barcelona, Spain	13
E024	Emilio Berti	University of Milano, Italy	29
E025	Ramon Pujol	Hospital del Mar. Barcelona, Barcelona, Spain	12
US-001	Youn Kim	Stanford University Medical Centre, California, USA	121
US-003	Steven Horwitz	Memorial Sloan Kettering Cancer Centre, New York, US	46
US-004	Joan Guitart	Northwestern Univesity, Chicago, USA	47
US-005	Madeleine Duvic	MD Anderson Cancer Centre, Houston, USA	169
US-006	Pierluigi Porcu	Ohio State University, Columbus, USA	11
US-010	Francine Foss	Yale University, New Haven, Conneticut, USA	40
US-011	Alain Rook	University of Pennsylvania, Pennsylvania, USA	16
A 001	Miles Prince	Peter MacCallum Cancer Centre, Australia	56
A 002	Makoto Sugaya	Faculty of Medicine, University of Tokyo, Tokyo, Japan	29
SA 001	José Antonio Sanches	University of Sao Paulo Medical School, Brazil	33

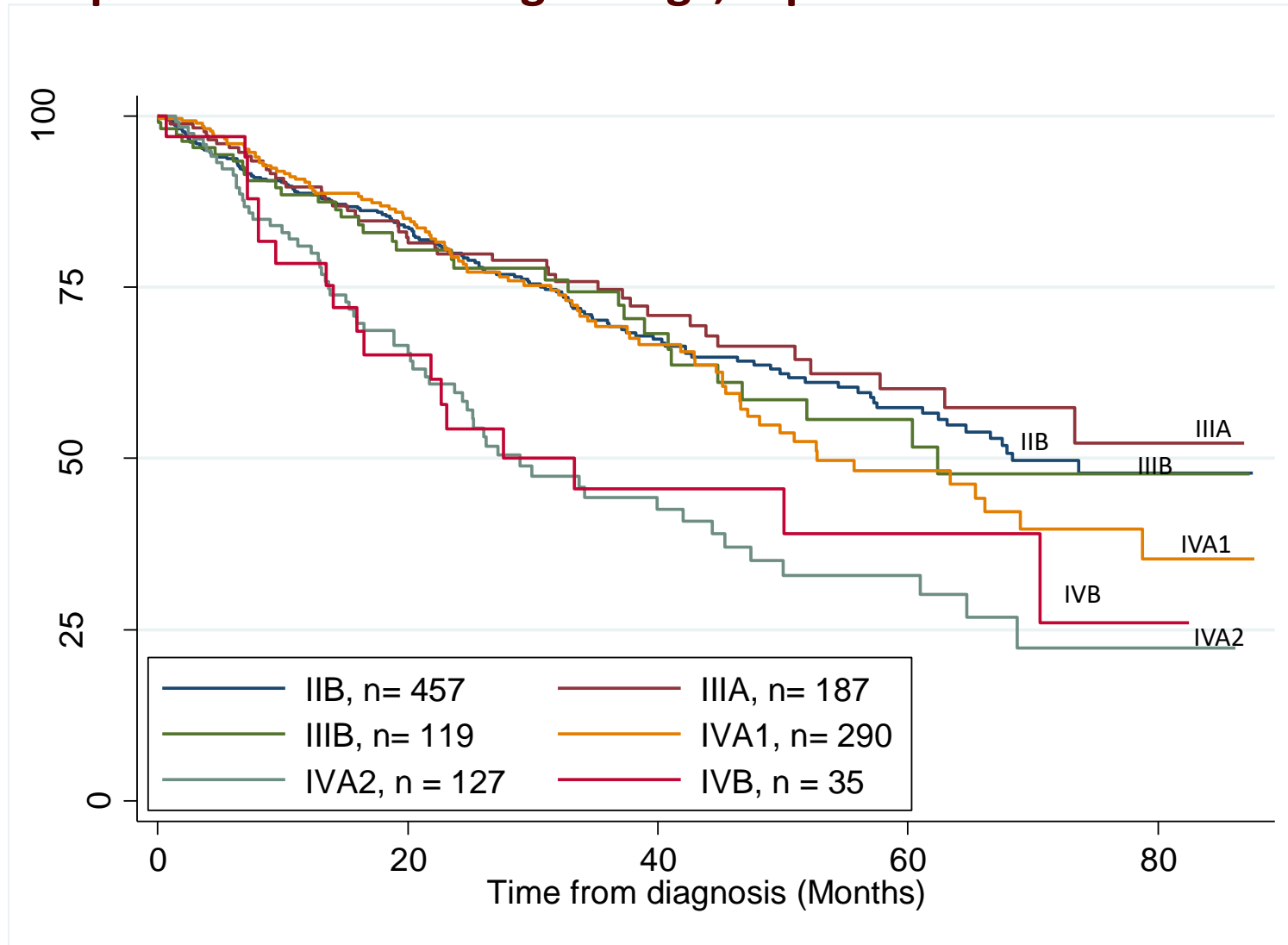


29 International Sites,
5 continents
Participated recruited
1275 advanced stage
patients

Disease Specific Survival (DSS) Against Stage

	No. of patients	Mean Age	Deaths	Median Survival	Mean DSS mnths	1-year DSS	2-year DSS	5-year DSS
IIB	457	62	132	NR	67	93%	80%	67% (57)
III (all)	320	65	80	NR	66	92%	85%	66% (58)
IIIA	187	63	46	NR	67	92%	84%	68% (60)
IIIB	119	66	33	NR	65	93%	87%	66% (56)
IVA (all)	463	64	168	63	57	92%	80%	52% (43)
IVA1	290	66	87	66	61	93%	85%	56% (48)
IVA2	127	60	61	44	49	87%	69%	44% (33)
IVB	35	65	18	33	44	79%	54%	39% (39)
Stages (all)	1275	63	398	NR	63	92%	83%	61% (52)

Retrospective Data According to Stage; Kaplan Meier Survival



Stage	n	Relative Survival	P value
Stage IIB	n=457	1	
Stage III	n=320	0.98 (0.71, 1.35)	0.895
Stage IVA	n=463	1.54 (1.08, 2.18)	0.016
Stage IVB	n=35	1.80 (1.05, 3.11)	0.034

Multivariate Analysis of 1275 advanced MF/SS patients from 29 centres in 13 countries

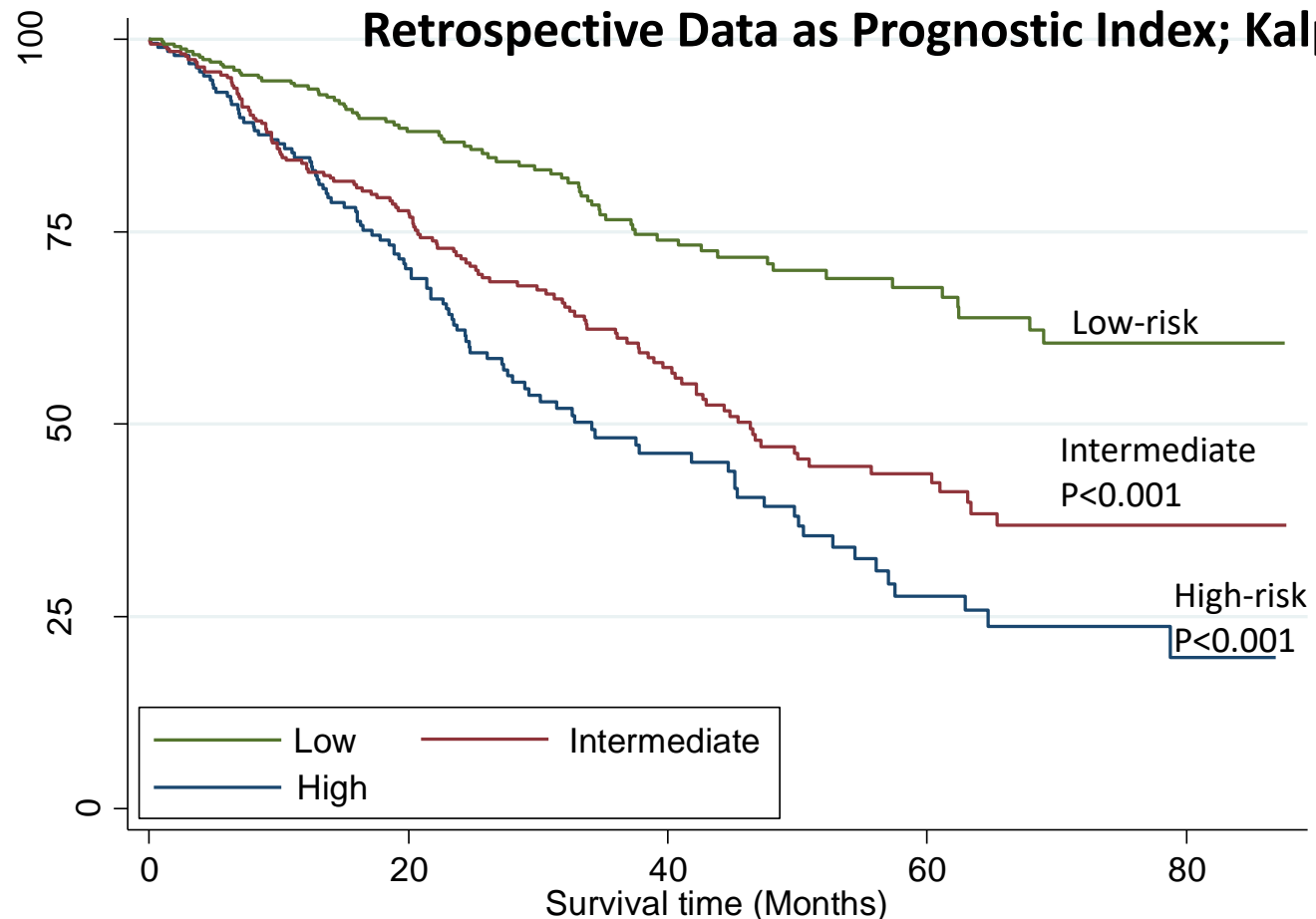


Variable	Hazard ratio (95% CI)	p-value
Male	1.18 (0.95, 1.47)	0.142
60 +	1.82 (1.43, 2.33)	<0.001
Identical clone blood to skin Y	1.22 (0.87, 1.70)	0.248
Raised WCC	1.09 (0.80, 1.48)	0.604
Low WCC	0.80 (0.36, 1.75)	0.57
Raised LDH	1.50 (1.15, 1.94)	<0.001
Raised lymphocyte	0.75 (0.54, 1.04)	0.081
Low lymphocyte	1.20 (0.82, 1.77)	0.35
Stage III	1.17 (0.83, 1.63)	0.372
Stage IV	1.95 (1.34, 2.86)	0.009
SS (vs MF)	0.73 (0.52, 1.03)	0.073
FT at Dx N	0.61 (0.43, 0.88)	0.07
LCT at Dx Y	1.64 (1.25, 2.16)	<0.001
CD 30+ve ≥ 10	1.08 (0.74, 1.58)	0.677
Ki 67 +ve ≥ 20	0.85 (0.55, 1.32)	0.472

Retrospective Data as Prognostic Index

- By combining these 4 factors significant in a prognostic model
 - Stage IV
 - Age
 - Raised LDH
 - LCT in skin
- Divides patients into risk groups for disease progression
 - Low-risk = 0-1 factors
 - Intermediate-risk = 2 factors
 - High-risk = 3-4 factors
- Separated advanced cohort into
 - **Low-risk: n = 327** (IIB n=166, III n=134, IV n=27)
 - **Intermediate-risk: n= 329** (IIB n=91, III n=82, IV n=156)
 - **High-risk: n = 201** (IIB n=20, III n=4, IV n=177)

Retrospective Data as Prognostic Index; Kalpein Meier



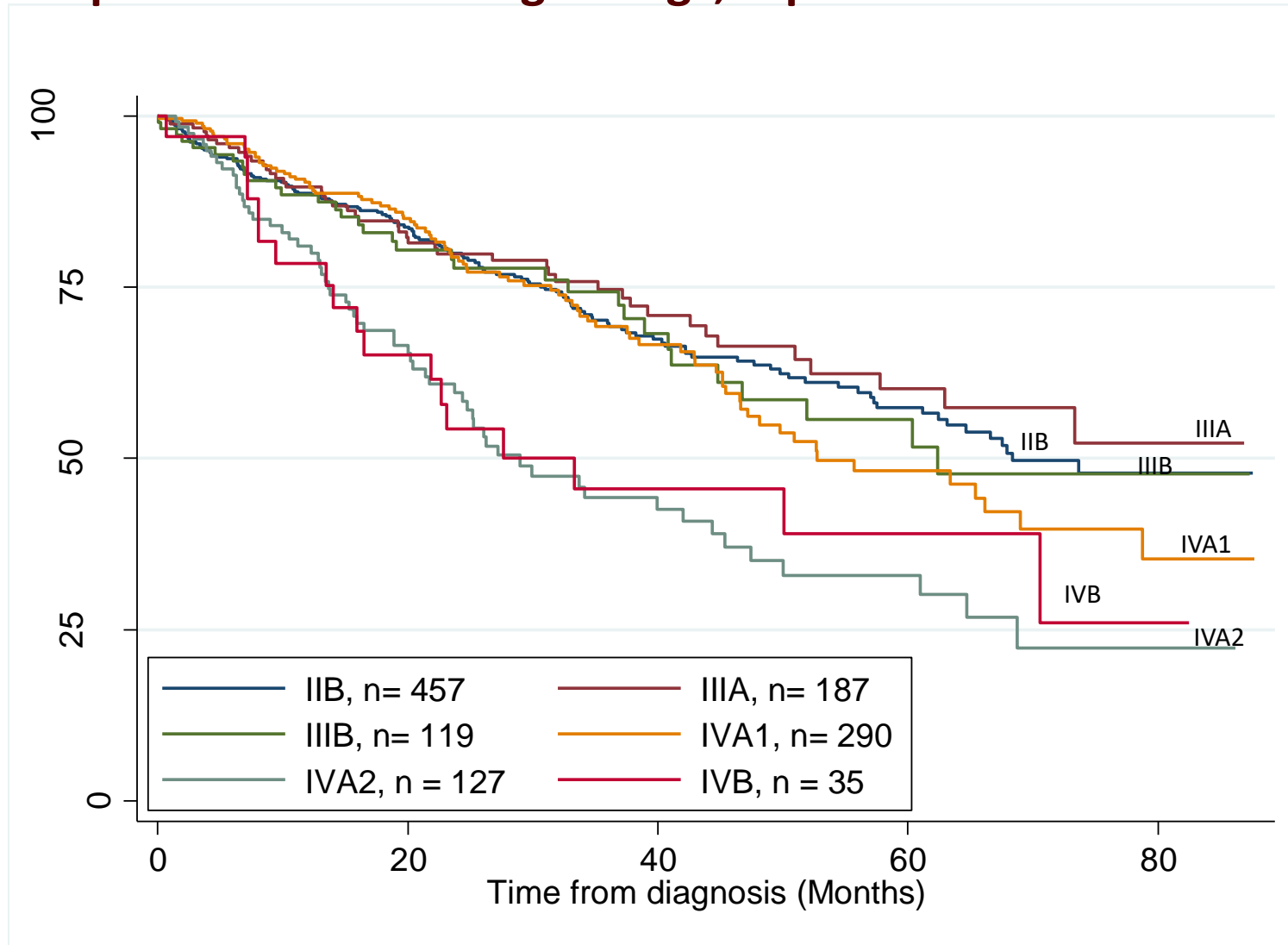
Excluded patients with missing age, stage, LDH and LCT from these analyses n=857 (IIB=277, III=220, IV=360)

4 Variables: age>60, LCT skin, raised LDH, stage IV

Low risk – 0-1 variable
Intermediate risk – 2 variables
High risk - 3-4 variables

Risk of poor survival (No risk factor)	N (deaths)	N IIB	N III	N IV	1-year survival	2-year survival	5-year survival	Median OS months	Hazard ratio (95% CI, p-value)
Low (0-1)	327(100)	166 (60%)	134 (61%)	27 (8%)	94%	87%	68%	NR	1
Intermediate (2)	329 (123)	91 (33%)	82 (37%)	156 (43%)	84%	72%	44%	46	2.09 (1.56, 2.80; p<0.001)
High (3-4)	201(100)	20 (7%)	4 (2%)	177 (49%)	85%	62%	27%	34	2.91 (2.15, 3.96; p<0.001)

Retrospective Data According to Stage; Kaplan Meier Survival



Stage	n	1	P value
Stage IIB	n=457	1	
Stage III	n=320	0.98 (0.71, 1.35)	0.895
Stage IVA	n=463	1.54 (1.08, 2.18)	0.016
Stage IVB	n=35	1.80 (1.05, 3.11)	0.034



PROCLIPi Study

To test this prognostic index and other prognostic factors internationally and prospectively

PROspective Cutaneous Lymphoma International **PRO**gnostic Index

Julia Scarisbrick, Pietro Quaglino, Maarten Vermeer, Youn Kim
On Behalf of the EORTC Gp & Cutaneous Lymphoma International Consortium

PROCLIPi Steering Committee
Julia Scarisbrick, Birmingham, UK
Youn Kim, Stanford, US
Pierluigi Porcu, Philadelphia, US
Joan Guitart, NorthWestern, US
Miles Prince, Melbourne, Aus
Steve Horwitz, U Columbia, US
Pietro Quaglino, Turin, Italy
Maarten Vermeer, Leiden, NL
Robert Knobler, Vienna, Austria
Sean Whittaker, London, UK
Emmie Hodak, Tel Aviv, Israel
Lia Papadavid, Athens, Greece
Pablo Ortiz, Madrid, Spain
Martine Bagot, Paris, France
Rudi Stadler, Minden, Germany
Rein Willemze, Leiden, NL



PROspective Cutaneous Lymphoma International Prognostic Index Study; *Opened July 2015*

- The purpose of PROCLIPi is to develop a PI in cutaneous lymphoma by collecting data at diagnosis and measuring against survival
 - Clinical
 - Pathological
 - Nodal
 - Haematological
 - Genotypic
 - Treatment
 - Biobank Material
- Prognostic variables will be tested against overall & progression free survival
- We will recruit a minimum of 1000 patients with early stage MF and 500 with advanced MF/SS over the 5 year study period, survival data for 10+ years
- 20% of patients to be used in the validation set



ProClipi x
University Hospitals Birmingham NHS Foundation Trust [GB] | <https://www.proclipi.uhb.nhs.uk/PatientSearch.aspx>

PROCLIPi Patient Search Review Stanford Admin
University Hospitals Birmingham NHS Foundation Trust
Logged in as: Julia Scarisbrick Logout

Patient Search Add New Patient

Unique Patient Hospital Number or PRC Study Number: Nhs Number: Date of Birth:

First Name: Surname: Postcode:

Site:

Search Results

Site	Study Number
University Hospitals Birmingham, UK	PRC0047
University Hospitals Birmingham, UK	PRC0929
University Hospitals Birmingham, UK	PRC0046
University Hospitals Birmingham, UK	PRC0033
University Hospitals Birmingham, UK	PRC0453
University Hospitals Birmingham, UK	PRC0358
University Hospitals Birmingham, UK	PRC0449
University Hospitals Birmingham, UK	PRC0638
University Hospitals Birmingham, UK	PRC0570
University Hospitals Birmingham, UK	PRC0667
University Hospitals Birmingham, UK	PRC0006
University Hospitals Birmingham, UK	PRC0621
University Hospitals Birmingham, UK	PRC0387
University Hospitals Birmingham, UK	PRC0753
University Hospitals Birmingham, UK	PRC0599

109 items in 8 pages

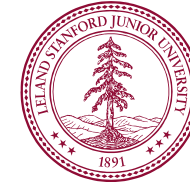
Sites enter data on a secure web based data system
<https://www.proclipi.uhb.nhs.uk>

Separate log on details for each institution

Sites are able to upload patient data directly via web

Anonymised data may be viewed centrally

CLIC CL App developed as data language platform, Stanford Program



'CLIC CL Application'

CLIC Cutaneous Lymphoma
v1.1.0

Logged in as Test User [Change Password](#) [Logout](#)

Dashboard Patients

3 patients found Search Patient ID's

Patient ID	Medrec	Last Name	First Name	M (Other Name)	Sex	Age	Race	BirthDate	1st Visit	Last Followup Date	ECOG	Actions
3	1234567	Z	Patient		M	30	White	01/01/1987	01/25/2016	01/11/2017	0	

Comments:

Dx Date: Disease Type: Last Stage:

Ethnicity: Non-Hispanic

Disease Status: a+

Datamanager: Test User

Treatment Diagnosis mSWAT / Photos / Lymphnodes Pathology Labs / Imaging Biobank Follow Up Consent Patient Studies To Do

mSWAT Photos Lymphnodes by Phx

Tag	Date	Score	Patch	Plaque	Tumor	A	C	F	H	P	U	C E	Response	Response description	Photos	Baseline	Treatment	Approved By	Date Approved	
	03/21/2017																			

Location	Site	Patch	Plaque	Tumor	A	C	F	H	P	U	C E	Other Variants
Left	Arm, Upper (4.0%)											
Left	Arm, Forearm (3.0%)											
Left	Hand (2.5%)											
Left	Leg (upper leg) (9.5%)											
Left	Leg (lower leg) (7.0%)											
Left	Foot (3.5%)											
Right	Arm, Upper (4.0%)											
Right	Arm, Forearm (3.0%)											
Right	Hand (2.5%)											
Right	Leg (upper leg) (9.5%)											
Right	Leg (lower leg) (7.0%)											
Right	Foot (3.5%)											

- Securely installed at local server or computer
- Use as center's own database

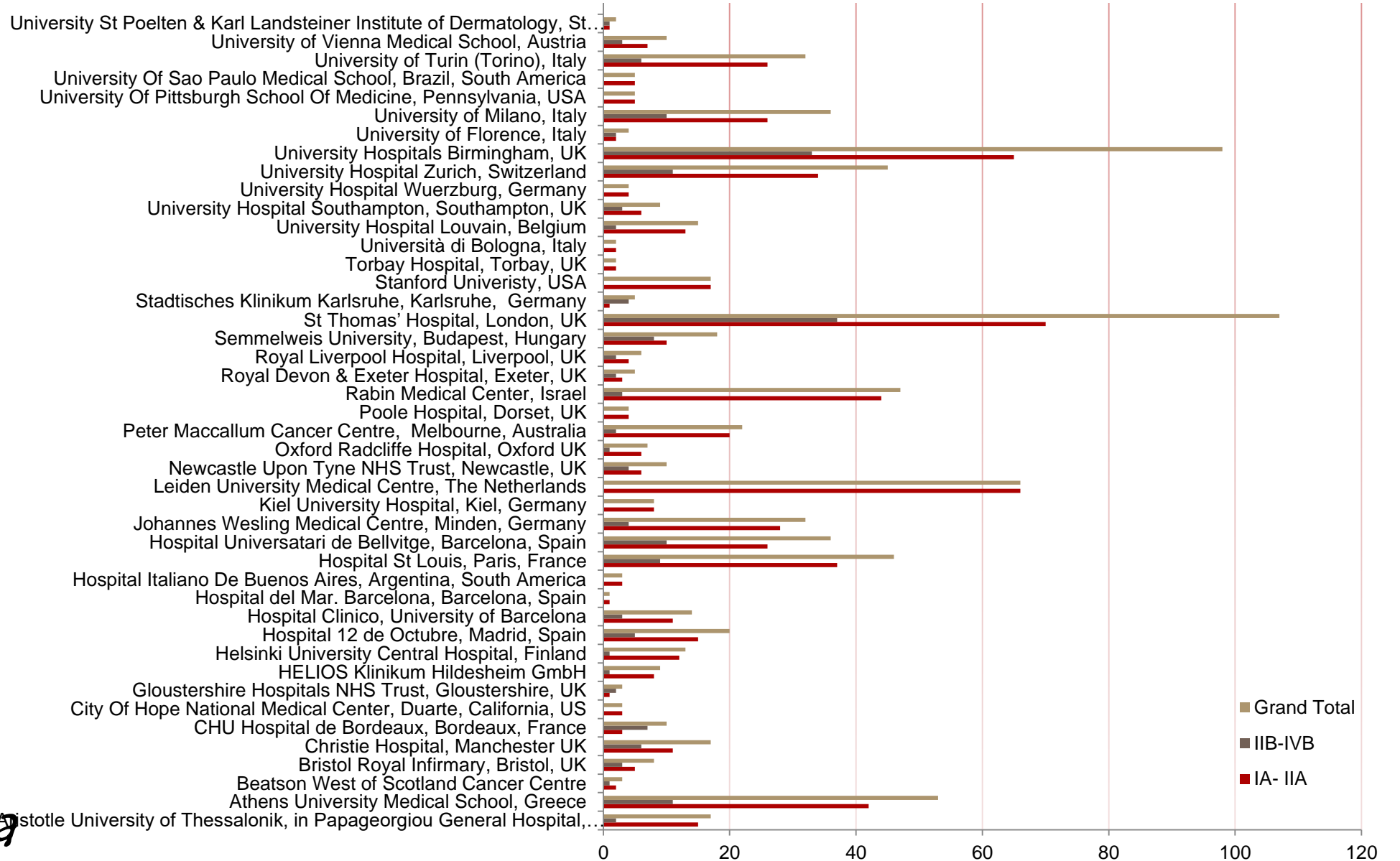
PROCLIP UHB database & CLIC CL App share a data dictionary & allow data flow between data systems (data share agreements in place)

64 Registered PROCLIP Centres

Principal Investigator	Centre Address	Principal Investigator	Centre Address
Sean Whittaker	St Thomas' Hospital, London, UK	Marion Wobser	University Hospital Wuerzburg, Germany
Julia Scarisbrick	University Hospital Birmingham, UK	Detlev Klemke	Städtisches Klinikum Karlsruhe, Karlsruhe, Germany
Maarten Vermeer	Leiden University Medical Centre, The Netherlands	Kim Benstead	Gloustershire Hospitals NHS Trust, Gloucestershire, UK
Evangelia Papadavid	Athens University Medical School, Greece	Pier Luigi Zinzani	Università di Bologna, Italy
Martine Bagot	Hospital St Louis, Paris, France	Deborah Turner	Torbay Hospital, Torbay, UK
Emilia Hodak	Rabin Medical Center, Israel	Pam Mackay	Beatson West Of Scotland Cancer Centre, Glasgow, UK
Emilio Berti	University of Milano, Italy	Franz Trautinger	University St Poelten, St Poelten, Austria
Octavio Servitje	Hospital Universitari de Bellvitge, Barcelona, Spain	Jan Nicolay	Universitätsmedizin Mannheim, Mannheim, Germany
Rudolf Stadler	Johannes Wesling Medical Centre, Minden, Germany	Jose Sanches	University Of Sao Paulo Medical School, Brazil, South America
Pietro Quaglino	University Of Turin (Torino), Italy	Oleg Akilov	University Of Pittsburgh School Of Medicine, Pennsylvania, USA
Reinhard Dummer	University Hospital Zurich, Switzerland	Chalid Assaf	HELIOS Klinikum Krefeld, Germany
Miles Prince	Peter Maccallum Cancer Centre, Melbourne, Australia	Claus-Detlev Klemke	University Medical Center Mannheim, Germany
Katerina Patsatsi	Aristotle University of Thessalonik, Greece	Ramon Puiol	Hospital del Mar. Barcelona, Barcelona, Spain
Marta Marschalko	Semmelweis University, Budapest, Hungary	Eve Gallop-Evans	Velindre Hospital, Cardiff, Wales, UK
Richard Cowan	Christie Hospital, Manchester UK	Di Gilson	St James University Hospital, Leeds, UK
Teresa Estrach	Hospital Clinico, University of Barcelona	Francesco D Amore	Aarhus University, Denmark
Pablo Oritz-Romero	Hospital 12 De Octubre, Madrid, Spain	Ilan Goldberg	Tel Aviv Sourasky Medical Center
Robert Knobler	University Of Vienna Medical School, Austria	Miguel A Piris	Hospital Universitario Marques de Valdecilla, Santander, Spain
John Frew	Newcastle Upon Tyne NHS Trust, Newcastle, UK	Lorenzo Cerroni	Department of Dermatology, University of Graz, Austria
Annamari Ranki	Helsinki University Central Hospital, Finland	Ricardo Fernández	Medical University, Tenerife,
Dr. Christina Mitteldorf	HELIOS Klinikum Hildesheim GmbH	Rose Moritz	Universitätshautklinik Münster, Münster, Germany
Marie Beylot-Barry	CHU Hospital de Bordeaux, Bordeaux, France	Adam Forbes	Royal Cornwall Hospitals NHS Trust, Truro, Cornwall, UK
Giles Dunhill	Bristol Royal Infirmary, Bristol, UK	Eleanor James	Nottingham University Hospitals, Nottingham, UK.
Dr Arvind Arumainathan	Royal Liverpool Hospital, Liverpool, UK	Antonio Cozzio	St Gallen University Hospital, St Gallen, Switzerland
Ulrike Wehkamp	University Hospital Kiel, Kiel, Germany	Salma Machan	Hospital Universitario Fundación Jimenez Diaz, Madrid, Spain
Anne-Marie Busschots	University Hospital Leuven, Leuven, Belgium	Joan Guitart	Northwestern University, Chicago, Illinois, USA
Youn Kim	Stanford University Hospital, California, USA	Ellen Kim	Hospital Of The University Of Pennsylvania, Philadelphia, US
Andrew Bates	University Hospital Southampton, Southampton, UK	Larisa Geskin	University Of Columbia, New York, USA
Rachel Wachsmuth	Royal Devon & Exeter Hospital, Exeter, UK	Paula Enz	Hospital Italiano De Buenos Aires, Argentina, South America
Nicola Pimpinelli	University Of Florence, Italy	Ale Gru	University Of Virginia, Virginia, USA
Rubeta Matin	Oxford Radcliffe Hospital, Oxford UK	Yang Wang	Peking University First Hospital, Beijing, China
Mike Bayne	Poole Hospital, Dorset, UK	Christiane Querfeld	City Of Hope National Medical Center, Duarte, California, US



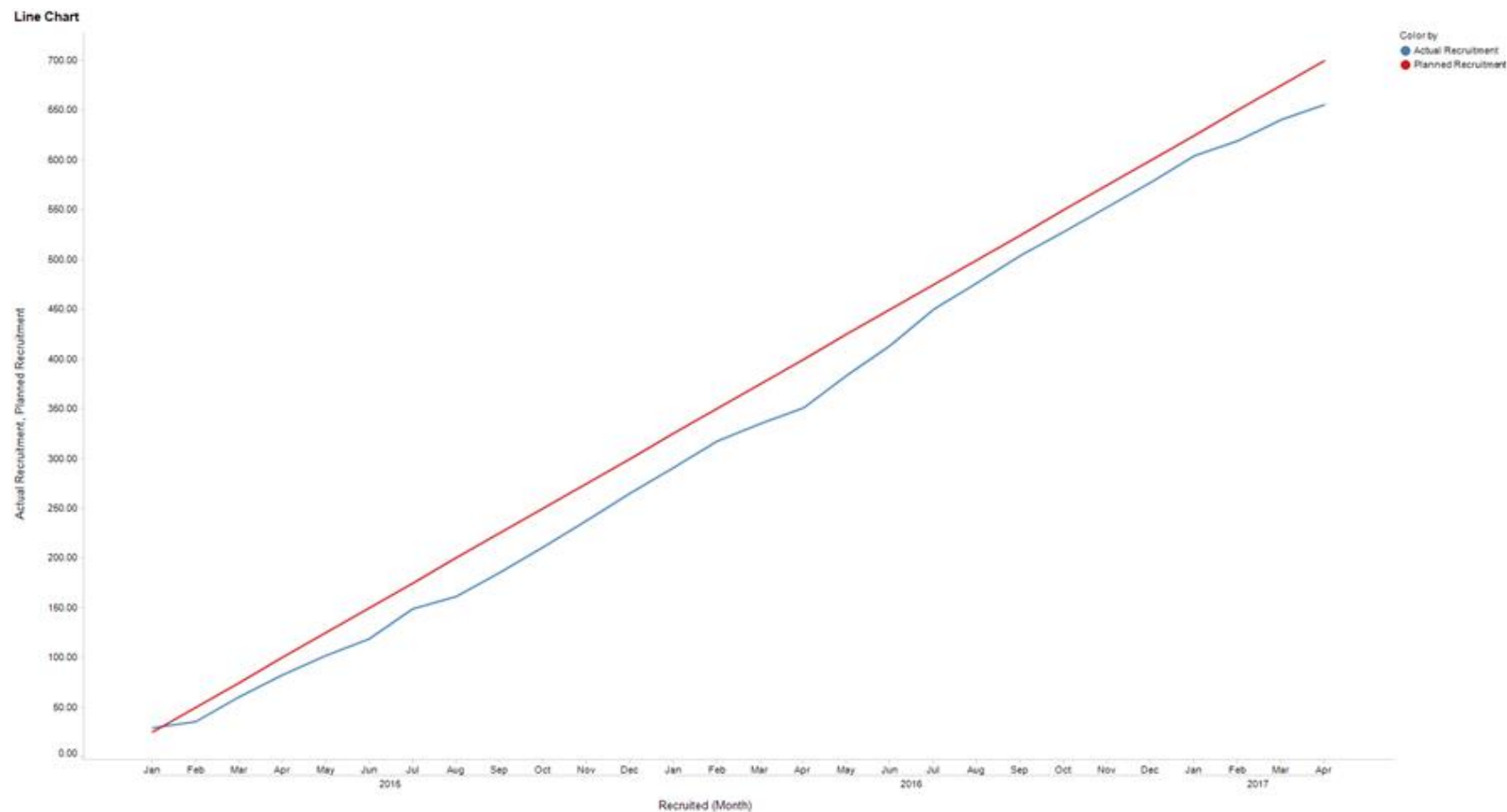
PROCLIPI: 879 patients recruited, 44 sites, from 18 countries, 4 continents



Spatz
FoundationQa

Year 2: Planned PROCLIPi recruitment ———

Year 2: Actual PROCLIPi recruitment ———



Stage of Patients n=879



Early stage MF; IB

Overall Stage	Number of Patients	%
IA	323	48%
IB	314	46%
IIA	43	6%
Early Stage Disease	680	77%
IIB	70	35%
IIIA	27	14%
IIIB	29	15%
IVA(1)	41	21%
IVA(2)	25	13%
IVB	7	4%
Advanced Stage Disease	199	23%



Late stage 'tumour' MF; IIB

Early stage data: 680 patients

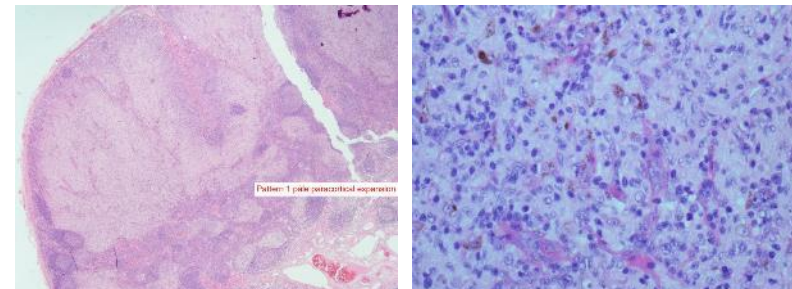


Stage IA; <10% patches & plaques
n=323 patients

Stage IB; >10% patches & plaques
n=314 patients



Stage IIA; Patches & plaques with enlarged lymph nodes showing dermatopathic changes or early involvement with MF (not effaced)
n=43 patients



Only patients passing central review will be included in the prognostic modelling - Early Stage review is Clinical, histopathological & immunohistochemical

Central Review Results:

378 undergone virtual central review

289 passed virtual review (76.4%) passed

89 (23.6%) failed

- 54 cases considered suspicious but non-diagnostic (opportunity for real-time review)
- 12 cases considered advanced MF
- 23 cases non diagnostic MF

Of 54 selected for Real-Time Central Review

- 39 undergone real-time central review (NY 28.10.16, Zurich 24.11.17)
 - 18 passed
 - 21 failed (2advanced / 19 non-diagnostic)
- 15 awaiting central review (3?advanced / 12 ?non-diagnostic)

Overall central review pass rate was $307/363 = 84.6\%$

- 275 patients (83%) classical MF
- 57 patients (17%) folliculotropic MF
- 6 patients (2%) had large cell transformation

Overall
pass
rate =
84.6%

Late stage data: 199 patients



Stage IIB; tumour stage
n=59 patients

Stage IVA2; Lymph nodes showing effaced lymph nodes
n=25 patients

Stage IVB; Visceral disease n=7 patients

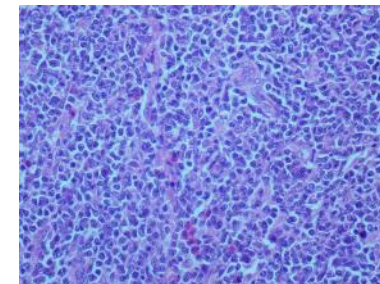
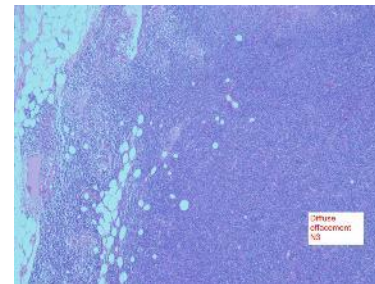
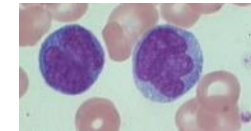
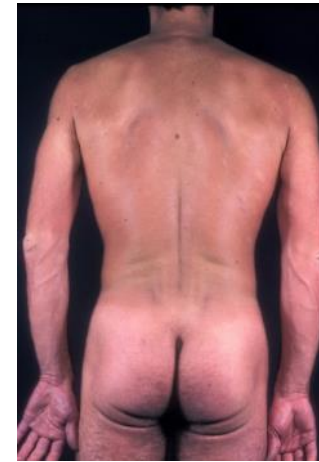
Erythroderma IIIA-IVA1

n= 68 patients

Stage IIIA; low
blood tumour
burden (B0) n=27
patients

Stage IIIB;
Moderate blood
tumour burden
(B1) n=29 patients

Stage IVA1; high
tumour burden
(B2) n=41 patients



Central Review of Late Stage: histopathological & immunohistochemical

Central Review Team Late stage;

Dermatopathology Panel



Melissa Pulitzer (MSKCC)



Joan Guitart (Northwestern)



Carlos Torres Cabala MD Anderson



Maxime Battistella, Paris



Werner Kempf, Zurich



Helmut Beltraminelli, Zurich



Joya Pawade, Bristol UK

Haematopathology Panel



Andrew Feldman, Mayo



Nancy L Harris, MGH



Miguel Angel Piris, Madrid



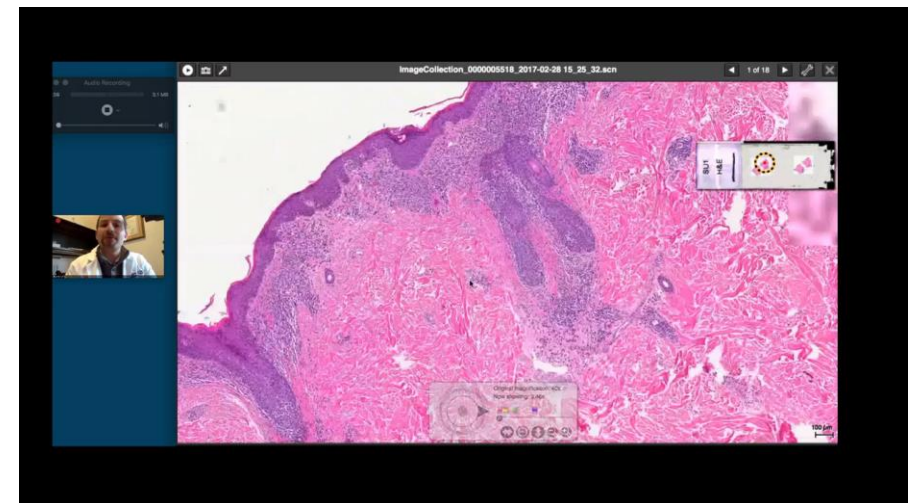
Maxime Battistella, Paris

‘Virtual Central Review’

- Slide scanning

- Analysis of whole slide for H&E and IHC
- Library and biorepository
- Digital analysis capability
- Easy to share virtual microscopy

Consensus Webinars



Add New Visit

Patient Summary

Attendance History

Visit 1 - 06/06/2016 ✓

Information

Date of Diagnosis: 06/06/2016
Age at Diagnosis: 41
Current Age: 42
TNMB Class: 0 0 0 0
Stage at Diagnosis: IA
Current Stage: IA

Test Patient

Virtual Central Review Yes ▾

Date 01/10/2017

Results

- Please Select
- Pass
- Fail

Missing Data Required Prior To Save

Save

Clinical Data on 879 patients*

*Includes patient data not yet receiving central review

	IA	IB	IIA	IIB	IIIA	IIIB	IVA(1)	IVA(2)	IVB	All Patients
Number of Patients	323	314	43	70	27	29	41	25	7	879
Classical Mycosis Fungoides	273 (84.5%)	252 (80.3%)	31 (72.1%)	48 (68.6%)	14 (51.9%)	5 (17.2%)	3 (7.3%)	9 (36.0%)	3 (42.9%)	638 (72.6%)
Folliculotropic Mycosis Fungoides	43 (13.3%)	56 (17.8%)	10 (23.3%)	22 (31.4%)	3 (11.1%)	2 (6.9%)	1 (2.4%)	3 (12.0%)	1 (14.3%)	141 (16.0%)
Sezary Syndrome	(0.0%)	1 (0.3%)	2 (4.7%)	(0.0%)	10 (37.0%)	22 (75.9%)	37 (90.2%)	13 (52.0%)	3 (42.9%)	88 (10.0%)
Median age years (IQR)	55 (43, 67)	58 (47, 69)	65 (52, 74)	66 (54, 79.8)	65 (53, 70.5)	68 (57, 78)	67 (59, 71)	65 (57, 73)	48 (36, 64.5)	60 (47, 70)
Male:Female	1.9:1	1.5:1	2.6:1	1.8:1	1.7:1	1.4:1	2.2:1	1.1:1	2.5:1.0	1.7:1.0
Diagnostic Delay: Median duration MF-like lesions, months	30 (12, 72)	36 (14, 84)	28 (11, 63)	24 (12, 48)	59(23, 131)	24 (12, 36)	38 (21, 51)	41 (29, 72)	15 (5, 39)	36 (12, 72)

- Median age early stage (IA-IIA) is 57 years which is significantly younger than late stages IIB-IVB at 66 years ($p < 0.0001$)
- There was no significant difference between duration of MF like lesions in IA versus IB disease ($p = 0.1739$) or in early (34 months) versus late disease at 36 months ($p = 0.9715$)

Clinical	Blood	Skin Biopsy	Lymph Nodes	Bone Marrow	Other Visceral	Clonality	Treatments	Fed Biobank	Death	Exploratory	QOL Skindex 29
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Add New Visit

Attendance History

- Visit 6 - 15/09/2017 ✓
- Visit 5 - 01/11/2015 ✓✓
- Visit 4 - 12/07/2015 ✓✓
- Visit 3 - 14/07/2015 ✓✓
- Visit 2 - 02/07/2015 ✓✓
- Visit 1 - 01/07/2015 ✓✓

Patient Summary

Information

Date of Diagnosis: 01/07/2015
 Age at Diagnosis: 73
 Current Age: 75
 TNMB Class: 4(3) 0 0 2
 Stage at Diagnosis: IIIA
 Current Stage: IVA(1)
Date of Death: 21/02/2017
 Survival from Diagnosis: 2 year(s)
 Test Patient
 Lost to Follow-up
 Date of Lost to Follow-up
 Withdraw Consent
 Date of Withdraw Consent

Treatment

Visit	Date Of Visit	Type	Reason for Stopping Therapy	Best Response	Date Started	Date Ended	Other
1	01-07-2015	Interferon alfa	Stage Progression	PR	01-07-2015	09-07-2015	
3	14-07-2015	Interferon alfa	No Response	SD	01-02-2015	01-07-2015	
5	01-11-2015	Phototherapy: NB UVB	Treatment Course Complete	CR	01-05-2015	01-07-2015	testttt

Treatment:

Added ability to select more than 1 treatment with same start date:

PRC0247

Clinical | Blood | Skin Biopsy | Lymph Nodes | Bone Marrow | Other

Fed Biobank | Death | Exploratory | Questionnaire

Treatment

+

Visit	Date Of Visit	Type	Date Started	MSWAT at Start of Treatment	Date Ended	MSWAT at End of Treatment	Other

- Pegylated Doxorubicin
- Pembrolizumab
- Phototherapy: BB UVB
- Phototherapy: NB UVB
- Phototherapy: P-UVA
- Polychemotherapy CHOP
- Polychemotherapy Other
- Pralatrexate
- Romidepsin
- RT: Local Radiotherapy
- Topical nitrogen mustard
- Topical Steroids - Moderate
- Topical Steroids - Potent
- Topical Steroids - Very Potent
- Tretinoin
- TSEBT
- Vorinostat

Type: 3 items checked

Date Started:

Date Ended:

Best Response:

Reason for Stop:

MSWAT at Start of Treatment: (0-400)

MSWAT at End of Treatment: (0-400)

If Other:

QOL Questionnaire Tab for Skindex-29



University Hospitals Birmingham **NHS**
NHS Foundation Trust

Logged in as: Taranjot Sahota

Logout



SQL 2012 Test Pas-support

Study Number: PRC0048

Address: WOLFSON, QEMC, Edgbaston, BIRMINGHAM, B15 2TH

Unique Patient
Hospital Number: G123456

Date of Birth: 03-05-1942

Telephone: 9876543210

NHS Number: Nhs123

Gender: Male

Ethnic Group: White - British



Questionnaire

HOW OFTEN DURING THE PAST FOUR WEEKS DID THESE STATEMENTS DESCRIBE YOU?

1. My skin hurt

Never Rarely Sometimes Often Always

2. My skin condition affected how well I slept

Never Rarely Sometimes Often Always

3. I worried that my skin condition might be serious

Never Rarely Sometimes Often Always

4. My skin condition made it hard to work or do things I enjoy

Never Rarely Sometimes Often Always

5. My skin condition affected my social life

Never Rarely Sometimes Often Always

6. My skin condition made me feel depressed

Never Rarely Sometimes Often Always

PROCLIFI Federated Biobank

- Biobank material is registered on the database, but *all material remains on site*
- Centers are responsible for medical ethical issues
- Material to be registered
 - Skin (paraffin, fresh frozen)
 - Blood (PBMC, serum)
 - Lymph node & other viscera

Registered;
312 patients (35%) with 688 samples

telephone:

Clinical	Blood	Skin Biopsy	Lymph Nodes	Bone Marrow	Other Visceral	Clonality	Treatments	Fed Biobank
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Samples

	Visit	Date Of Visit	Date Of Test	Sample Type	If Sample Skin Type	Viscera Location	Tissue Storage Method	Sample Depleted
	1	05/10/2015	05/10/2015	Skin	Plaque		Paraffin Embedded	False

Date of test

Sample type

If sample type skin

Tissue storage method

Sample Depleted

- Paraffin Embedded
- Frozen (Stored in "RNAlater" at -20 C)
- Frozen (Snap frozen and stored in liquid nitrogen)

'Working together for improved research'



United States Cutaneous Lymphoma Consortium



Michael and Corie Koss, Haas Family Foundation

Drs. Martin and Dorothy Spatz Charitable Foundation