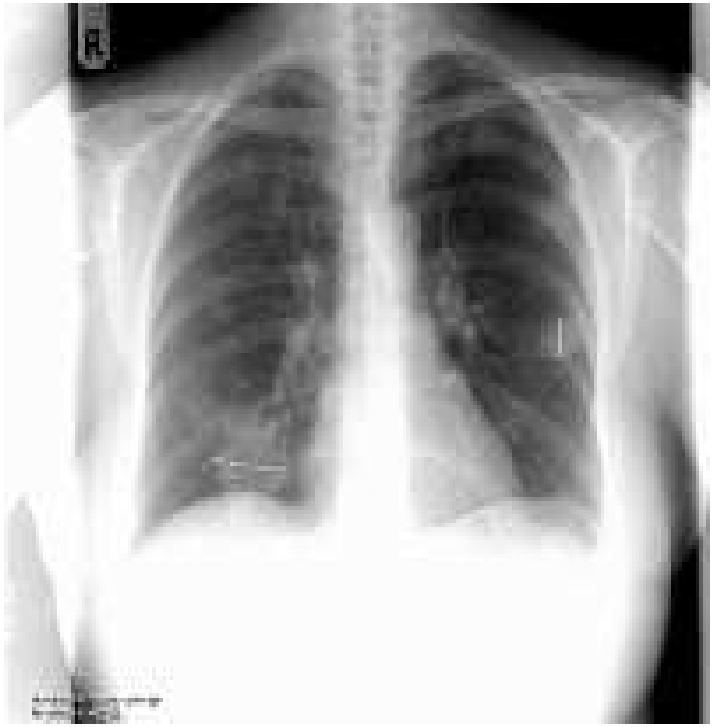
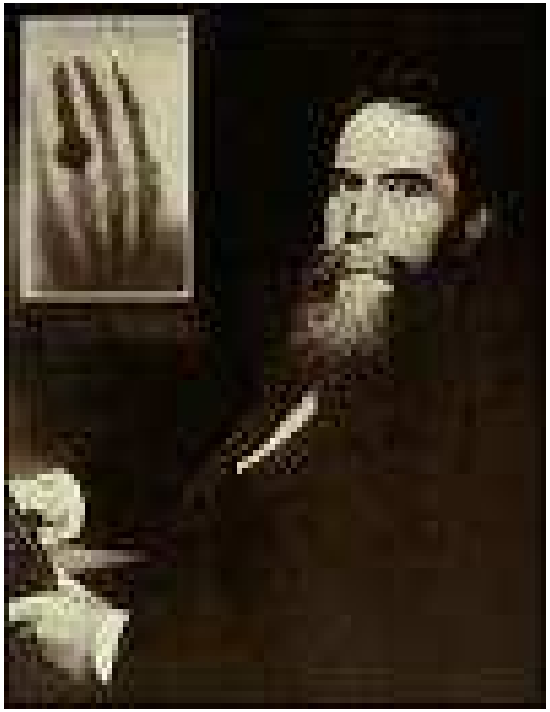
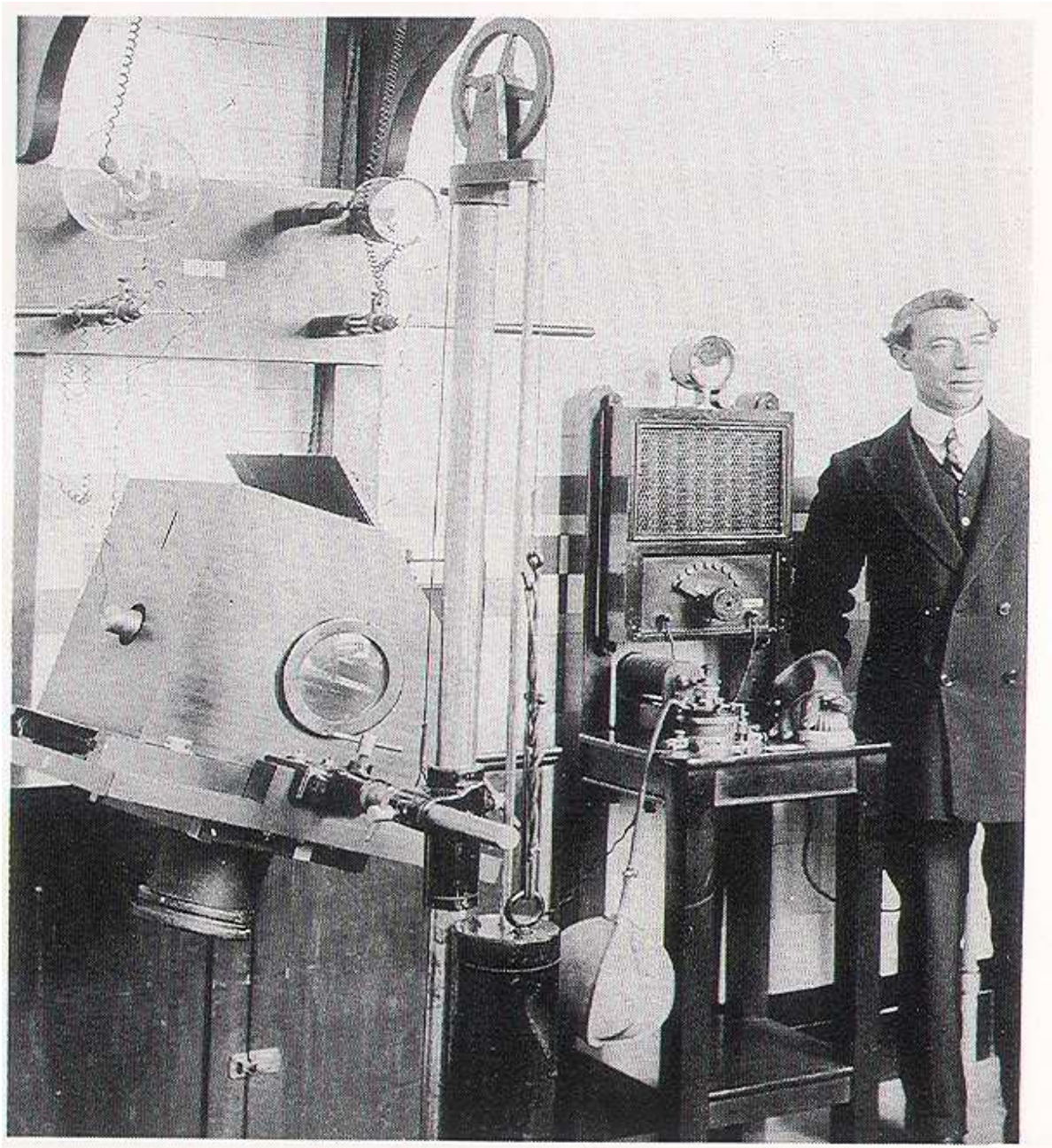
ining a patient, c.1905.

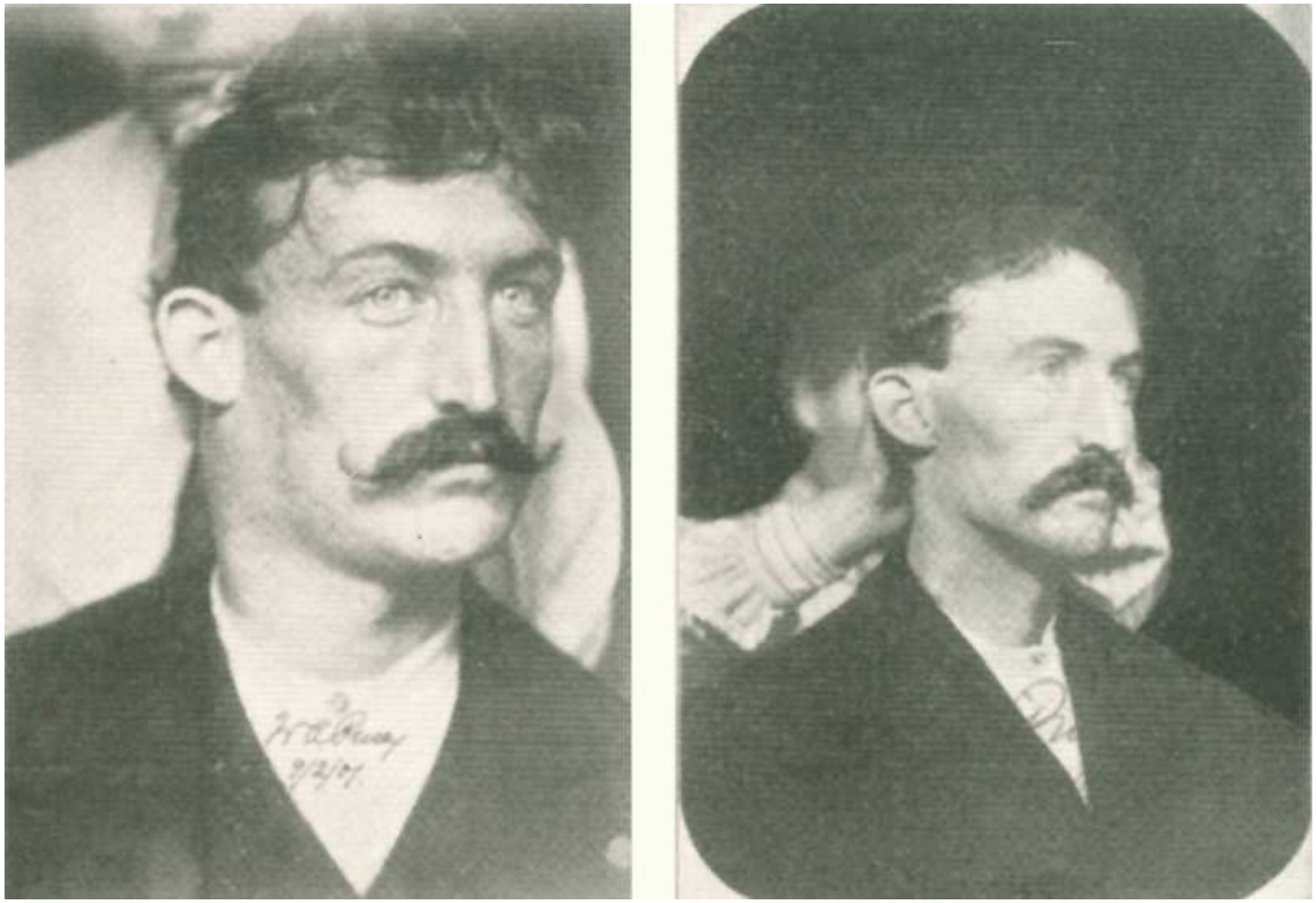
RADIOLOGY:
the chest x-ray



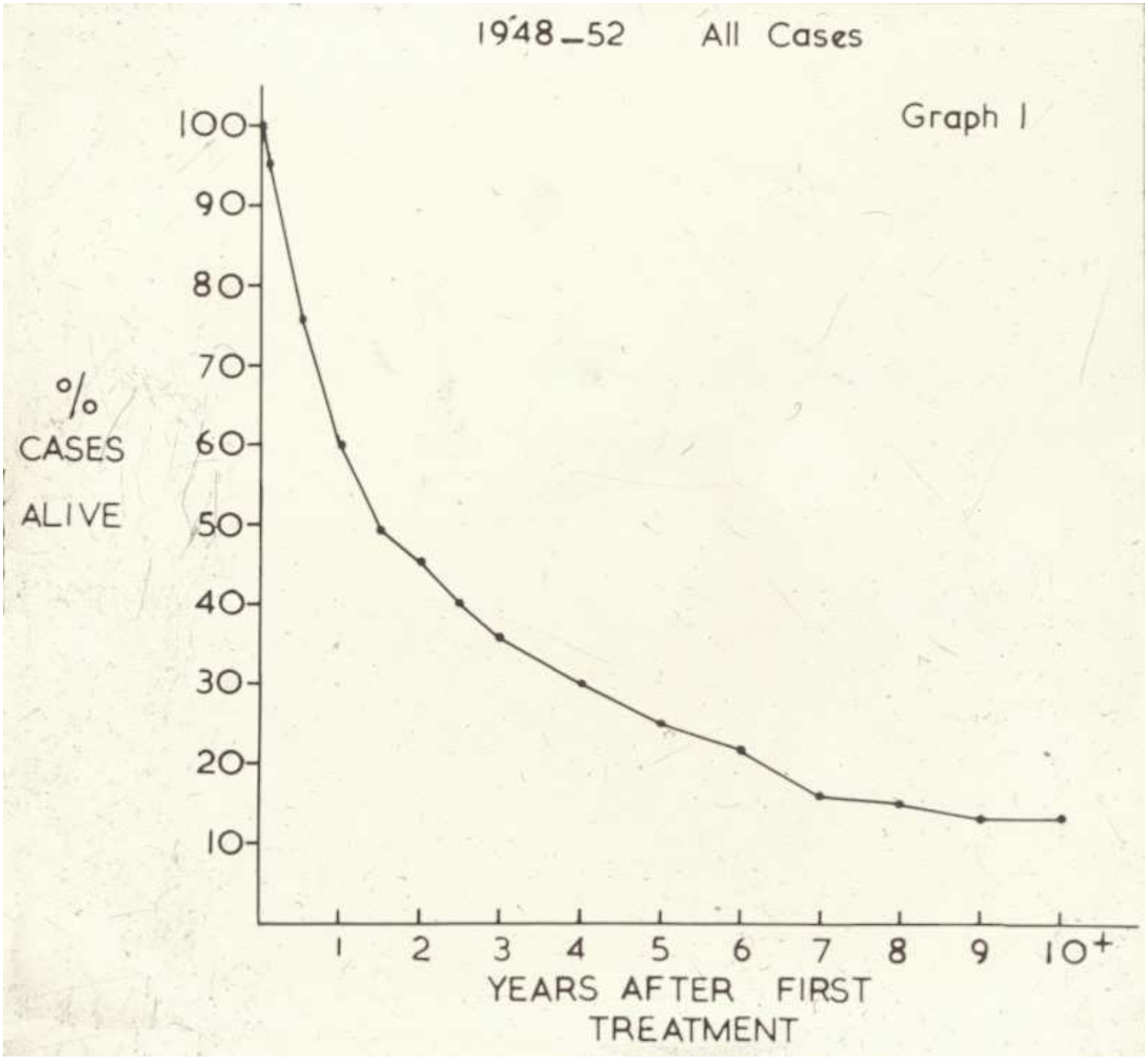




X-ray apparatus at St Bartholomew's Hospital, c.1910.



A case of lymphoma that was treated in September 1901 by W. A. Pusey, Professor of Dermatology in the Medical Department of the University of Illinois. **A:** The patient on September 2, before the start of radiotherapy for lymphoma. **B:** The patient on October 11, 2 weeks after the end of treatment. This seems to be the first documented case of radiotherapy for lymphoma(From Pusey WA. Cases of Sarcoma and of Hodgkin's disease treated by exposures to x rays - a preliminary report. JAMA 1902;38:169, with permission.)


1948–52 All Cases
Graph 1
100
90
80
70
60
50
40
30
20
10
% CASES ALIVE
1 2 3 4 5 6 7 8 9 10+
YEARS AFTER FIRST TREATMENT

[CANCER RESEARCH 28 Part 1, 1310, June 1968]

Report of the Committee on the Staging of Hodgkin's Disease

SAUL A. ROSENBERG

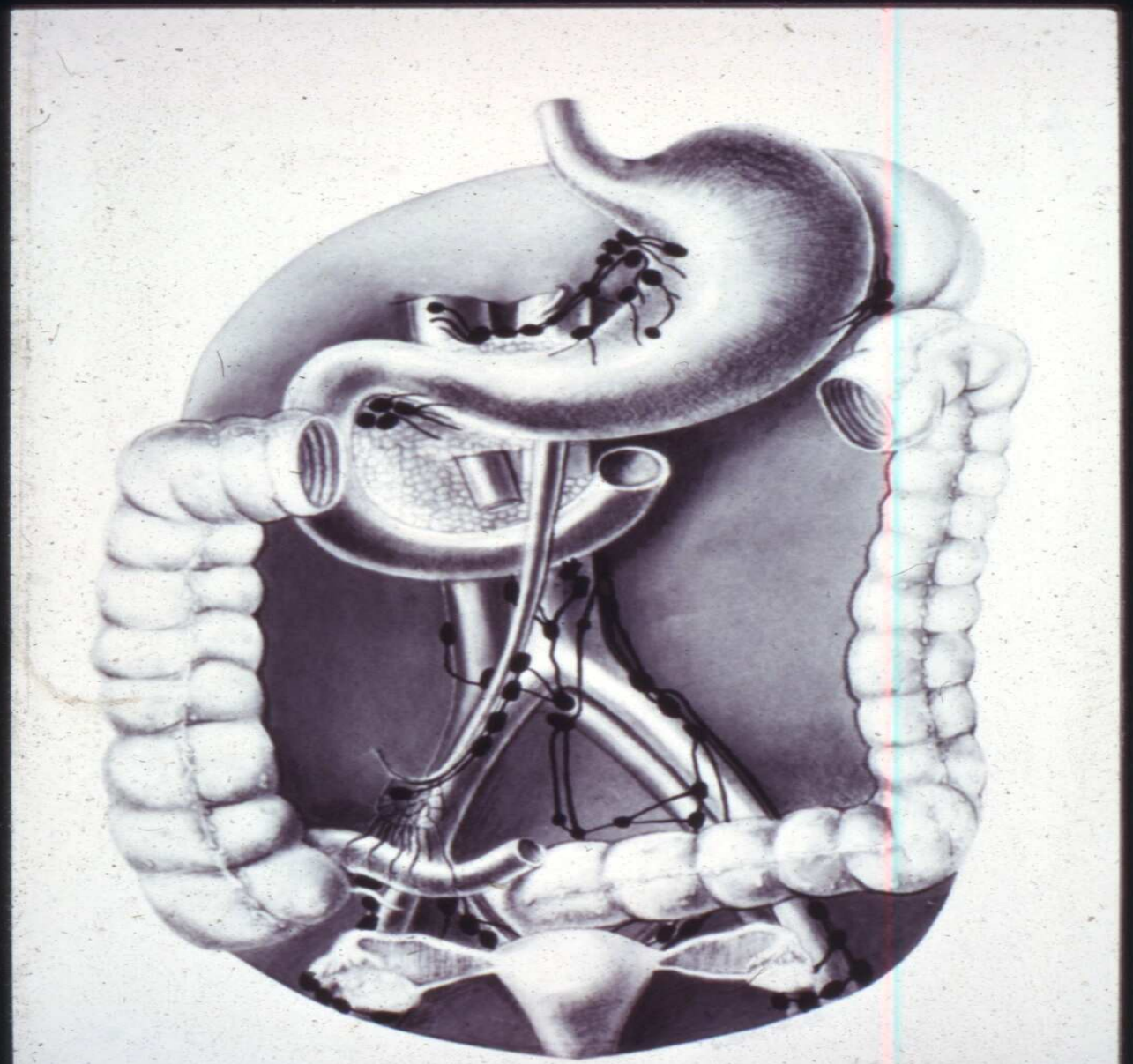
Departments of Medicine and Radiology, Stanford University School of Medicine, Palo Alto, California

[CANCER RESEARCH 31, 1860–1861, November 1971]

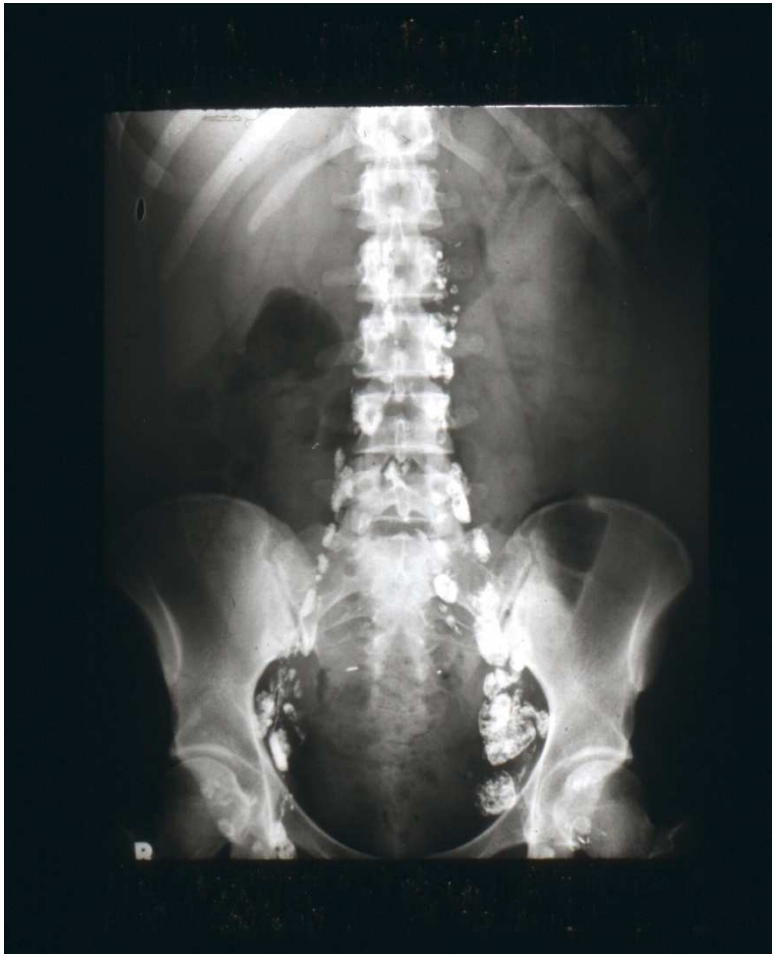
Report of the Committee on Hodgkin's Disease Staging Classification

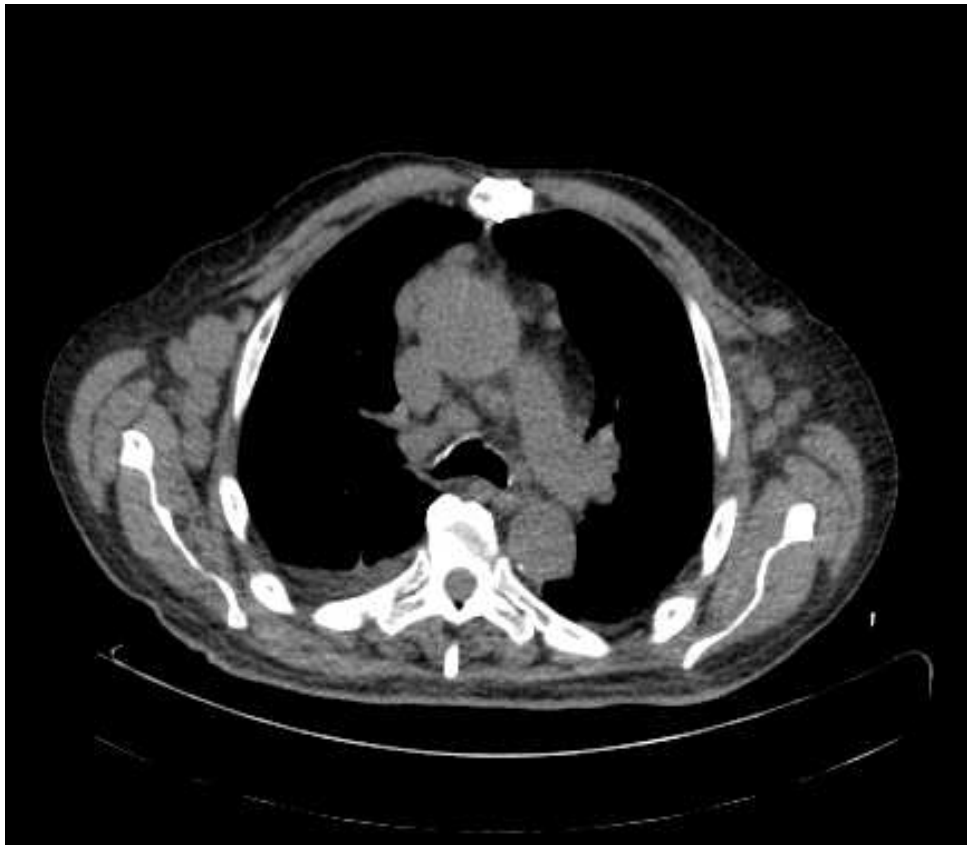
Paul P. Carbone (Chairman), Henry S. Kaplan, Karl Musshoff, David W. Smithers, and Maurice Tubiana

National Cancer Institute, Bethesda, Maryland 20014 [P. P. C.]; Stanford University, Stanford, California 94305 [H. S. K.]; Roentgen-Radium-Abteilung, Freiburg, Germany [K. M.]; Royal Marsden Hospital, London, England [D. W. S.]; and Institut Gustave Roussy, Villejuif, France [M. T.]



Lymphogram, CT scan



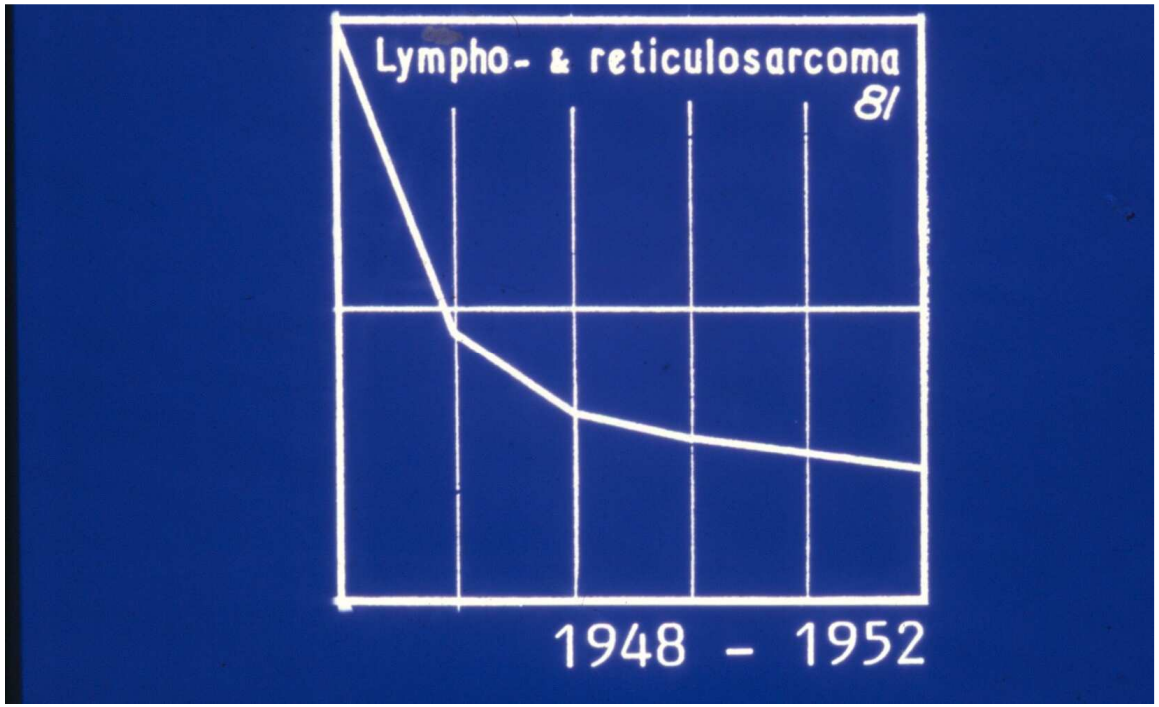


Report of a Committee Convened To Discuss the Evaluation and Staging of Patients with Hodgkin's Disease: Cotswolds Meeting

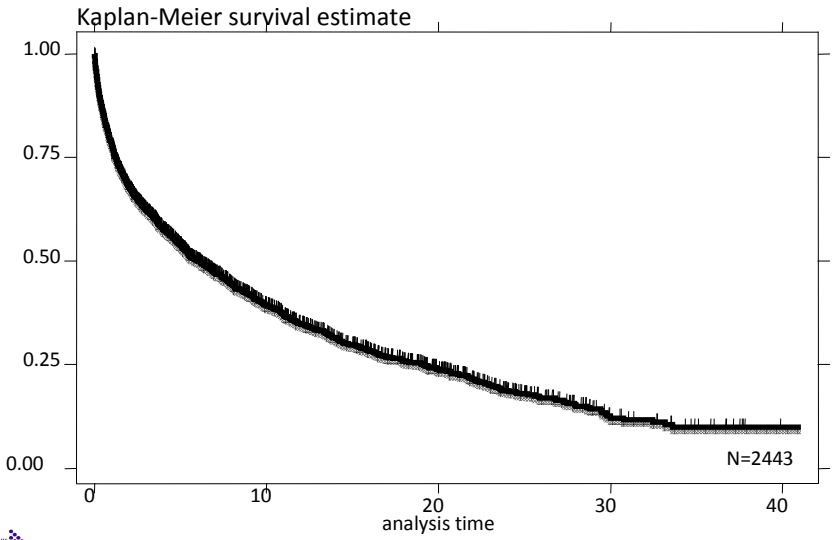
By T.A. Lister, D. Crowther, S.B. Sutcliffe, E. Glatstein, G.P. Canellos, R.C. Young, S.A. Rosenberg, C.A. Coltman, and M. Tubiana

The Ann Arbor classification for describing the stage of Hodgkin's disease at initial presentation has formed the basis upon which treatment is selected and has allowed comparison of results achieved by different investigators for almost two decades. A meeting was convened to review the classification and modify it in the light of experience gained in its use and new techniques for evaluating disease. It was concluded that the structure of the classification be maintained. It was particularly recommended: (1) that computed tomography (CT) be included as a technique for evaluating intrathoracic and inhadiaphragmatic lymph nodes; (2) that the criteria for clinical involvement of the spleen and liver be modified to include evidence of focal defects with two imaging techniques and that abnormalities of liver function be ignored; (3) that the suffix 'X' to designate bulky disease (greater than 10 cm maximum dimension) be introduced: and (4) that a new category of response to therapy, unconfirmed/uncertain complete remission (CR[u]), be introduced to accommodate the difficulty of persistent radiological abnormalities of uncertain significance.

J Clin Oncol 7:1630-1636.

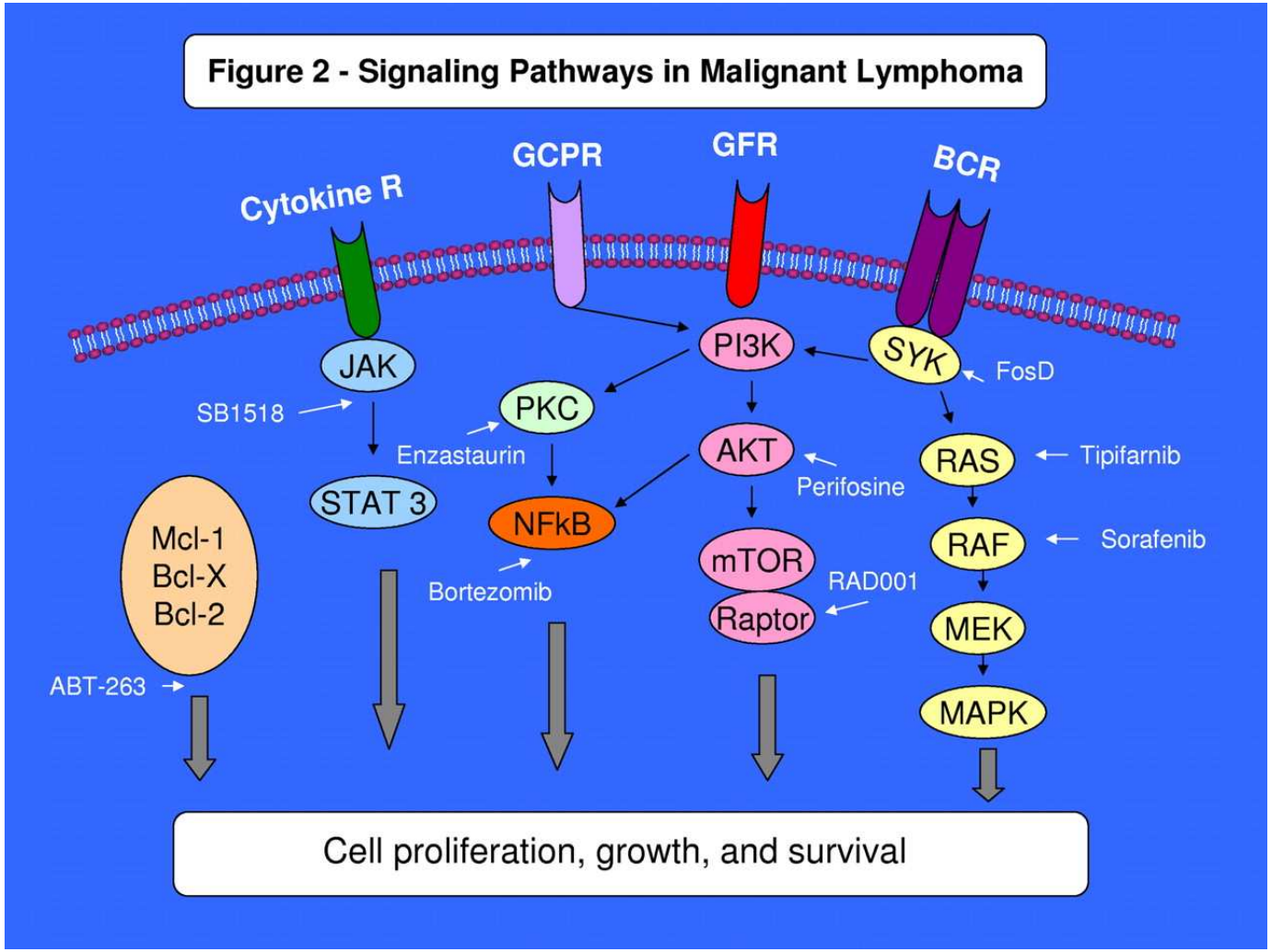


‘Lymphosarcoma’



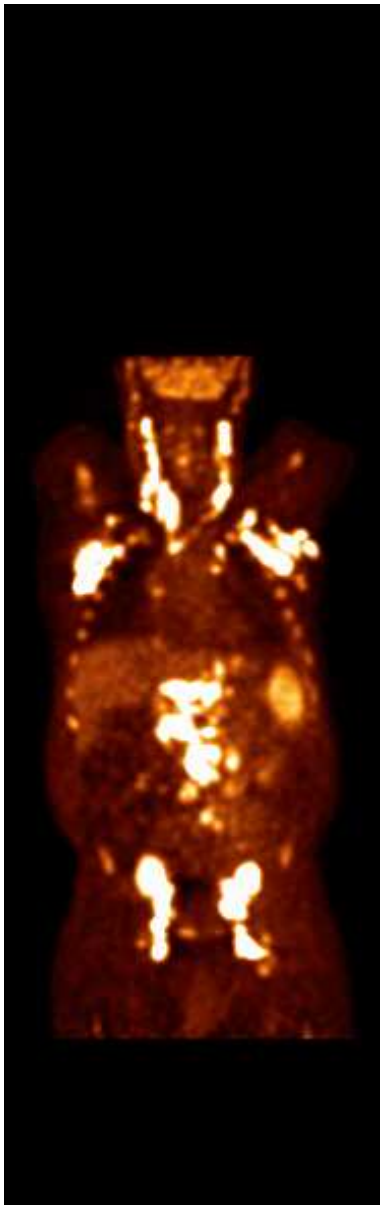
blood
JOURNAL OF THE AMERICAN SOCIETY OF HEMATOLOGY

Signaling pathways in malignant lymphoma.



Reeder C B , Ansell S M Blood 2011;117:1453-1462

PET/CT



Medical Invention of the year in TIME magazine 2000
Dr David Townsend and Dr Nutt

11th INTERNATIONAL CONFERENCE ON MALIGNANT LYMPHOMA
Lugano, Switzerland, June 15-18, 2011
11-ICML

Closed Workshop:
Lymphoma pretreatment assessment and response criteria in the New Millennium: Beyond Ann Arbor

Tuesday, June 14, 2011 – USI Auditorium, Lugano University

Steering Committee: B.D. Cheson, R.I. Fisher, T.A. Lister, E. Zucca

Aims of the workshop

- to improve, standardize and legitimize the current and evolving staging procedures for nodal lymphoma (HL and NHL) and also the criteria for response to therapy

- to achieve a consensus that can last (10 years?) and be relevant for:
  - the community physician
  - investigators'-led trials
  - cooperative phase III trials
  - not necessarily registration trials

Aims

- our relatively ambitious goal is “not likely” to be achieved today
- we hope, however, to determine:
  - what data are already available to help us
  - what more may be required
  - how to get it
  - what should be done (and who is going to do it)
    to possibly have at 12-ICML (June 18, 2013)
    another workshop, where consensus may be achieved

Challenges

- Do we need a new staging system?
- Do we want the same system for all histological subtypes?
- Is nodal disease different from primary extranodal lymphoma?
- Can we adopt a simpler staging system (limited vs disseminated)?

Challenges

- How do we assess response?
- How to best assess PR and PD by nodal sites?
- What is the appropriate threshold for PR (50%)
- How do we graduate response in different subtypes?
- PET-avid vs the rest?
- the input of the major cooperative groups will be needed (and perhaps of the FDA and the EMEA)

Staging

Chair: R.I. Fisher, Rochester, NY (USA) and T.A. Lister, London (UK)

PET

Current role – *B.D. Cheson, Washington, D.C. (USA)*

MSKCC experience with PET in NHL – *A.D. Zelenetz, New York*, (USA)

Impact of PET staging in advanced HL - *A. Gallamini, Cuneo (Italy)*

PET and FL staging – *M. Federico, Modena (Italy)*

PET in the staging of PTCL – *J.M. Vose, Omaha, NE (USA)*

BULK / VOLUME

How close are we to incorporating bulk disease in the staging system?
- *L.H. Schwartz, New York, NY (USA)*

BONE MARROW

What are the criteria for bone marrow involvement? - *R.D. Gascoyne, Vancouver, B.C. (Canada)*

PROGNOSTIC INDICES

Should we include prognostic indices? – *G. Salles, Pierre Benite (France)*

Response Assessment

Chair: B.D. Cheson, Washington, D.C. (USA) and S. Barrington, London (UK)

PET

Are different criteria needed for interim vs post-treatment PET; should the threshold for a 'positive' scan vary according to pretest probability, timing of scan, disease type and proposed intervention (ie, descalation vs escalation)? - *M. Meignan, Créteil (France)*
What is the independent prognostic value of a change in nodal size of a residual mass in addition to FDG findings?– *M. Hutchings, Copenhagen (Denmark)*

BULK / VOLUME

Relationship between outcome and tumor load reduction – *A. Hagenbeek, Amsterdam (Netherlands)*

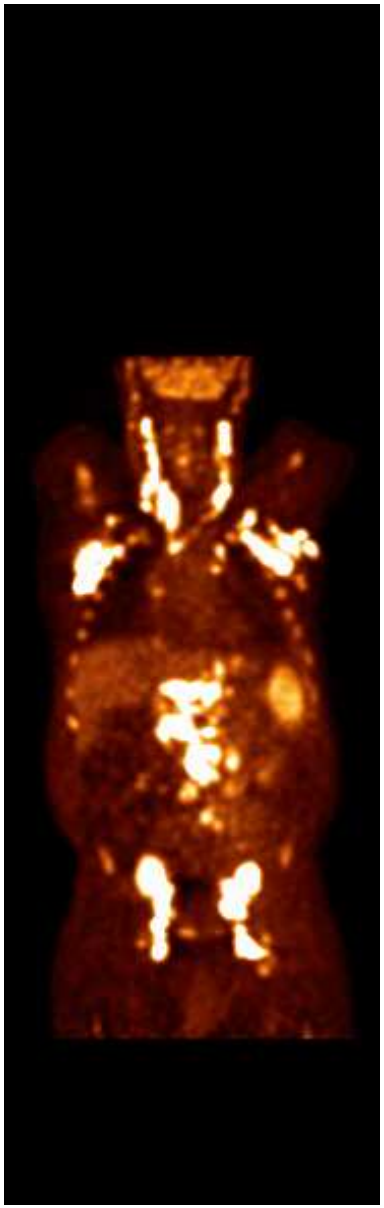
MRD

Potential role of MRD in FL and MCL – *M. Dreyling, Munich (Germany)*

SURVEILLANCE

- Role of surveillance in HL and NHL – *J.O. Armitage, Omaha, (USA)*
- PET surveillance in HL – *R.H. Advani, Stanford, CA (USA)*

PET/CT

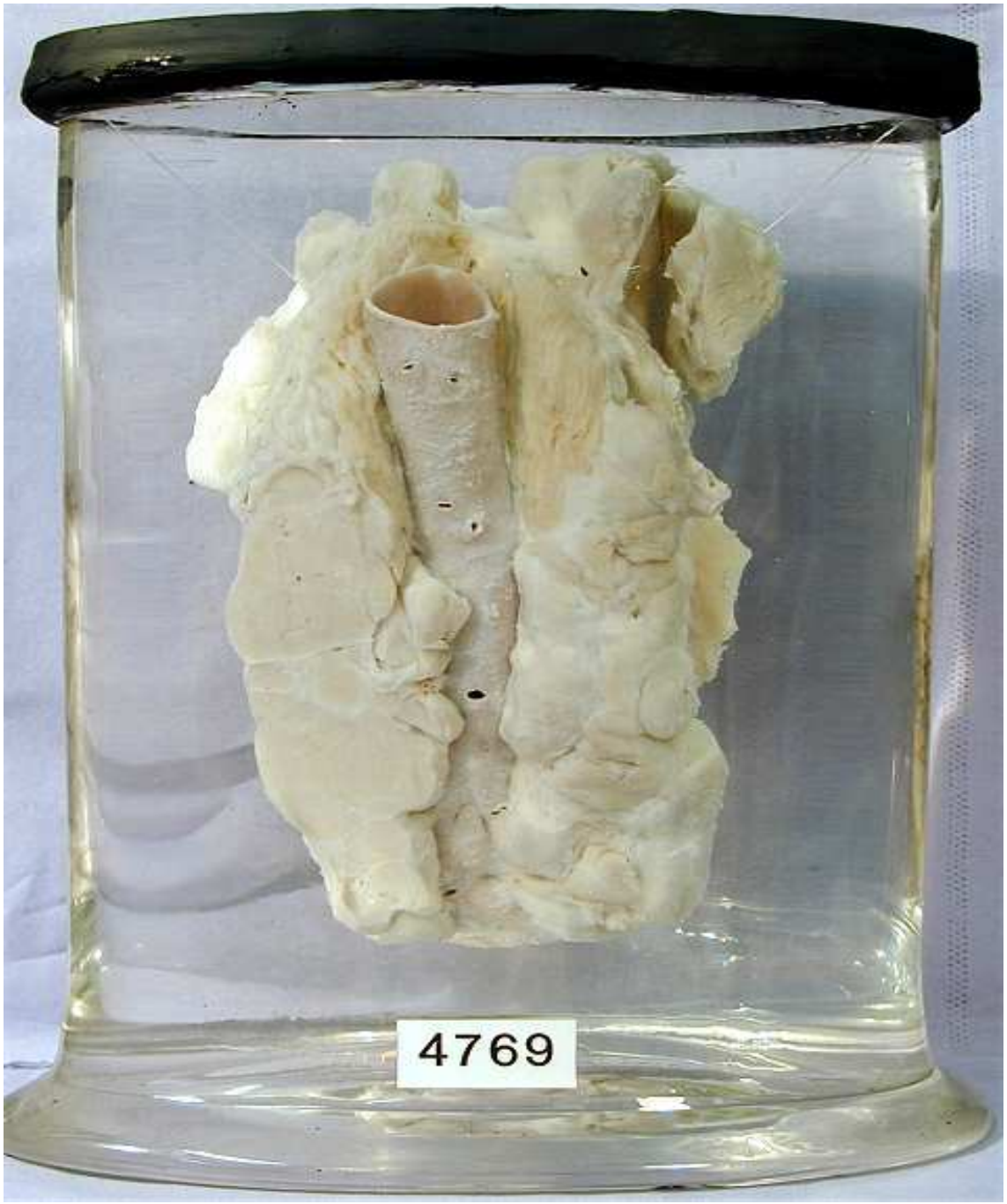


Medical Invention of the year in TIME magazine 2000
Dr David Townsend and Dr Nutt

PET vs CT in HL/NHL Staging

Study	Pts	Modality	Sensitivity (%)	Specificity (%)
Newman (‘94)	16	PET	100	100
		CT	91	100
Thill (‘97)	27	PET	100	NA
		CT	77	
Buchman (‘01)	52	PET (N)	99.2	100
		CT (N)	83.2	99.8
		PET (E)	100	99.4
		CT (E)	80.8	99.4
Schaefer (‘04)	60	PET/CT (N)	94	100
		CT (N)	88	86
		PET/CT (E)	88	100
		CT (E)	50	90
Hutchings (‘06)	99	PET/CT (N)	92.2	99.3
		CT	82.6	98.9

Cheson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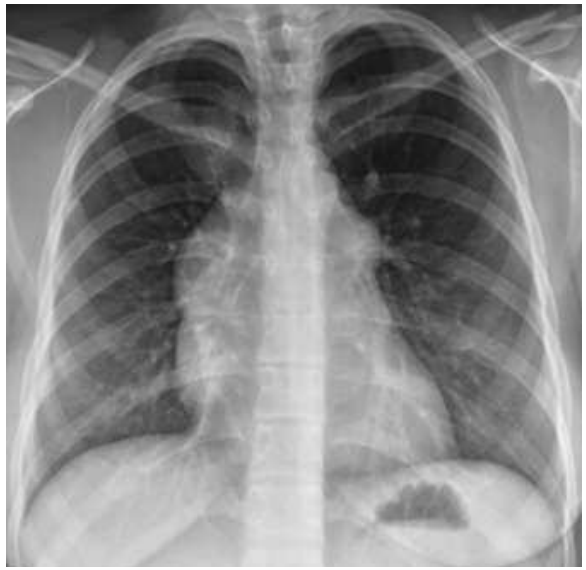
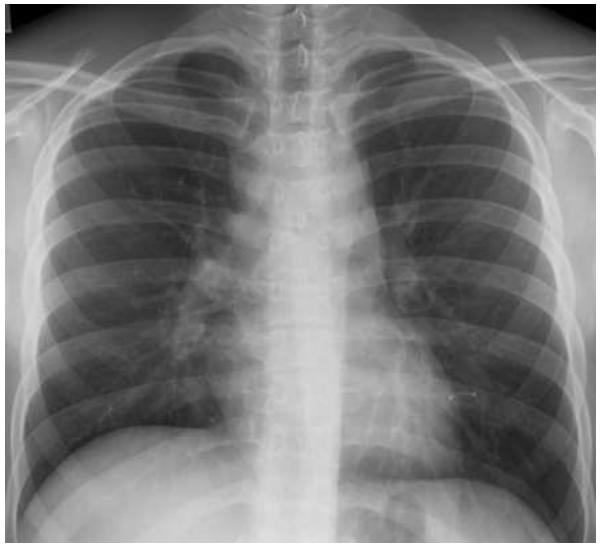
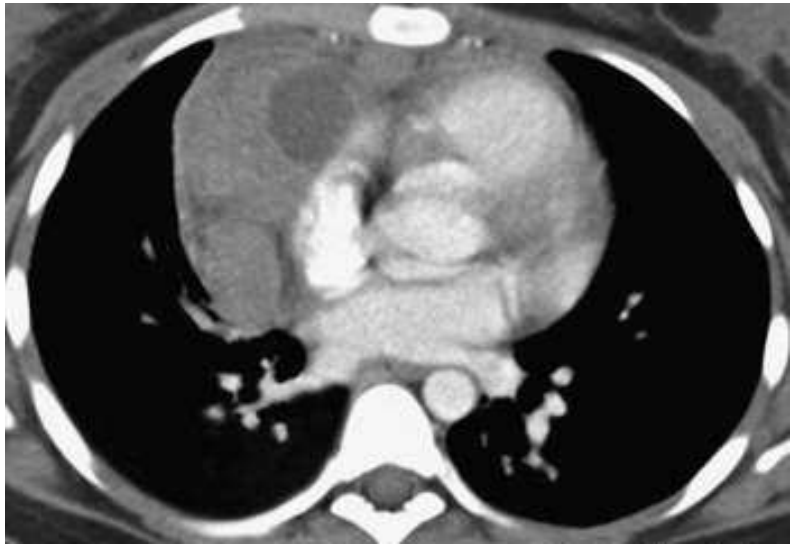
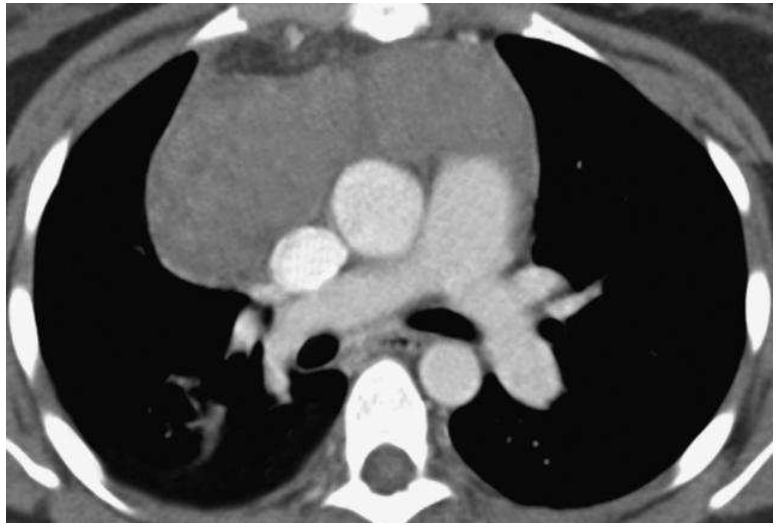
Beyond Ann Arbor . . .



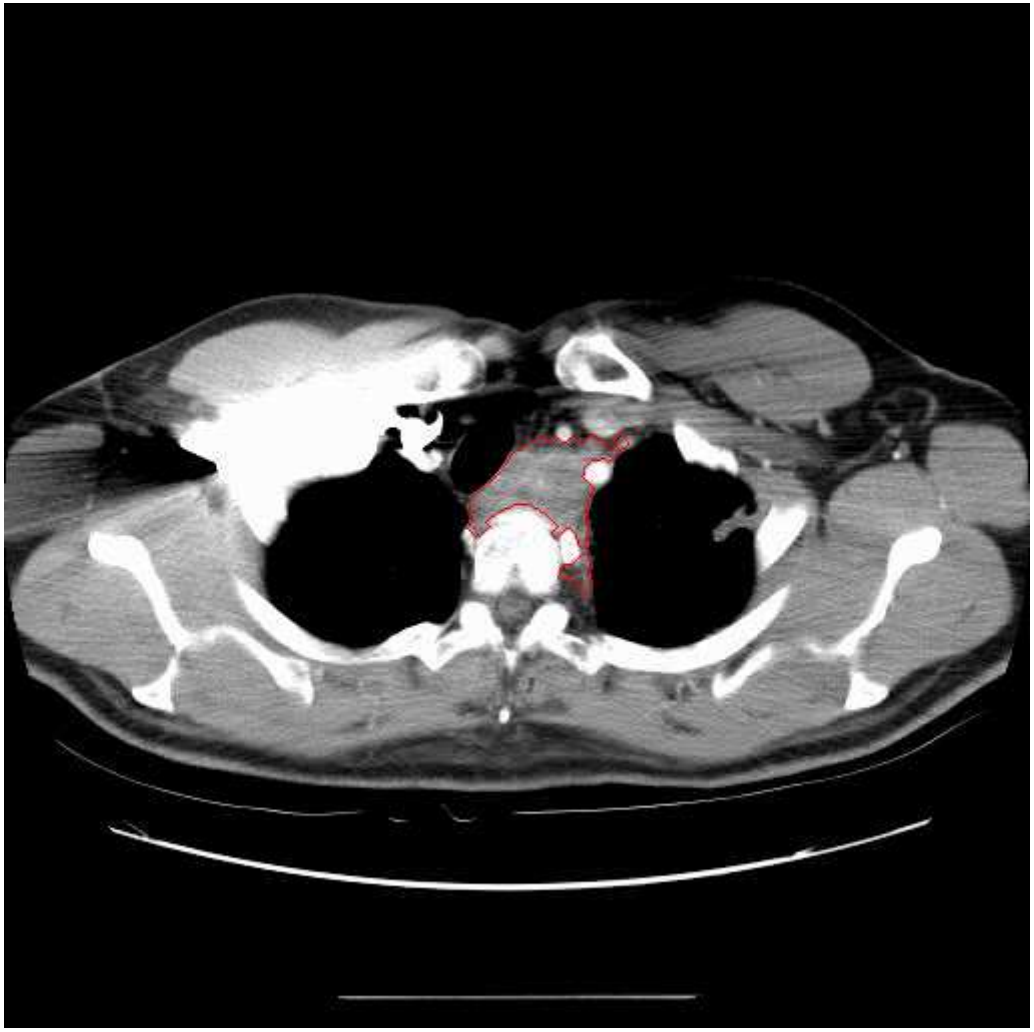




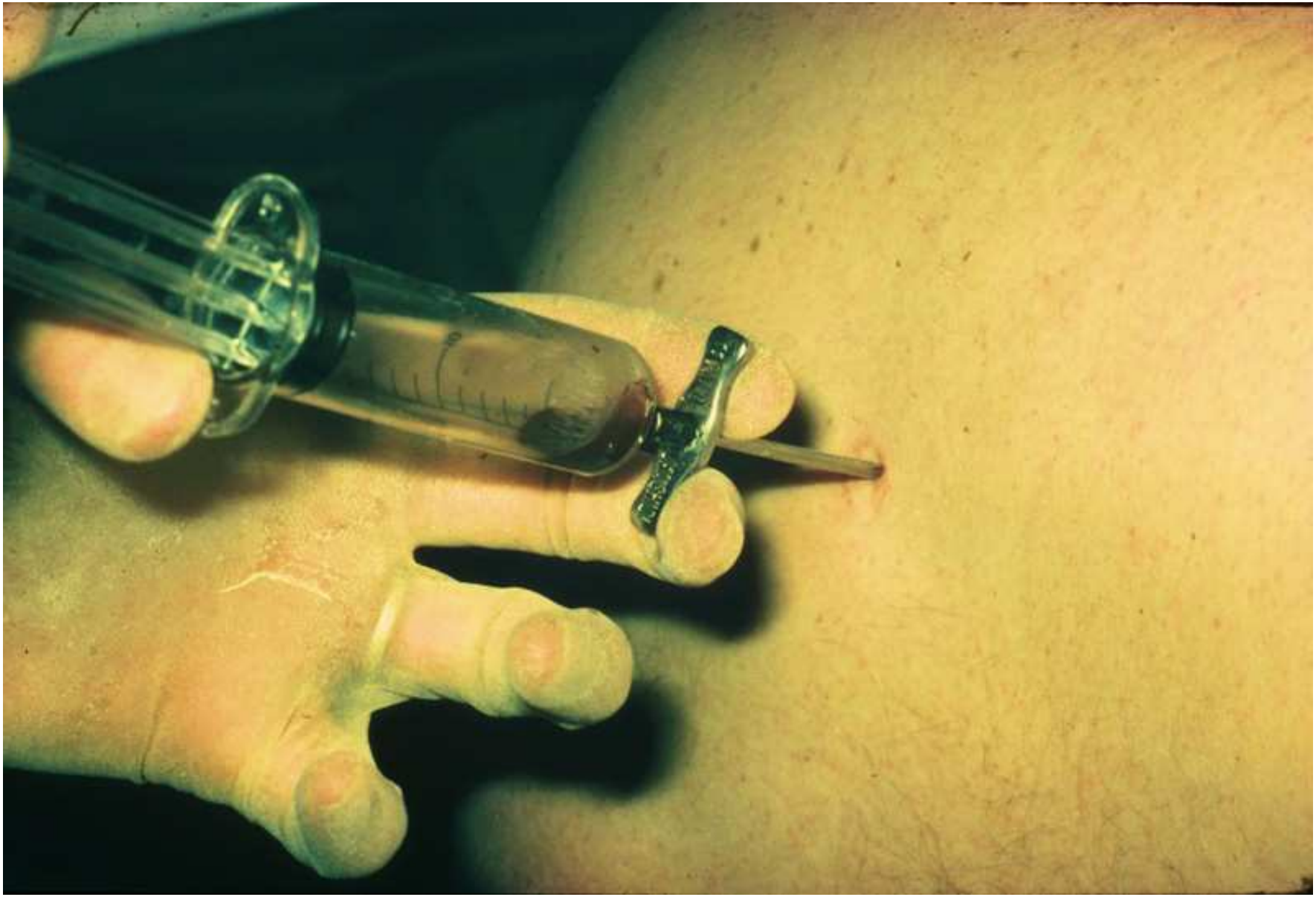


Schwartz

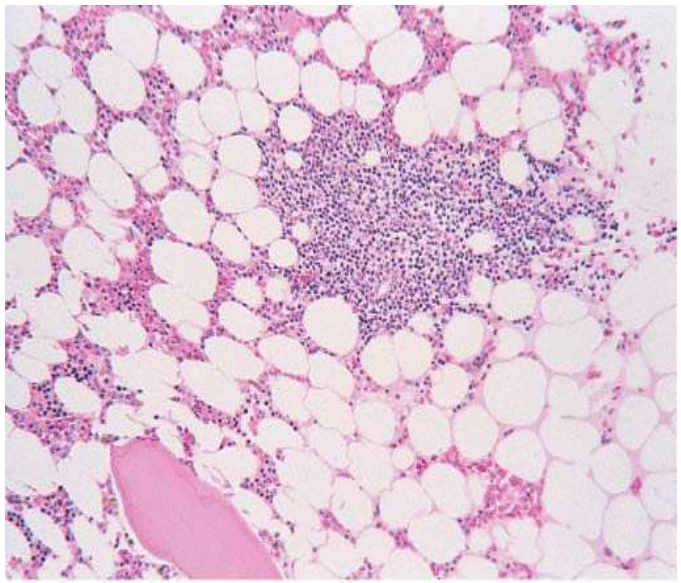
Beyond Ann Arbor

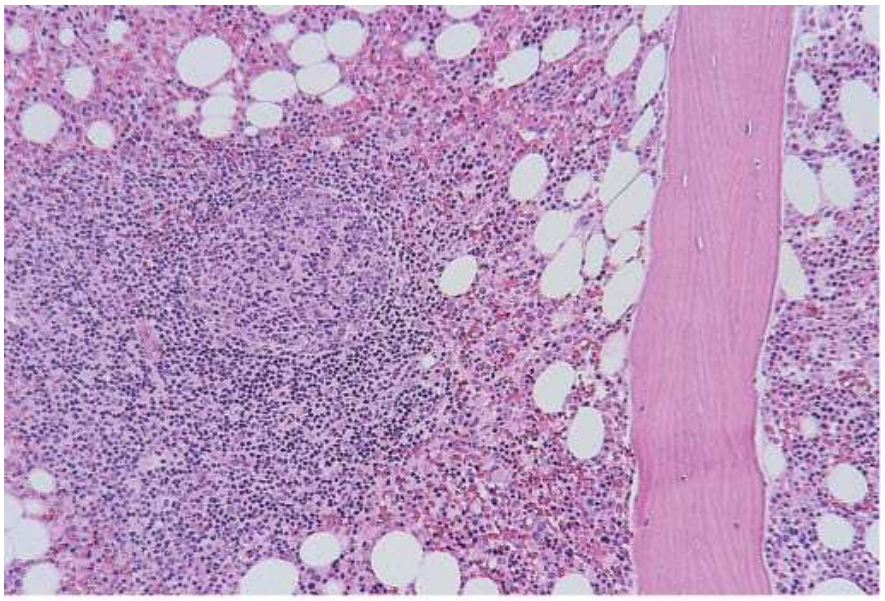


Schwartz



Benign lymphoid aggregates in the BM

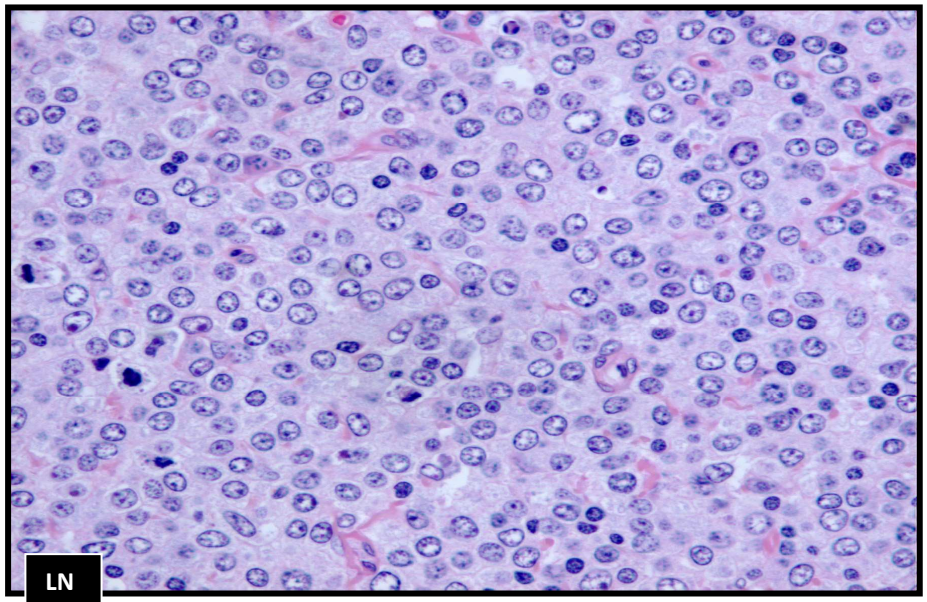


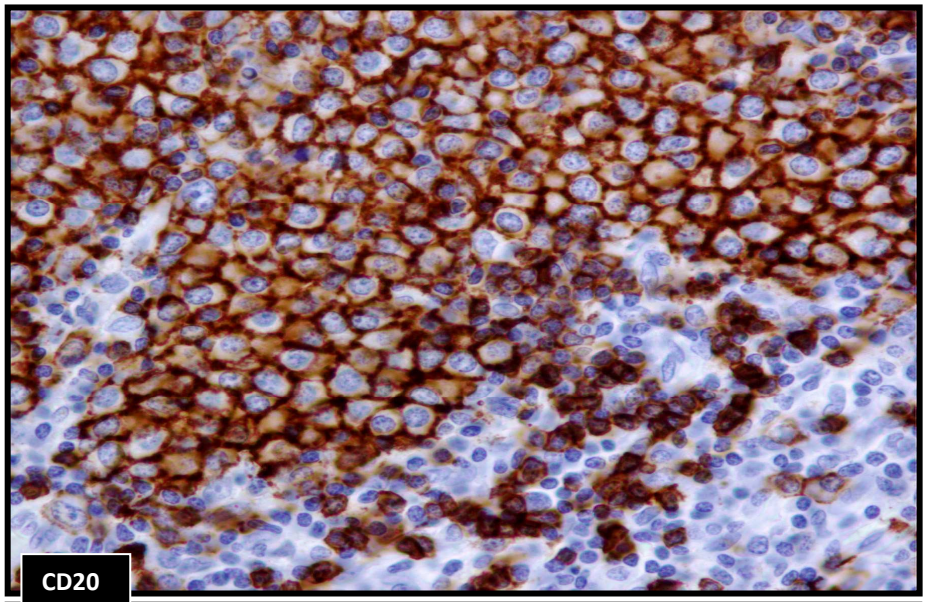


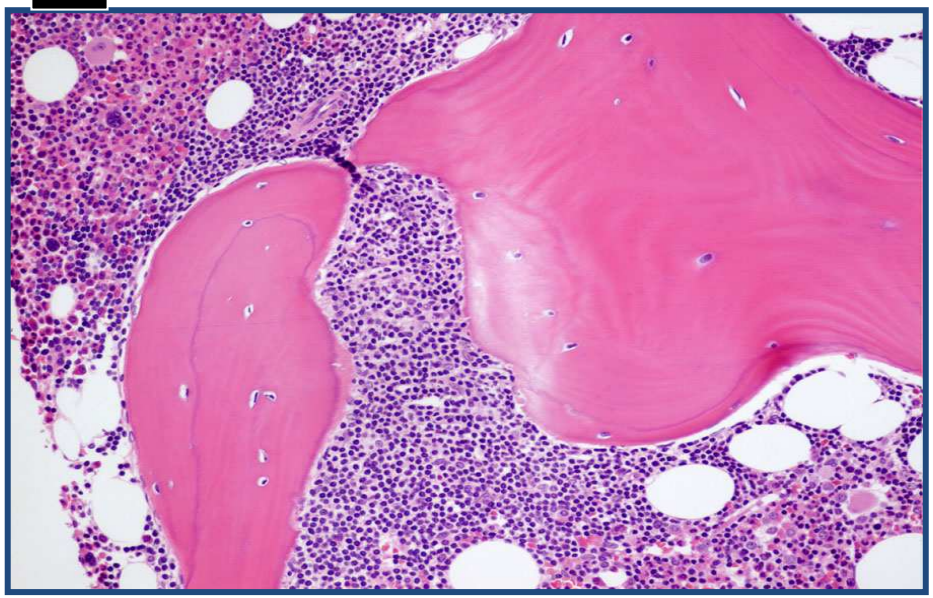
Distinguishing these reactive infiltrates from
low-grade B cell lymphomas
can be challenging

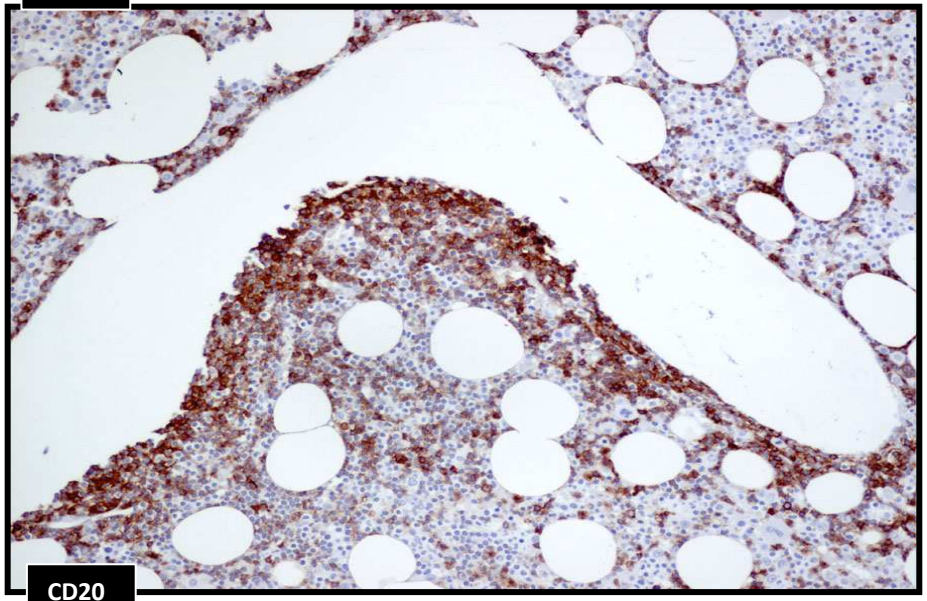
Gascoyne

Discordant BM involvement in DLBCL



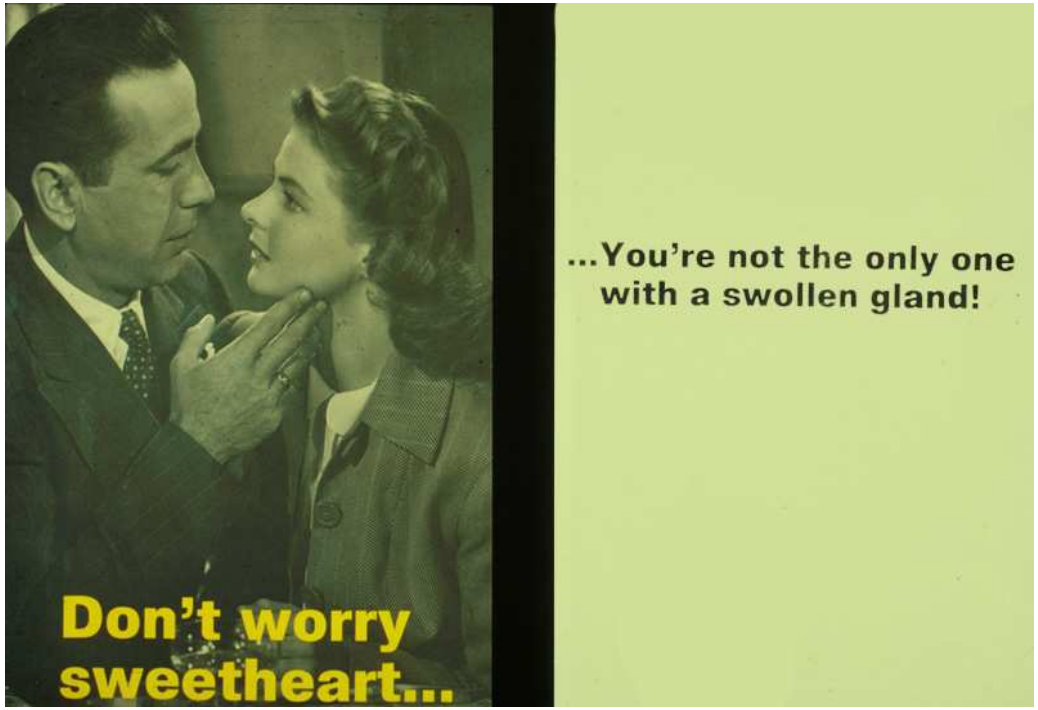


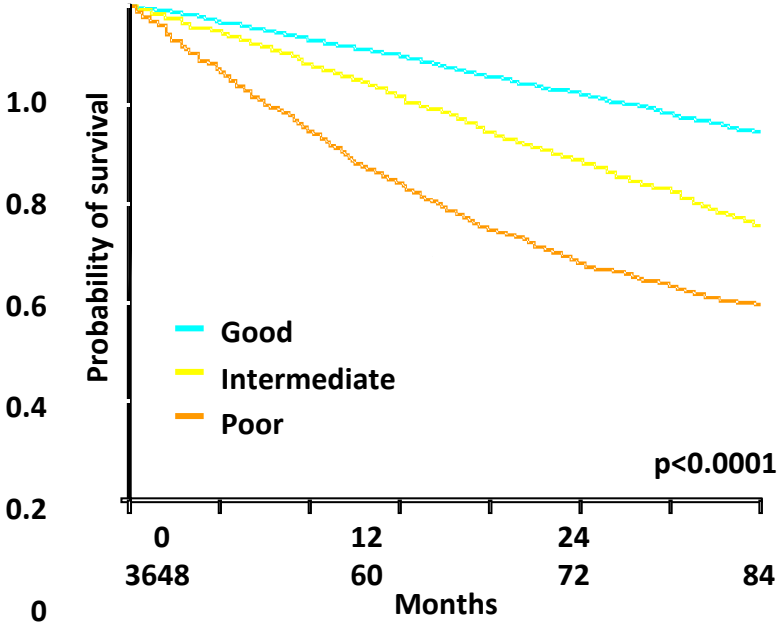




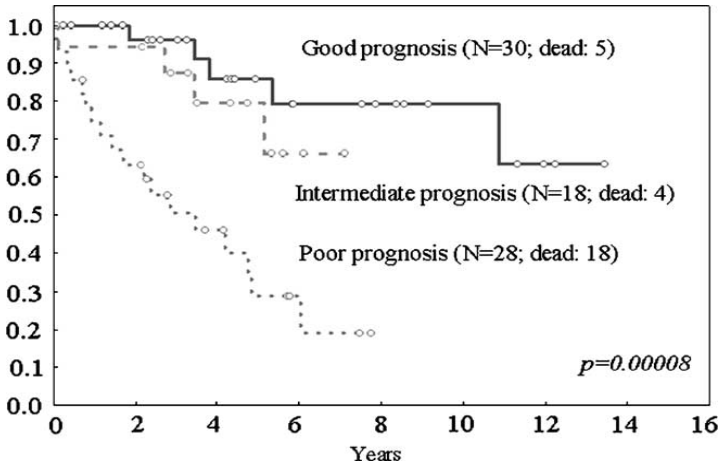
Gascoyne

F.L.PROGNOSTIC FACTORS





Solal-Céligny P, et al. Blood 2004;104:1258–65



Montoto et al, Annals of Oncol, 2004

1 – WHO ARE THEY?

2 – SO WHAT – ABOUT FLIPI 1 or 2?

CONCLUSIONS
PET

STAGING

- We may give up the CXR! $ 65 (data not shown)
- PET should be (already is , “legitimised”) incorporated when clinically appropriate (HL, DLBCL ? FL...)
- More information will become available.

Conclusions

BONE MARROW

- Maintain Status Quo.
- The role of IHC and FLOW remain to be fully defined.

BULK/VOLUME

- Prospective studies needed to identify the importance of different sized lesions (greater than 5, ? 10 cm), if relevant, and volume.

CONCLUSIONS

- It is as well our expectations were modest!

And over to Sally…..(while missing Bruce)