

Professor Mark Bower

Chelsea and Westminster Hospital, London

COMPETING INTEREST OF FINANCIAL VALUE \geq £1,000:	
Speaker Name	Statement
Mark Bower	None
Date	22 September 2012

Do cancer patients with HIV die sooner?

Professor Mark Bower

National Centre for HIV Malignancy

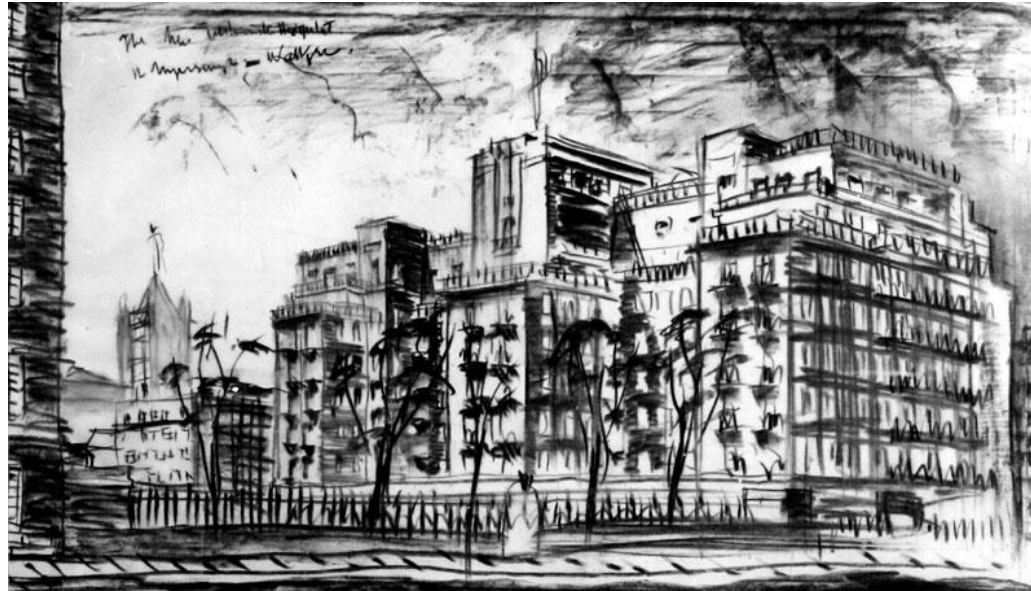
Chelsea & Westminster Hospital

1987-2012





1989-
1993





The Westminster Hospital Oncology Department (established 1939)

Sir Stanford Cade
pioneered radium
needles for breast
cancer
(brachytherapy) and
“radium Bomb”
therapy



AIDS related lymphoma in 1980s

Relatively few diagnosed lymphoma (24 cases)

<5% of causes of death in people with HIV

Median survival 3 months

5 year survival 0%

1990 - 5HT₃ antagonists



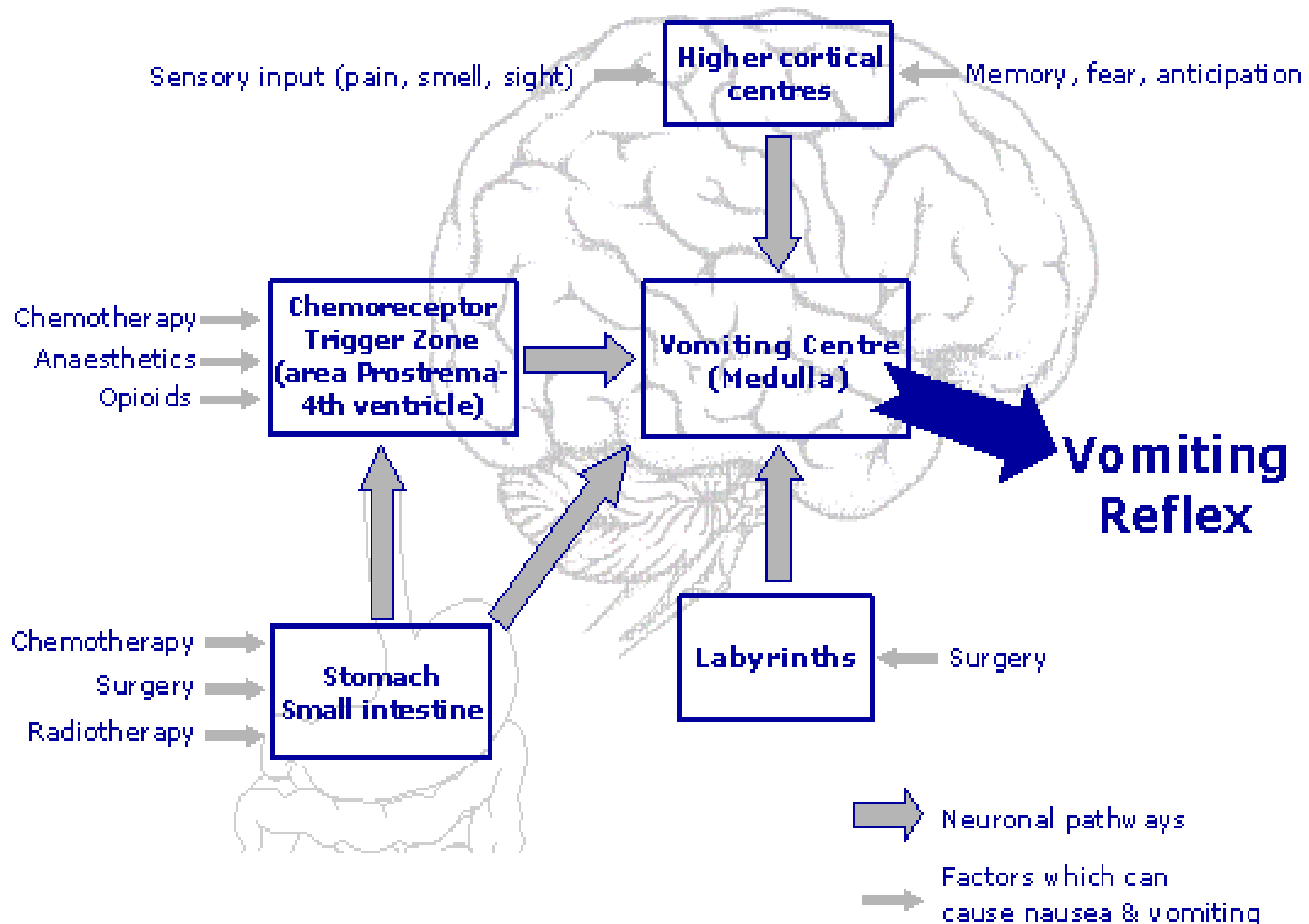
OmeletteTM
ondansetron
tablets 8mg

Each tablet contains
8mg ondansetron
as ondansetron hydrochloride dihydrate
Also contains lactose and maize starch

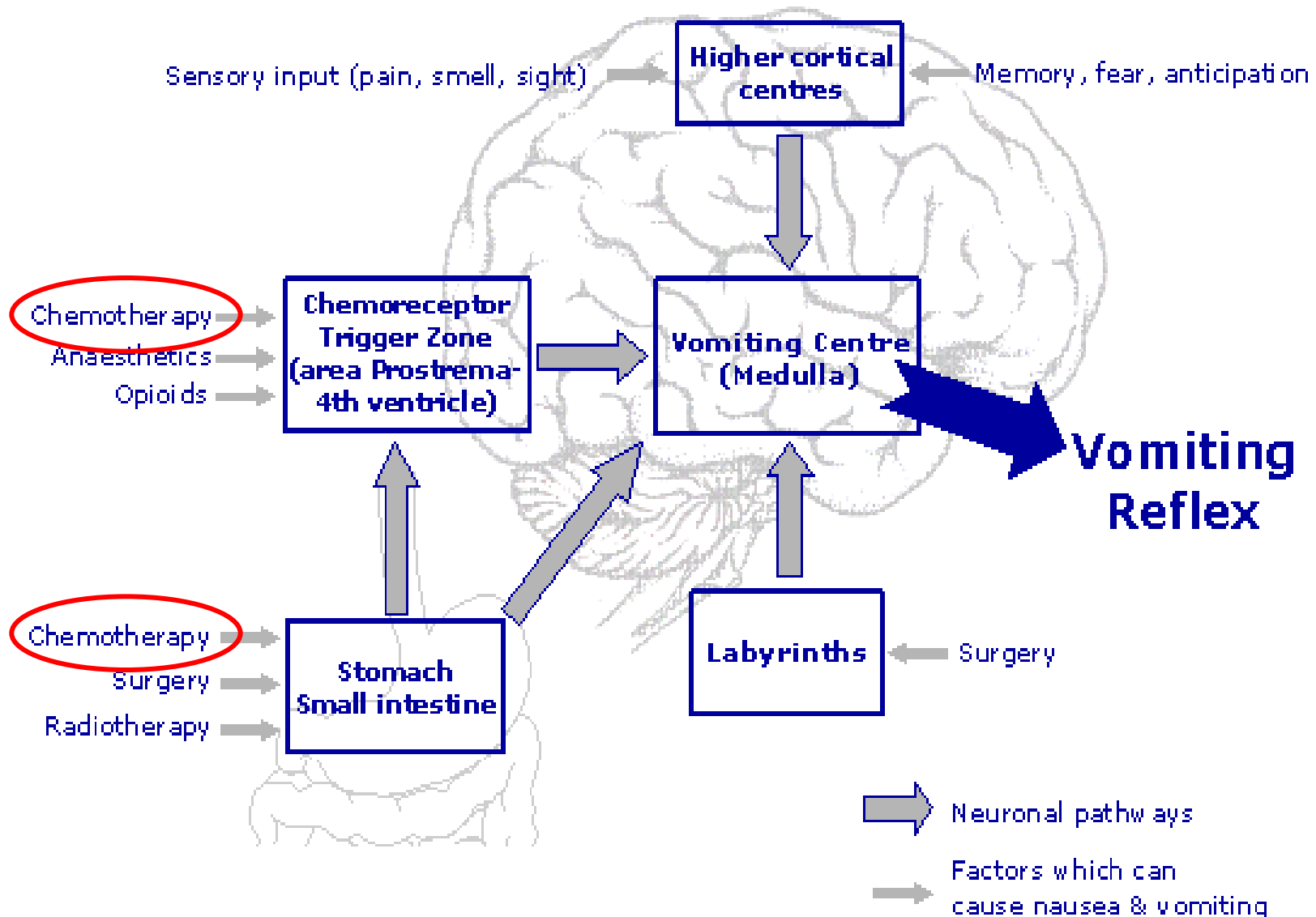
10 tablets

HirstDamien

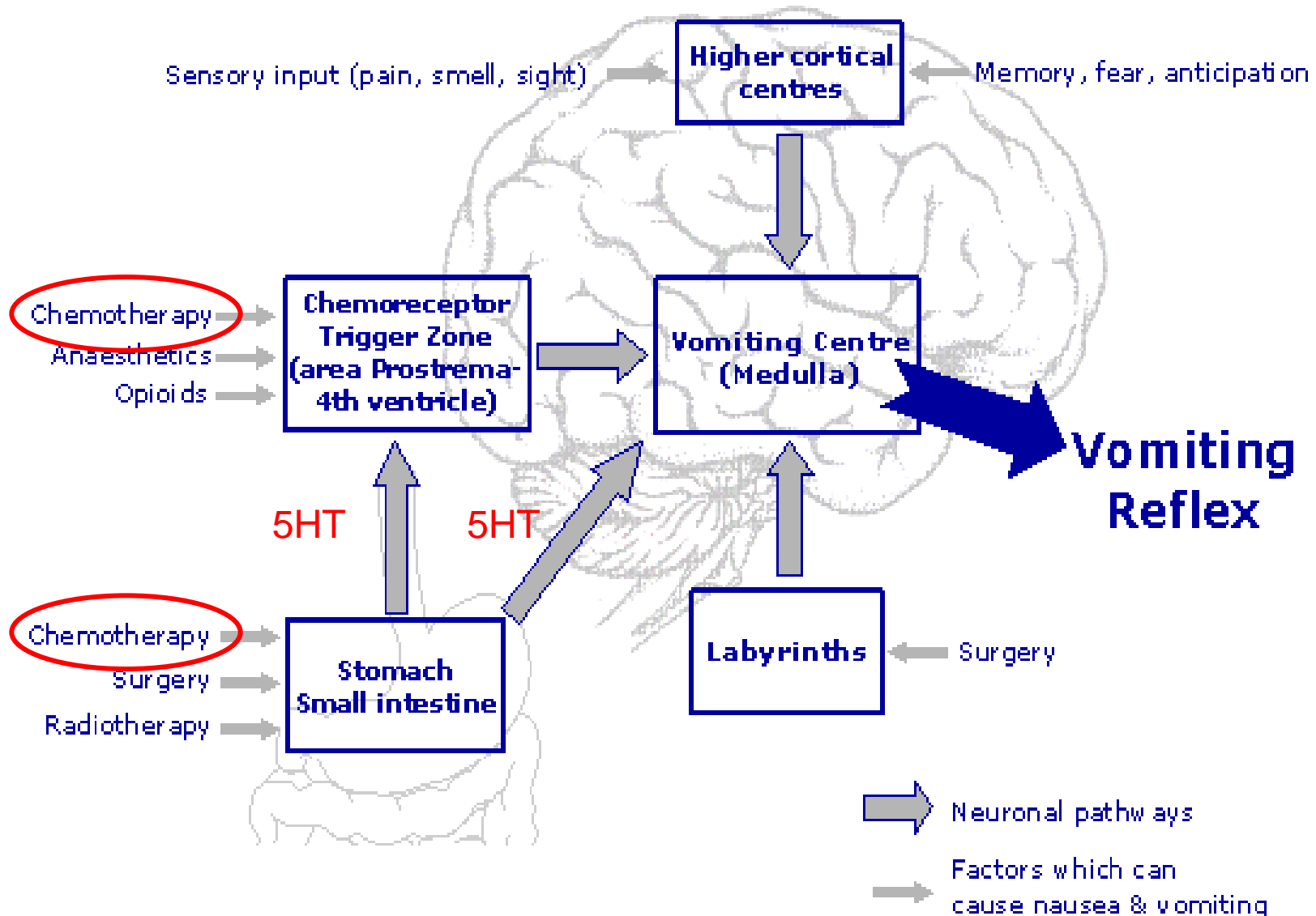
What makes you sick?



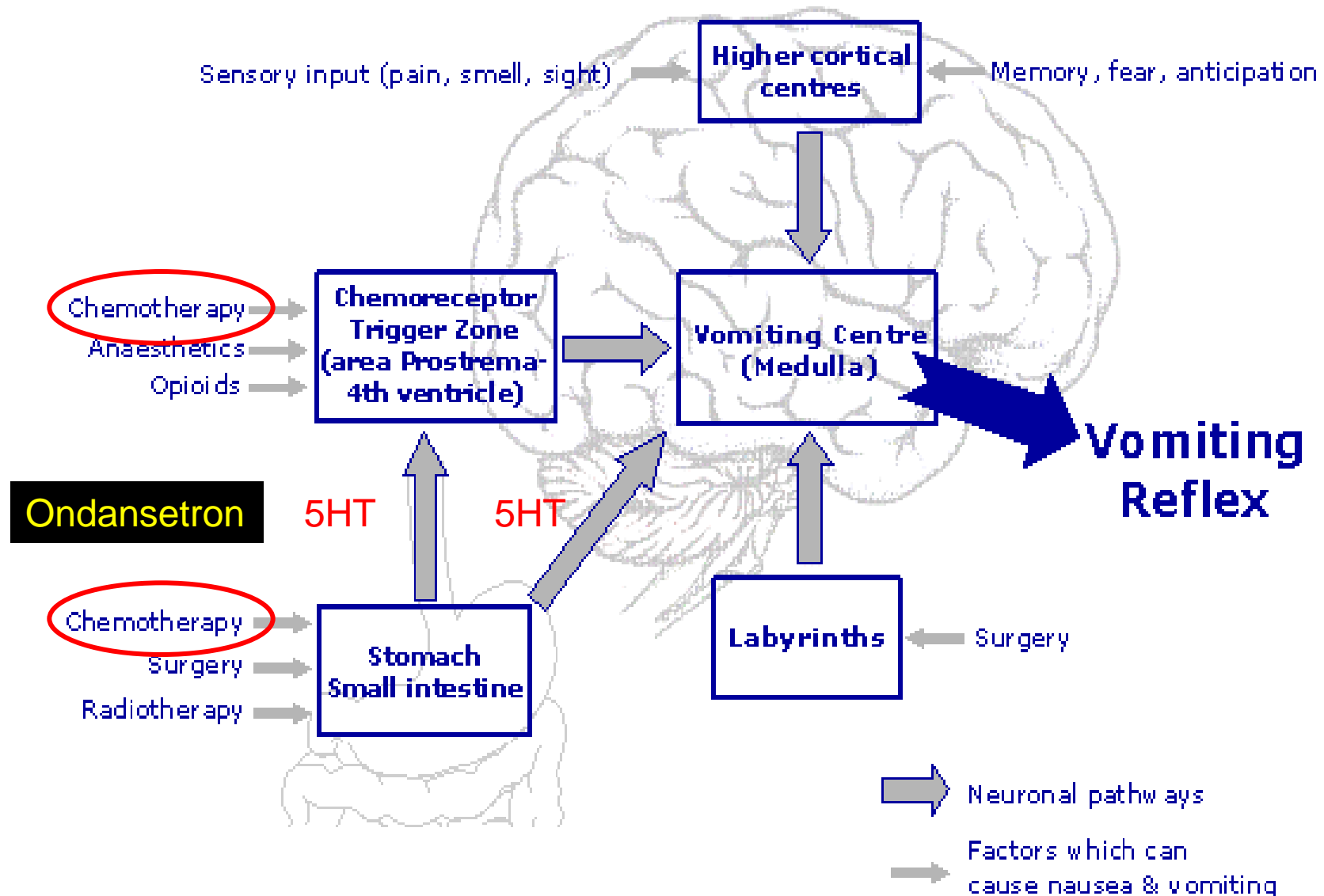
What makes you sick?



What makes you sick?



What makes you sick?



1990 G-CSF

10 - 1 mL Single Use Vials

NDC 55513-530-10

AMGEN[®]

Neupogen[®] Filgrastim

A Recombinant Granulocyte Colony Stimulating Factor (rG-CSF) derived from *E. coli*

**300
mcg**

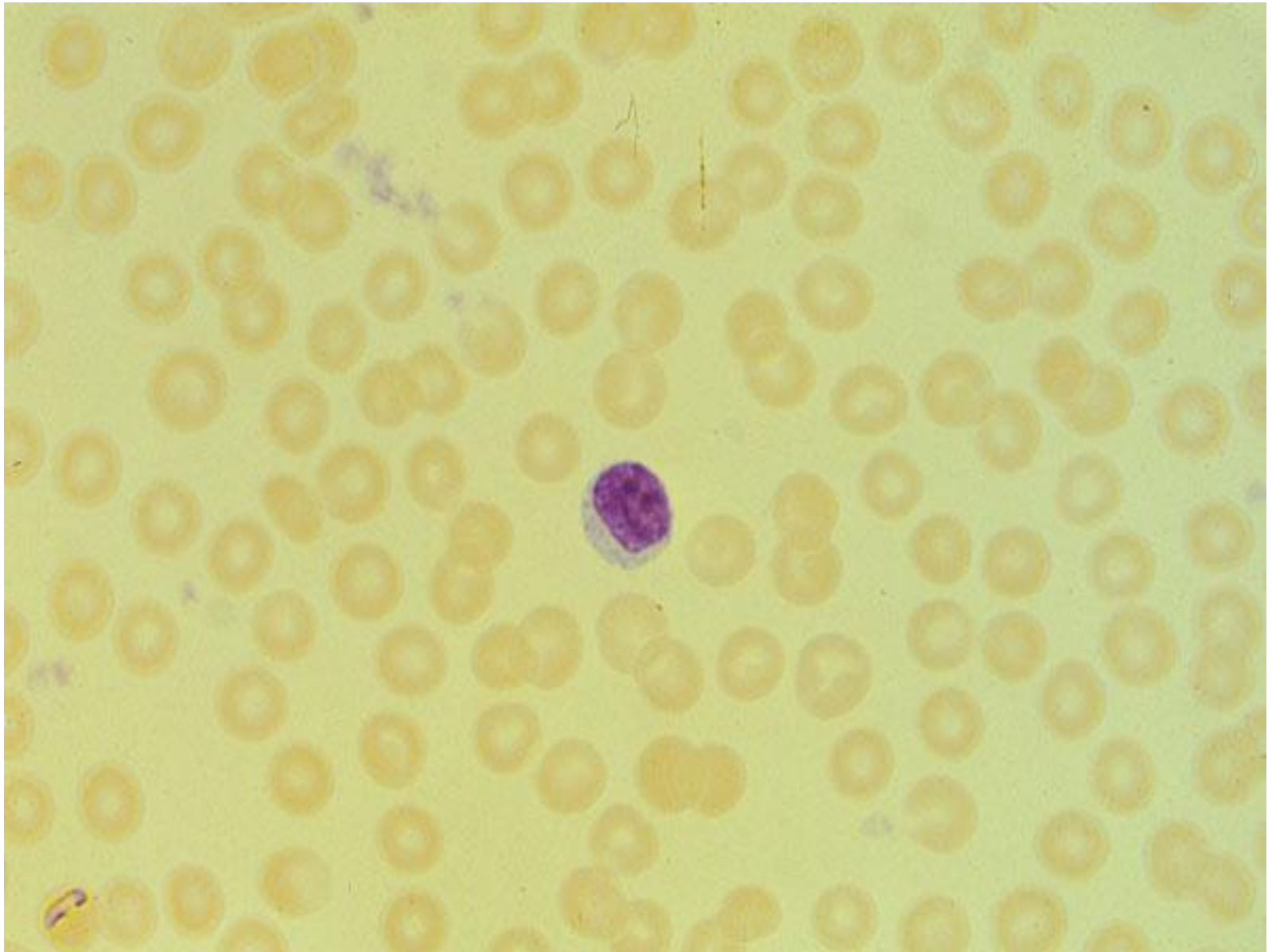
300 mcg/1 mL (3 x 10⁷ Units/1 mL)

For Subcutaneous or Intravenous Use Only
Sterile Solution - No Preservative

Refrigerate at 2° to 8°C (36° to 46°F). Avoid Shaking.

Amgen Inc. Thousand Oaks, CA 91320 U.S.A. U.S. License No. 1080

Neutropenic blood film



1990: A new approach to ARL

Prognosis stratified approach

Good risk <2 of:

CD4 <100/mm³

ECOG performance status >2

Prior AIDS

Aggressive chemotherapy (curative intent)

BEMOP/CA

Alternating weekly regimen

Bleomycin, Etoposide, Methotrexate,
Vincristine, Prednisolone / Cyclophosphamide,
Adriamycin

G-CSF support

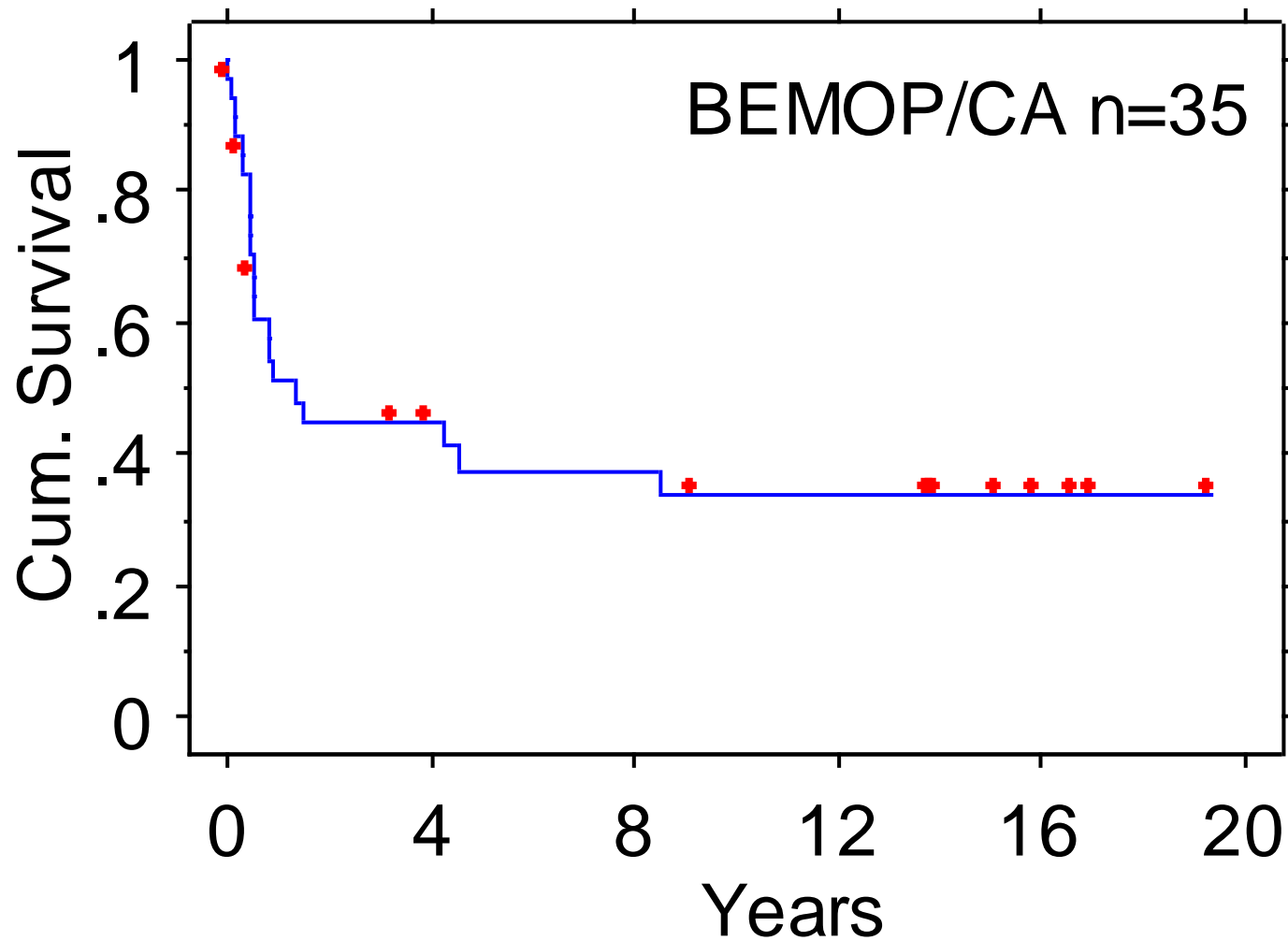
Opportunistic infection prophylaxis

BEMOP/CA (1990-1997)

	Number of patients	Median Survival	5 year survival
1980s	24	3 month	0%
BEMOP/CA (good risk patients)	35	8 months	38%

Bower M, Eur J Cancer 36(3):363-7.

BEMOP/CA



Full vs Low dose m-BACOD

ACTG trial randomised controlled study

Low dose mBACOD (n=98)

vs

Full dose mBACOD with GM-CSF (n=94)

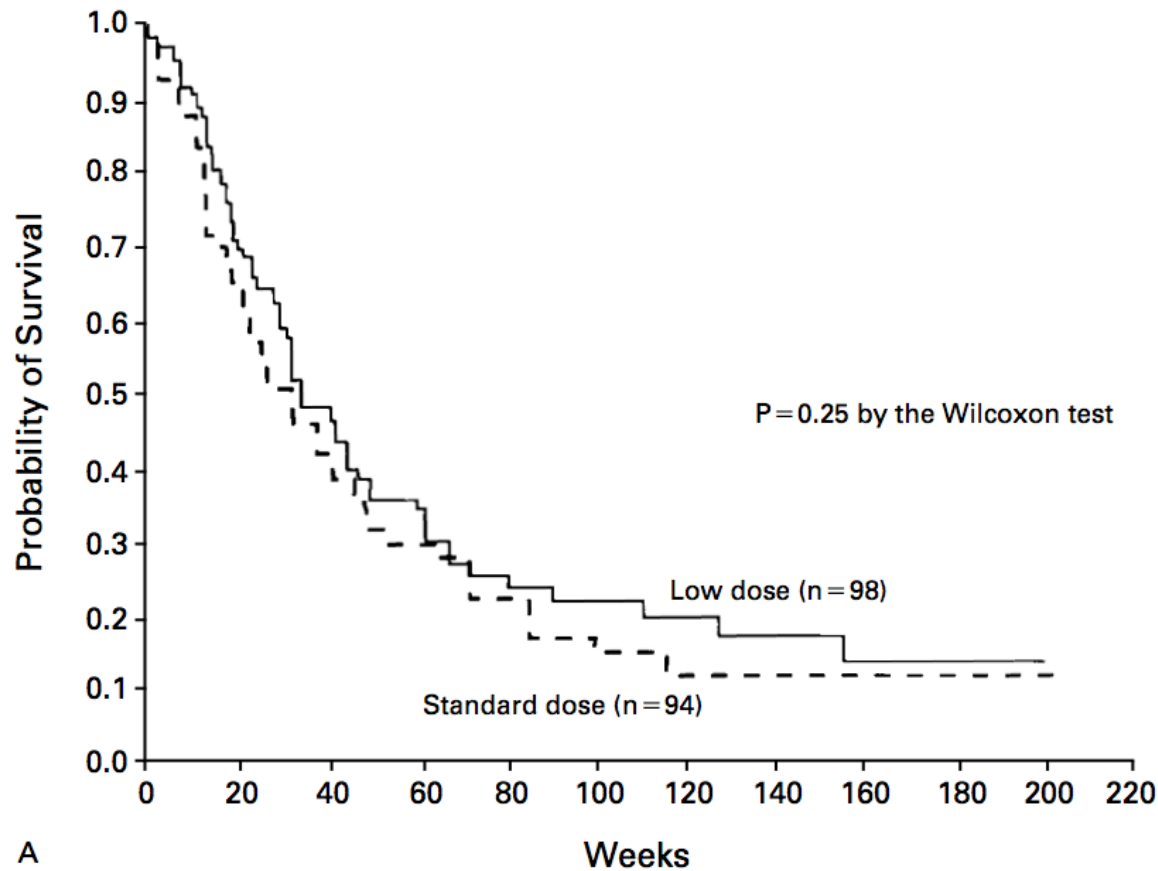
Full vs Low dose m-BACOD

	Low dose	Standard dose
Treated	94	81
Complete Response	41%	52%

High dose treatment more toxic

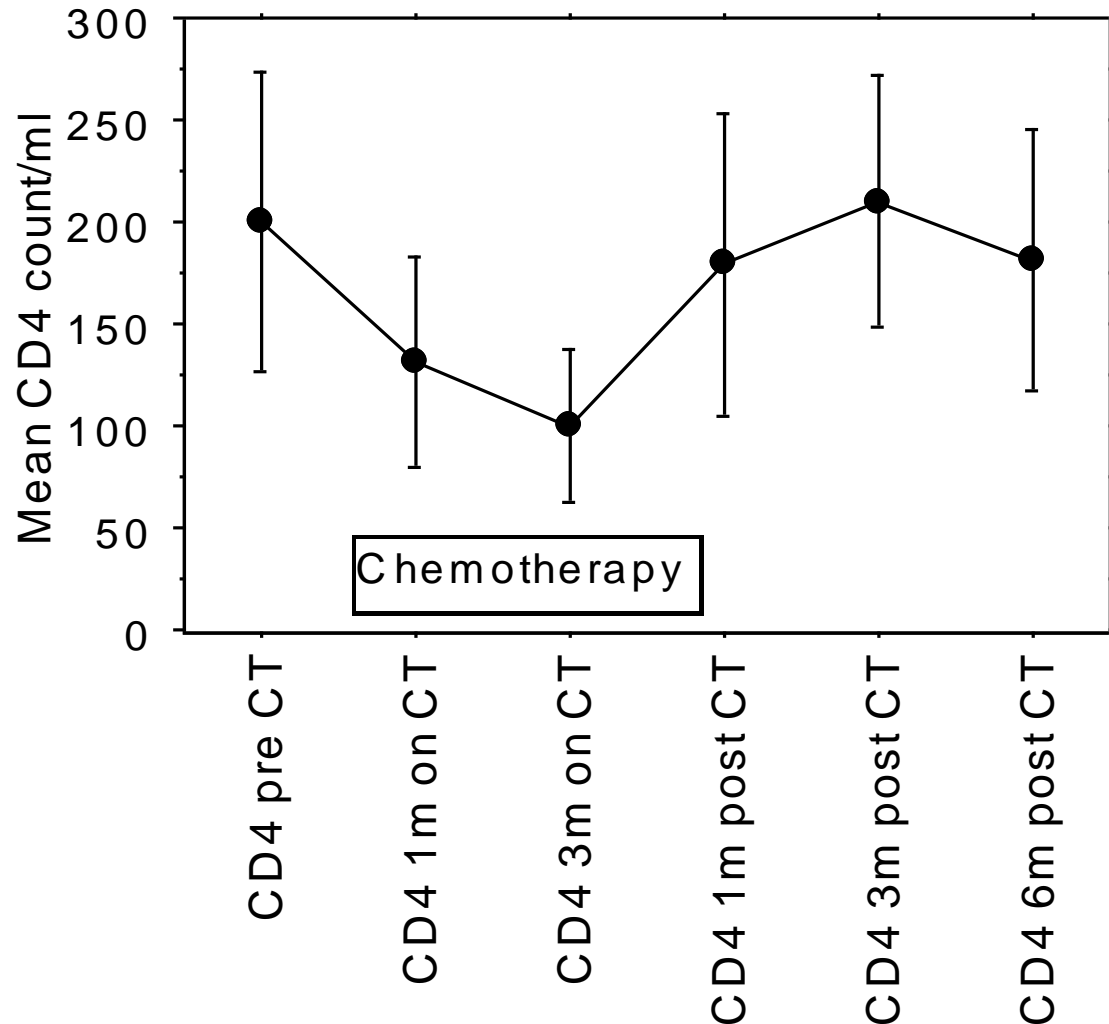
No difference in overall survival

Full vs Low dose m-BACOD



Kaplan L, 1997, NEJM 336:1641-1648

CD4 decline during chemotherapy



HAART era (1998-2006)

Treat all patients with curative attempt

Infusional chemotherapy over 5 days to avoid pharmacokinetic interactions with HAART

CDE (cyclophosphamide, doxorubicin, etoposide)

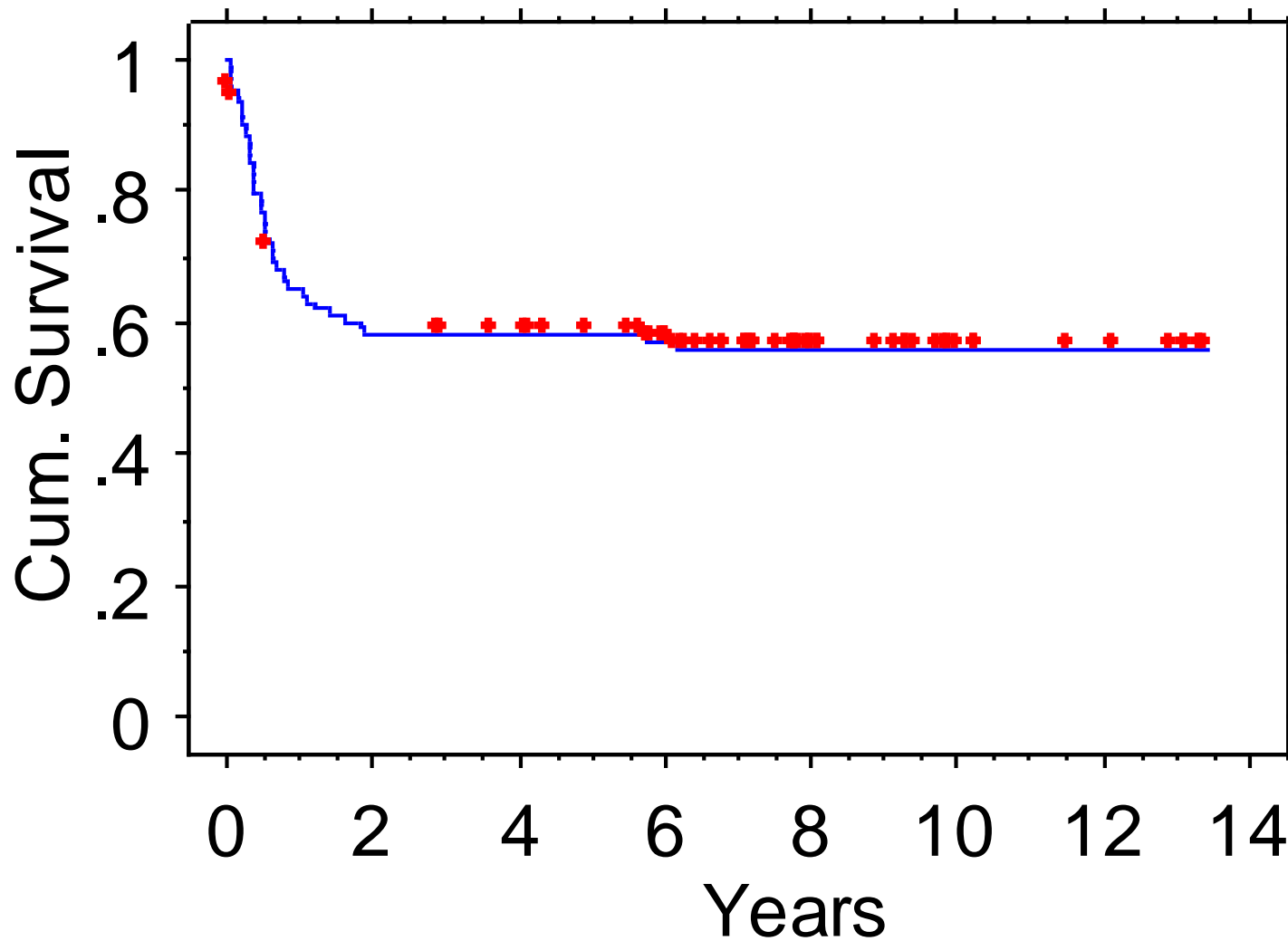
G-CSF support & full OI prophylaxis

CDE

	Number of patients	Median Survival	5 year survival
1980s	24	3 month	0%
BEMOP/CA (good risk patients)	35	8 months	38%
CDE (all patients)	105	Not yet reached (>10 years)	58%

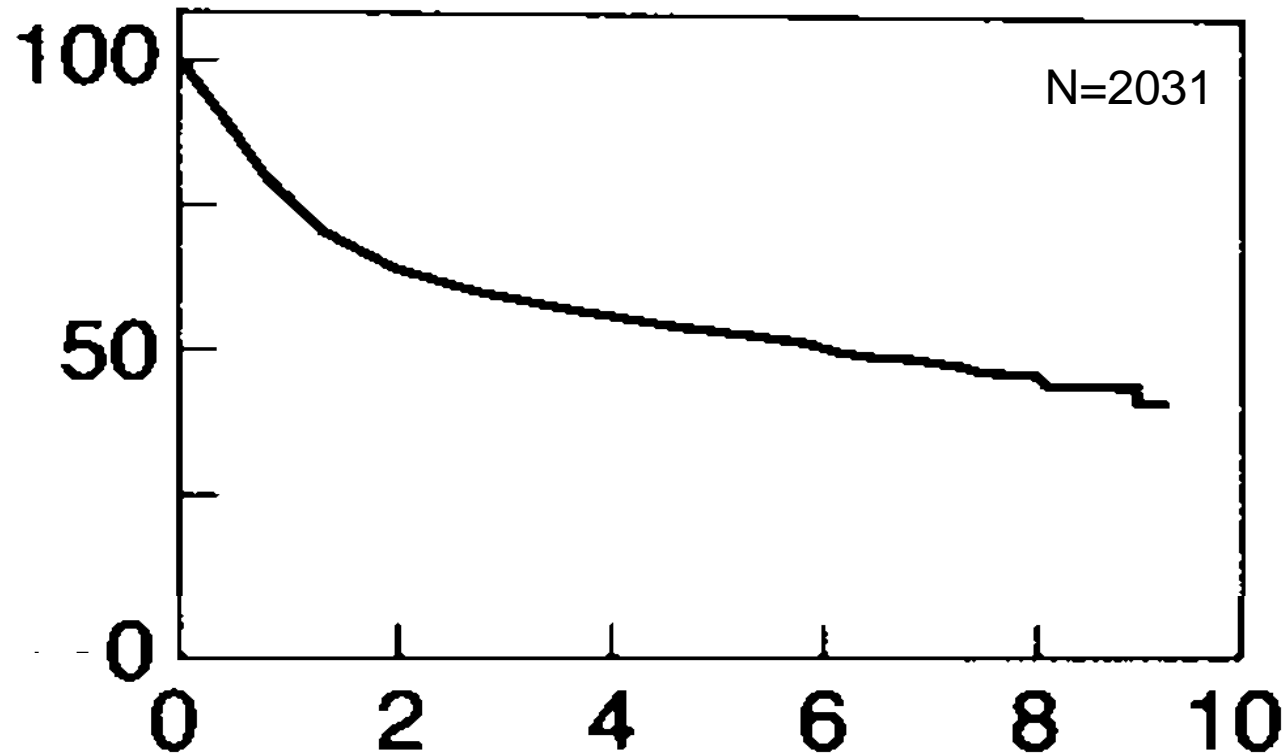
Bower M, Blood 2004;104(9):2943-6.

CDE (1998-2006)



International non-Hodgkin's lymphoma prognostic score project

Overall Survival

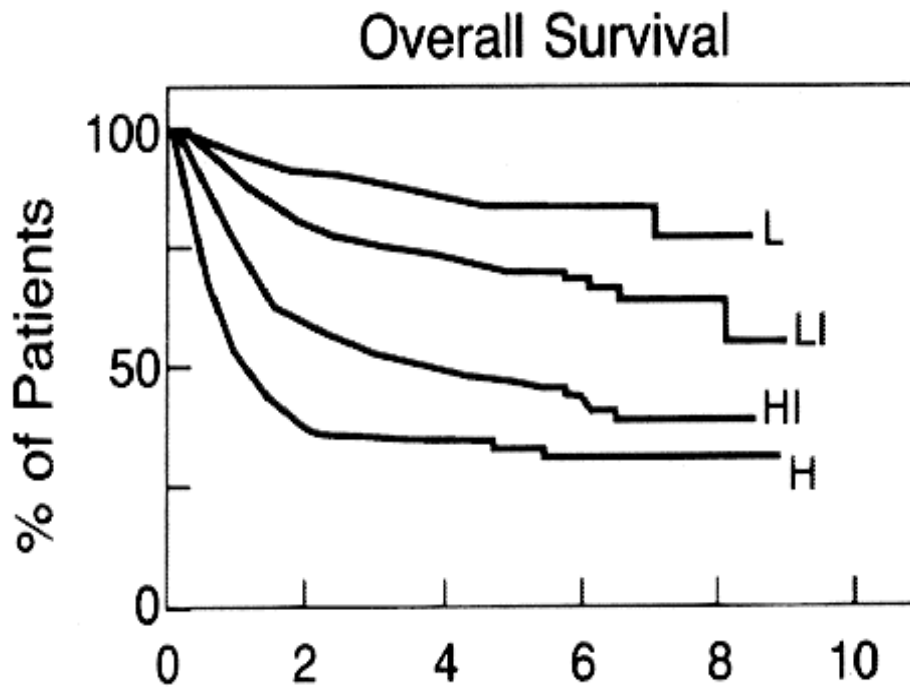


Prognostic scores in NHL

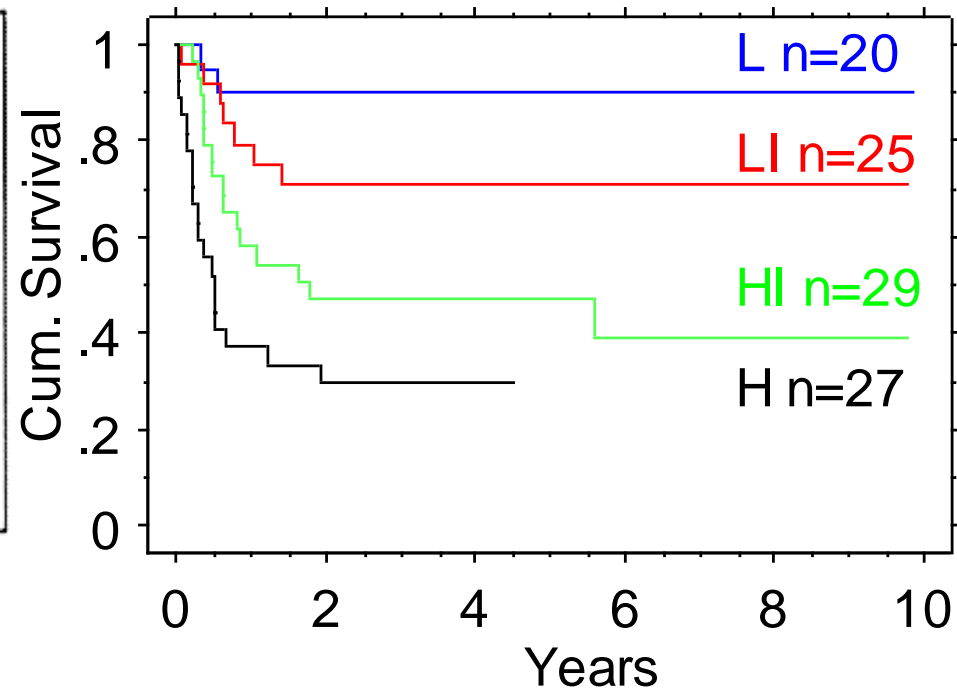
International Prognostic Index (IPI) score based on:

1. Age > 60
2. Stage of NHL > 2
3. Raised serum LDH
4. Poor performance status (ECOG > 1)
5. Extranodal sites (> 1 site)

Overall survival by IPI group

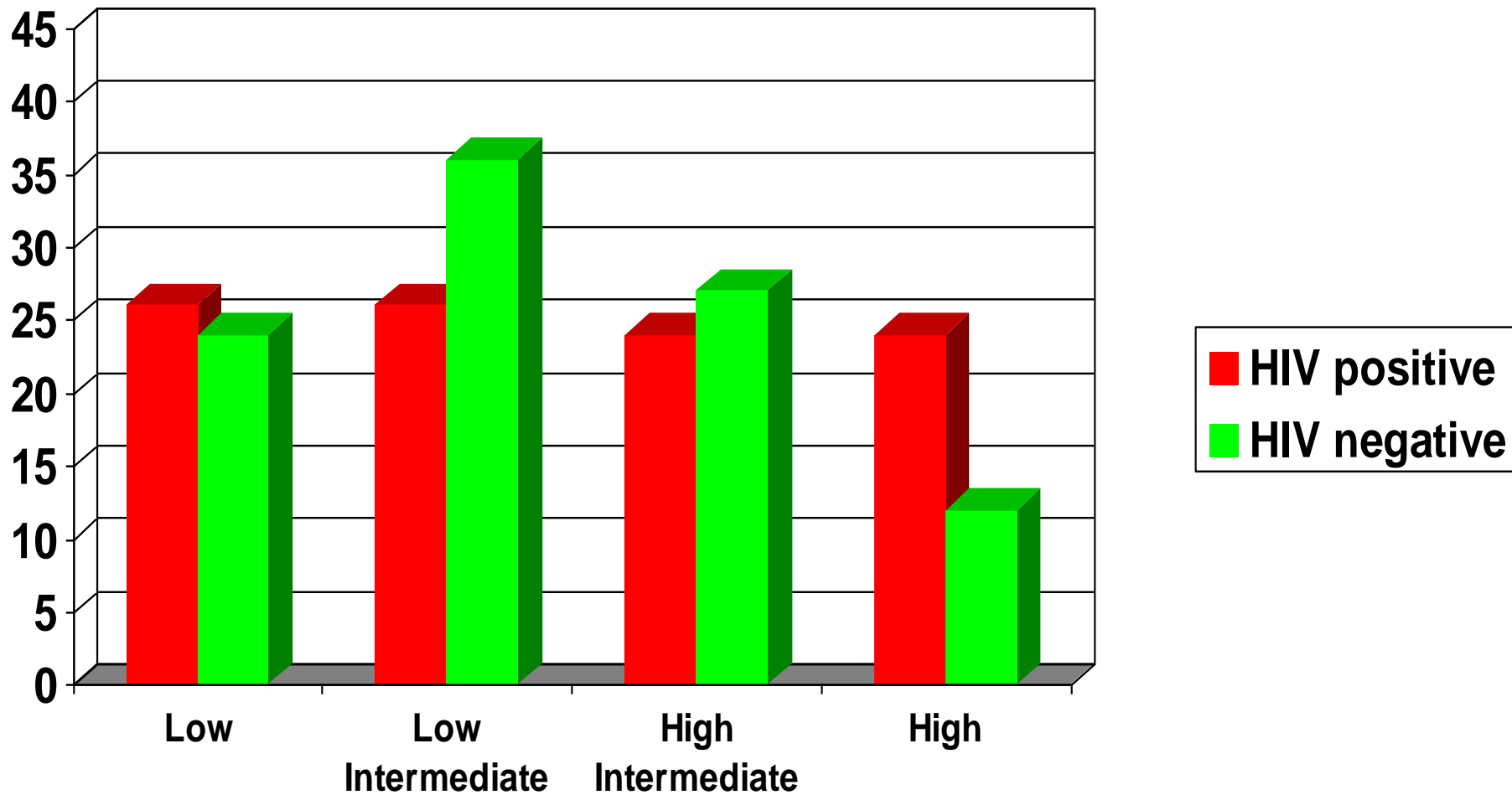


Aggressive B-NHL



CDE & HAART

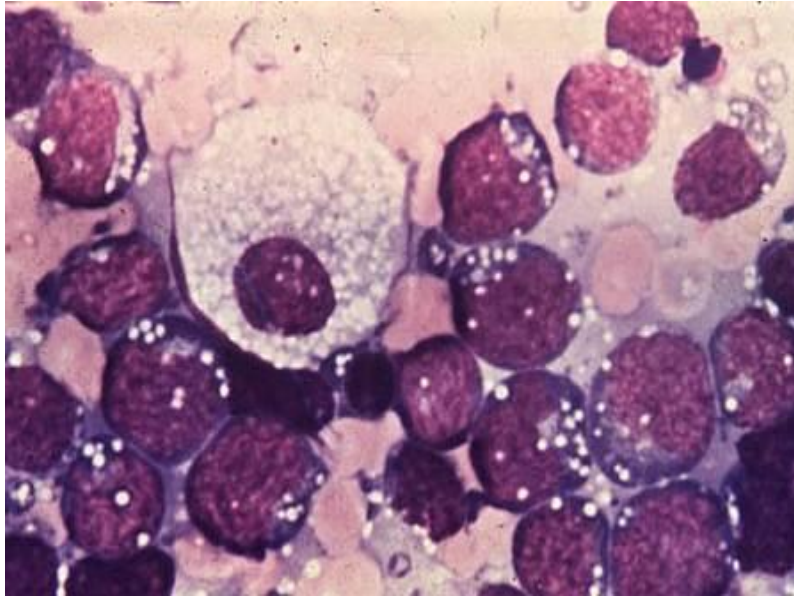
Worse IPI prognostic scores



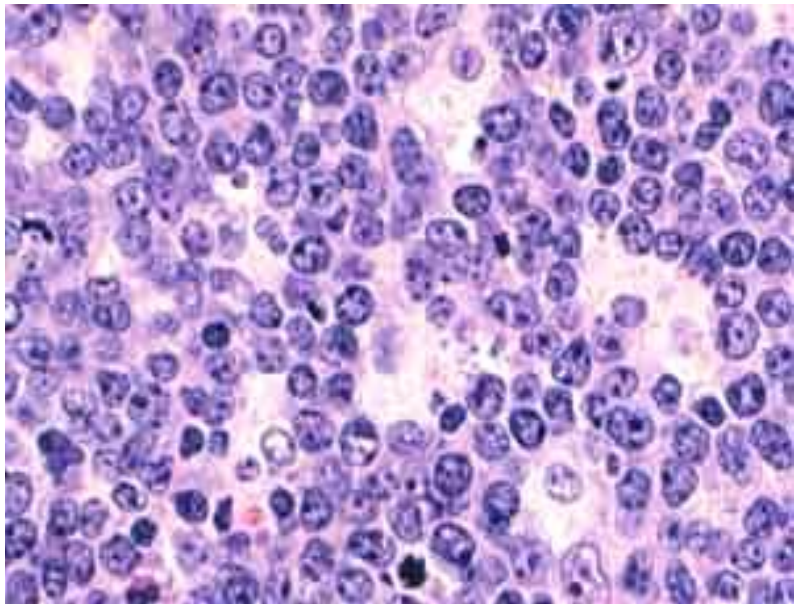
Management of NHL

1. Chemotherapy (R-CHOP, CODOX-M/IVAC)
2. Intrathecal chemoprophylaxis
3. Opportunistic prophylaxis (PCP, MAC, fungi)
4. HAART

BHIVA HIV malignancy guidelines HIV Med 2008

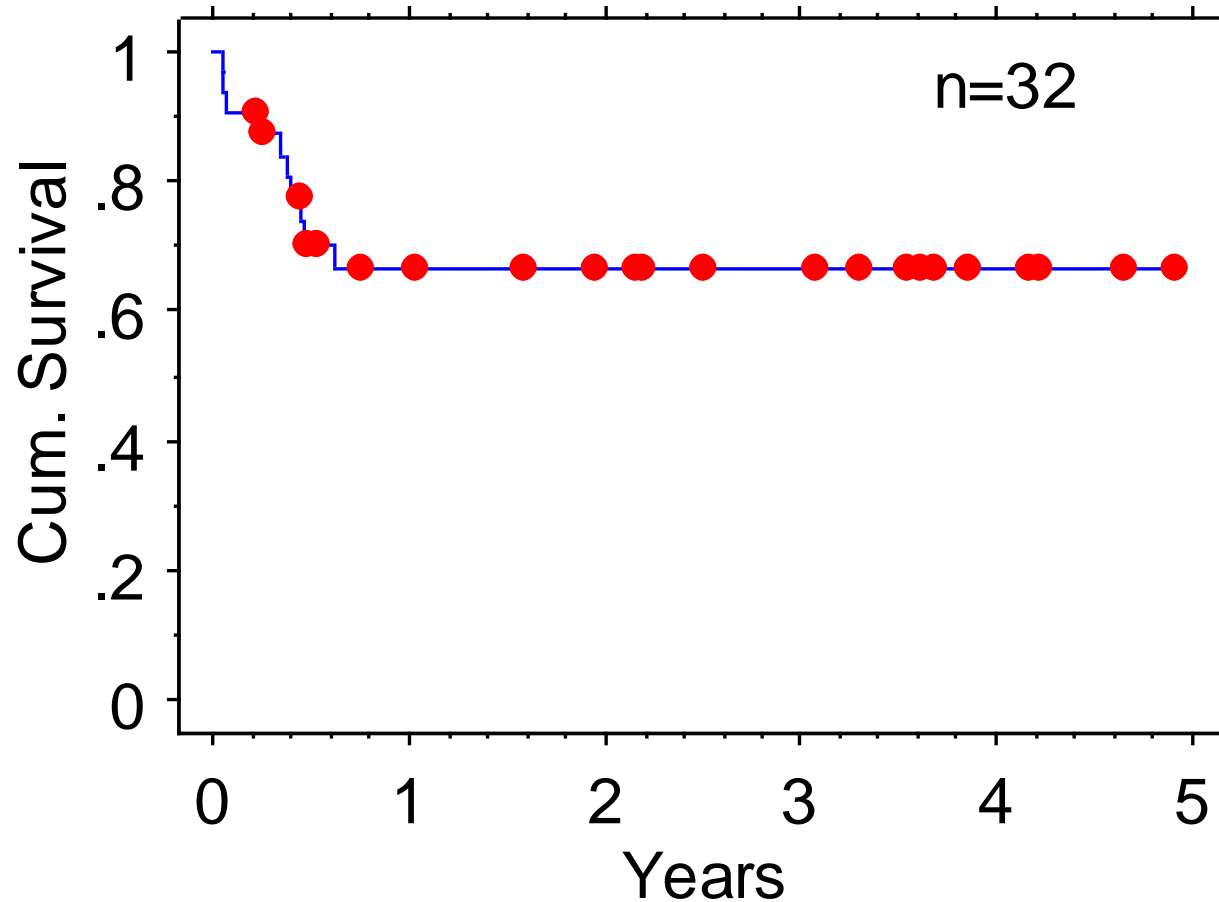


Burkitt's
lymphoma

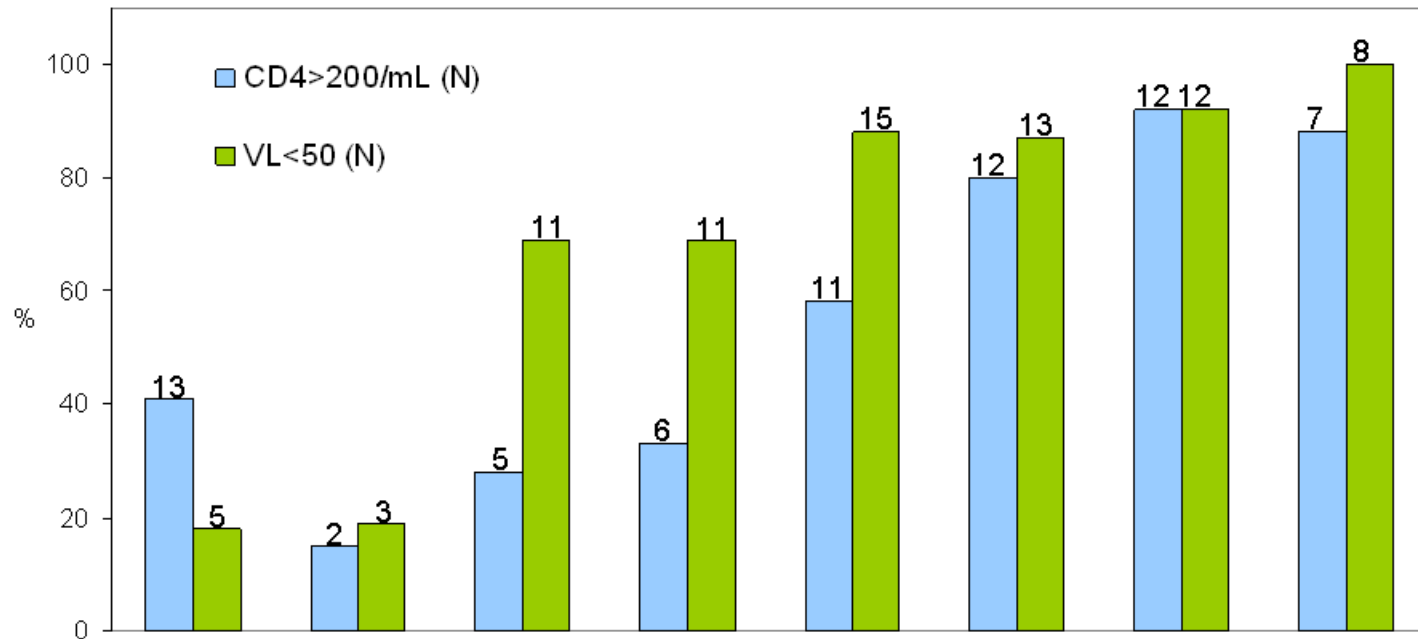


Diffuse large B
cell lymphoma

Burkitt Lymphoma: CODOX-M/IVAC (2007-12)



Good immunological recovery following CODOX-M/IVAC

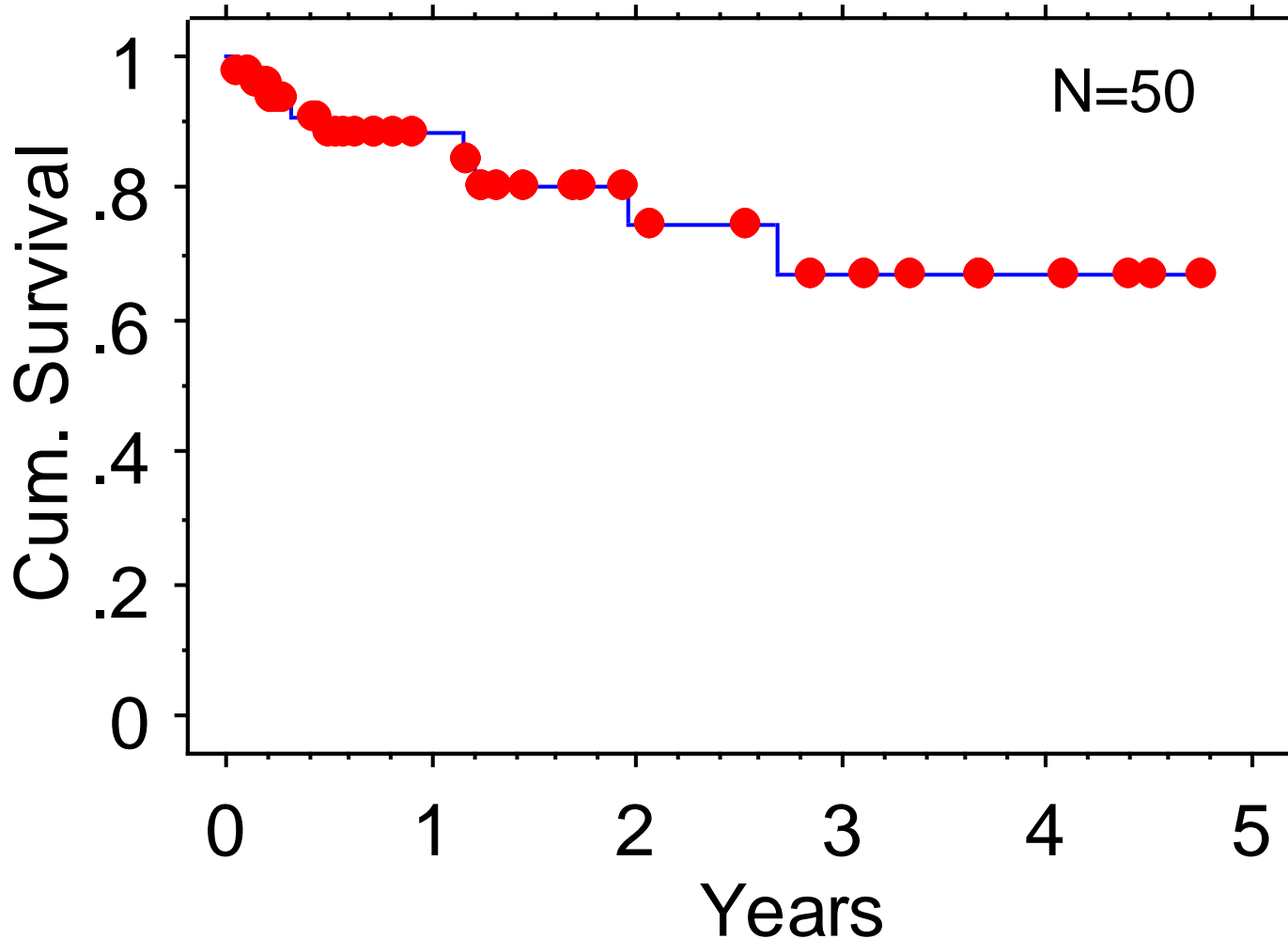


Time	AT BL diagnosis	1 mo. after starting therapy	3 mo. after starting therapy	1 mo. after finishing therapy	6 mo. after finishing therapy	12 mo. after finishing therapy	18 mo. after finishing therapy	24 mo. after finishing therapy
No. patients	30	30	26	22	20	16	13	8
No. samples assessed*	30/29	13/16	18/16	18/16	19/17	15/15	13/13	8/8

*CD4 count/VL

Montoto S, AIDS. 2010; 24:851-6.

Diffuse large B-cell lymphoma: R-CHOP (2007-12)



25 years of progress

	Number of patients	Median Survival	5 year survival
1980s	24	3 month	0%
BEMOP/CA (good risk patients)	35	8 months	38%
CDE (all patients)	105	Not yet reached (>10 years)	58%
Standard lymphoma management (all patients)	108	Not yet reached (>5 years)	63%

Lymphoma survival equal in HIV positive

5 Year Survival	
Male all*	61%
HIV+ (2007-12)	63%

*Male age-standardised 5 year relative survival, England & Wales 2009

Stem cell transplantation for refractory/relapsed lymphoma (2002-12)

17 patients peripheral stem cells harvested

2 failed, 1 sibling allograft & died of sepsis

15 harvested, 4 pre transplant deaths

11 autologous transplants, 3 died

8 alive in remission

Eligibility into clinical trials

A trial looking at chemotherapy and rituximab for people with Burkitt's lymphoma (R-CODOX-M/IVAC for BL)

Started 2007 excluding people living with HIV

Exclusion dropped 2012



Non-AIDS defining malignancies

Rising incidence (ageing cohort)

Unrelated to CD4 cell count

Risk not reduced by HAART

Viral oncogenesis implicated in many

Multi-centre testicular cancer series

N=35

CWH

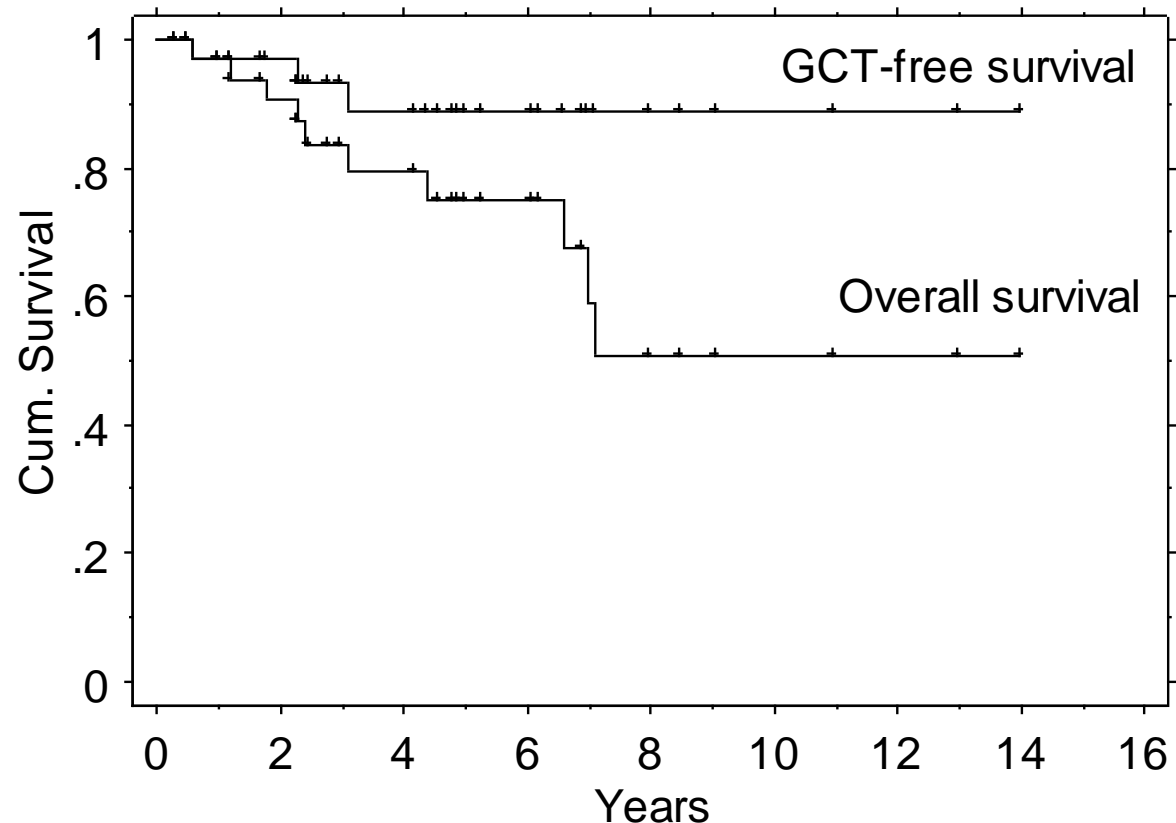
Barts

St Thomas'

RFH

Brighton

Copenhagen

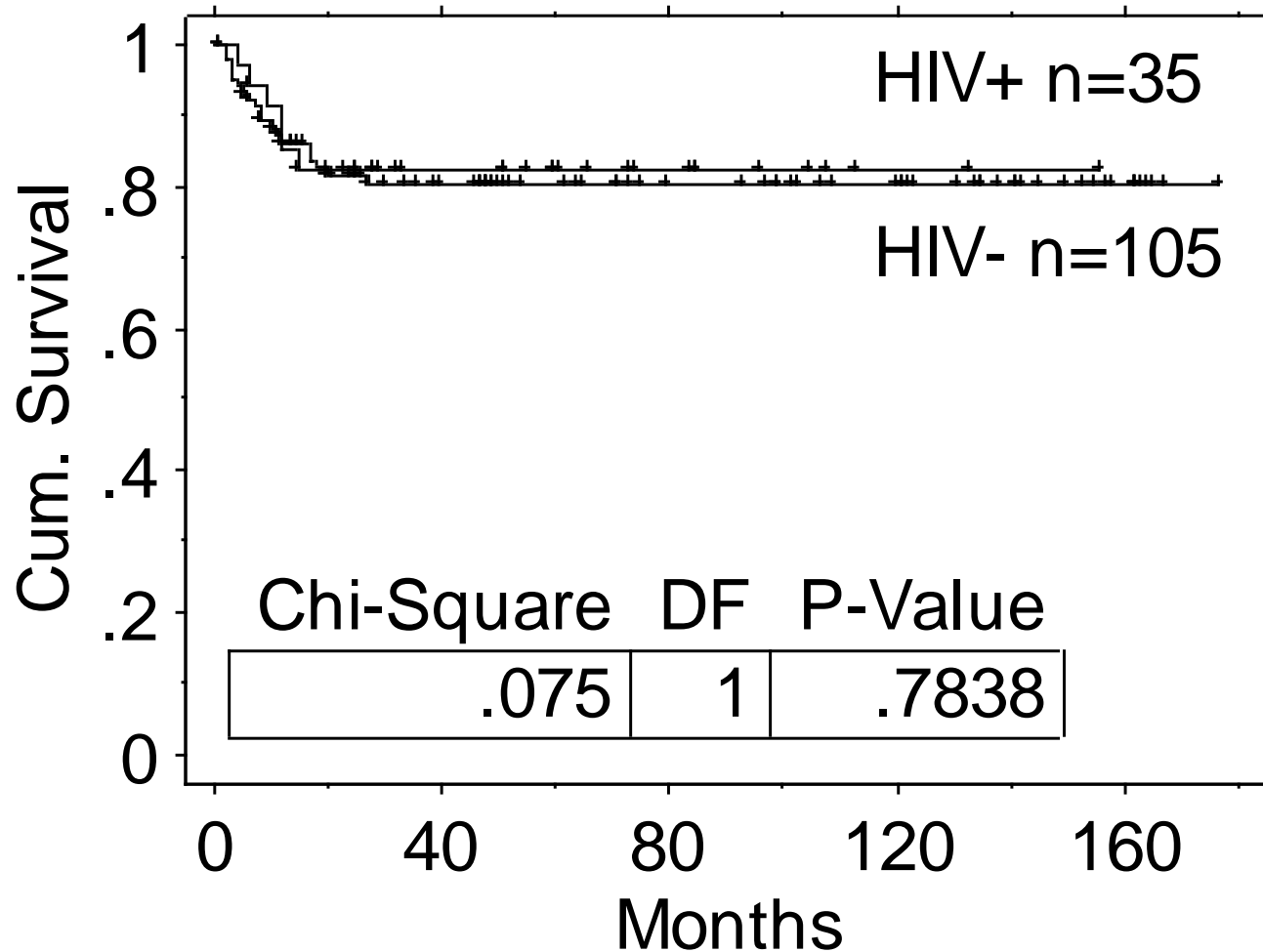


Powles T, Bower M, Daugaard G, Shamash J, De Ruiter A, Johnson M, Fisher M,

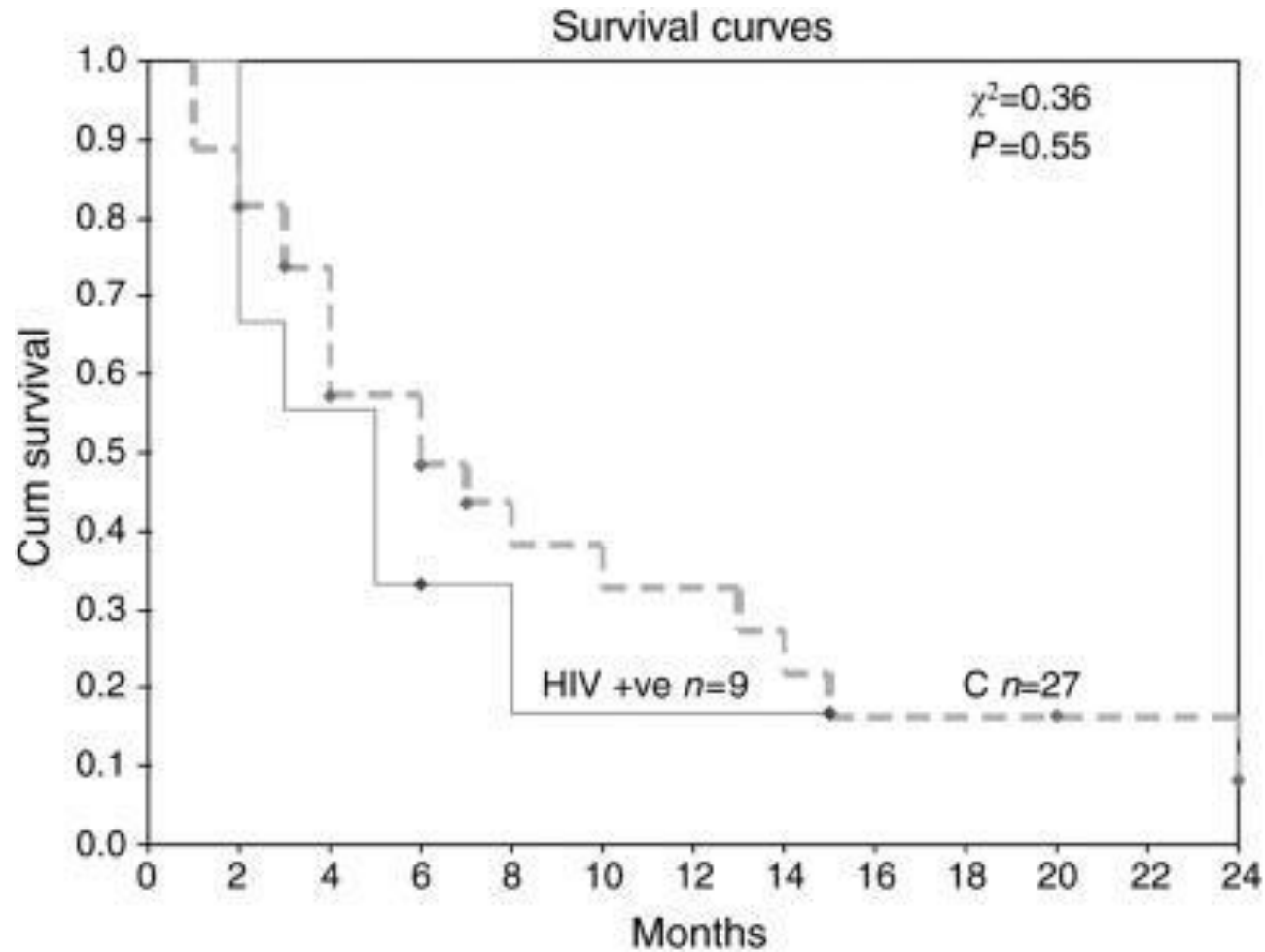
Anderson J, Mandalia S, Stebbing J, Nelson M, Gazzard B, Oliver T.

J Clin Oncol. 2003;21(10):1922-7

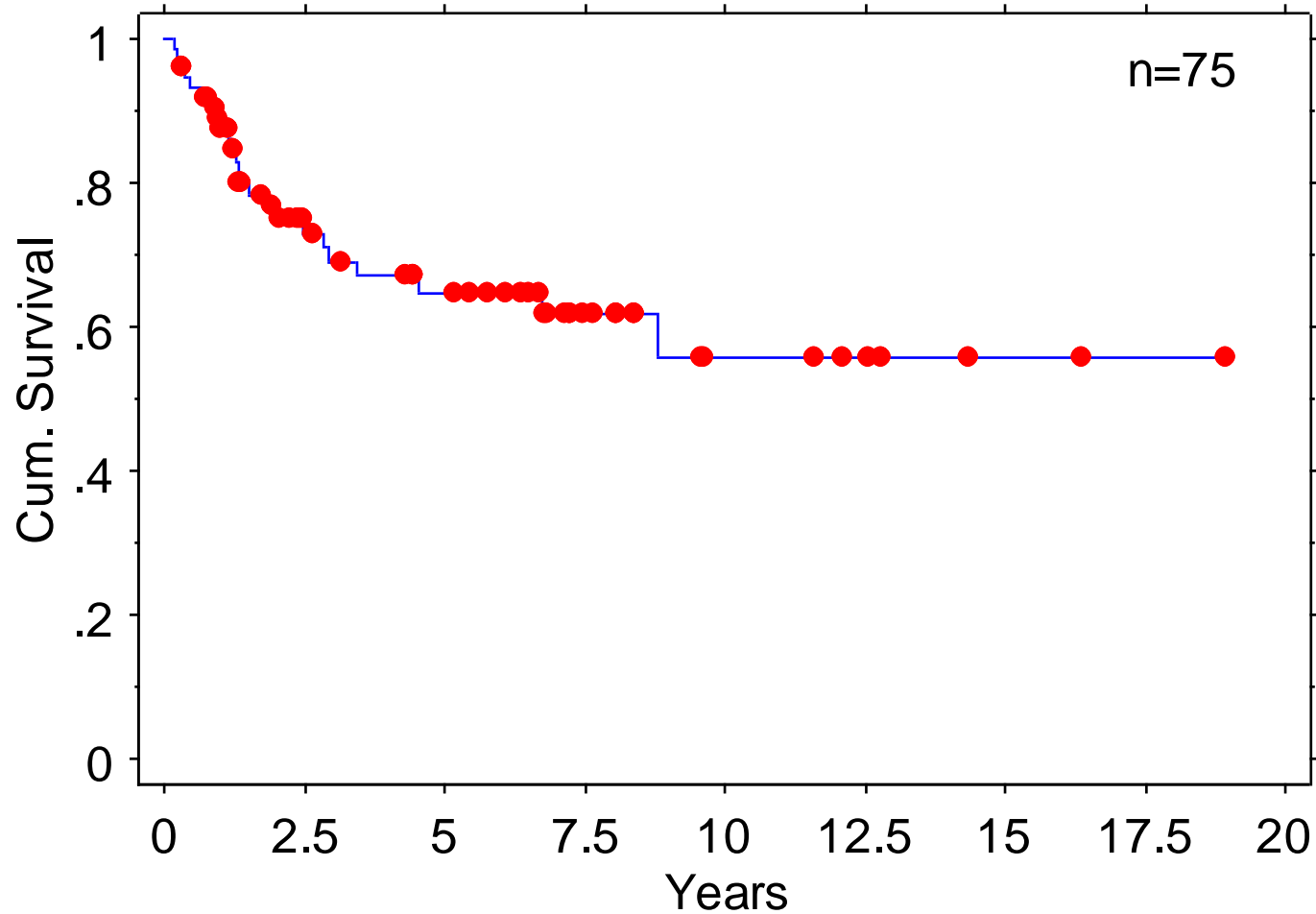
Testicular cancer free survival



Lung cancer



Overall survival HIV+ anal cancer



	HIV+ (CWH)	CRUK
5 year survival	65% (59-71%)	60% (male)

25 years of progress.... now it's your turn

Similar treatment gets similar results

New BHIVA (NICE approved) guidelines for 2013

Insist that the oncologist treats your patients properly

Screening for cervical & liver cancer...ensure access to national screening programmes for others (breast, colon)

