Breast Cancer Care & Research

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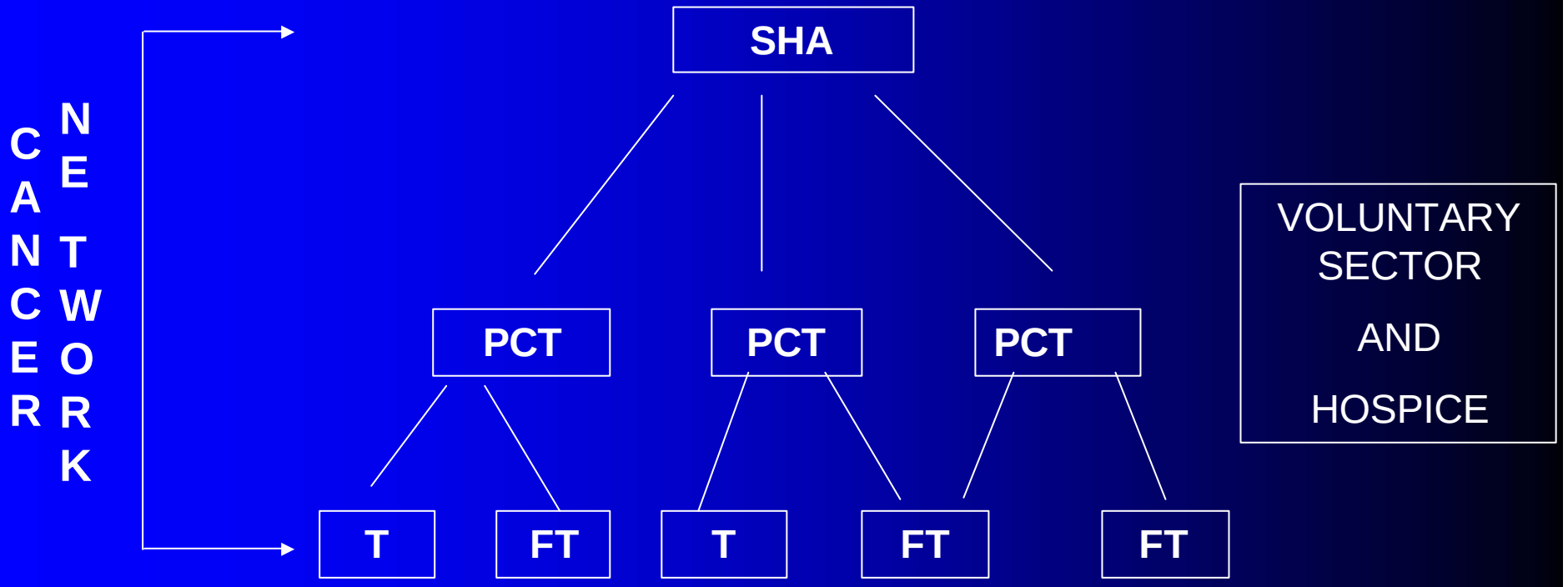
Breast Cancer (BC)

- 15,000 BC deaths in the UK each year
- 20% female cancer deaths
- 5% all female deaths
- 89% BC deaths occur in women >50yrs

Structure of Cancer Care in UK



SHA = Strategic Health Authority
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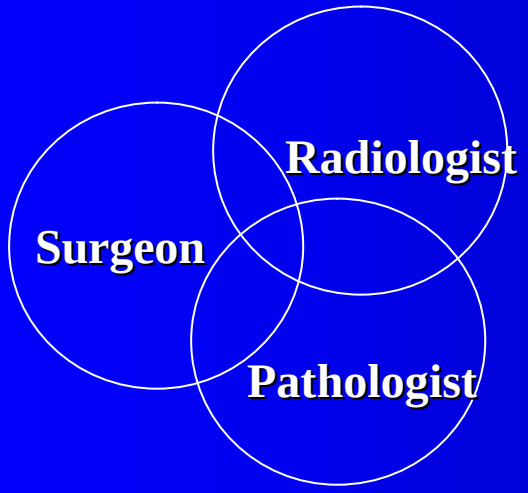
Trusts & Foundation Trusts - Breast Units

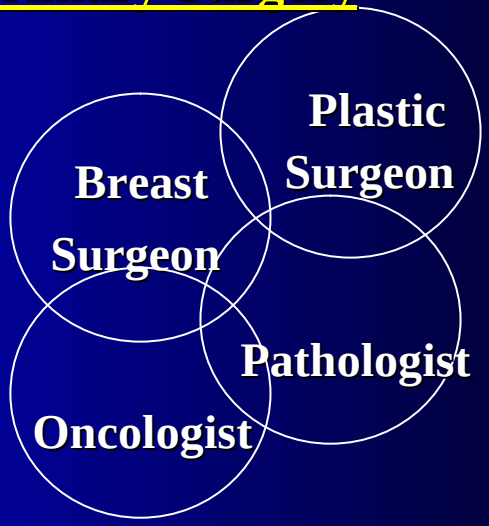
- Integrated Breast Service
  - Specialist Teams
    - Breast Surgeons
    - Radiologists
    - Pathologists
    - Plastic Surgeons
    - Oncologists
    - Orthopaedic Surgeons
    - BCN
    - Nurse Practitioners
    - Paramedical Specialities (eg physiotherapist)
  - Specialist Facilities
  - Education & Training
  - Control of Budget

Breast Units - Integrated Service
Core Medical Members

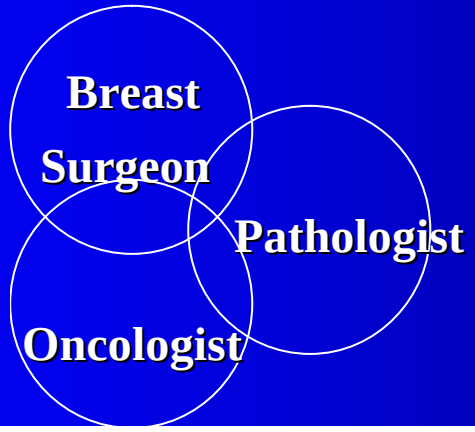
Diagnosis



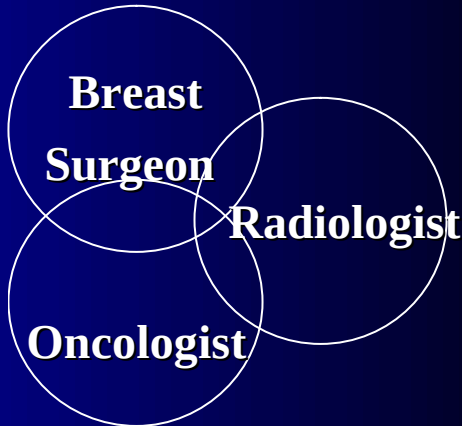
Primary Surgery



Adjuvant Therapy



Advanced Breast Cancer

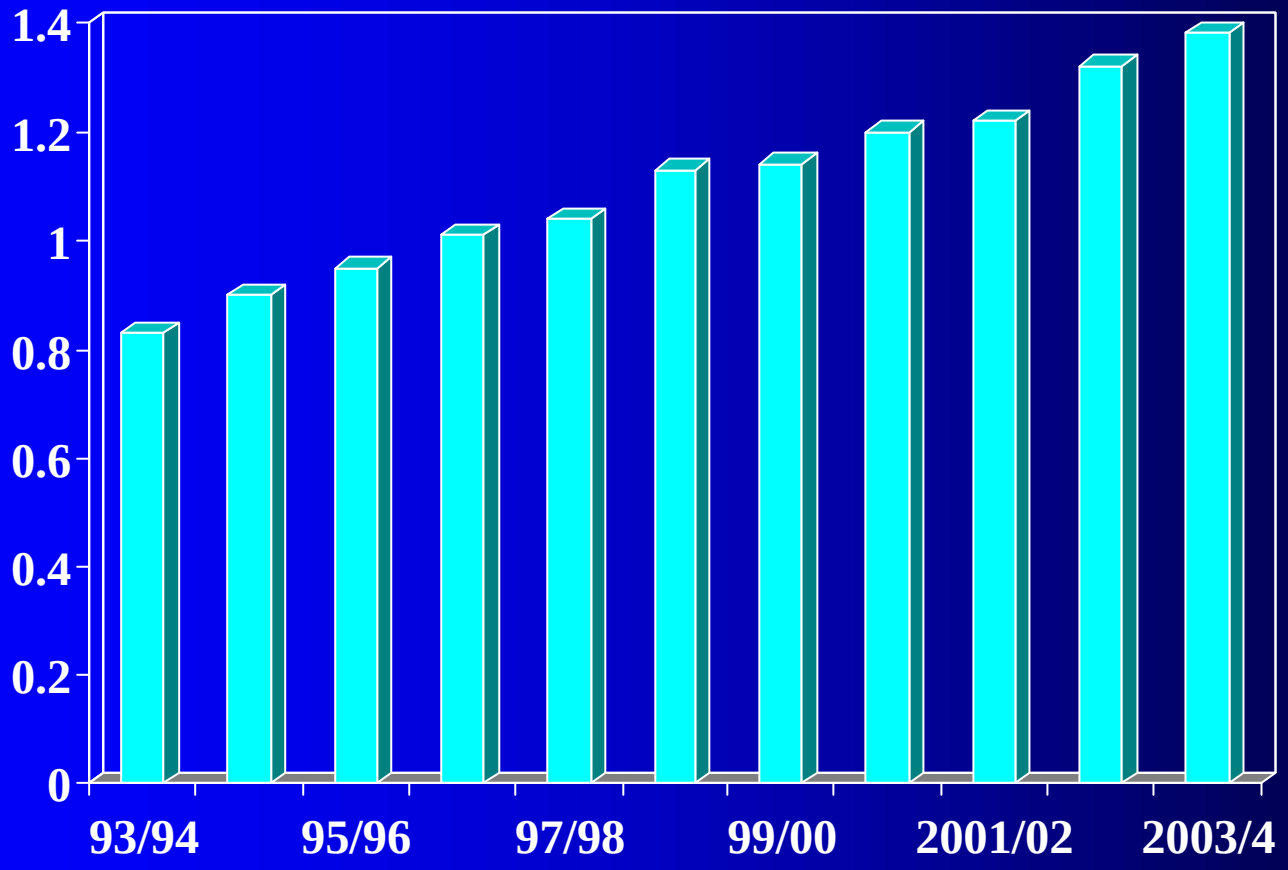


Current Screening Programme

- 3 yearly screening for women aged 50-69
- Two views at all screens
- Single Reading

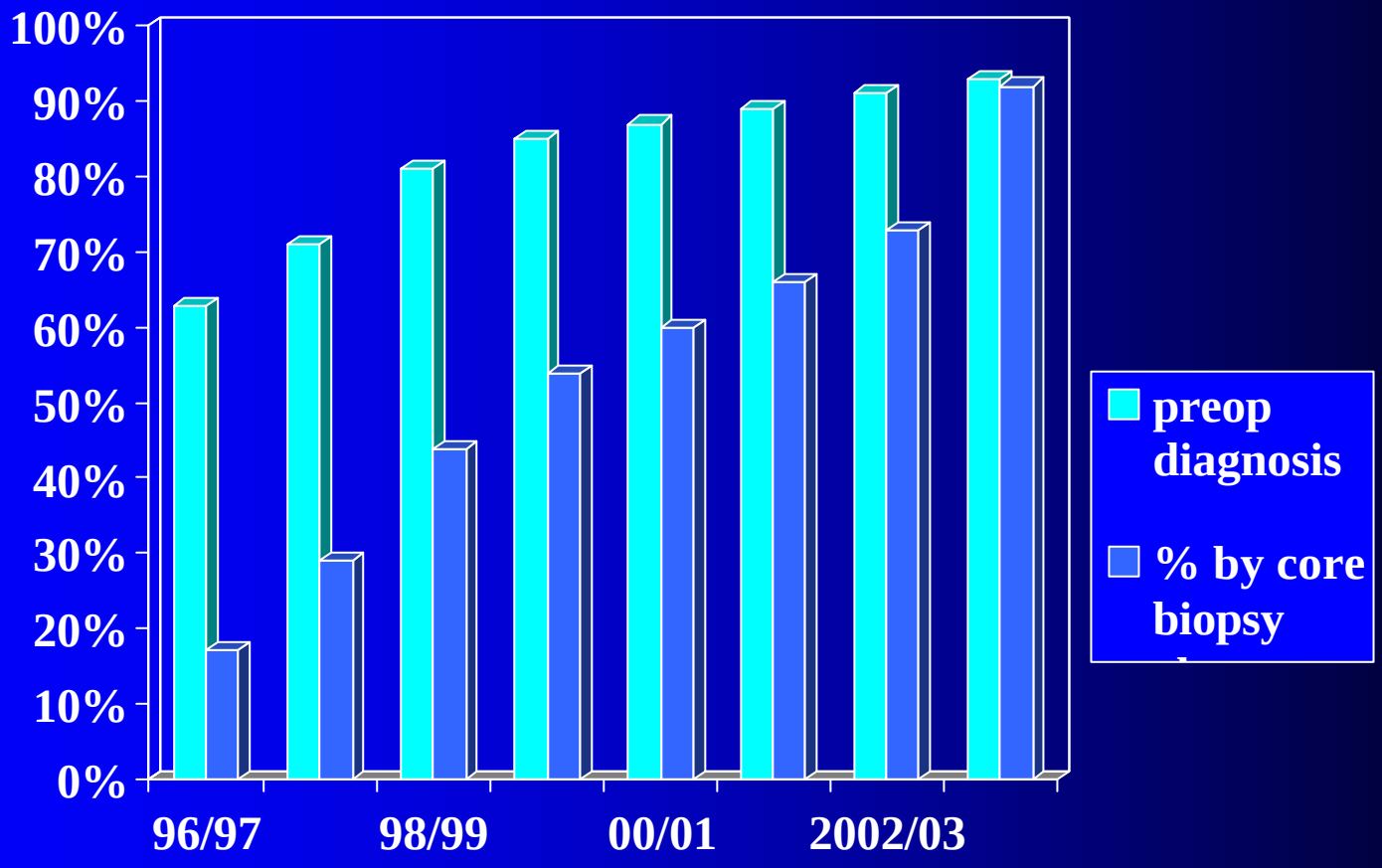
Has screening quality improved in the UK?

SDR's all screens NHSBSP



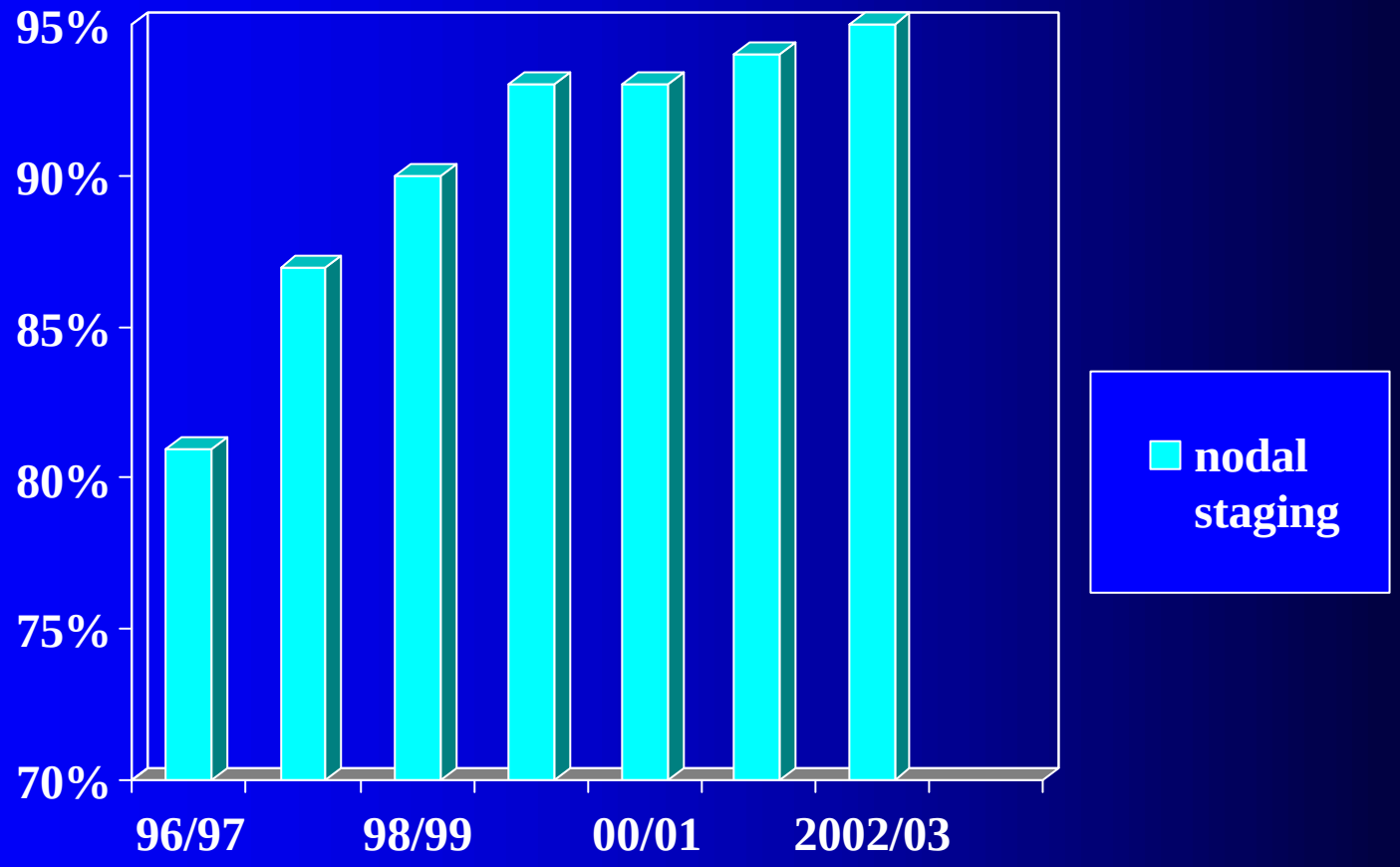
Has screening quality improved in the UK?

Preoperative diagnosis in NHSBSP



Has screening quality improved in the UK?

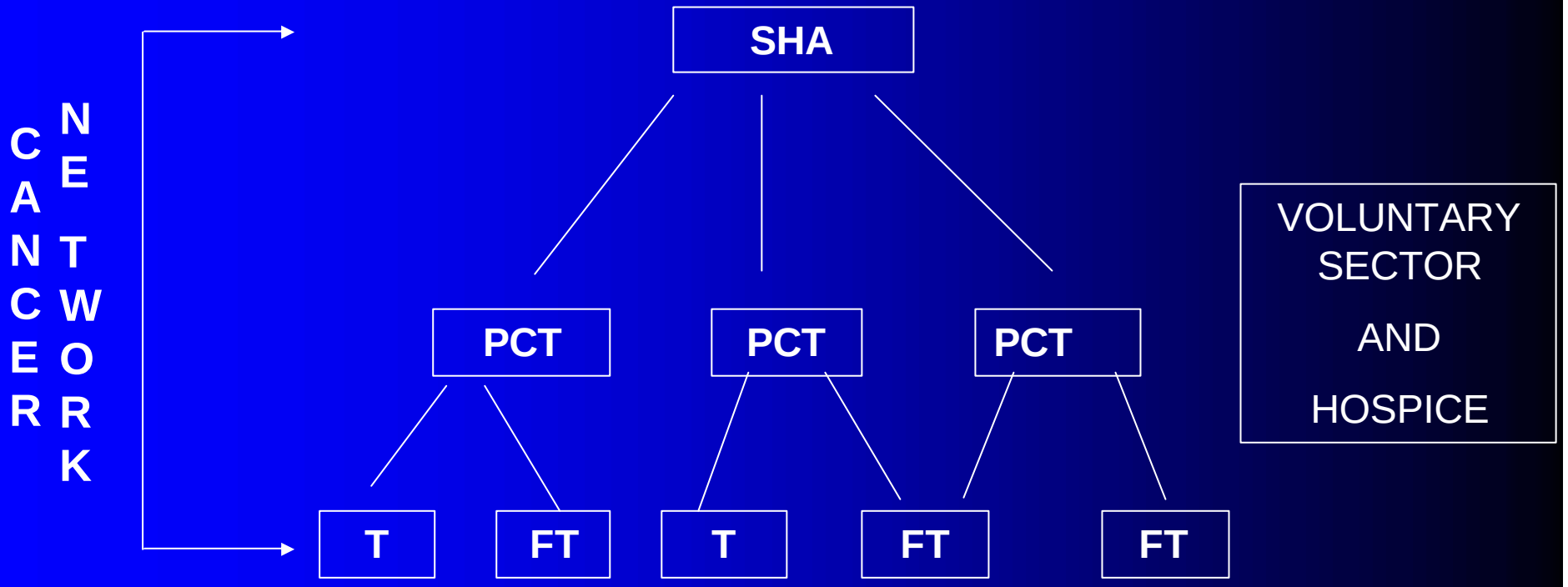
Nodal staging of invasive cancer in NHSBSP



Diagnosis

- Screening highlighted relative lack of resources for women presenting with a symptom (eg nipple discharge, lump)
- Screening has improved overall diagnostic facilities – both screening & symptomatic

Structure of Cancer Care in UK



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ISSUES

- PCTs have multiple & competing priorities
- Commissioners/PCTs have a finite resource and many NSFs to fund
- Trusts have multiple & competing performance targets
- Networks have other priorities within Cancer

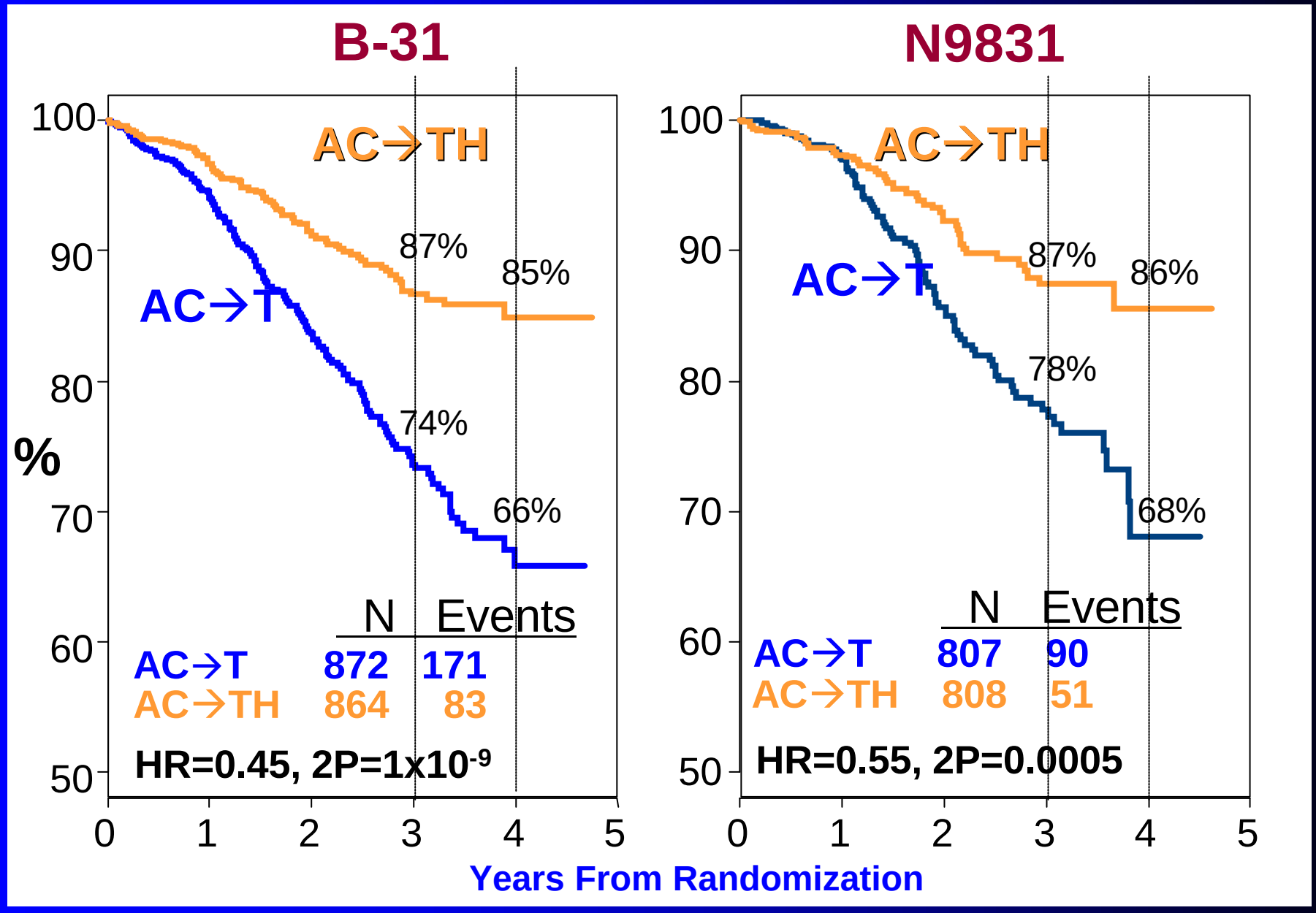
Structural Issues with 'The System'

- Idea of fixed health care budget – economically prudent or economically flawed ?
  - Cost control mechanism – all within 'the box'
  - Health Care funding is now a political agenda
  - UK is a wealthy country
- Implies that the cost of health care can be known before it happens
- Sets clinicans against each other for resources
  - Cardiovascular Vs Cancer
  - Lung Cancer Vs Breast Cancer

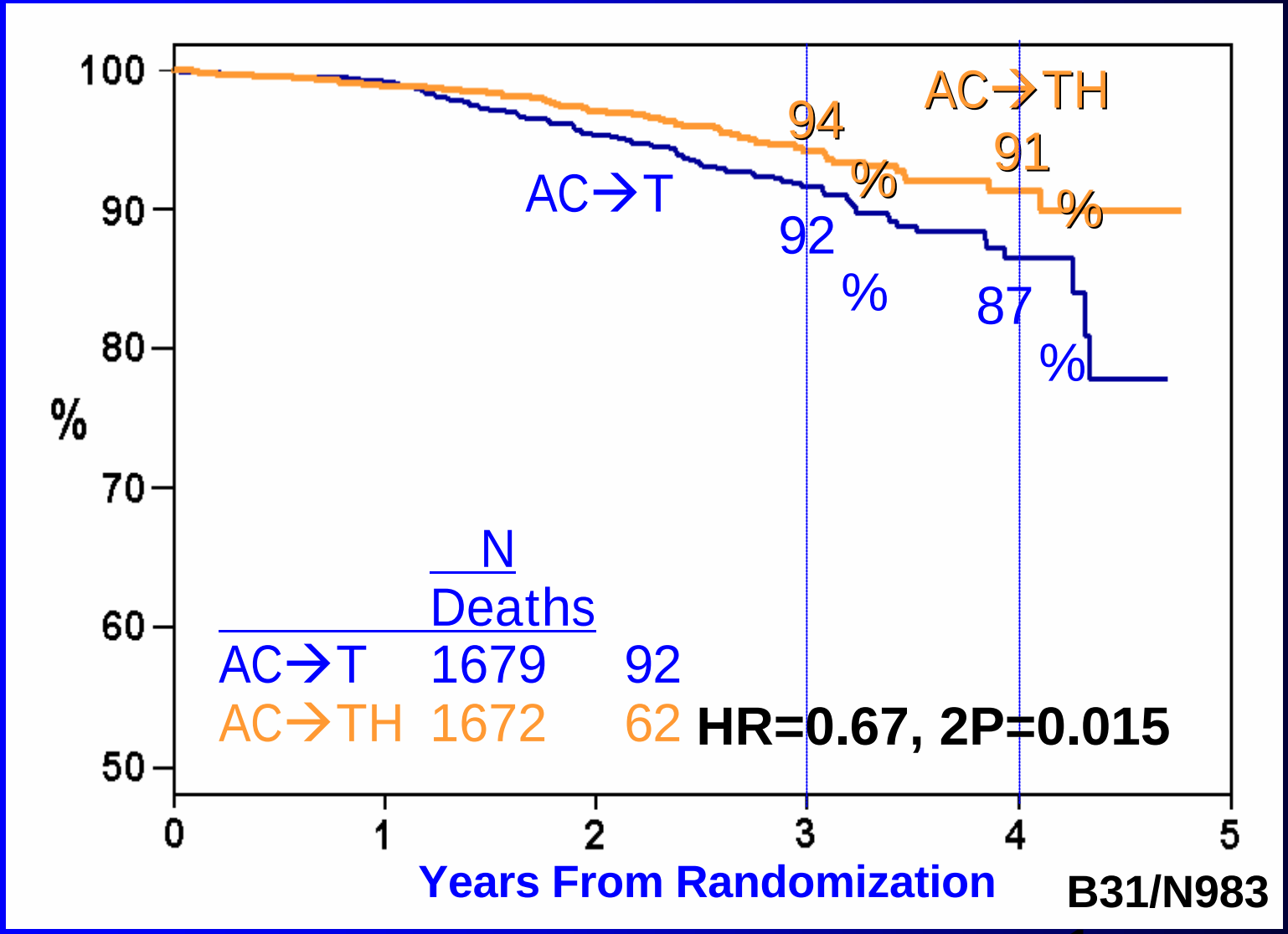
Structural Issues with 'The System'

- More negative control mechanisms within 'the health care box'
  - Bureaucracy to get anything changed – endless committees
  - Focus on process rather than outcomes – eg governance, audit
- Spending on non-front-line staff (eg governance, audit) rather than treatment (eg new drugs)
- New drugs have often to be found from cost savings
- Funding one drug for breast cancer may mean cannot fund another drug for another cancer
- NICE approval

Adjuvant Herceptin- Disease-Free Survival



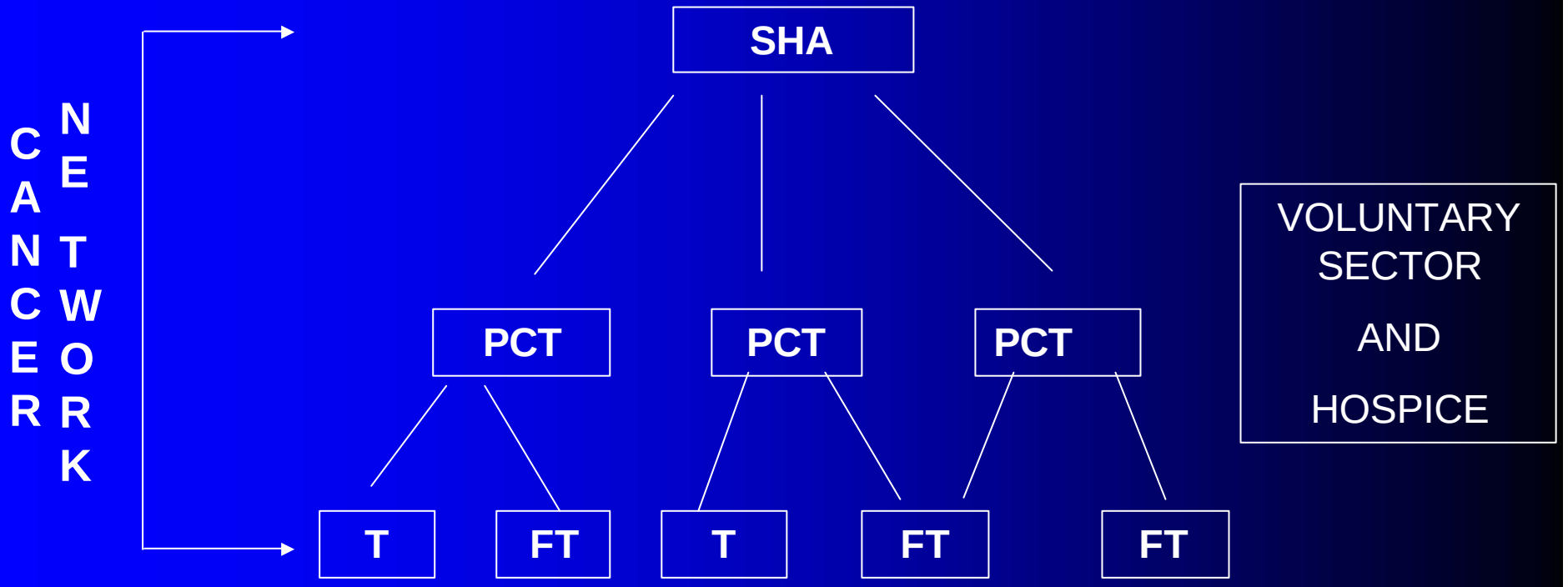
B-31/N9831 Survival



Process for funding New Drugs

- Development of a business case/proposal
- Business case to Network Drugs and Therapeutics committee
- Recommendation to commissioners
- PCT process for agreeing priorities and identification of funding
- Authorisation/Endorsement/Implementation
- Audit of Compliance

Structure of Cancer Care in UK



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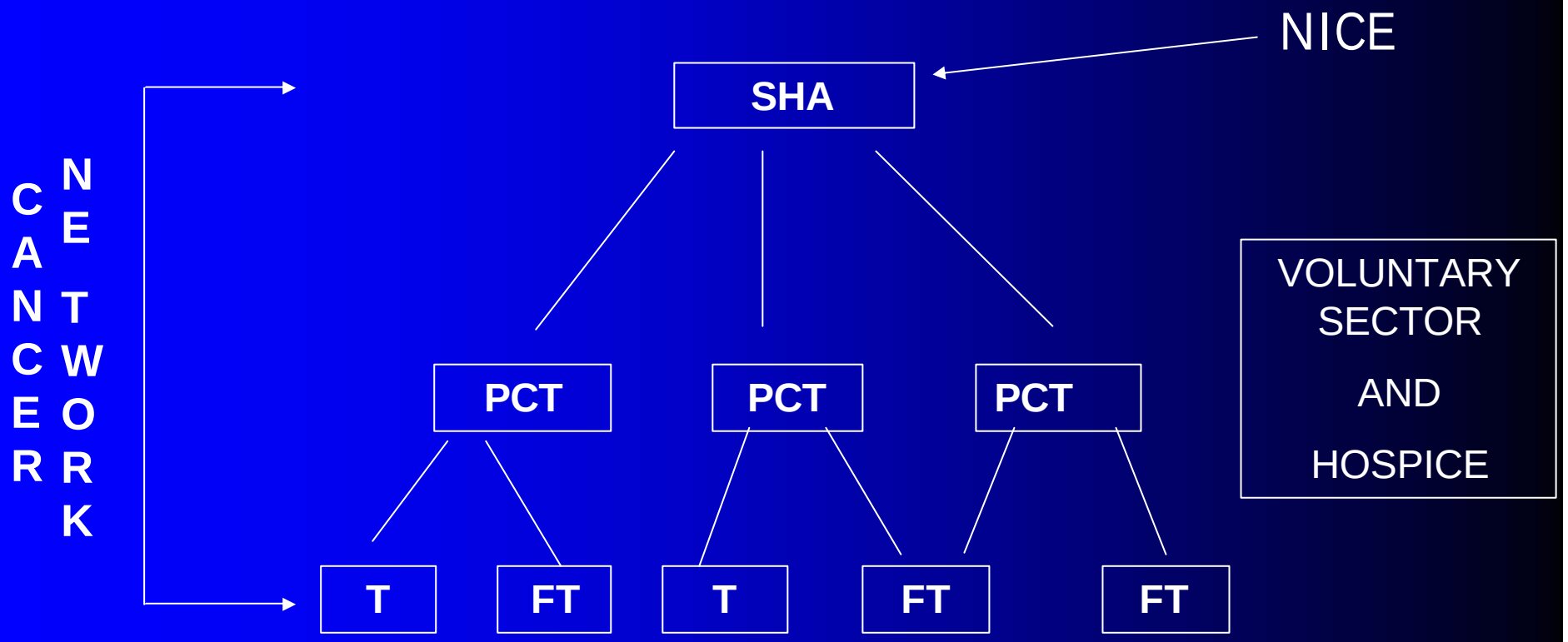

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Breast Cancer Care in UK 2005

- Performance driven
  - Process rather than outcomes
- Target driven
  - Time (eg “2 week wait”) & cost
- Health expenditure on breast cancer has to be justified against other diseases
- Processes to control spending on new drugs of developments

Main Research Themes

- Screening & Early Diagnosis
- Prognostic and Predictive Factors
- Blood Tumour Markers
  - Autoimmunity–Screening & Early Detection
  - Antigens–Diagnosis & Monitoring of MBC
- Therapeutics
  - Endocrine & Growth Factor Therapies
  - Chemotherapy
- Pharmacogenomics

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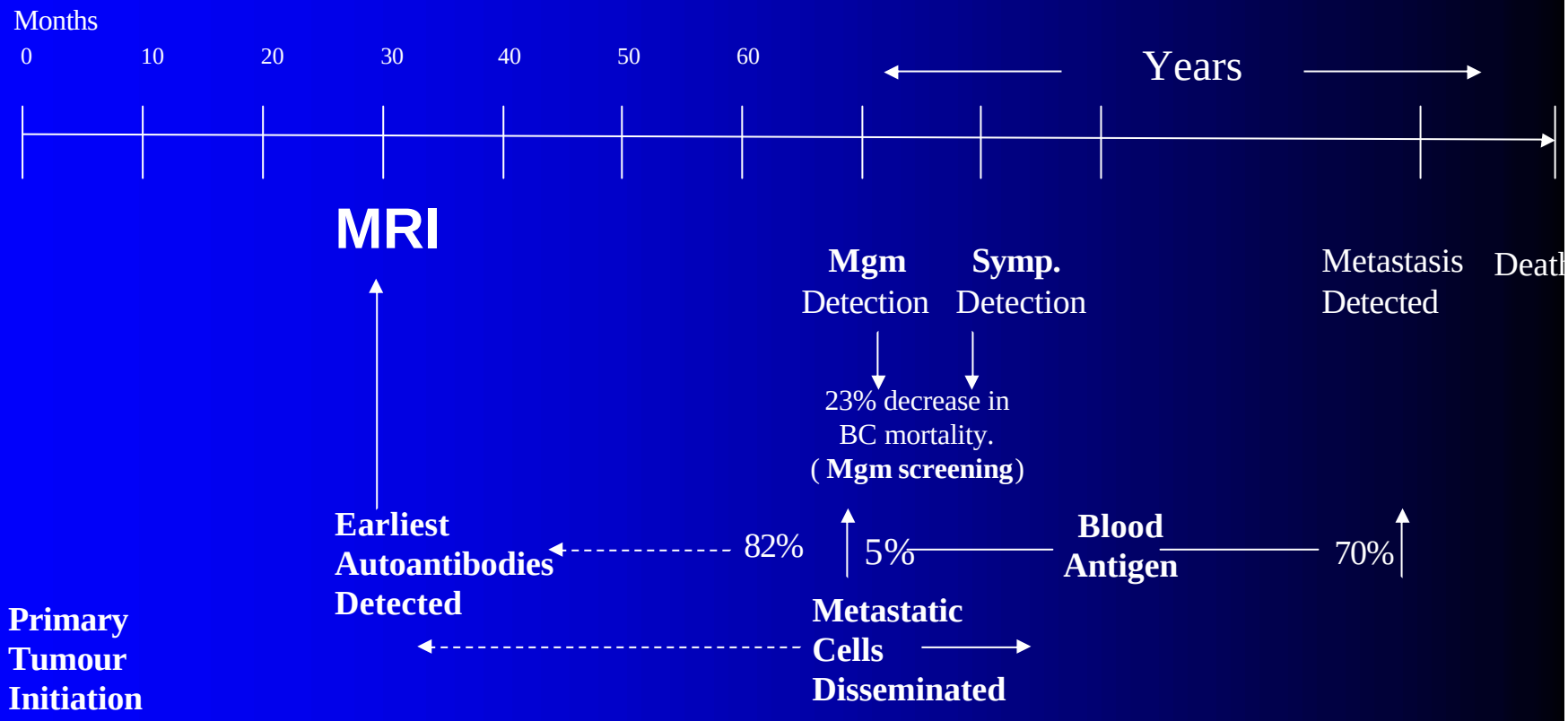
The average breast cancer time line



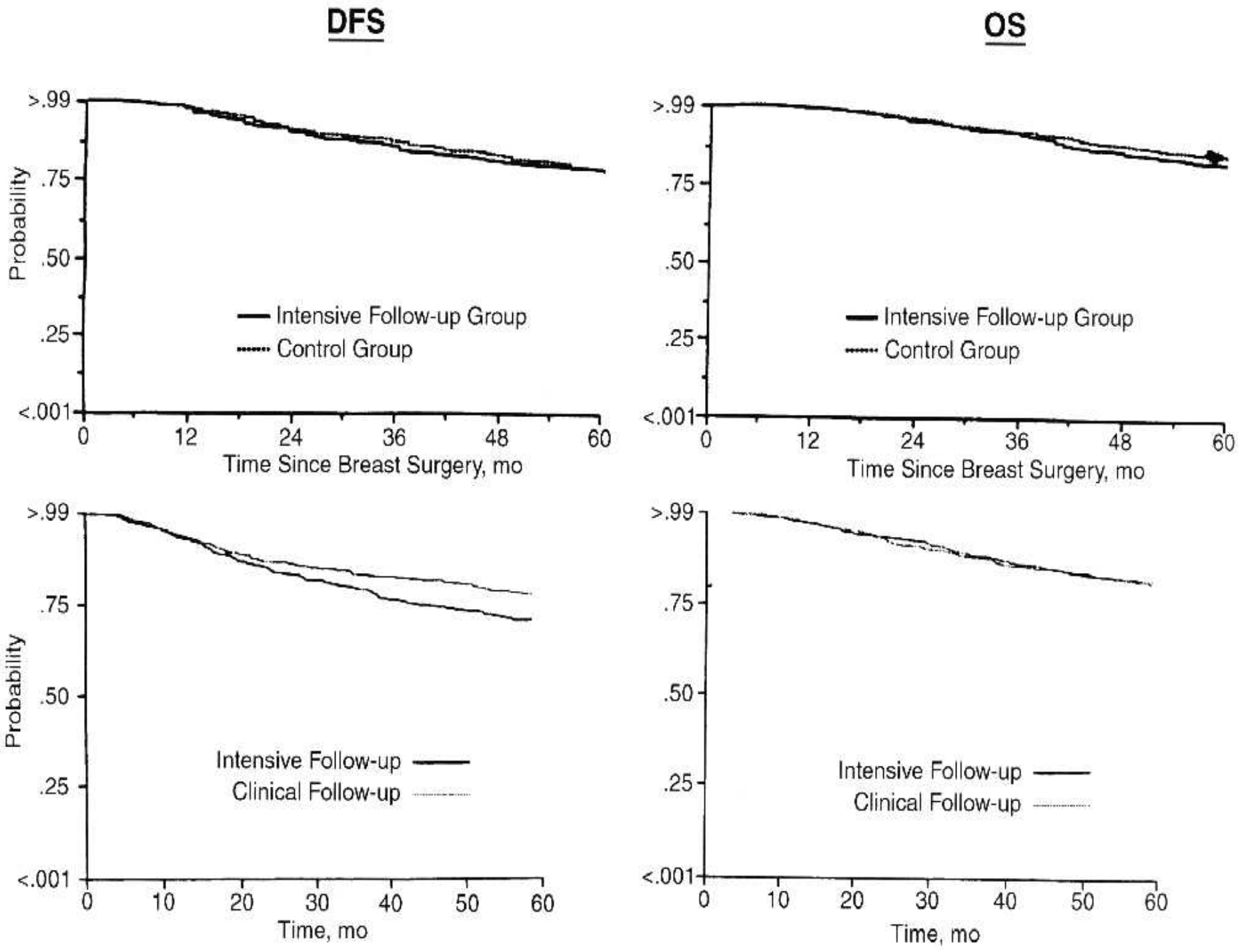
“Intensive” Vs Routine Follow-up

- N = 1320
- < 70 yrs
- **BS & US - annual**
- **CXR - 6/12ly**
- Compliance - 80%
- MFI - NS
- Survival - NS

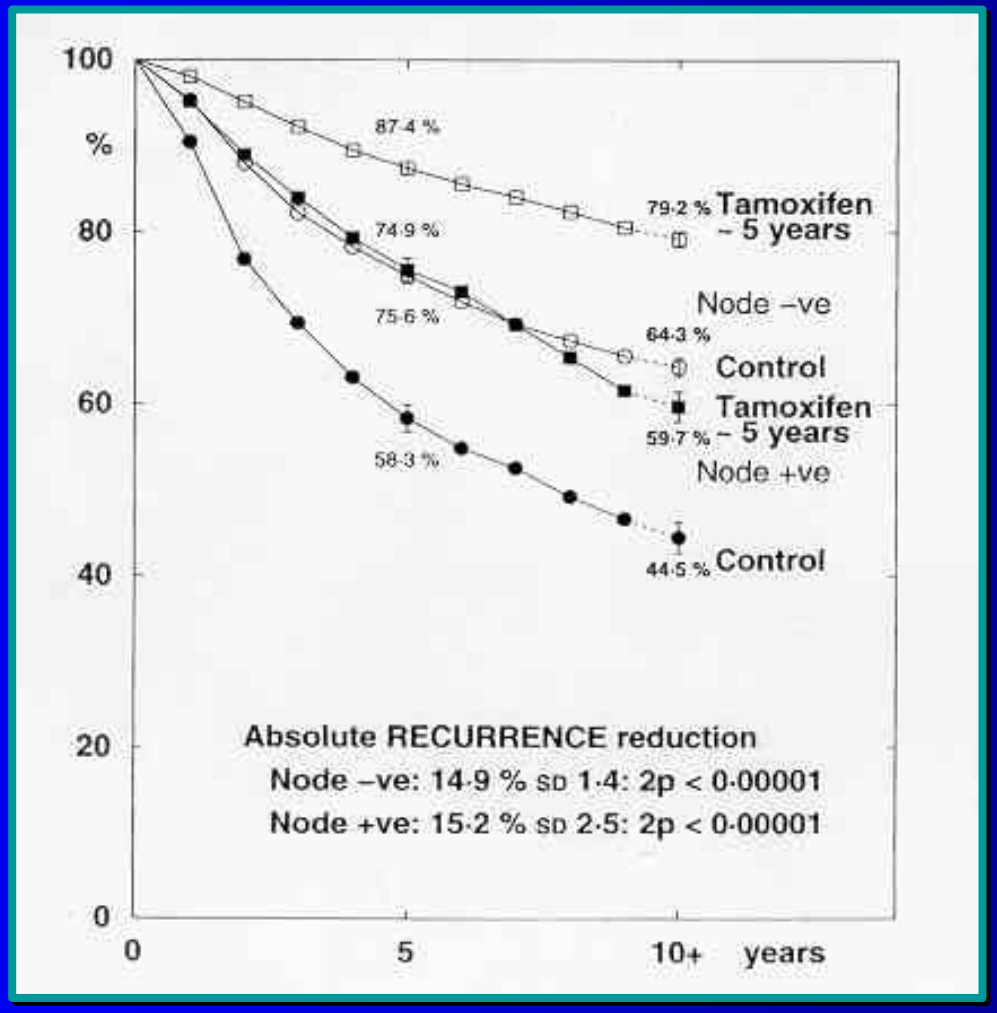
GIVIO Trial, 1994

- N = 1243
- < 70 yrs
- **BS & CXR - 6/12ly**
- **US - None**
- Compliance 75%-80%
- DFI - $p<0.05$
- Survival - NS

Del Turco et al, 1994

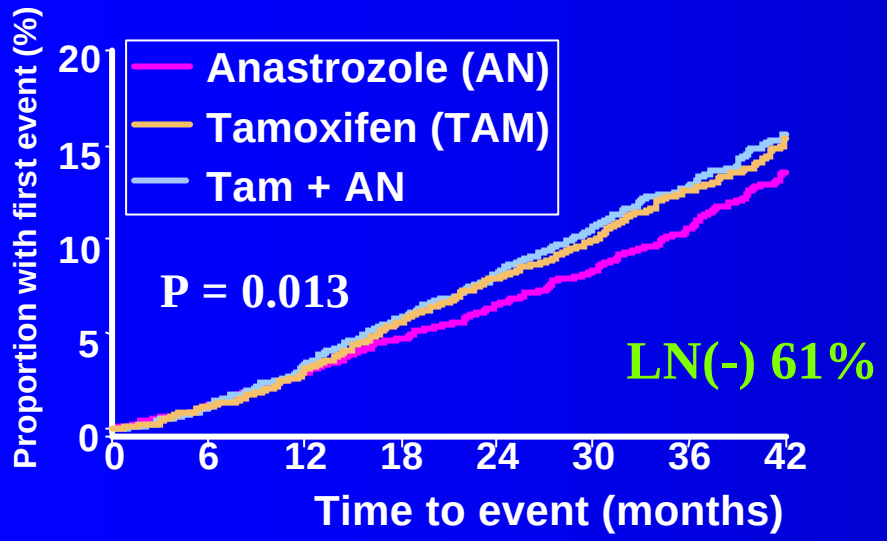

DFS
OS
>.99
.75
.50
.25
<.001
Probability
Intensive Follow-up Group
Control Group
0
12
24
36
48
60
Time Since Breast Surgery, mo
Intensive Follow-up
Clinical Follow-up
10
20
30
40
50
Time, mo

Absolute Reduction in Recurrence During the First 10 Years After Treatment with Tamoxifen for 5 Years

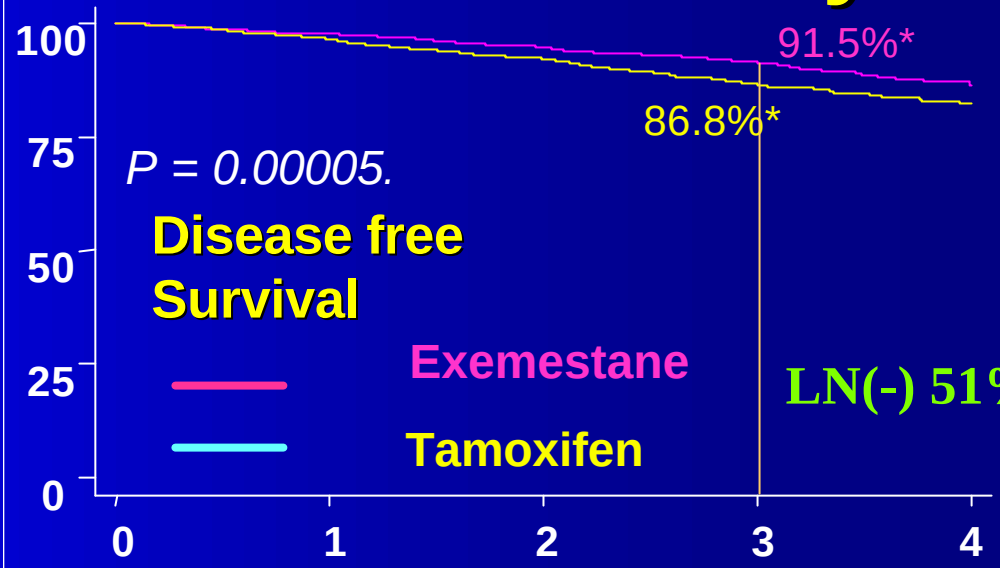


EBCTCG, Lancet 1998; 351:1451-1467.

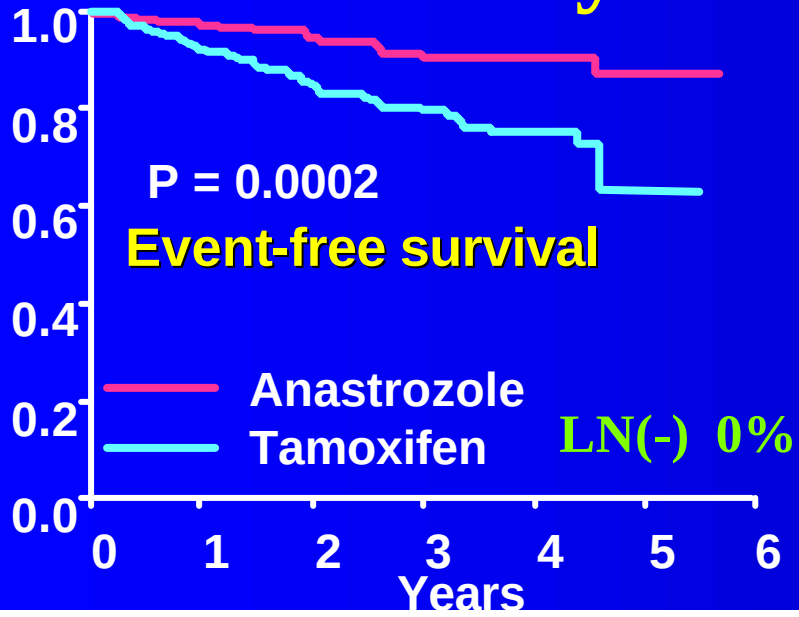
ATAC study



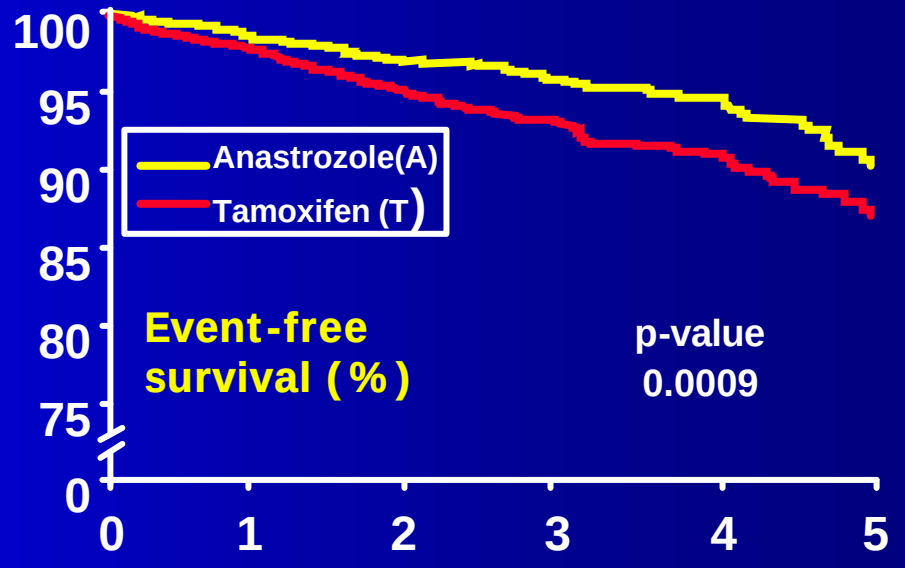
IES 031 study



ITA study



ABCSG 8 / ARNO 95



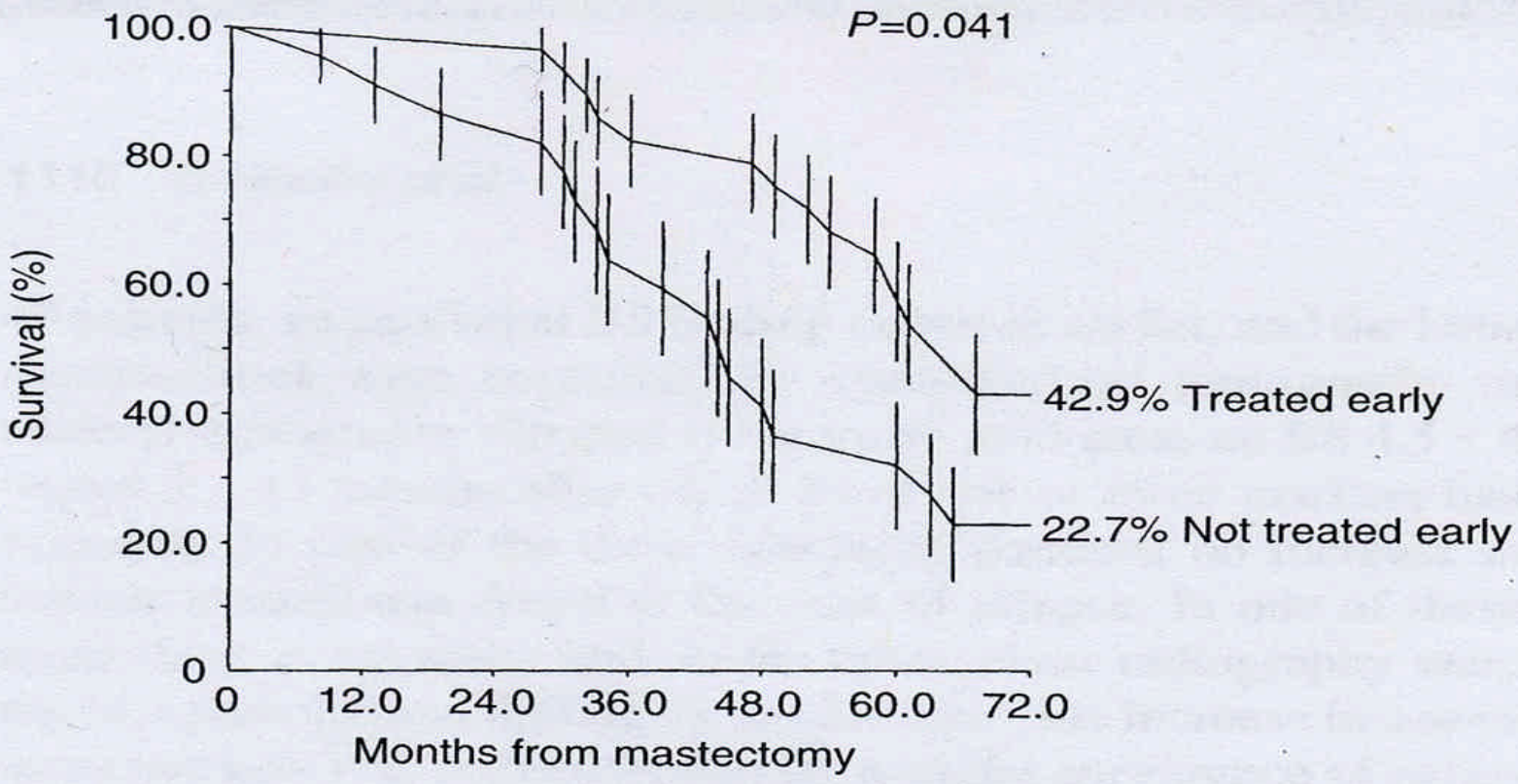


Figure 1 Survivals from mastectomy in 28 patients treated 'early' (group a + b) and in 22 patients not treated 'early' (group c)

Antigen Research Studies

- Biological/molecular studies –to characterise the antigens
- Early Diagnosis of Recurrence – 5 yrs sequential collection of sera
- Early Intervention study – pilot study
- UK study of standard FU Vs Early Intervention with TMs