

LONDON  
SCHOOL of  
HYGIENE  
& TROPICAL  
MEDICINE



LSHTM Research Online

Woods, LM; Rachet, B; O'Connell, D; Coleman, MP; (2008) Large differences in breast cancer survival between Australia and England: a comparative study using cancer registry data (oral presentation). [Conference or Workshop Item] <https://researchonline.lshtm.ac.uk/id/eprint/2121491>

Downloaded from: <http://researchonline.lshtm.ac.uk/2121491/>

DOI:

**Usage Guidelines:**

Please refer to usage guidelines at <https://researchonline.lshtm.ac.uk/policies.html> or alternatively contact [researchonline@lshtm.ac.uk](mailto:researchonline@lshtm.ac.uk).

Available under license: Copyright the author(s)

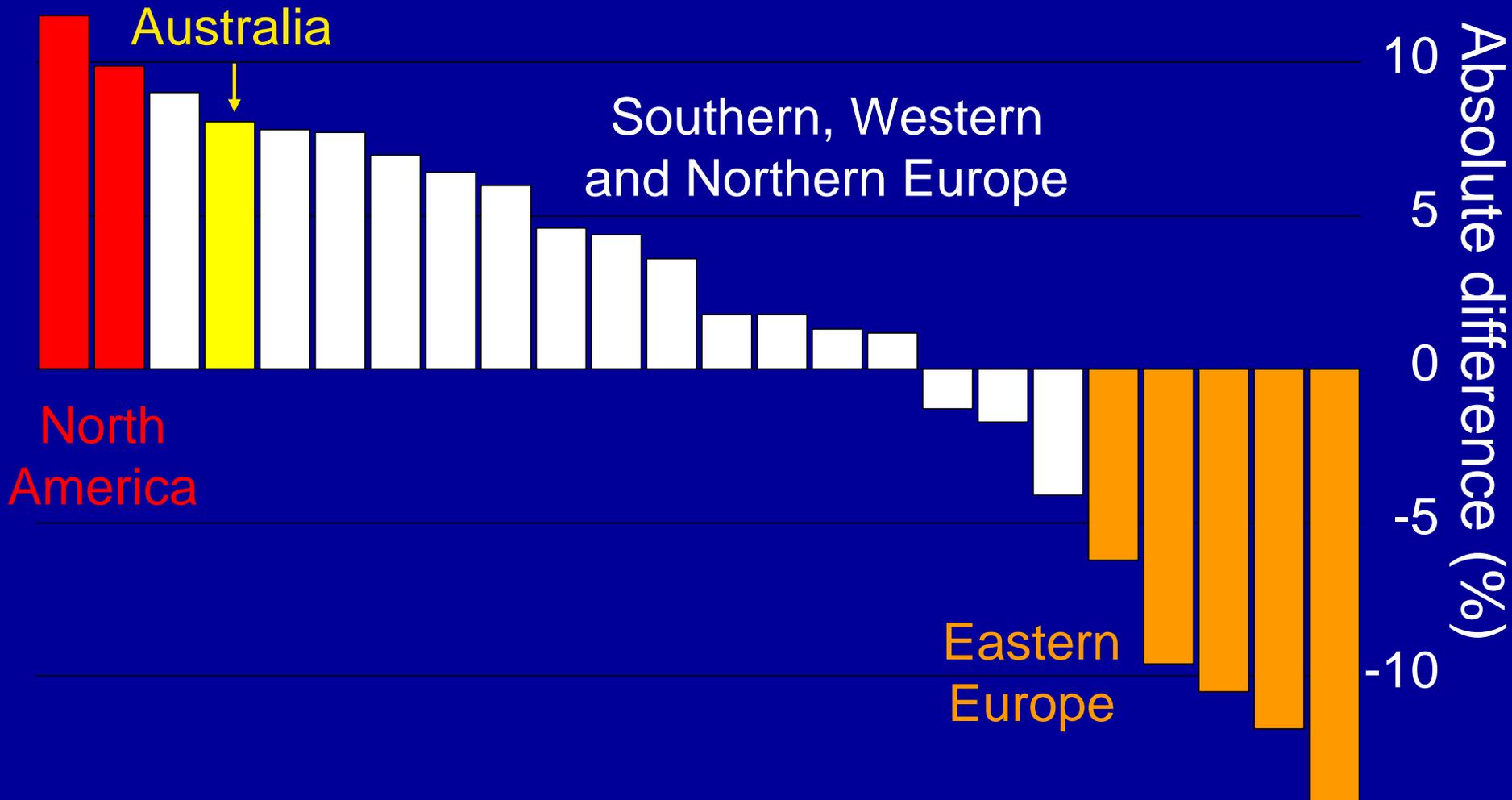
<https://researchonline.lshtm.ac.uk>

# **Large differences in breast cancer survival between Australia and England**

a comparative study using  
cancer registry data

UICC Conference, Geneva, 28<sup>th</sup> August 2008

# International differences in five-year survival compared to England and Wales (baseline)



# Material

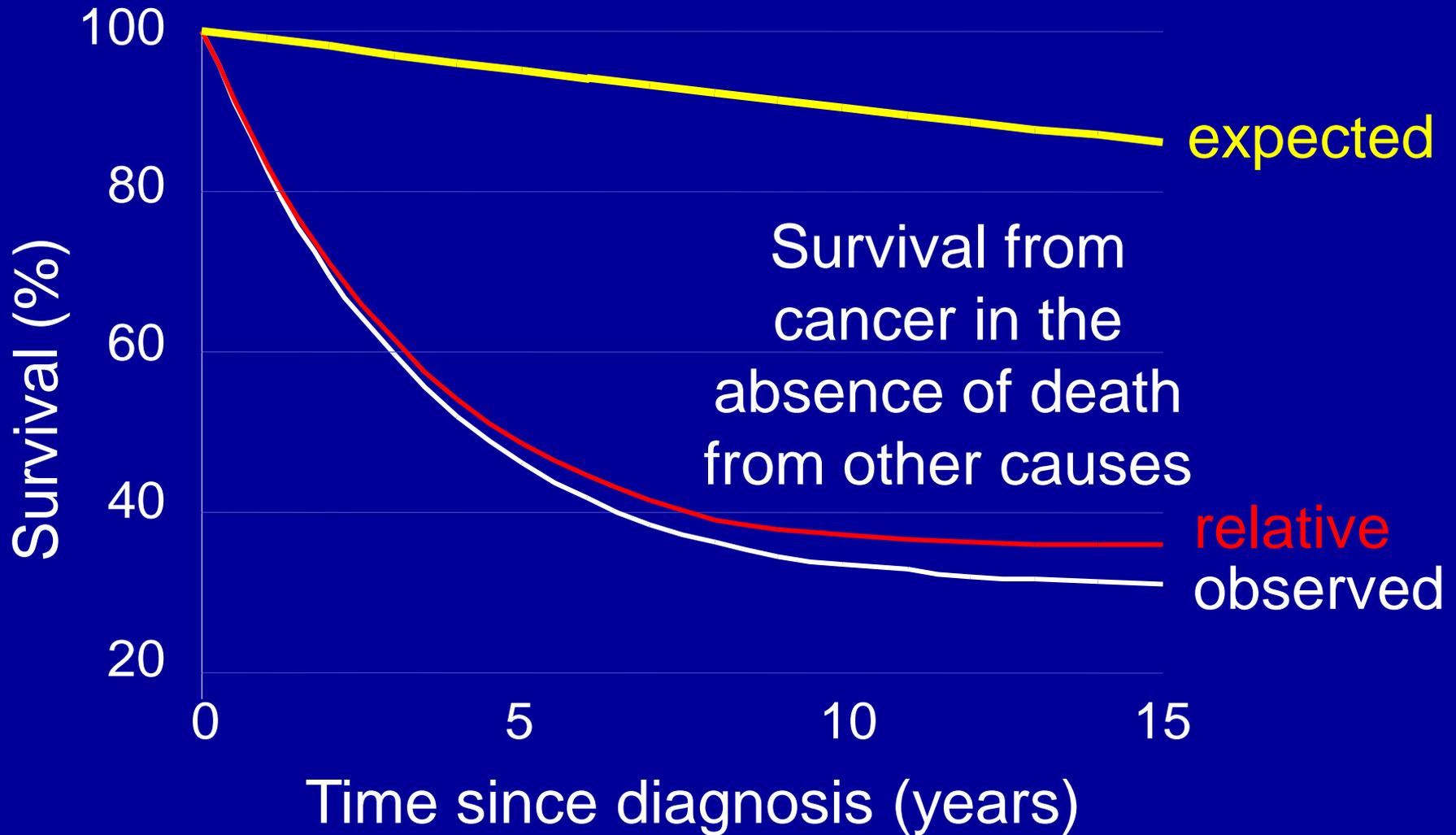
- **Cancer registry data**
  - **Women aged 15-99 diagnosed with breast cancer**
  - **Australia and England (1990-1994)**
  - **New South Wales and West Midlands (1980-2002)**
    - **Patient demographics, tumour characteristics**
    - **Ecological deprivation scores (unemployment)**
- **Life tables: 1991, 2001**

# Methods

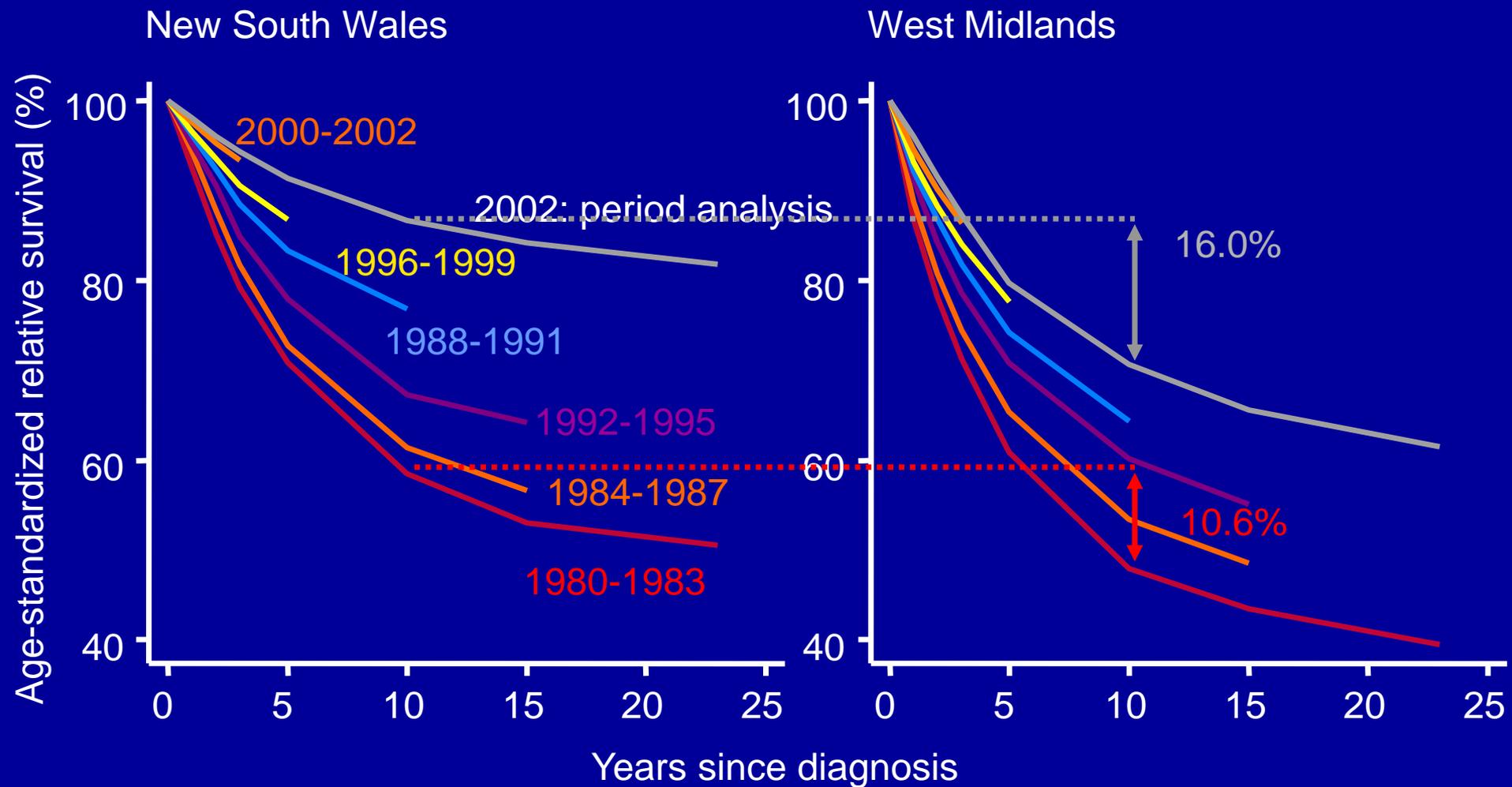
## Relative survival

- Probabilities
- Excess hazard ratio

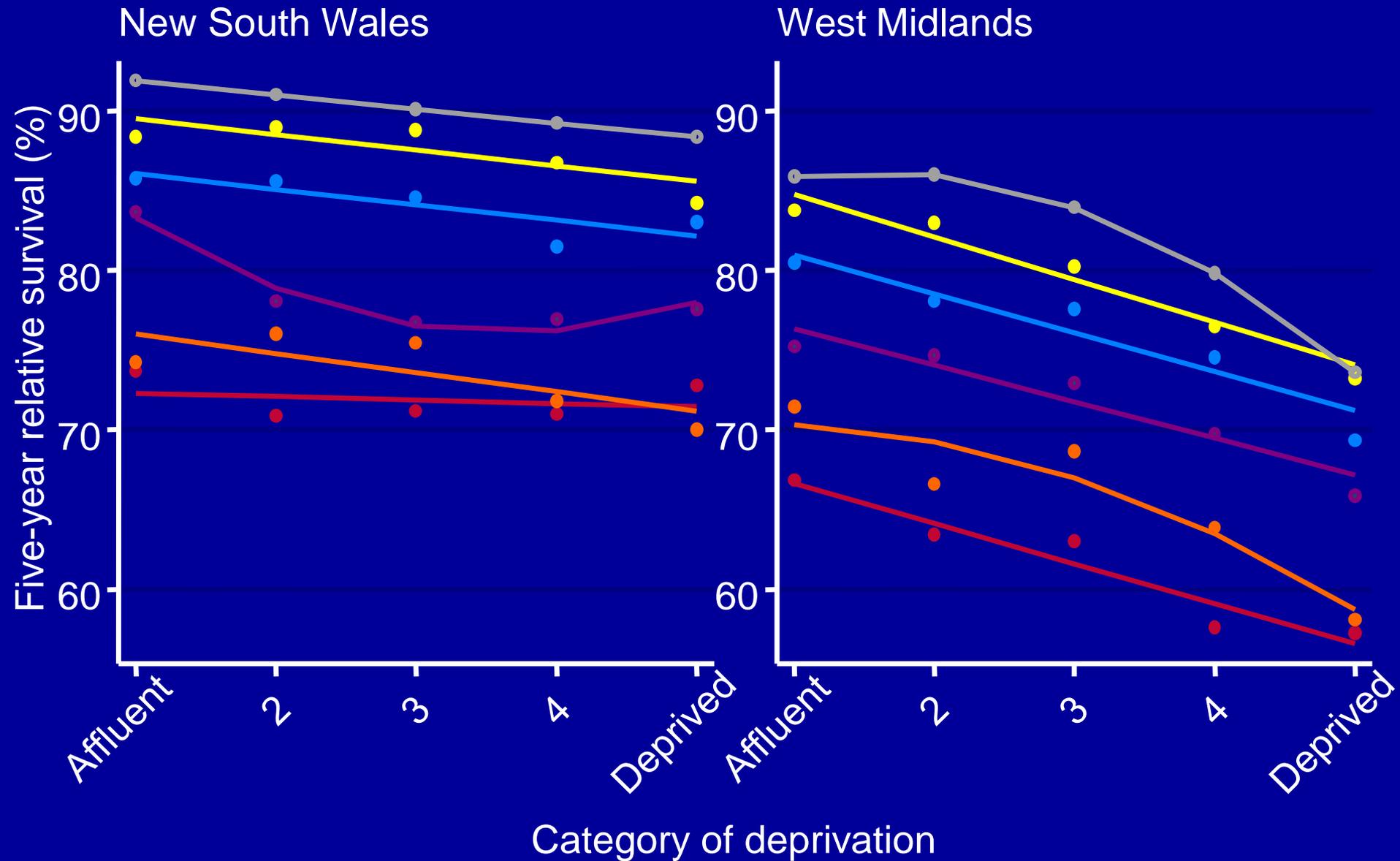
# Methods



# Results



# Results



# Results - patterns

- **Survival higher in New South Wales and Australia**
- **Deprivation 'gap' wider in West Midlands**
- **Survival much lower among elderly in West Midlands than New South Wales**
- **Extent-specific differences greater in New South Wales**

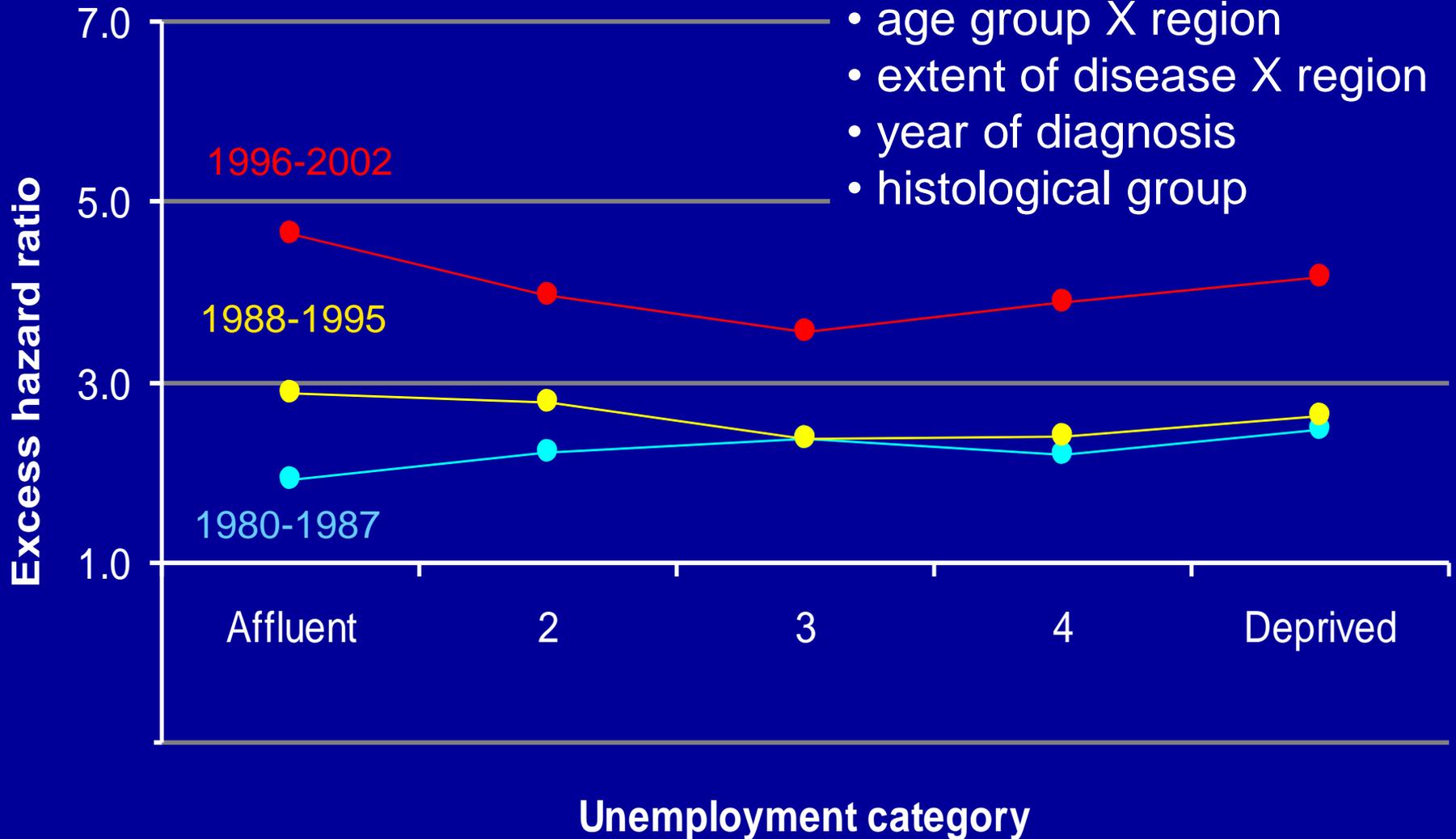
# Results - explanations

- **International & socio-economic differences not fully explained by extent of disease**
- **No effect of age or histology**
- **Not explained by deprivation**

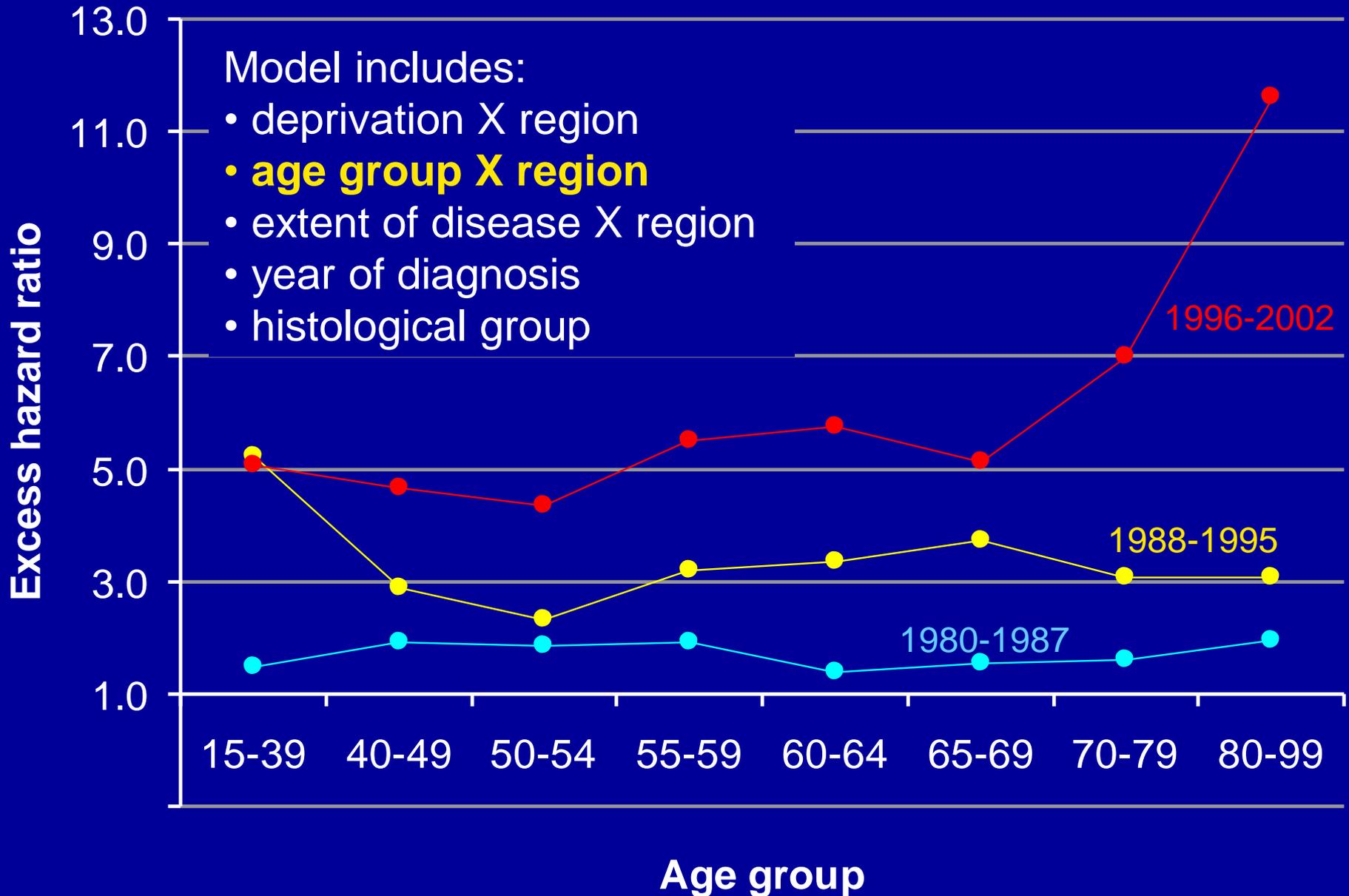
# Up to one year after diagnosis

Model includes:

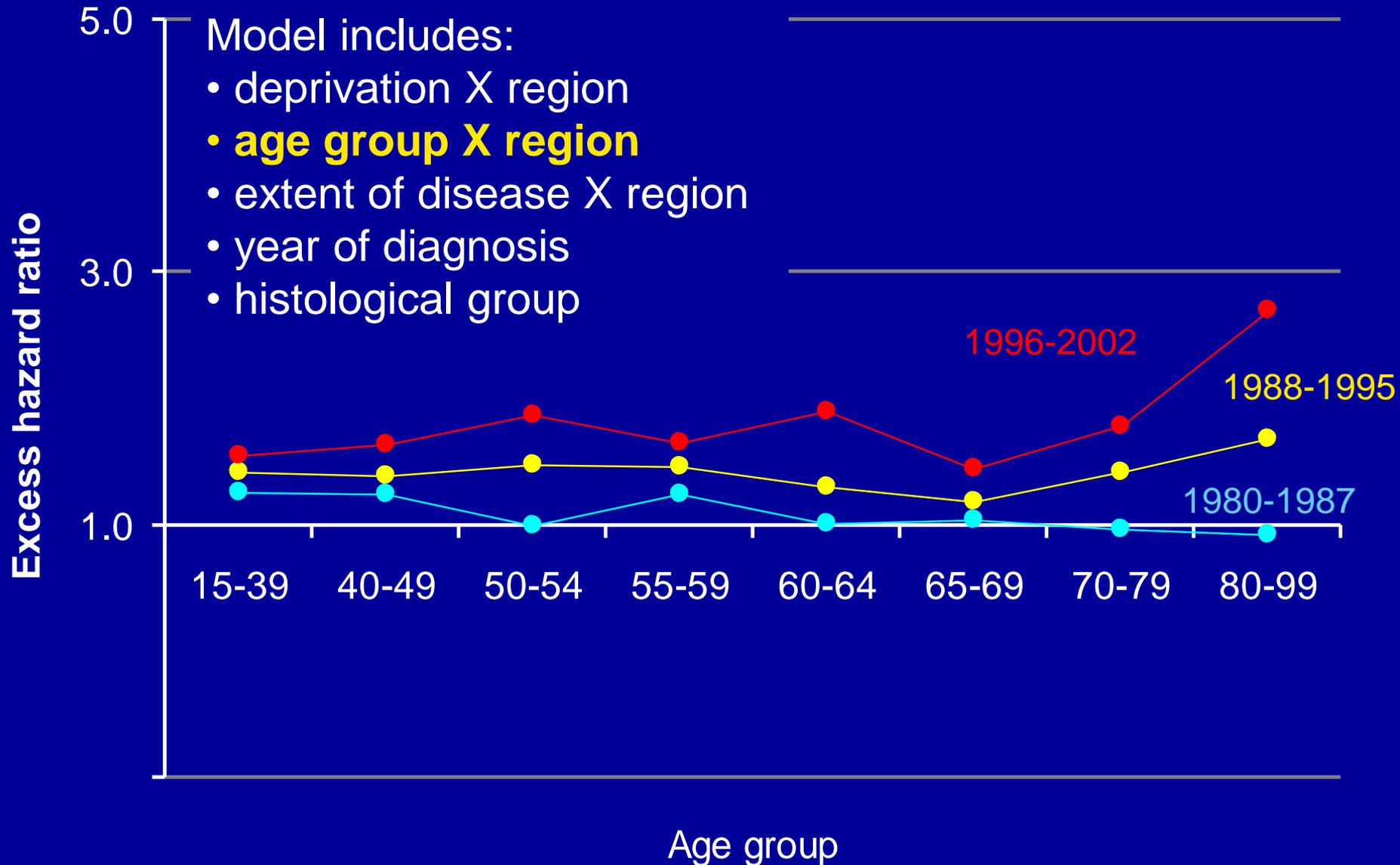
- **deprivation X region**
- age group X region
- extent of disease X region
- year of diagnosis
- histological group



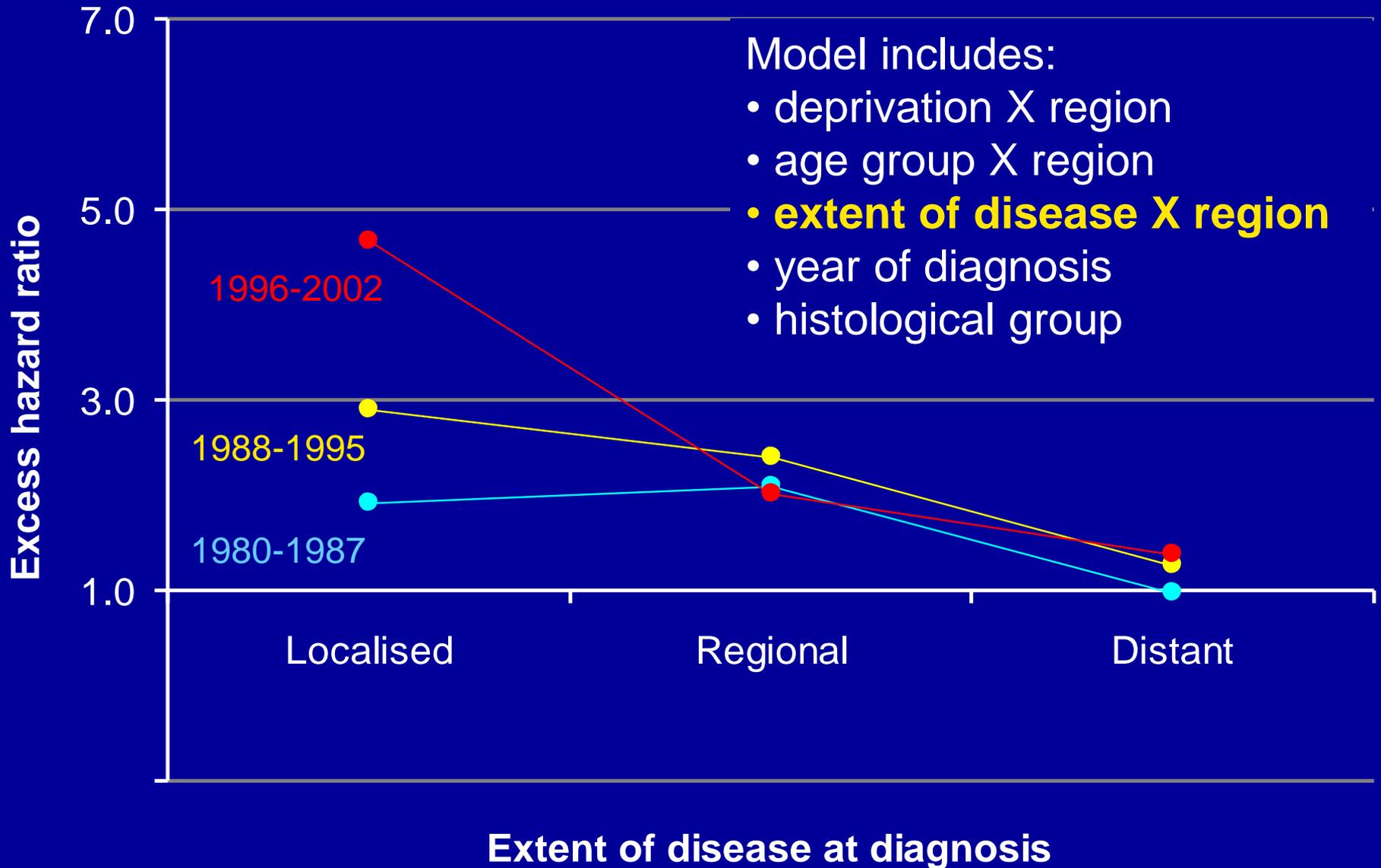
# Up to one year after diagnosis



# 2<sup>nd</sup>-5<sup>th</sup> years after diagnosis



# Up to one year after diagnosis



# **Some causal explanations**

- **Delay in diagnosis – patient or system**
- **Treatment – type, delivery, compliance**
- **Nutritional status, co-morbidity**

# Conclusions

- **Breast cancer survival differences exist**
- **Unlikely to be artefact**
- **May be treatment-related**
- **May also be partly related to delay  
(patient, healthcare system)**