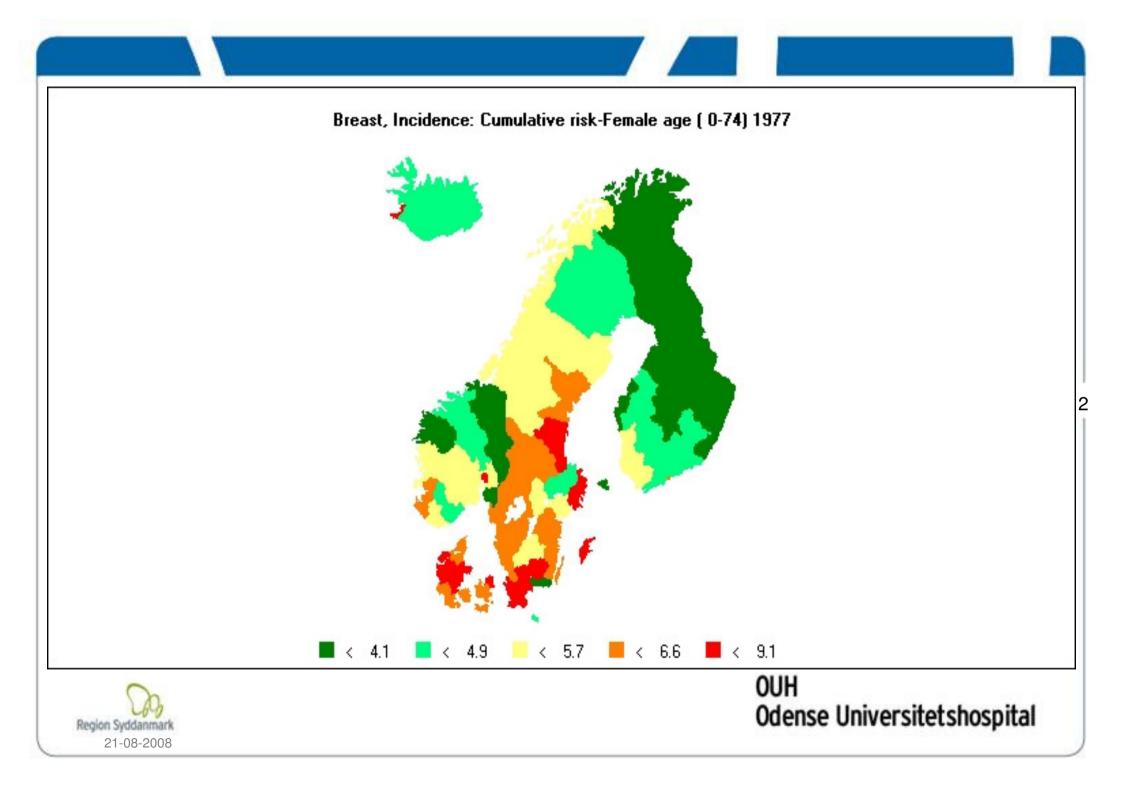
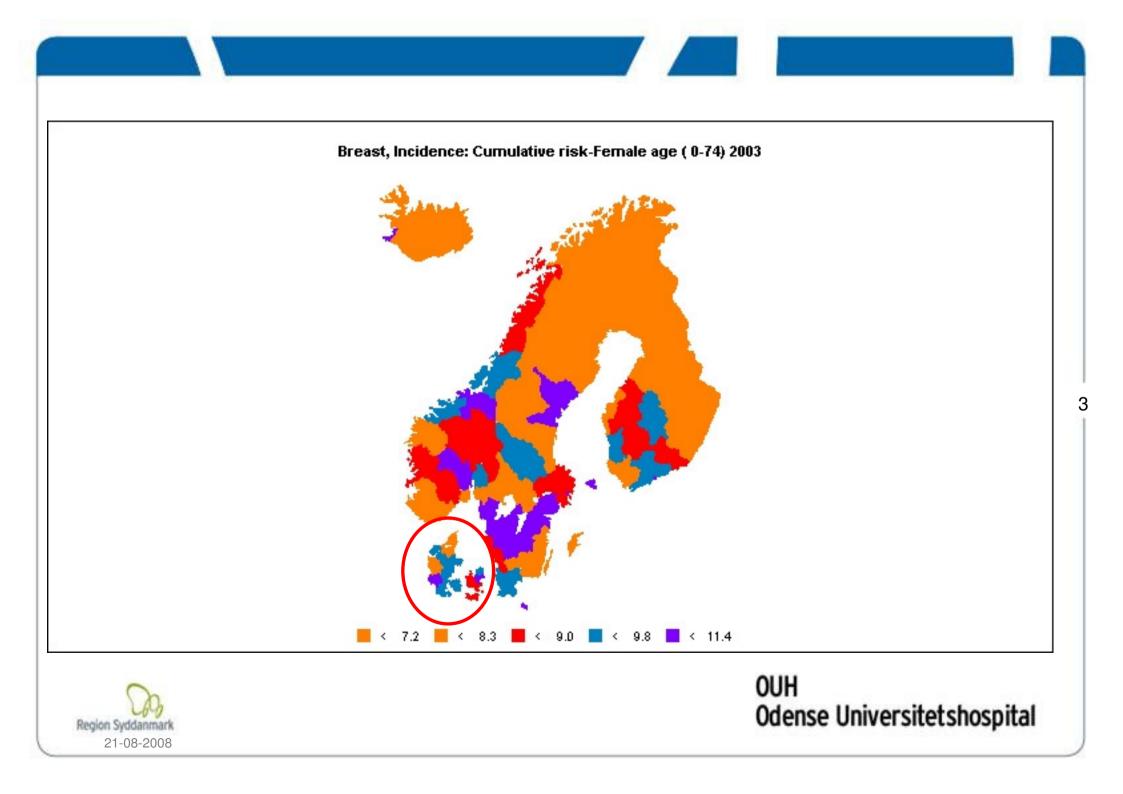
Epidemiology of breast cancer in Denmark, 1977-2007

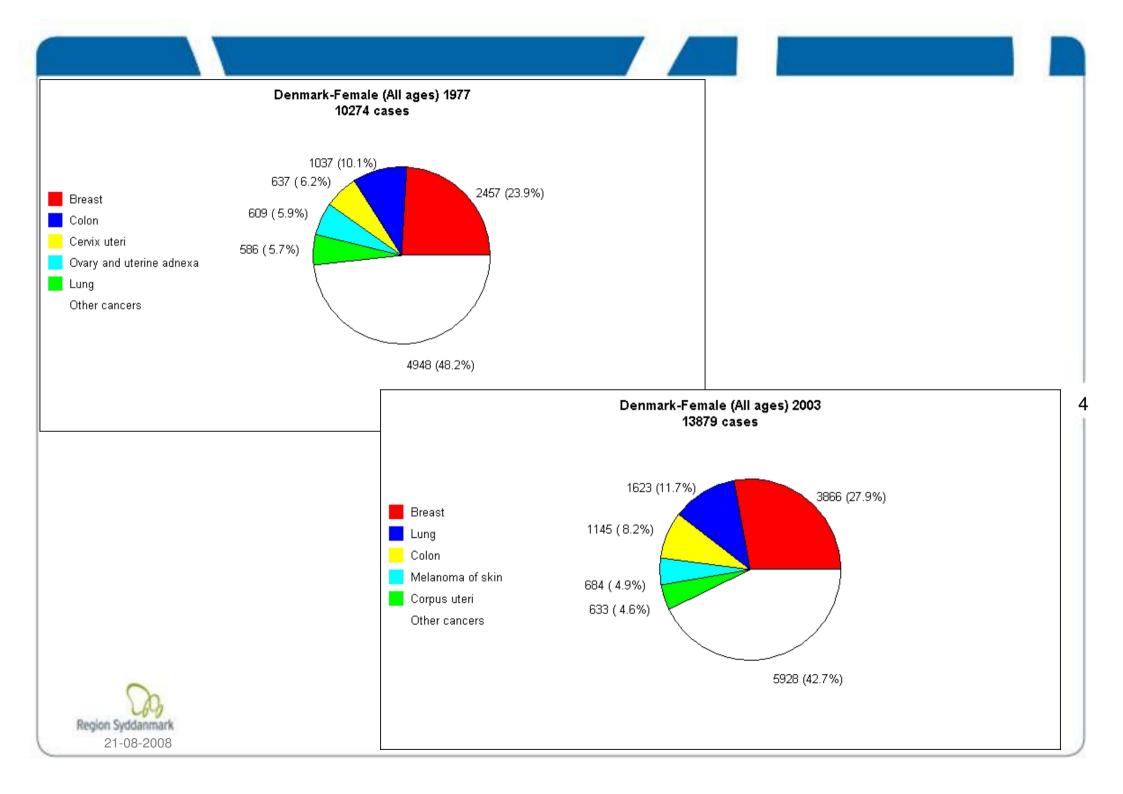
Marianne Ewertz, Department of Oncology, Odense University Hospital

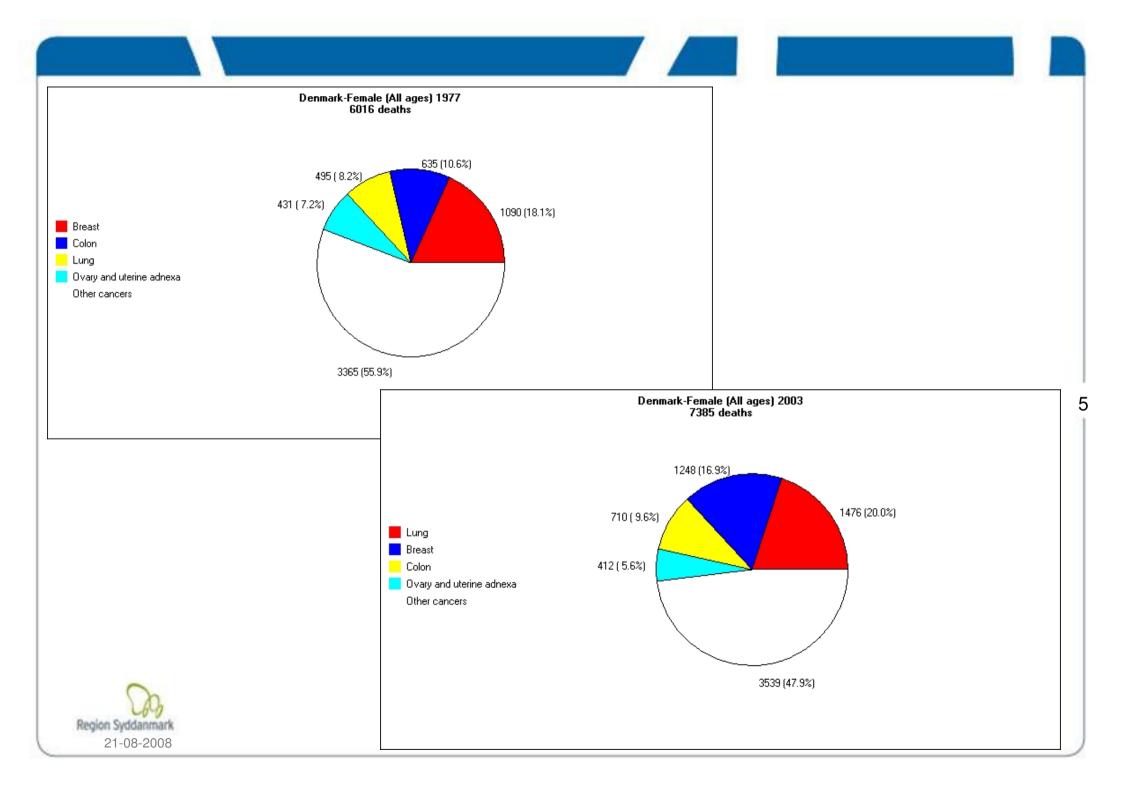


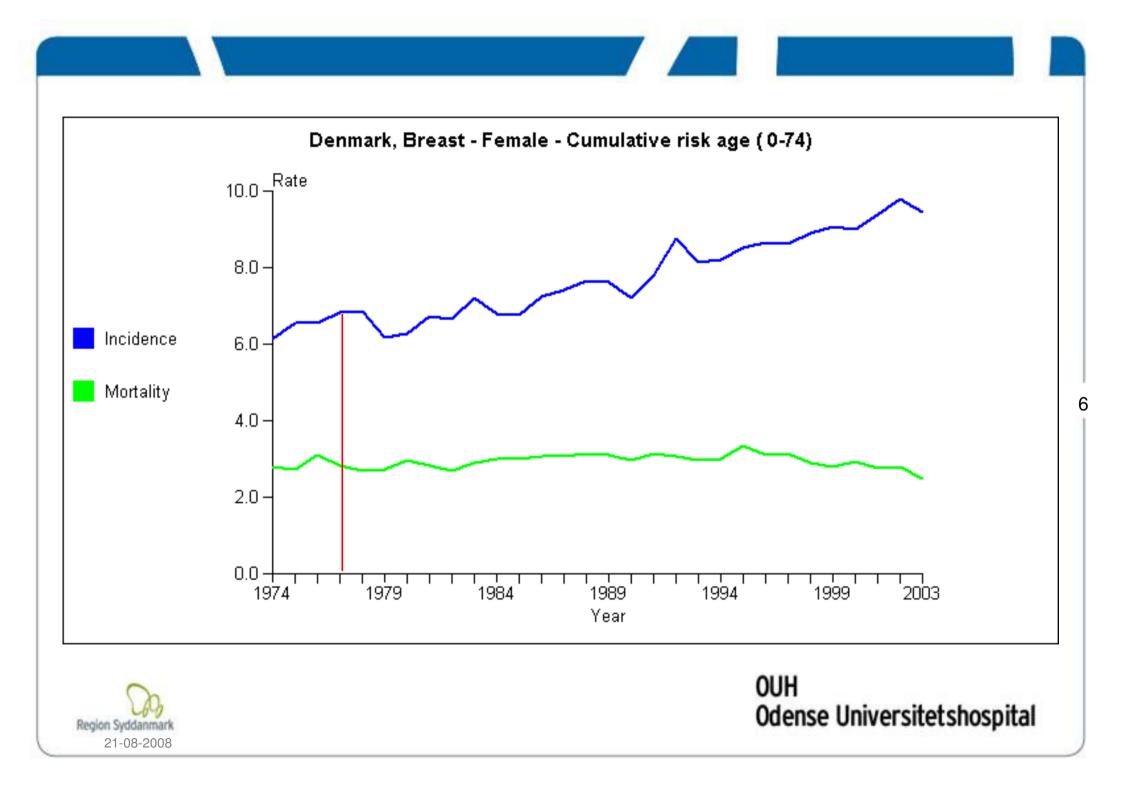


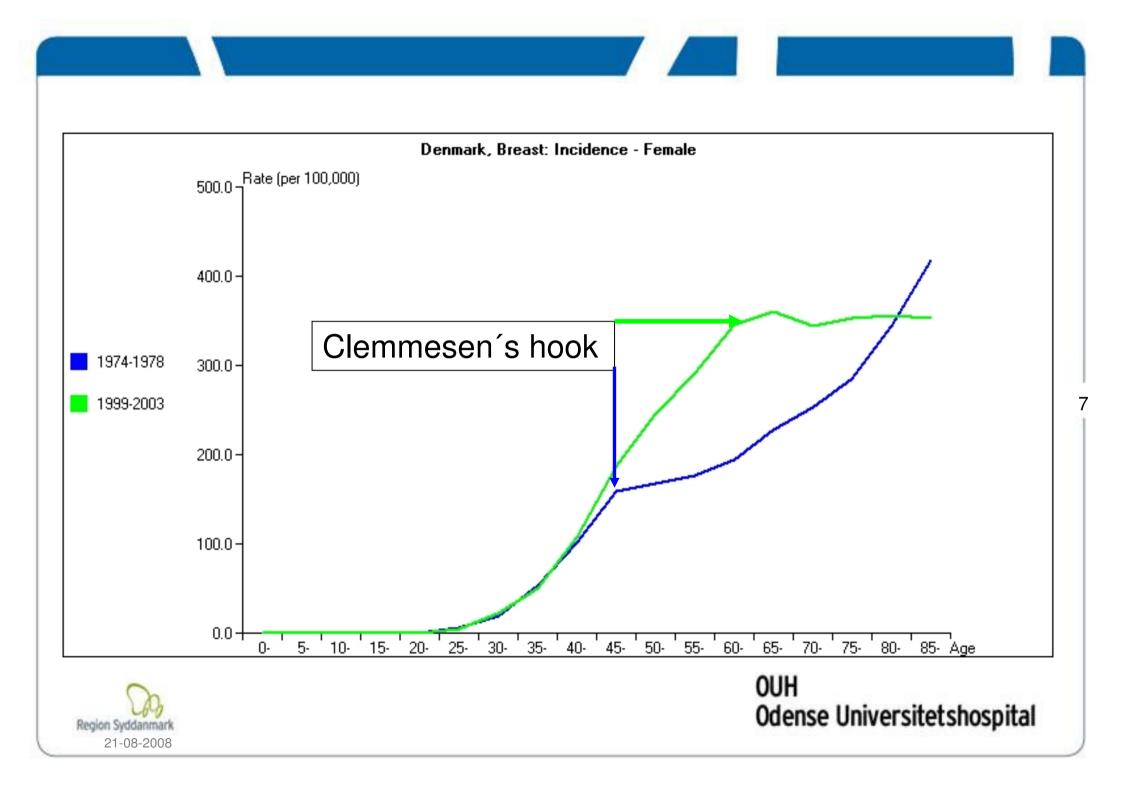








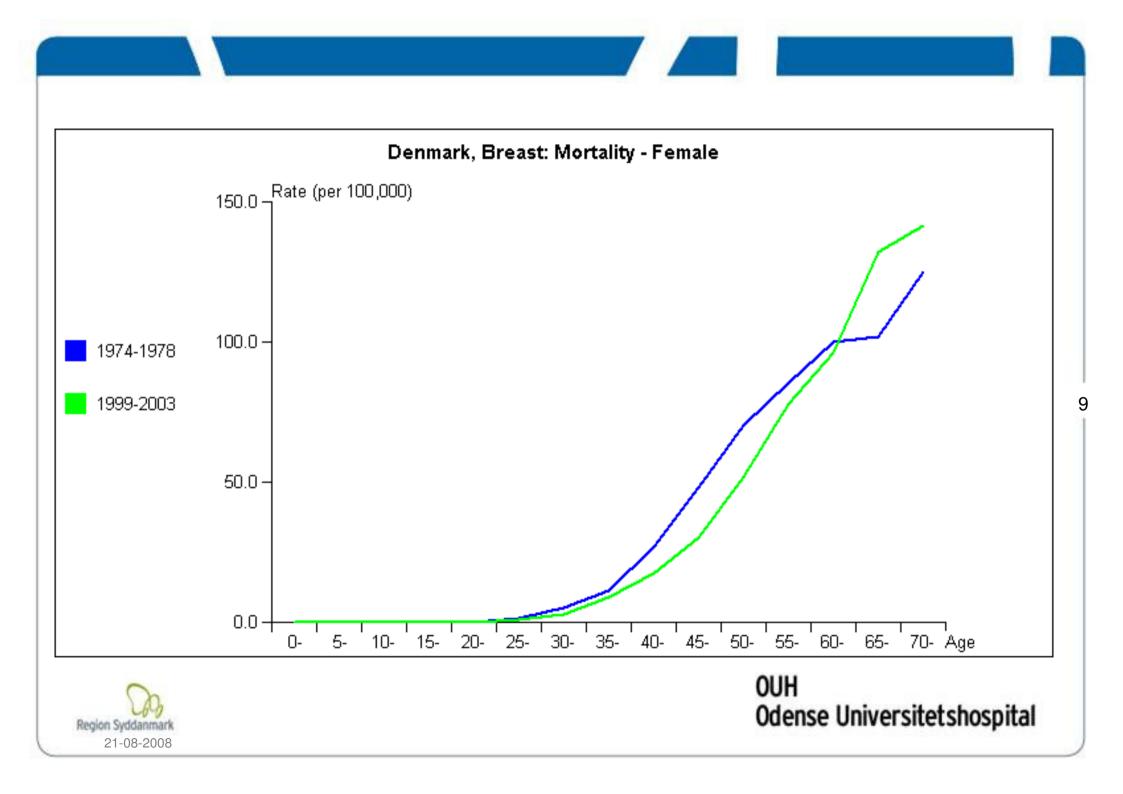




Breast cancer incidence in Denmark, 1977-2007

- No national statistics available for 2004-2007
- 1977-2003: an increase in incidence for ages 45-80 years
- Likely explanations:
 - Increase in diagnostic activity, e.g. mammography screening
 - Real increase, i.e. higher inicidence of risk factors such as fewer childbirths, later ages at childbirths, later menopause, increasing obesity, hormone treatment of menopausal symptoms





Breast cancer mortality in Denmark, 1977-2007

- Mortality has been decreasing for women age < 55 years
 - Likely explanations: earlier diagnosis, better adjuvant treatment (chemo-, endocrine, and radiotherapy)
- Mortality has been increasing for women aged > 55 years
 - Likely explanations: lack of population based mammography screening, reluctance to chemotherapy to older women



How has DBCG contributed to epidemiology from 1977-2007 ?

- 3 doctoral theses (Ewertz, 1993; Kroman, 2001; Wohlfahrt, 2005)
- 2 Ph.D.-theses (Cold, 1998; Ravnsbæk, 2003)
- Peer reviewed papers on epidemiology: 27



How can we contribute in the future ?

- DBCG Epidemiology Committee: established in 2006
- Members:

4 external experts in epidemiology: E.Lynge, M.Melbye, J.H.Olsen, H.T.Sørensen

Representatives from other committees: N.Kroman (surgery), M.Andersson (radiotherapy), Anne-Vibeke Lænkholm (pathology), Dorte Crüger (genetics), M.Ewertz (medical) DBCG Secretariat: the statisticians



How can we contribute in the future ?

- Evaluation of incoming projects
- Focus area: age related factors in prognosis and co-morbidity



Sygdom	Score
АМІ	1
Hjerteinsufficiens	1
Karsygdomme	1
Cerebrovasculær	1
Demens	1
COLD	1
Bindevævssgd.	1
Ulcussgd.	1
Mild leversgd	1
Ukompl. diabetes	1
Hemiplegi	2
Nyresygdom	2
Kompl. diabetes	2
Cancer, lymfom	2
Mod.,svær lever	3
Mestast. cancer	6
AIDS	6

Co-morbidity: Charlsons index

Score 0: rask

Score 1-2 : lidt syg

Score 3+ : svært syg

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Distribution of Charlson score for 9300 patients in Jutland

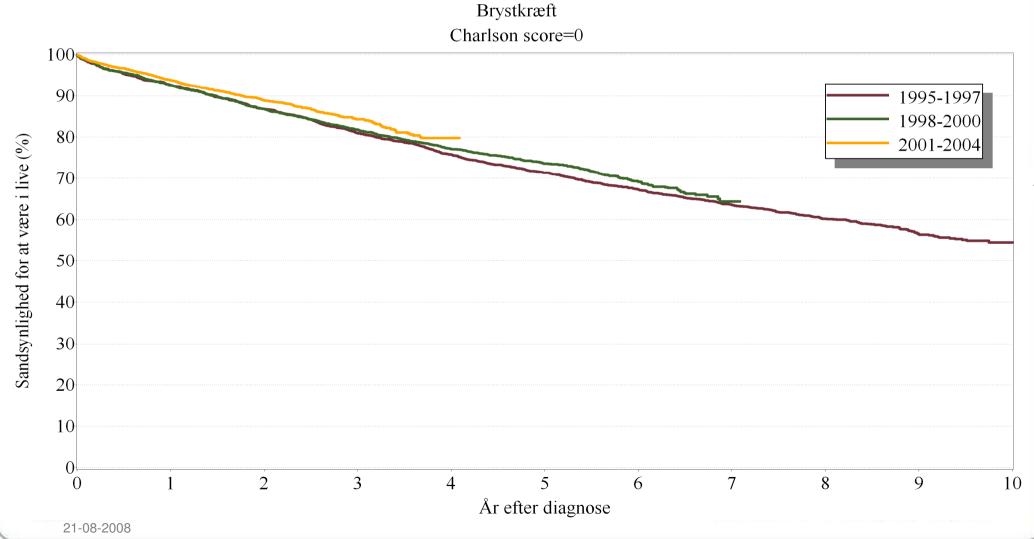
Charlson score

	0	1-2	3+		
	n (%)	n (%)	n (%)	Total	
1995-1997	2423 (86)	360 (13)	36 (1)	2819 (100)	
1998-2000	2518 (84)	431 (14)	54 (2)	3003 (100)	
2001-2004	2829 (81)	565 (16)	84 (2)	3478 (100)	
Total	7770	1356	174		9300



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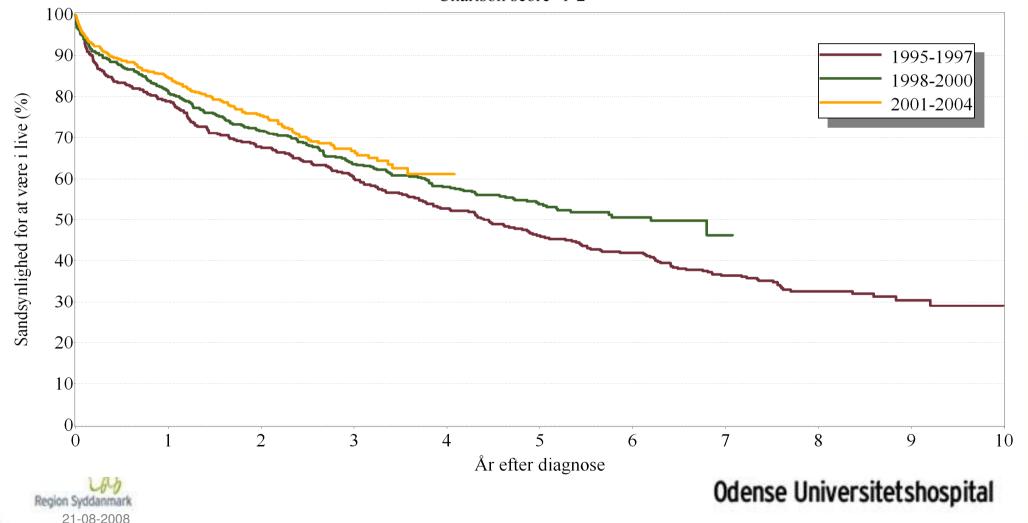
Survival of patients with Charlson score = 0



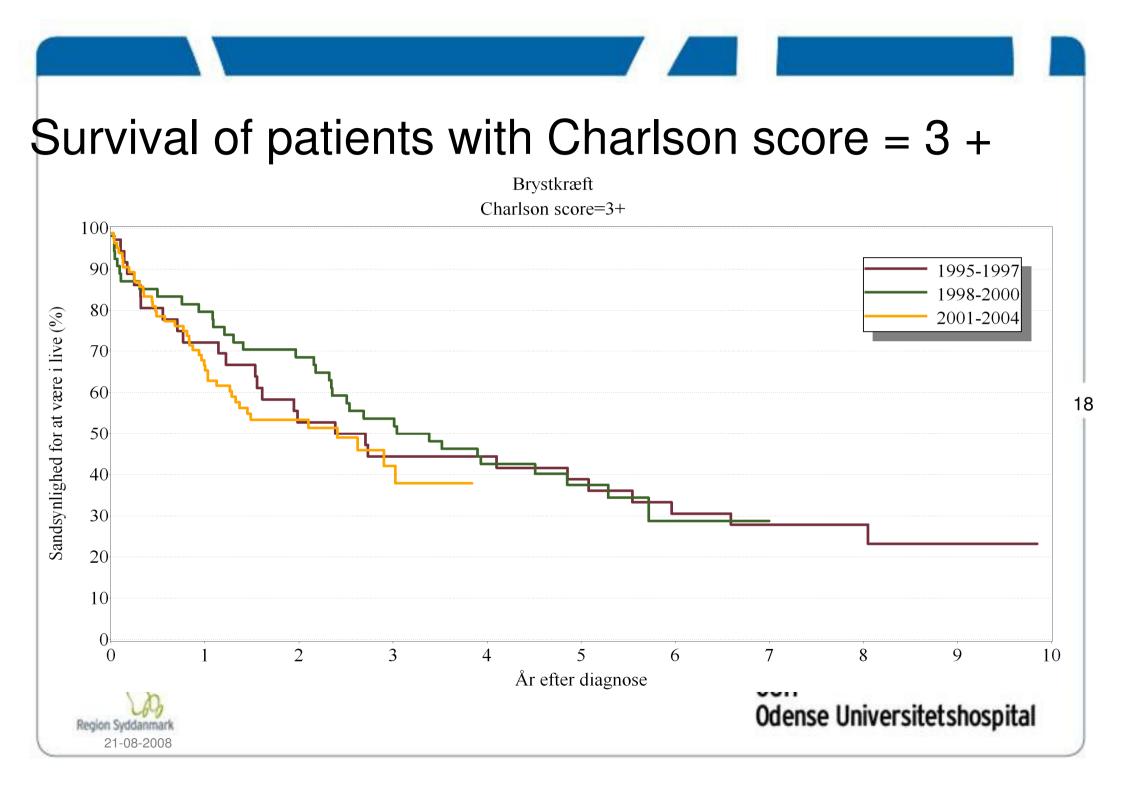
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Survival of patients with Charlson score = 1-2

Brystkræft Charlson score=1-2



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Conclusion: Co-morbidity

- Over the past 10 years prognosis has improved for otherwise healthy (Charlson score = 0) women with breast cancer
- More elderly women with severe co-morbidity (Charlson 3+) are diagnosed with breast cancer and their prognosis has become worse over the past 10 years.
- The Epidemiology Committee shall focus future activities on evaluating age and co-morbidity on a national scale.

