

EUROCARE high-resolution studies

J FAIVRE*, Dijon, France

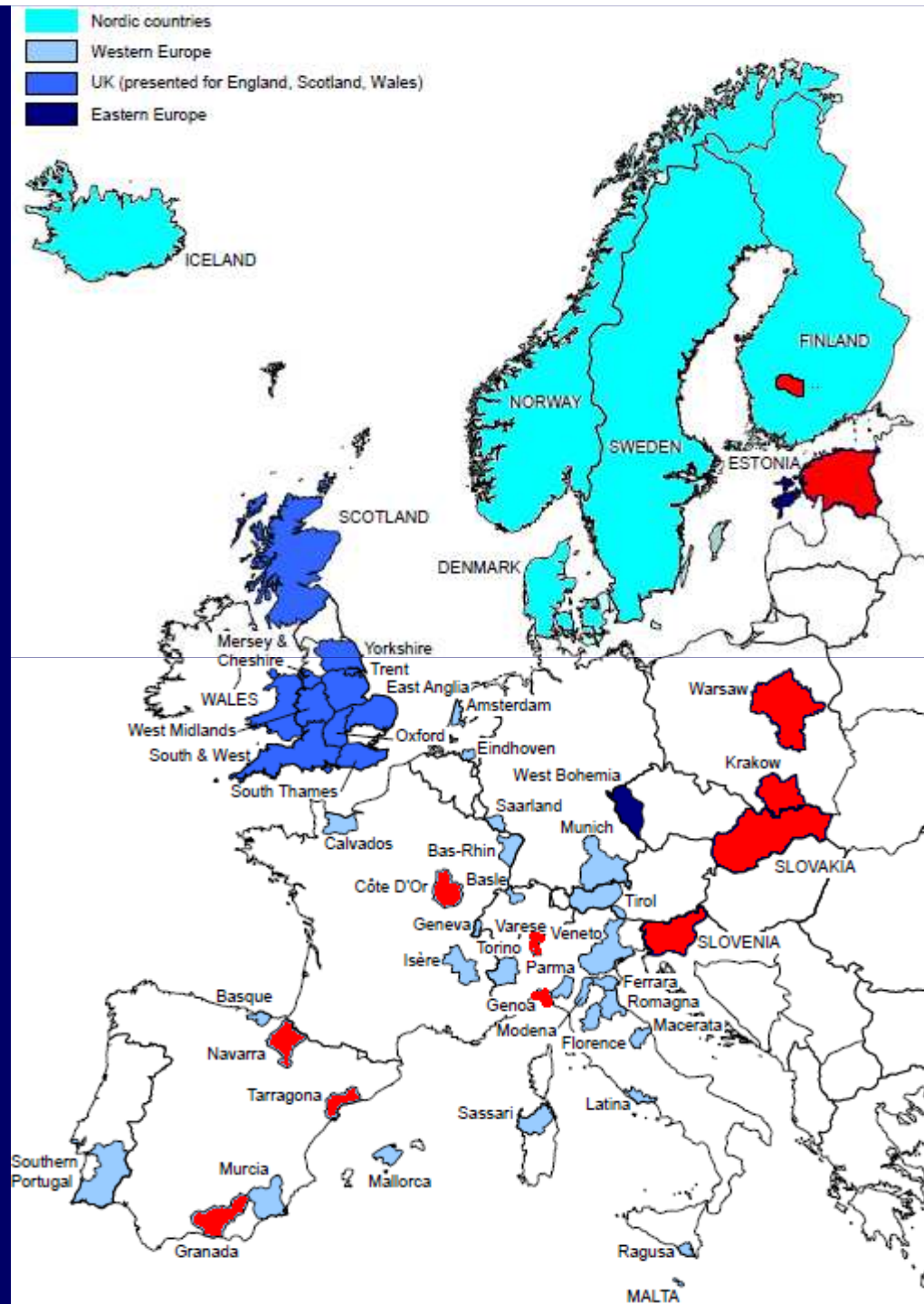
**Member of EUROCARE Steering Committee*

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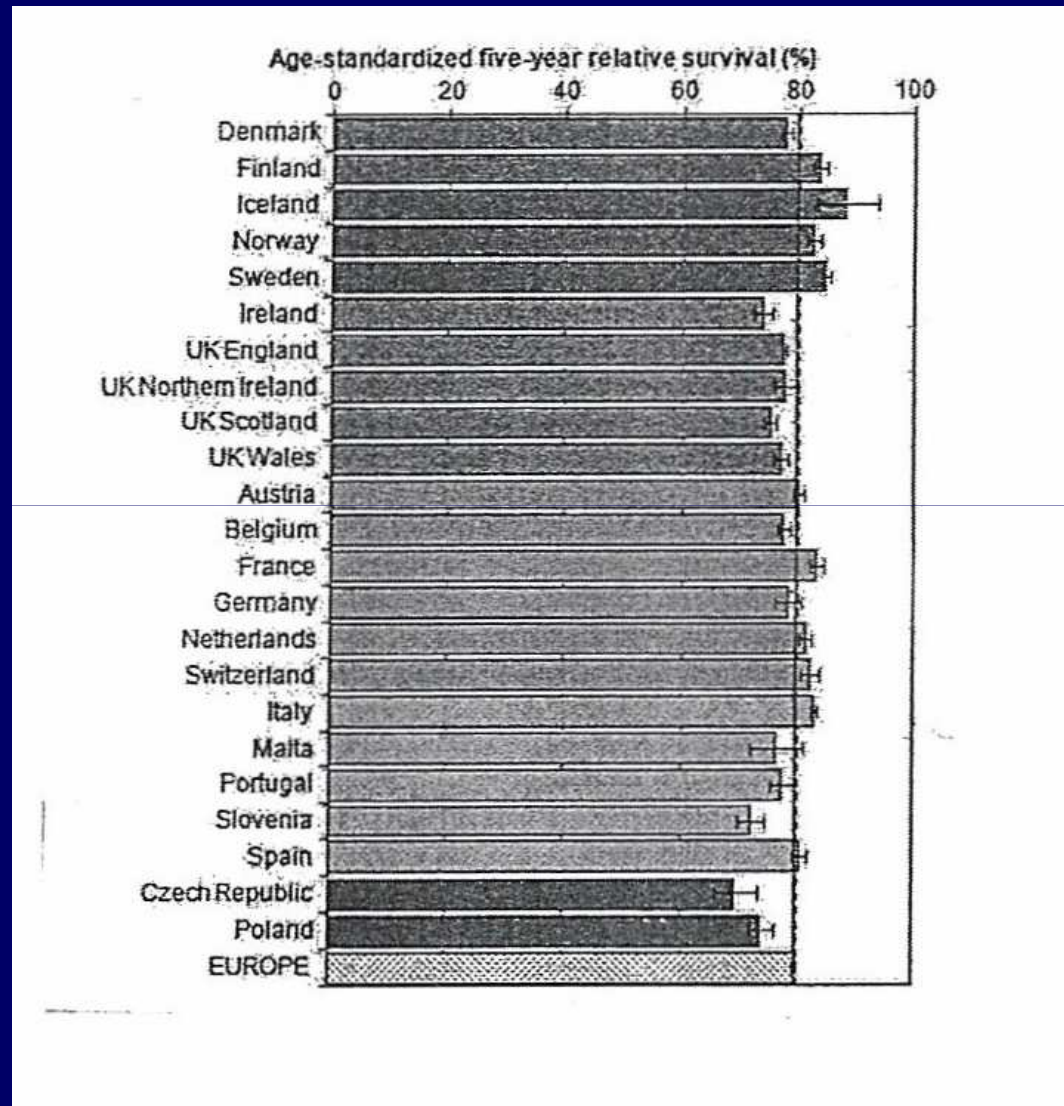
- European co-operative registry-based study on cancer patient survival and care

- EUROCARE 1 (1978-1984) → EUROCARE 5 (2000-2004)

Map of EUROCARE cancer registries

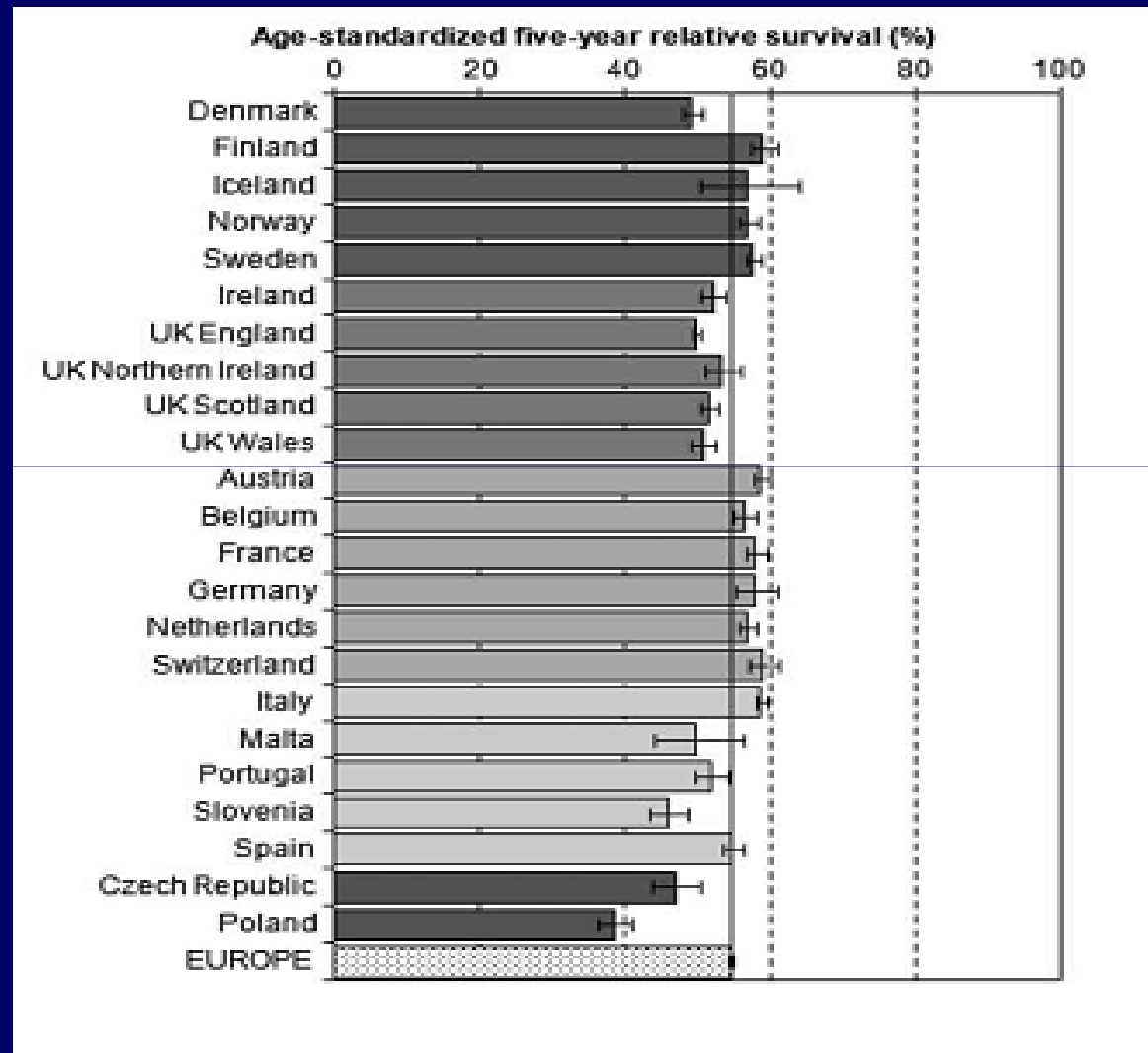


5-year relative survival rates for breast cancer in Europe (1975-1999)



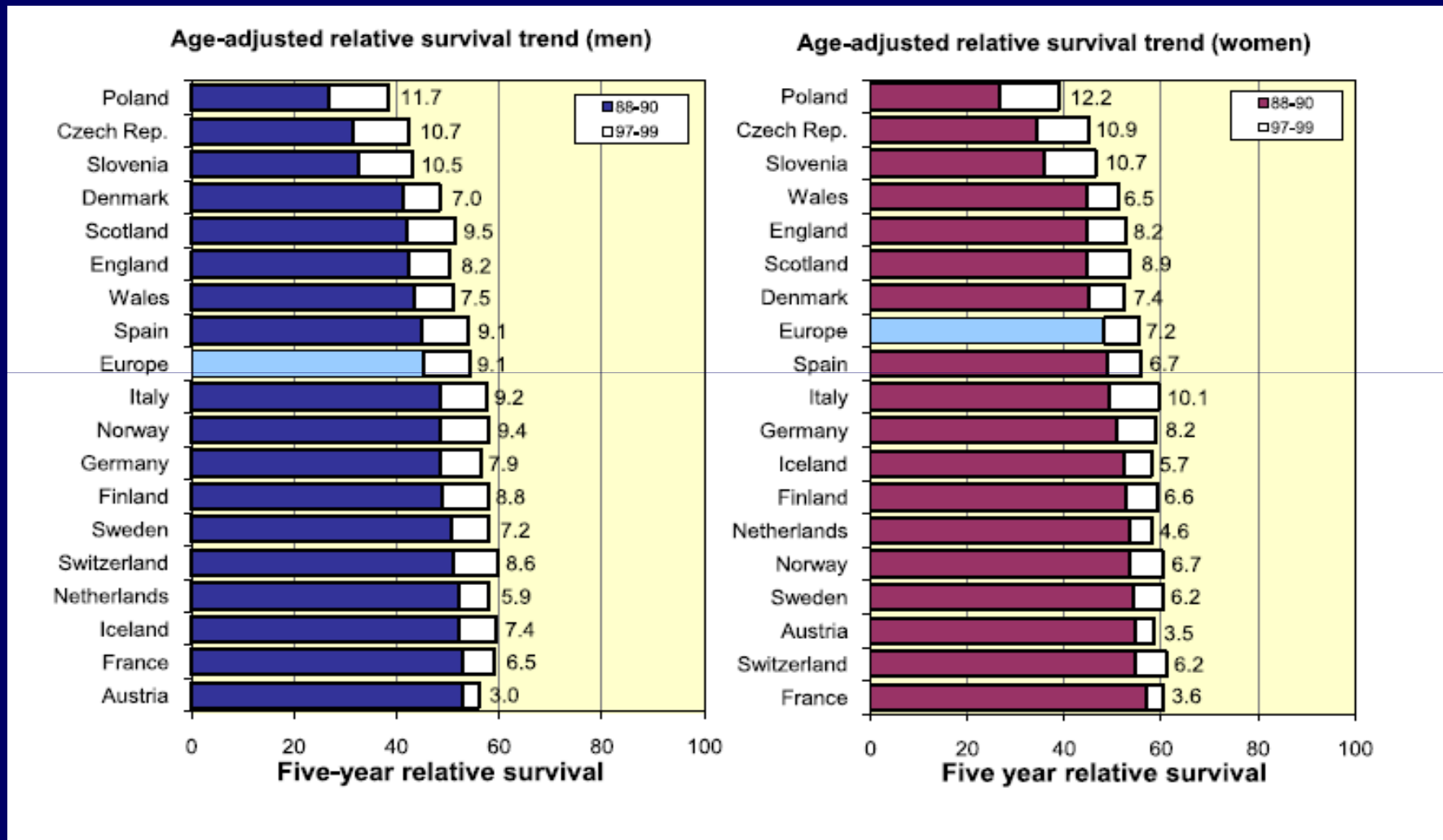
Sant et al, *Europ J Cancer* 2008

5-year relative survival rates for colon cancer in Europe (1975-1999)



Sant et al, *Europ J Cancer* 2008

Trends in 5-year relative survival rates for colorectal cancer in Europe



High-resolution studies

- Studies nested within EURO CARE project collecting data not usually available to population-based registries
- Standardised information
 - Stage at diagnosis
 - Diagnostic and pre-treatment work-up
 - Treatment

Aims of high-resolution studies

- Describe and compare patterns of care between countries and regions
- Study adherence to standard cancer care (in particular ESMO referential)
- Interpret survival differences between countries highlighted by the EURO CARE main analysis

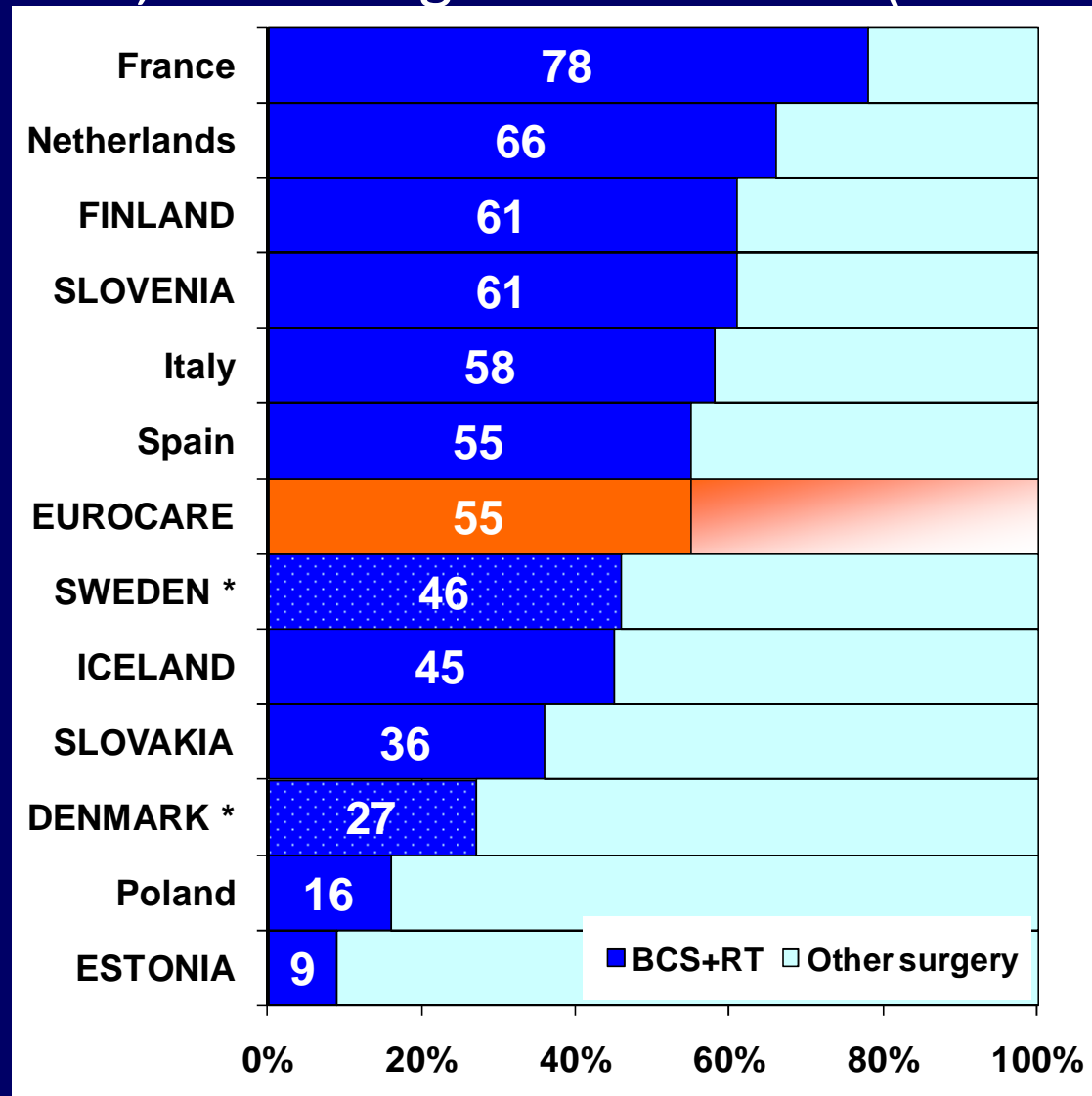
Problem of data comparability

- In depth analysis of criteria of "complete registration"
- **Problem of death certificate**
- Criteria to establish stage at diagnosis

EUROCARE high-resolution studies

- Breast cancer
- Colorectal cancer
- Gastric cancer
- Prostate cancer
- Testicular cancer

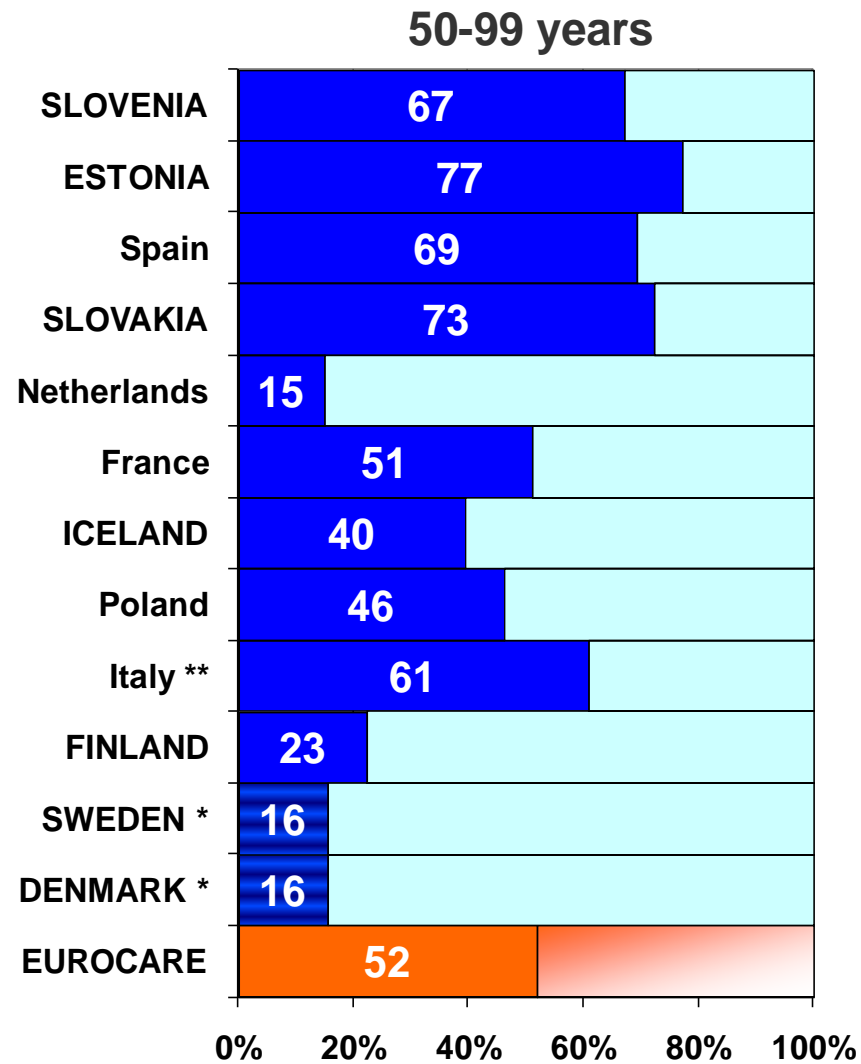
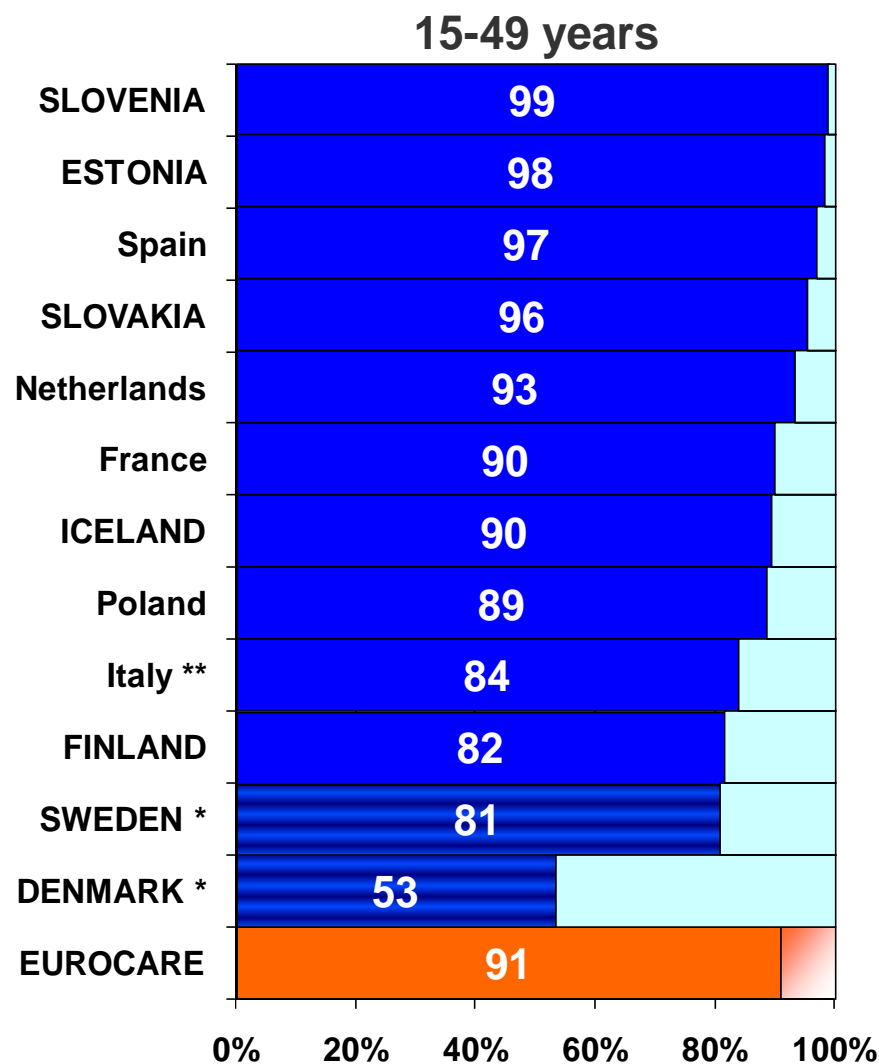
Breast-conserving surgery plus radiotherapy (%): Europe, women operated 1996-98 Small, node-negative tumours (T1N0M0)



* Women operated 1994

Allemani et al., EJC, 2010

Adjuvant chemotherapy (%) in node-positive breast cancer: Europe, women operated 1996-98, by age at diagnosis



* Women diagnosed 1994 ** Four Italian registries

Proportion of rectal cancer cases treated with surgery for cure receiving radiotherapy

Finland (Tampere)	16%
France (Côte-d'Or)	51%
Italy - Genoa	1%
- Varese	8%
Spain - Granada	0%
- Navarra	51%
- Tarragona	2%
Estonia	21%
Slovenia	5%
Slovakia	1%
Poland (Cracow)	3%

Radiotherapy among resected cancer patients in the Nordic countries

	% radiotherapy	% preoperative radiotherapy
Denmark	2.8%	50%
Finland	25.7%	38%
Iceland	33.3%	69%
Norway	12.2%	51%
Sweden	54.8%	95%

Folkesson et al, *Int J Cancer* 2009

Proportion of stage II and III colon cancer cases receiving adjuvant therapy in Europe

	Stage II	Stage III
All cases	22%	46%
< 65	38%	69%
65-74	25%	50%
≥ 75	5%	16%
Finland (Tampere)	7%	42%
France (Côte-d'Or)	12%	52%
Italy - Genoa	29%	39%
- Varese	26%	43%
Spain - Granada	36%	31%
- Navarra	32%	51%
- Tarragona	14%	49%
Estonia	5%	46%
Slovenia	9%	45%
Slovakia	61%	73%
Poland (Cracow)	38%	24%

Proportion of administered chemotherapy among patients with stage II colon cancers

	Italy (n=759)		France (n=410)	
	%	p	%	p
Global	38,3		21,7	
Sex				
Males	40,0		23,4	
Females	36,5	0,331	19,6	0,348
Age (yrs)				
<65	67,2		44,0	
65-74	47,6		26,2	
75-84	10,8		10,3	
>85	3,6	0,001	0,0	0,001
Stage				
IIA	37,2		19,7	
IIB	45,7	0,121	29,6	0,052
Examined nodes				
0 to12	33,3		18,6	
12 or more	41,3	0,040	23,1	0,306
Presenting features				
Out of emergency	37,1		17,9	
Emergency	46,3	0,059	45,5	0,001

Number of lymph nodes examined among colorectal cancer cases resected for cure

	Number of lymph nodes examined			
	0	1-11	≥ 12	NA
France (Côte-d'Or)	6.9%	64.5%	28.7%	0%
Italy (Varese)	2.4%	52.7%	40.7%	4.2%
Spain - Granada	1.2%	55.4%	30.7%	12.7%
- Tarragona	0%	39.1%	53.8%	7.0%
Slovenia	2.9%	38.0%	51.9%	7.2%
Poland (Cracow)	2.0%	69.2%	8.3%	20.5%

Gastric cancer excess hazard ratio (EHR) of death in selected European populations

	EHR*	EHR	EHR
France	1	1	1
Northern Italy	1.03	1.06	-
Ragusa	1.22*	0.81	-
Netherlands	1.10	0.97	0.98
Granada	1.43**	1.24*	1.08
Yorkshire	1.43**	1.35*	1.51**
Slovakia	1.24*	1.06	1.01
Slovenia	1.19*	1.03	1.04
Poland	1.73**	0.98	-
Surgical resection		1	
No resection		3.87**	
T1/T2N0M0			1
T4N0M0/ALL T N+M0			2.62**
Advanced stages			7.46**

* p < 0.05

** p < 0.001

To be successful high-resolution studies need:

- "Easy" access to clinical data
- **A careful education of investigators**
- Funding for data collection

Conclusions (1)

- Disparities in the treatment of cancers are unexpectedly large
- Adherence to guidelines is often unsatisfactory
- Differences in the stage at diagnosis are the main reason for the lower survival reported in some geographic areas compared to others
- Improvement in the treatment facilities are needed in some areas

Conclusions (2)

These disturbing results should sound as a warning to health authorities and oncologists:

- Guidelines must be better disseminated. It is not acceptable that patients did not receive adequate treatments
- Regular population-based high-resolution studies are needed to evaluate changes in practices and implementation of new therapeutic strategies