

4.6 About the Munich Cancer Registry, its latest annual report and a list of figures and tables

This chapter describes the work of the Munich Cancer Registry (MCR) and aims to help English speaking colleagues who are engaged in cancer control to interpret results and compare data.

The second annual report of the MCR presents results of cancer registration in Munich City and the surrounding counties. As a main topic, the present annual report provides statistical analyses of gynaecological cancers, particularly ovary, tube, corpus uteri, cervix uteri, vulva and vagina. Additionally, for the most frequent cancer diagnoses the 15-year-survival rates are presented. Nearly 5,000 general practitioners, 45 hospitals with about 250 departments and 156 communities will receive this issue. This report points out the importance and the usefulness of population-based clinical data for physicians.

The MCR is part of the comprehensive Munich Cancer Center and started registering patients in 1978. For the first years a few departments of the Ludwig-Maximilians-University and the Technical University Munich collaborated. The number of collaborating members grew continuously. The world age-standardized incidence rate in 1996 was estimated at 242/100,000 (209 for females) for Munich.

Bavaria has a total population of 12 million, the Federal Republic of Germany has 82 million people. The MCR collects cancer data of about 2.3 million people, which equals to 2.8% of the German population. The Bavarian Cancer Registration Law came into force at the beginning of 1998 allowing the MCR to legally process all death certificates of the catchment area. For 1998 and 1999 informations of death certificates were compared with registry data provided by clinical institutions on the individual level. Tab. 7a-b illustrate the observed cancer related mortality for the Munich area. A first estimation of the DCO-rate was about 17% in 1998. The reduction of the current DCO-rate can be expected as a result of follow-back-actions in the near future.

Each collaborating hospital receives a survey of all their patients treated irrespective of their home address. Therefore the MCR also registers patients from outside the registration area (about 25%). Since the beginning in 1994 the reports of 12 pathological institutions have been the basis for checking completeness of registration. In this way correctness of incidence rates may be roughly judged (tab. 20).

For data collection 26 cancer-specific forms have been developed. Often, copies of medical reports are sent to the registry as well. Cooperating hospitals additionally report on local and regional progressions and the occurrence of metastases. In this way the course of malignant disease is described.

The MCR produces periodical reports for all cooperating hospitals to keep them informed about their clinical registries. The most frequent cancer diagnoses of all patients in the region are analysed and the larger hospitals are anonymously compared by their clinical results.

Cancer Incidence, Mortality, Survival and Lifestyle Survey Statistics Provided by the MCR

1	Data and services of the Munich Cancer Registry	1
2	Eight healthcare providers and their expected contributions to the MCR	6
3	The current partners and the quality of their cooperation	8
4	Services of the MCR	11
5	Processed forms and medical reports in 1999	15
6a	Age-specific and age-standardized incidence rates in Munich 1996 and 1997 for males	16
6b	Age-specific and age-standardized incidence rates in Munich 1996 and 1997 for females	18
7a	Age-specific and age-standardized mortality rates in Munich 1998 and 1999 for males	22
7b	Age-specific and age-standardized mortality rates in Munich 1998 and 1999 for females	24
8	The cancer related deaths in Germany 1998 and in the Munich area 1998/99	26
9	The results of the official mortality rates in 1998 in comparison to the independent MCR-coding of all tumor diagnosis mentioned on the death certificate	27
10	The hour of day of cancer related death in 1998	27
11	Percentage of cancer related deaths in hospitals according to age and gender	28
12	About the quality of the death certificates	30
13	The part of the German death certificate for the specification of the cause of death	31
14	Cancer related deaths in Munich and in the villages of the registration area in 1998 and 1999	34
15	Basic data and characteristics of the course of frequent cancers	40
	S1: number of patients with one malignancy	
	S2-S6: age at diagnosis S2-S4 10%, median, 90% quantiles, S5-S6 mean age for males and females	
	S7: percentage of males	
	S8-S9: life expectancy from age at diagnosis for males and females	
	S10-S11: number of tumor related deaths in Germany in 1998 for males (40.0 million) and females (42.0 million)	
	S12-S16: relative 2-, 5-, 10-year-survival and 5- and 10-year overall survival (secondary malignomas included)	
	S17-S18: cumulative incidence of secondary malignancies (Kaplan-Meier estimation)	
	S19: percentage of patients (relative to S1) with at least a second malignancy, who were registered in addition to S1 (underestimated because of underreporting)	
	S20: mean follow-up (years)	
	S21: % M1 at diagnosis	
	S22-S23: time to 1st progression for M0-diseases in months (50%, 90% quantiles)	
	S24-S25: time from 1st progression to death in months (50%, 90% quantiles)	
	S26-S29: survival time for patients with M0-diseases and at least one progression in months (50%, 90% quantiles), mean survival time (S28) and mean survival time including M1-diseases (S29)	
	S30: number of patients with M0-disease and progression	
	S31-S34: percentage of metastases, local recurrences, regional lymph node recurrences and unspecified (for solid tumors) progressions during the course of disease (metachronous events)	
	S35-S42: distribution of the 1st event with synchronous locations (locoregional recurrences, unspecified progression, lung, liver, bone, distant lymph node, CNS and not specified metastases)	
16a	Overall survival for gynaecological cancers	47
16b	Relative survival for gynaecological cancers	47
17a	Overall survival for urological cancers	48
17b	Relative survival for urological cancers	48
18a	Overall survival for gastroenterological cancers	49
18b	Relative survival for gastroenterological cancers	49
19a	Overall survival for head and neck cancers	50
19b	Relative survival for head and neck cancers	50
20a	Overall survival for haematological cancers	51
20b	Relative survival for haematological cancers	51

fig./tab. (Abb./Tab.)	page
21a Overall survival for in fig. 16-20 not mentioned cancers	52
21b Relative survival for in fig. 16-20 not mentioned cancers	52
22 Breast cancer: the changes of the 5 functional scales of EORTC QLQ-C30 in the 4 half years (Hj) after diagnosis according to age	54
23 Breast cancer: the changes of the 5 functional scales of EORTC QLQ-C30 in the 4 half years (Hj.) after diagnosis according to age and surgery	54
24 Breast cancer: Percentage of answers "never" or "a little" to the question: "Are you satisfied with the cosmetic result of surgery" and "Are you content with your body" in the 4 half years (Hj.) after diagnosis according to breast conserving or radical surgery	55
25 Breast cancer: Frequency of a reduced arm mobility after revision of the axilla according to the time span since diagnosis	55

Main Topic: Malignant Gynaecological Tumors

26 Epidemiological data for gynaecological cancers	60
27 Time series of the age-standardized mortality of gynaecological cancers in Germany from 1980 to 1997	61
28 Age-specific mortality for ovarian cancer in Germany in 1980,1990,1997	62
29 Age-specific mortality for cervical cancer in Germany in 1980,1990,1997	62
30a Age-specific incidence rates for gynaecological cancers (MCR)	63
30b Distributions of age at diagnosis for gynaecological cancers (MCR)	63
31a Overall survival for gynaecological cancers (MCR) and different time periods	64
31b Relative survival for gynaecological cancers (MCR) and different time periods	64

Ovary

32 Clinical characteristics according to FIGO-stage	67
33 Clinical characteristics according to histology	68
34 Overall survival according to FIGO-stage (total cohort)	68
35 Overall survival according to the most frequent histologies	69
36 Overall survival according to histological grading (total cohort)	69
37 Overall survival according to radicality of surgery for FIGO-stage II-IV	70
38 Changes of the primary therapy since 1977 for 4 consecutive time periods	70
39 Decrease of adjuvant radiotherapy and increase of chemotherapy (1980-1995)	71
40 Overall survival according to FIGO-stage for the two time periods before 1988 and afterwards	71
41 Distribution of the disease-free survival time up to metastasization, local recurrence and the 1st progression	72
42 Distribution of the survival time after progression	72
43 Survival time in months since diagnosis for patients with progressions according to clinical and therapeutical results (total cohort)	73
44 Distribution of the survival time for patients with progressions according to FIGO-stage (total cohort)	73
45 Scatter diagram for the disease free survival time and the survival time after progression (logarithmic scale and total cohort)	74
46 Relative survival for the patients of 8 hospitals and with a diagnosis after 1987	74
47 Clinical and therapeutical characteristics of the patients from 8 hospitals with at least 40 patients	75
48 Characteristics of the results of 11 pathological services (P1-P11) with at least 30 patients	75
49 Characteristics of tube cancers	76

Corpus uteri

50 Clinical characteristics according to FIGO-stage	79
51 Overall survival according to FIGO-stage and expected survival (total cohort)	79
52 Overall survival for FIGO-stage I before the TNM- classification 1992 and afterwards	80
53 Overall survival according to the most frequent histologies	80
54 Overall survival according to histological grading (total cohort)	81
55 Overall survival for FIGO-stage I according to comorbidity	81
56 Overall survival according to FIGO-stage and therapeutical modalities	82
57 Changes of the primary therapy since 1977 for 4 time periods	82

fig./tab. (Abb./Tab.)	page	
58	Changes of the primary therapy since 1977	83
59	Primary therapy since 1977 according to age over 4 consecutive time periods	83
60	Overall survival according to FIGO-stage for the two time periods before 1988 and afterwards	84
61	Distribution of the disease-free survival time up to metastasization, local recurrence and the 1st progression	84
62	Distribution of the survival time after progression	85
63	Survival time in months since diagnosis for patients with progression according to clinical and therapeutical results	85
64	Distribution of the survival time for patients with progressions according to FIGO-stage (total cohort)	86
65	Relative survival for the patients of 8 hospitals and with a diagnosis after 1987	86
 <i>Cervix uteri</i>		
66	Clinical characteristics according to FIGO-stage	89
67	Clinical characteristics according to age	89
68	Distribution of the nodal status according to the pT-category	89
69	Overall survival according to FIGO-stage	90
70	Overall survival according to the pT-category and lymphnode status	90
71	Overall survival according to FIGO-stage for squamous and adeno cancers	91
72	Overall survival according to histological grading for squamous and adeno cancers	91
73	Overall survival according to FIGO-stage and therapeutical modalities	92
74	Changes of the primary therapy since 1977 over 4 time periods	92
75	Overall survival according to FIGO-stage for the two time periods before 1988 and afterwards	93
76	Distribution of FIGO-stages over 4 time periods	93
77	Distribution of the disease-free survival time up to metastasization, local recurrence and the 1st progression	94
78	Distribution of the survival time after the 1st progression	94
79	Distribution of the survival time for patients with progressions according to FIGO-stage (total cohort)	95
80	Relative survival for the patients of 8 hospitals and with a diagnosis after 1987	95
 <i>Vulva and Vagina</i>		
81	Age distribution of patients with vulva and vagina cancer	97
82	Vulva cancer: clinical characteristics according to FIGO-stage	97
83	Vulva cancer: Overall survival according to FIGO-stage and expected survival	98
84	Vagina cancer: clinical characteristics according to FIGO-stage	98
85	Vagina cancer: Overall survival according to FIGO-stage and expected survival	99
 Appendix		
86	Life expectancy for males and females in Germany 1995/97	109
87	Some parameters for the description of cancer mortality	110
88	Six levels of preventive activities for cancer control	111
89	Population pyramid for the Munich area	114