

# Urinary tract, without bladder

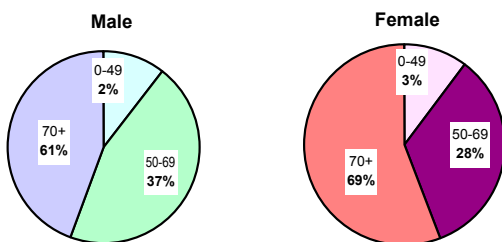
NICER and Swiss Cancer Registries

### Raw data - Period 2003-2006

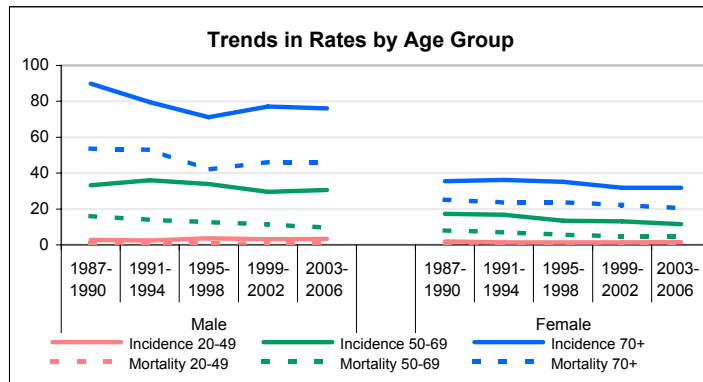
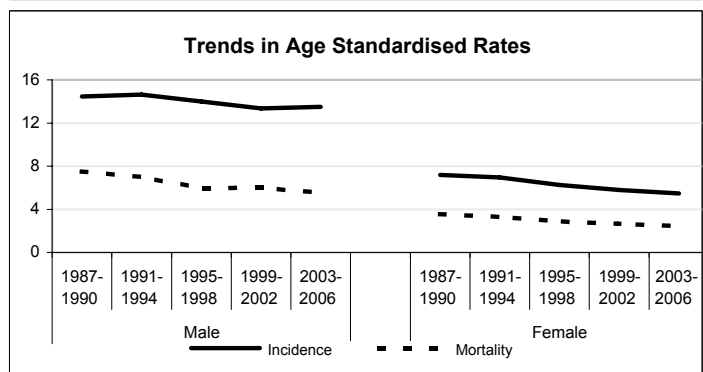
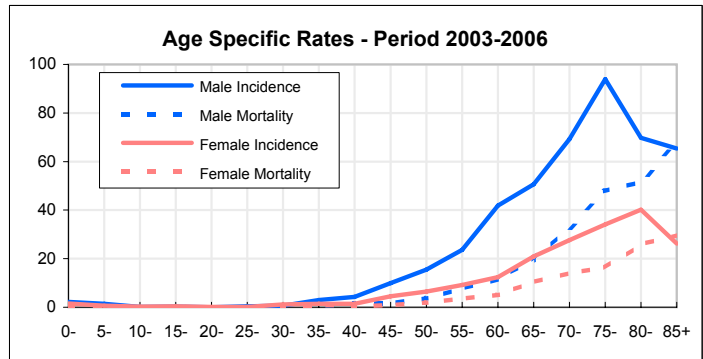
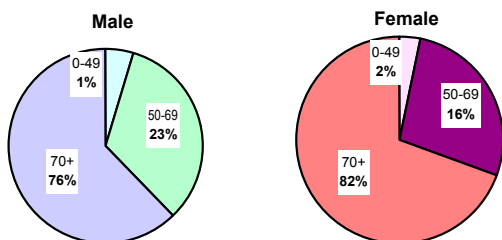
Gender	Yearly averages		5-year Prevalence (3)	Years of life lost (4)
	New cases (1)	Deaths (2)		
Male	569	244	2005	1548
Female	294	153	1154	755
Total	863	397	3159	2303

- (1) Swiss estimates on basis of nine registries
- (2) Computed from data of Statistical Federal Office
- (3) Estimated from Globocan 2002, IARC - Lyon
- (4) Years lost each year before age 75

### New cases by age group



### Deaths by age group



Kidney and other urinary tracts, except the bladder, represent about 3% of all cancers in men and 1.8% in women in Switzerland. Mortality from kidney cancer is high and survival is low, about 56% for 5-year relative survival. Renal cell carcinoma accounts for 80 to 85 percent of all kidney cancers.

Overall, the etiological mechanisms of kidney cancer remain poorly understood. For renal cell carcinoma, major known risk factors are cigarette smoking, phenacetin intake (now banned 20 years ago), obesity, hypertension and endstage of renal disease. Some data suggest that trichloroethylene exposure is a risk factor for renal cell carcinoma.

Kidney cancer is most commonly sporadic, but it can also be hereditary. Six clinically distinct types of inherited kidney cancer have been identified so far. Approximately 30 percent of kidney cancers are incidentally detected because of widespread and increasing use of computed tomography (CT) for other medical indications.

There is some evidence that earlier detection leads to better outcomes in kidney cancer, although few screening studies have been conducted. However, techniques for early diagnosis of these cancers are extremely limited and treatment fails in 95 percent of patients with advanced disease.

In localized kidney cancer, radical nephrectomy remains the standard of care, but minimally invasive and nephron-sparing surgical techniques are becoming widely used. Early successes with radiofrequency and cryosurgical ablation of small kidney cancer are being reported.

Despite the severe limitations of existing therapies for kidney cancers, the number of survivors of these diseases is increasing. Factors influencing quality of life in these people are largely uninvestigated.

Edited by: Jean-Michel Lutz & Pierre Pury, NICER

# Brain and central nerves

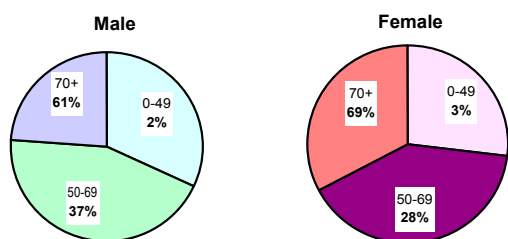
NICER and Swiss Cancer Registries

### Raw data - Period 2003-2006

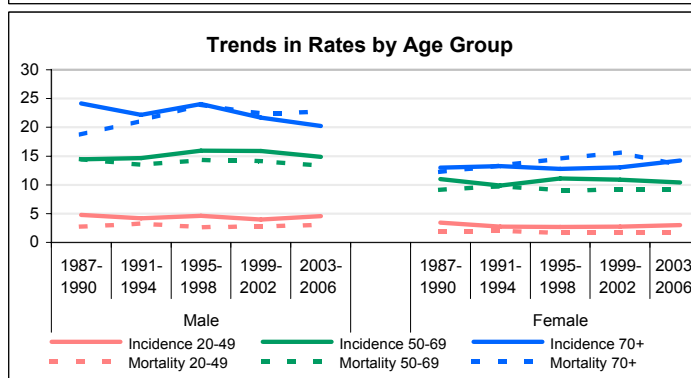
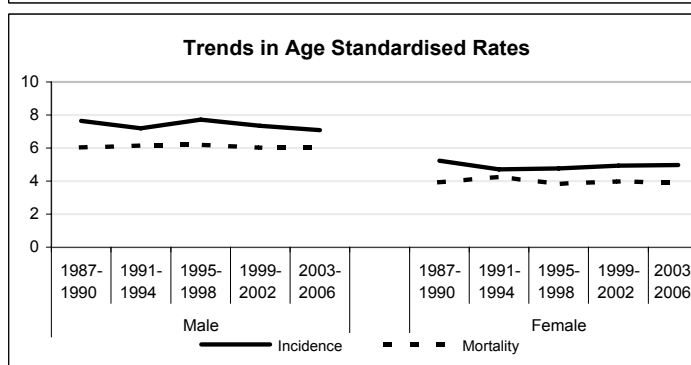
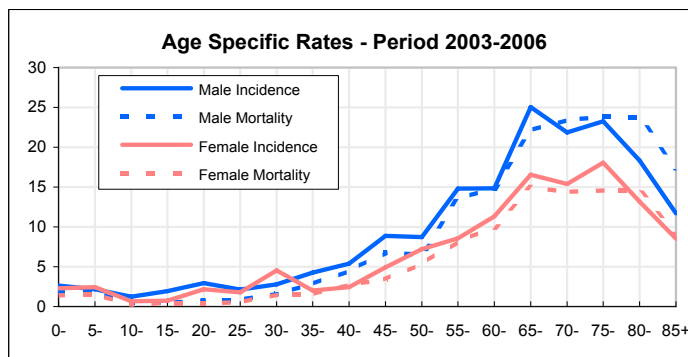
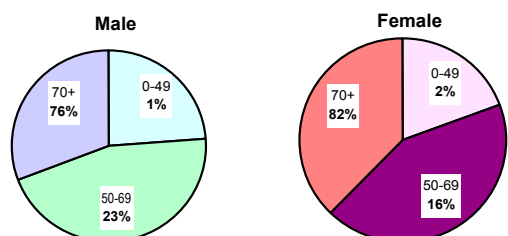
Gender	Yearly averages		5-year Prevalence (3)	Years of life lost (4)
	New cases (1)	Deaths (2)		
Male	282	246	576	3900
Female	224	184	743	2596
<b>Total</b>	<b>506</b>	<b>430</b>	<b>1319</b>	<b>6496</b>

- (1) Swiss estimates on basis of nine registries
- (2) Computed from data of Statistical Federal Office
- (3) Estimated from Globocan 2002, IARC - Lyon
- (4) Years lost each year before age 75

### New cases by age group



### Deaths by age group



Brain tumours account for 85% to 90% of all primary central nervous system (CNS) tumours, which represent 1.3% (females) to 1.5% (males) of all cancers in Switzerland. The most frequent histologic types of brain tumour are anaplastic astrocytoma and glioblastoma, accounting for approximately 38% of primary brain tumours, and meningiomas and other mesenchymal tumours accounting for approximately 27%. Overall, the prognosis of brain tumour is poor: age standardized relative survival in Switzerland is about 44% at one year and 21% at five year (EUROCORE 4 data).

Few definitive observations on environmental or occupational causes of primary CNS tumours have been made : Exposure to vinyl chloride may predispose to the development of glioma, Epstein-Barr virus infection has been implicated in the etiology of primary CNS lymphoma and transplant recipients and patients with the acquired immunodeficiency syndrome have substantially increased risks for primary CNS lymphoma.

There are also few familial tumour syndromes (and respective chromosomal abnormalities that are associated with CNS neoplasms) such as neurofibromatosis, von Hippel Lindau disease, Li-Fraumeni syndrome or Turcot syndrome. Familial tumour syndromes with defined chromosomal abnormalities are associated with gliomas.

Seizures are a presenting symptom in approximately 20% of patients with supratentorial brain tumours and may antedate the clinical diagnosis by months to years in patients with slow-growing tumours

For patients with brain tumors, two primary goals of surgery are (1) establishing a histologic diagnosis and (2) reducing intracranial pressure by removing as much tumor as is safely possible to preserve neurological function. Total elimination of primary intraparenchymal tumors by surgery alone is extremely rare. Radiation therapy and chemotherapy options vary according to histology and anatomic site of the brain tumour.

Edited by: Jean-Michel Lutz & Pierre Pury, NICER