

Ticino

Statistics of Cancer Survival

1996 - 2015

Coordinates

www.ti.ch/tumori

Locarno – May 2018

Prepared by Laura Ortelli

Head of Ticino Cancer Registry

Andrea Bordoni

Data Management

Paola Mazzola

Simona Peverelli

Statistical Analysis

Laura Ortelli

Alessandra Spitale

MATERIALS AND METHODS

All patients with malignant tumour (with the exception of non-melanoma skin cancers) diagnosed from 1996 to 2015 were retrieved from the archives of the population-based Ticino Cancer Registry and included in the present study. The active follow up (31 December 2015) consisted of systematic checks of patient vital status through a record-linkage procedure between the local Cancer Registry database and the regional Office of Population Registry Rosters.

Survival was computed for all patients aged 15-99. The items used for the analysis were the following: date of birth, gender, date of diagnosis, cancer topography and morphology (according to the International Classification of Diseases for Oncology¹, ICD-O-III), vital status, date of follow-up and basis of diagnosis.

Table 1 reports the criteria adopted for the definition of the cancer sites.

Major Site	Cancer Site	Topography	Morphology	Beh	
Head and Neck	Head	C000-C148	8000-9589	3	
	Larynx	C300-329	8000-9589	3	
	Oesophagus	C150-C159	8000-9589	3	
	Stomach	C160-C169	8000-9589	3	
Colon rectum	Colon	C180-C189	8000-9589	3	
	Rectum	C199-C209	8000-9589	3	
	Liver	C220-C221	8000-9589	3	
	Pancreas	C250-C259	8000-9589	3	
	Lung	C339-C349	8000-9589	3	
	Skin melanoma	C440-C449	8720-8780	3	
	Breast	C500-C509	8000-9589	3	
	Cervix Uteri	C530-C539	8000-9589	3	
	Uterus	C540-C559	8000-9589	3	
	Ovary	C569	8000-9589	3	
	Prostate	C619	8000-9589	3	
	Kidney	C649	8000-9589	3	
	Urinary Tract	Renal Pelvis	C659	8000-9589	3
		Ureter	C669	8000-9589	3
		Bladder	C670-C679	8000-9589	3
8000-8010, 8120-8131				0-2	
Other urinary organs	C680-C689	8000-9589	3		
	Brain and CNS	C700-C729	8000-9589	3	
	Thyroid	C739	8000-9589	3	
	Myeloma	C00-C809	9731, 9732, 9734	3	
	Hodgkin Lymphoma	C000-C809	9650-9667	3	
	Non Hodgkin Lymphoma	C000-C419, C422-C423, C440-C809	9823,9827	3	
			C000-C809	9590-9596, 9670-9729	3
	Leukaemia	C420-C421, C424	9823, 9827	3	
			C000-C809	9733,9742, 9800-9820, 9826, 9832-9931, 9945-9946	3
	All Sites	C000-C809	8000-8046, 8120-9989	3	

Table 1: Tumours sites considered in the present analysis.

We excluded from the analysis both patients who were not resident in Ticino at the moment of the diagnosis and patients coming first to the attention of the Registry by the death certificate for which the trace back was unsuccessful. Indeed, the only evidence of a tumour for these cases, commonly defined in a cancer registry setting as death certificate-only cases (DCOs), was provided by the death certificate, but no further information was available and the real date of diagnosis was unknown.

If a patient had two or more cancers of the same site we proceeded as follows:

- If the cancers were diagnosed inside 30 days, then the worst case was selected (based on TNM/pTNM classification).
- Otherwise, the first cancer was selected.

In addition, we considered, for the same patient, all the tumours, subsequent to the first, but with different localization. The inclusion of multiple primaries implies that each single patient may be counted several times in different analyses, because of the presence of different primaries for the same patient, and also within the same analysis, when grouping different cancer sites. This inclusion has a variable effect on the survival estimates², but it is desirable for a better net survival estimate, as well as to improve the reliability of international comparison^{2,3}.

In this study, we calculated the observed (OS) and the relative survival (RS) with their respective 95% confidence intervals (95%CI). Relative survival is an estimate of cancer survival in the absence of other causes of death (proxi of the cancer-specific survival) and it is the ratio of the observed survival rate (OS) in the cancer patients under study to the expected survival rate (ES) in the general population with similar gender and age distribution.

$$RS = \left(\frac{OS}{ES} \right) \cdot 100$$

To compute the Relative survival we used the *period* approach, since it gives more up-to-date results (follow-up period window 01.01.2011 – 31.12.2015), by exclusively reflecting the survival experience of patients within some recent calendar period. Expected survival rates were calculated on the basis of the Ticino life tables by age and gender, using the Ederer II method. In order to favour international comparisons, 5-year age-standardized Relative survival rates were also computed for all sexes together and were reported in each output as footnote.

The standard used is that proposed by Corazziari et al.⁴ which is composed of 5 types of standards, depending on the type of tumour, or more precisely on the distribution of incidence by age (see table 2). Type 1 standard is associated to tumours that set in mainly during old age, thus it is used in the majority of sites. Standards 2 and 3 correspond respectively to tumours with the same incidence for each age group (melanoma, cervix uteri, brain,...), and those prevailing at a younger age (testicle, Hodgkin, acute lymphatic leukaemia). Standard 1* and 4 are used exclusively for mesothelioma and prostate cancer respectively.

Standard	Age groups	Weights	Cancer Sites
1	15-44, 45-54, 55-64, 65-74, 75+	7, 12, 23, 29, 29	All (except those included in standard 1*, 2, 3, 4)
1*	15-54, 55-64, 65-74, 75+	19, 23, 29, 29	Mesothelioma
2	15-44, 45-54, 55-64, 65-74, 75+	28, 17, 21, 20, 14	Nasopharynx, soft tissues, melanoma, cervix uteri, brain and CNS, thyroid
3	15-44, 45-54, 55-64, 65-74, 75+	60, 10, 10, 10, 10	Testis, Hodgkin lymphoma, acute lymphatic leukaemia
4	15-54, 55-64, 65-74, 75-84, 85+	19, 23, 29, 23, 6	Prostate

Table 2: Standard population used to calculate standardized relative survival.

Special cases

Lymphomas and leukemia were analyzed separately and excluded from the analysis of each tumour localization.

Due to the several issues related to the current use of different practices for coding behaviour of the urinary bladder cancers, we decided to include in the survival analysis non-malignant bladder transitional cell papillomas and carcinomas (ICD-O-III morphologies: 8000-8010 and 8120-8131).

References

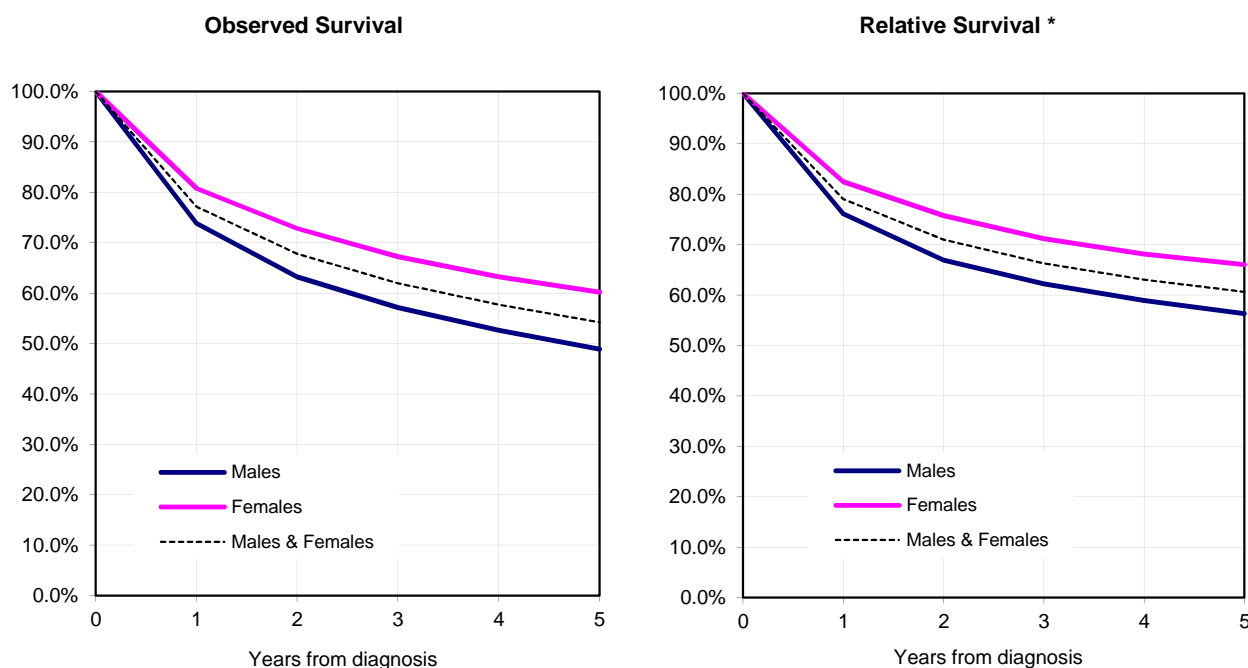
- ¹ Fritz A *et al.* International Classification of Diseases for Oncology, 3rd ed. Genève: World Health Organization; 2000.
- ² Brenner H *et al.* Patients with previous cancer should not be excluded in International comparative cancer survival studies. *Int J Cancer* 2007; 121: 2274-2278.
- ³ Rosso S. *et al.* Multiple tumours in survival estimates. *Eur J Cancer* 2009 ; 45 : 1080-1094.
- ⁴ Corazziari I *et al.* Standard cancer patient population for age standardising survival ratios. *Eur J Cancer* 2004 Oct; 40(15): 2307-16.

ALL SITES EXCEPT SKIN NON MELANOMA

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	6393	73.8%	72.6% - 75.0%	76.1%	74.9% - 77.3%
	2 years	4723	63.2%	61.9% - 64.5%	66.9%	65.6% - 68.3%
	3 years	4000	57.2%	55.8% - 58.5%	62.2%	60.8% - 63.7%
	5 years	3213	48.9%	47.5% - 50.2%	56.3%	54.8% - 57.9%
Females	1 year	5905	80.8%	79.6% - 81.8%	82.5%	81.3% - 83.6%
	2 years	4687	72.9%	71.6% - 74.1%	75.7%	74.4% - 77.0%
	3 years	4065	67.2%	65.9% - 68.5%	71.2%	69.7% - 72.5%
	5 years	3313	60.2%	58.8% - 61.5%	66.0%	64.5% - 67.5%
Males & Females	1 year	12298	77.2%	76.3% - 77.9%	79.0%	78.2% - 79.9%
	2 years	9410	67.8%	66.9% - 68.7%	71.0%	70.0% - 71.9%
	3 years	8065	62.0%	61.0% - 62.9%	66.3%	65.2% - 67.3%
	5 years	6526	54.2%	53.2% - 55.2%	60.6%^	59.5% - 61.7%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

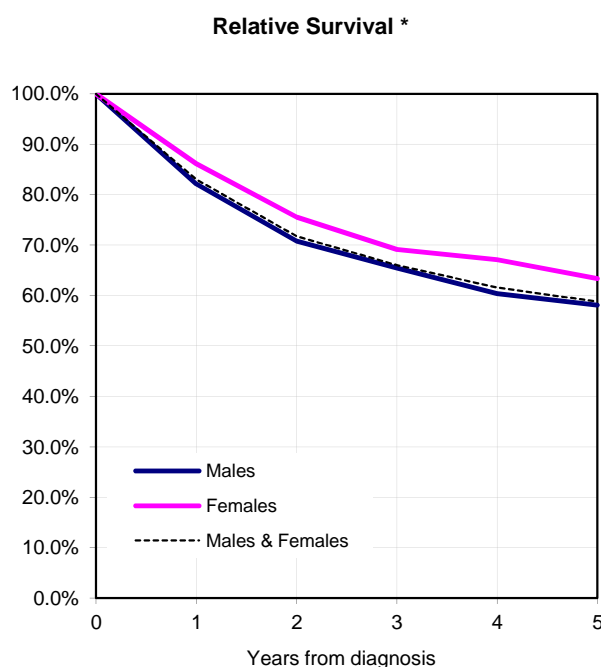
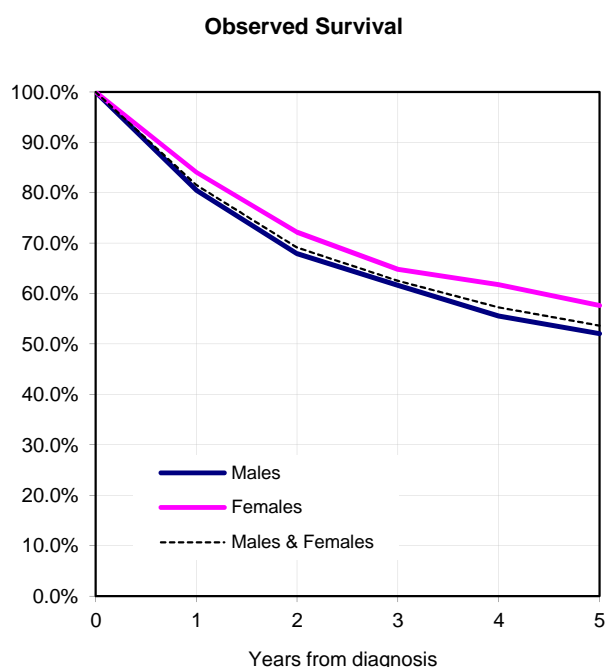
^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 61.6% (CI 95%: 60.5% - 62.6%).

C00-14 HEAD AND NECK C30-32 NASAL CAVITY, SINUSES AND LARYNX

Analysis period: 2011-2015

Ticino Cancer Registry

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	318	80.5%	75.3% - 84.7%	82.1%	76.8% - 86.4%
	2 years	266	68.0%	62.1% - 73.1%	70.8%	64.6% - 76.2%
	3 years	217	61.6%	55.6% - 67.1%	65.5%	59.0% - 71.3%
	5 years	173	52.1%	45.9% - 57.9%	58.1%	51.2% - 64.5%
Females	1 year	120	84.1%	75.7% - 89.8%	86.1%	77.5% - 92.0%
	2 years	101	72.2%	62.5% - 79.8%	75.5%	65.4% - 83.4%
	3 years	84	64.8%	54.7% - 73.3%	69.1%	58.3% - 78.1%
	5 years	70	57.6%	47.4% - 66.6%	63.3%	52.0% - 73.2%
Males & Females	1 year	438	81.5%	77.2% - 85.1%	83.0%	78.7% - 86.7%
	2 years	367	69.1%	64.2% - 73.5%	71.7%	66.6% - 76.3%
	3 years	301	62.5%	57.4% - 67.2%	66.0%	60.6% - 71.0%
	5 years	243	53.6%	48.4% - 58.6%	58.8%^	53.0% - 64.2%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

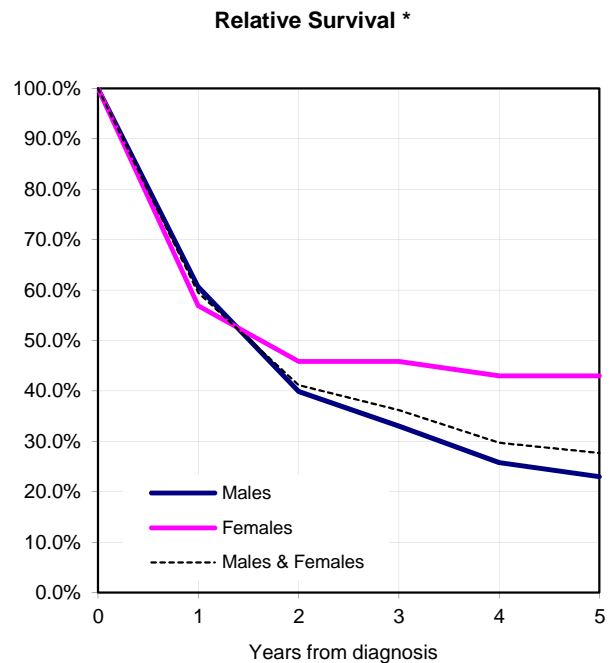
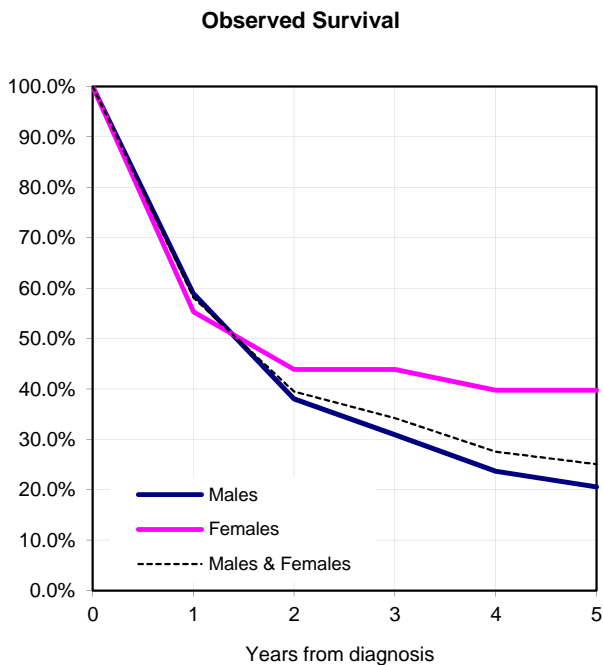
^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 58.4% (CI 95%: 52.8% - 64.6%).

C15 OESOPHAGUS

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	145	58.9%	50.0% - 66.8%	60.6%	51.4% - 68.8%
	2 years	73	38.1%	29.3% - 46.8%	39.9%	30.7% - 49.1%
	3 years	38	30.9%	22.4% - 39.9%	33.0%	23.9% - 42.6%
	5 years	19	20.5%	12.9% - 29.4%	23.0%	14.4% - 32.9%
Females	1 year	46	55.3%	39.0% - 68.8%	56.9%	40.1% - 70.8%
	2 years	20	43.8%	28.1% - 58.5%	45.9%	29.4% - 61.2%
	3 years	15	43.8%	28.1% - 58.5%	45.9%	29.4% - 61.2%
	5 years	10	39.7%	23.9% - 55.1%	43.0%	25.9% - 59.7%
Males & Females	1 year	191	58.1%	50.3% - 65.0%	59.5%	51.5% - 66.7%
	2 years	93	39.5%	31.8% - 47.1%	41.2%	33.1% - 49.1%
	3 years	53	34.2%	26.6% - 42.0%	36.2%	28.1% - 44.4%
	5 years	29	25.1%	17.8% - 33.0%	27.7%^	19.6% - 36.4%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

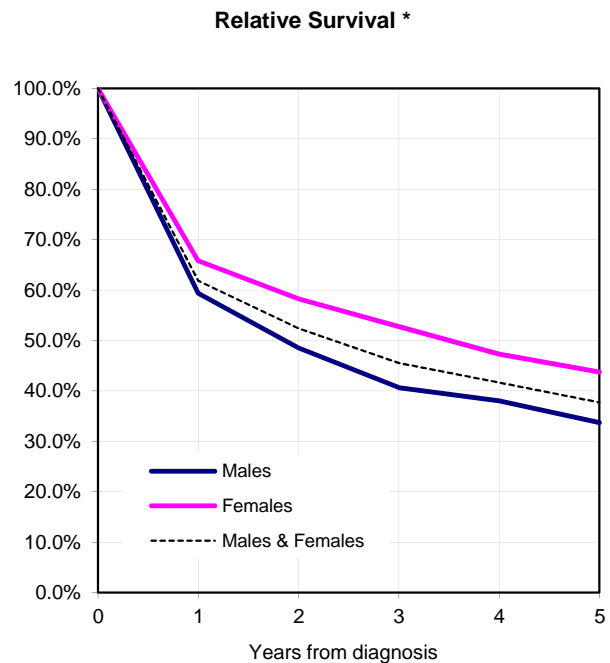
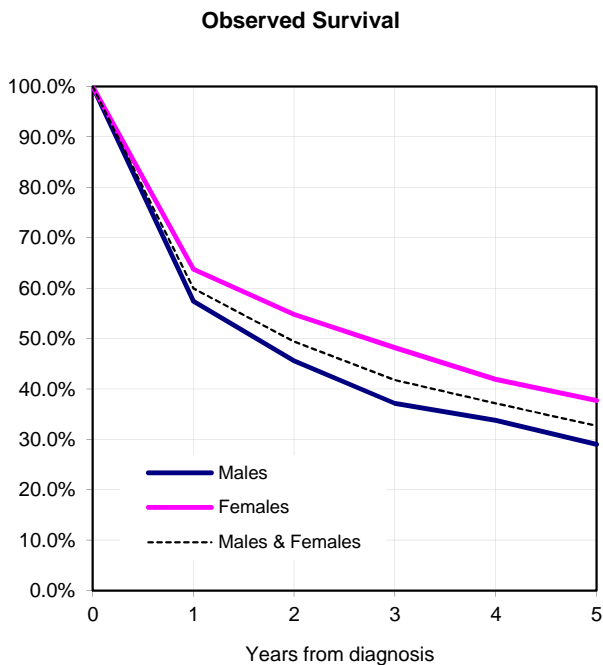
^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 22.4% (CI 95%: 15.4% - 32.5%).

C16 STOMACH

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	206	57.4%	49.9% - 64.2%	59.4%	51.6% - 66.4%
	2 years	119	45.6%	38.2% - 52.6%	48.5%	40.7% - 56.0%
	3 years	87	37.2%	30.1% - 44.2%	40.7%	32.9% - 48.4%
	5 years	61	29.0%	22.3% - 36.0%	33.7%	26.0% - 41.9%
Females	1 year	150	63.7%	54.6% - 71.5%	65.7%	56.3% - 73.8%
	2 years	99	54.8%	45.7% - 63.0%	58.2%	48.6% - 66.9%
	3 years	79	48.2%	39.2% - 56.6%	52.8%	42.9% - 62.0%
	5 years	59	37.7%	29.2% - 46.2%	43.8%	33.8% - 53.6%
Males & Females	1 year	356	60.0%	54.2% - 65.2%	61.8%	55.9% - 67.2%
	2 years	218	49.4%	43.7% - 54.8%	52.4%	46.3% - 58.1%
	3 years	166	41.8%	36.2% - 47.2%	45.5%	39.4% - 51.5%
	5 years	120	32.7%	27.3% - 38.1%	37.7% ^Λ	31.6% - 44.0%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

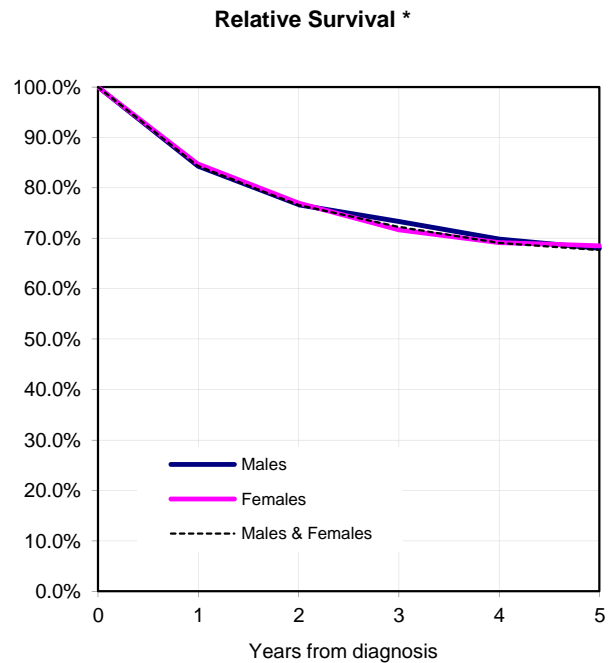
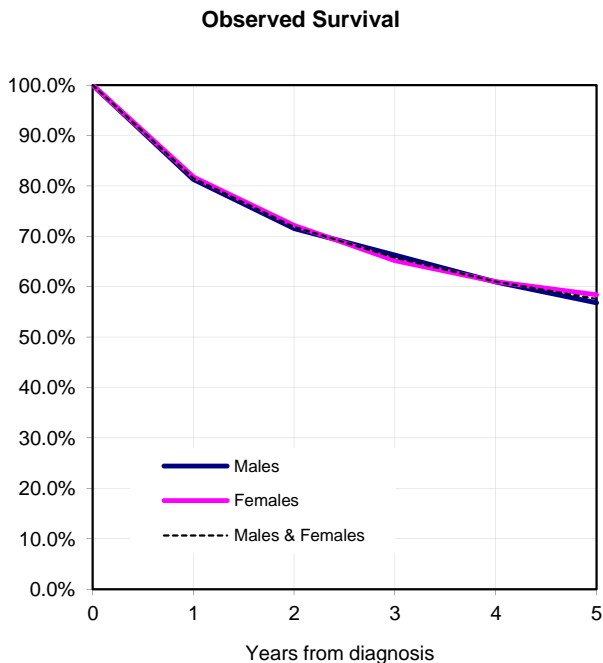
Λ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 43.0% (CI 95%: 36.8% - 50.1%).

C18 COLON

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	522	81.3%	77.3% - 84.6%	84.2%	80.1% - 87.7%
	2 years	418	71.6%	67.1% - 75.5%	76.7%	71.9% - 80.9%
	3 years	361	66.3%	61.6% - 70.6%	73.3%	68.1% - 78.0%
	5 years	290	56.8%	51.9% - 61.4%	68.0%	62.1% - 73.5%
Females	1 year	478	81.7%	77.6% - 85.2%	84.7%	80.4% - 88.3%
	2 years	382	72.2%	67.4% - 76.3%	77.0%	71.9% - 81.4%
	3 years	309	65.2%	60.2% - 69.7%	71.7%	66.2% - 76.7%
	5 years	257	58.4%	53.2% - 63.2%	68.5%	62.4% - 74.1%
Males & Females	1 year	1000	81.5%	78.7% - 84.0%	84.3%	81.4% - 86.9%
	2 years	800	71.8%	68.6% - 74.8%	76.6%	73.2% - 79.7%
	3 years	670	65.8%	62.4% - 68.9%	72.2%	68.5% - 75.7%
	5 years	547	57.6%	54.0% - 60.9%	67.7% [^]	63.5% - 71.6%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

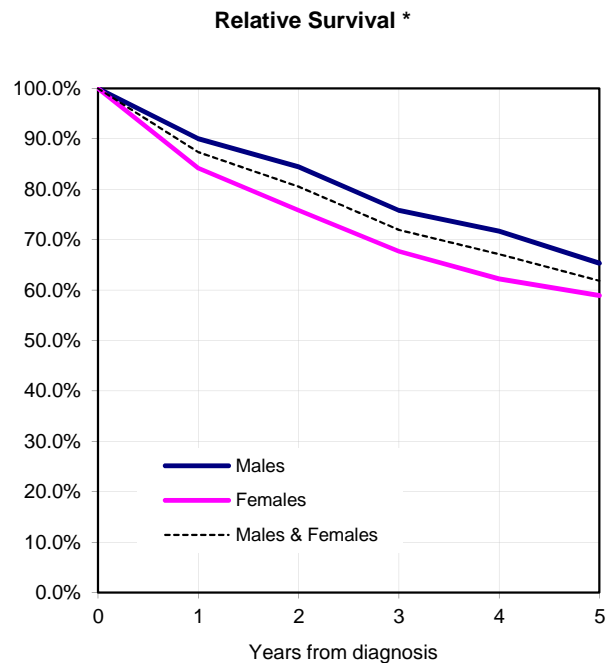
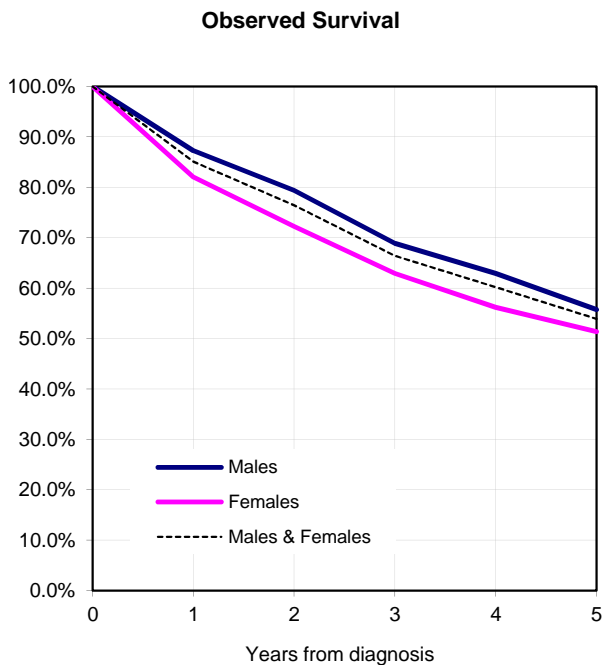
[^] For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 70.5% (CI 95%: 66.7% - 74.5%).

C20 RECTUM

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	249	87.2%	81.8% - 91.1%	90.0%	84.4% - 94.0%
	2 years	215	79.4%	73.1% - 84.3%	84.4%	77.8% - 89.7%
	3 years	192	68.9%	62.0% - 74.8%	75.8%	68.2% - 82.3%
	5 years	156	55.7%	48.6% - 62.2%	65.4%	57.0% - 73.0%
Females	1 year	178	82.0%	74.8% - 87.4%	84.2%	76.7% - 89.6%
	2 years	140	72.3%	64.2% - 78.8%	75.8%	67.3% - 82.7%
	3 years	109	62.9%	54.4% - 70.3%	67.7%	58.6% - 75.6%
	5 years	85	51.4%	42.7% - 59.4%	58.9%	49.0% - 68.1%
Males & Females	1 year	427	85.1%	80.9% - 88.4%	87.4%	83.1% - 90.8%
	2 years	355	76.4%	71.6% - 80.5%	80.5%	75.4% - 84.8%
	3 years	301	66.4%	61.2% - 71.1%	71.9%	66.2% - 77.0%
	5 years	241	53.9%	48.4% - 59.0%	61.8%^	55.6% - 67.7%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

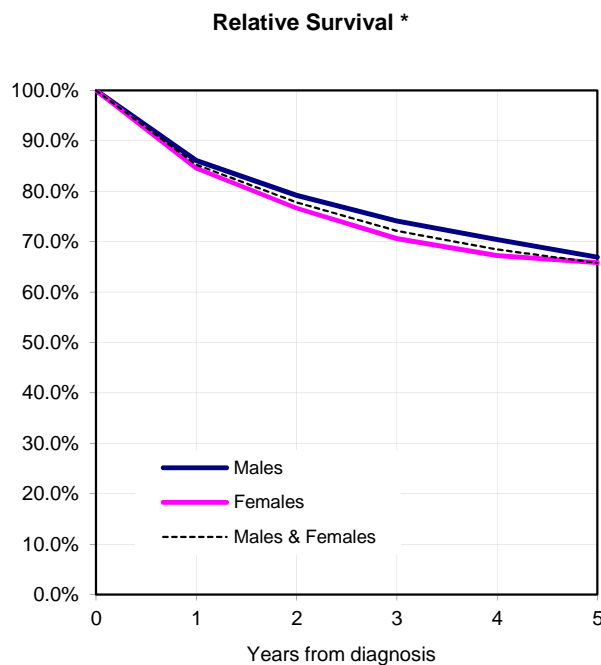
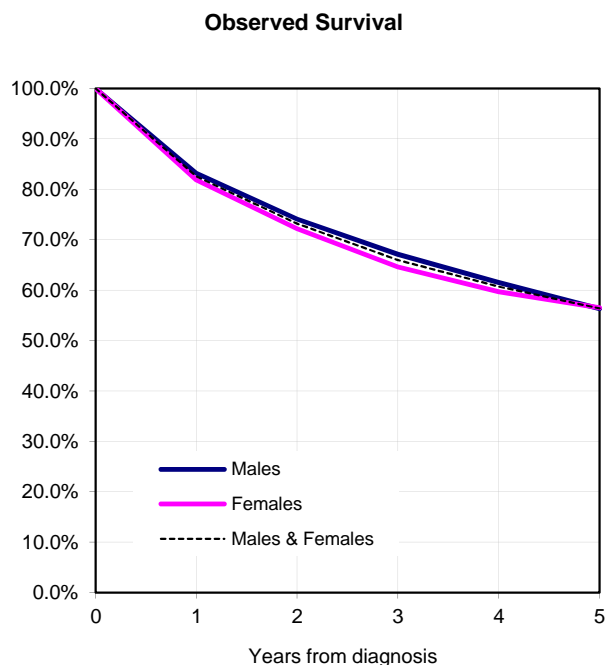
^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 62.4% (CI 95%: 56.7% - 68.7%).

C18-20 COLON-RECTUM

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	772	83.2%	80.1% - 85.9%	86.1%	82.9% - 88.9%
	2 years	634	74.1%	70.5% - 77.3%	79.2%	75.3% - 82.6%
	3 years	553	67.1%	63.3% - 70.6%	74.1%	69.8% - 77.9%
	5 years	446	56.3%	52.3% - 60.1%	66.9%	62.2% - 71.5%
Females	1 year	656	81.8%	78.3% - 84.8%	84.5%	80.9% - 87.6%
	2 years	522	72.2%	68.2% - 75.8%	76.6%	72.4% - 80.5%
	3 years	418	64.6%	60.3% - 68.5%	70.6%	65.9% - 74.9%
	5 years	342	56.5%	52.1% - 60.7%	65.9%	60.7% - 70.7%
Males & Females	1 year	1428	82.6%	80.3% - 84.6%	85.2%	82.9% - 87.3%
	2 years	1156	73.2%	70.6% - 75.6%	77.7%	75.0% - 80.3%
	3 years	971	65.9%	63.1% - 68.6%	72.1%	69.0% - 75.0%
	5 years	788	56.4%	53.4% - 59.2%	65.8%^	62.3% - 69.1%



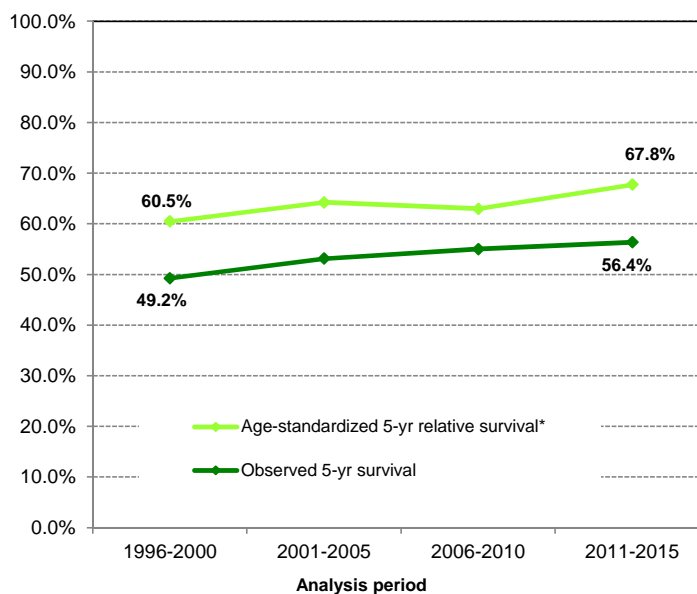
* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The period approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 67.8% (CI 95%: 64.6% - 71.1%).

Survival trend from 1996 to 2015 in Canton Ticino

	Analysis period	Alive at the beginning of the analysis period	Observed 5-yr survival	CI 95%	Age-standardized 5-yr relative survival*	CI 95%
Males & Females	1996-2000	896	49.2%	45.9% - 52.5%	60.5%	56.8% - 64.4%
	2001-2005	1010	53.2%	50.0% - 56.2%	64.2%	60.8% - 67.8%
	2006-2010	1102	55.0%	52.0% - 57.9%	63.0%	59.3% - 66.9%
	2011-2015	1428	56.4%	53.4% - 59.2%	67.8%	64.6% - 71.1%

Time trends in 5-year survival rates (Males & Females)



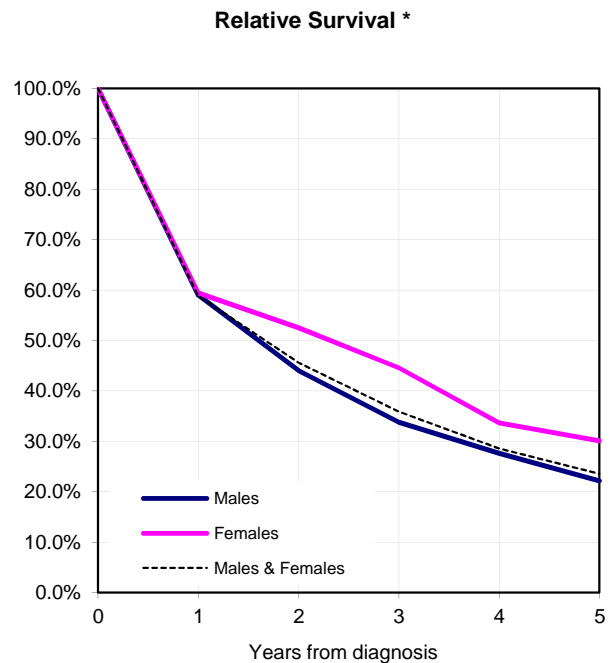
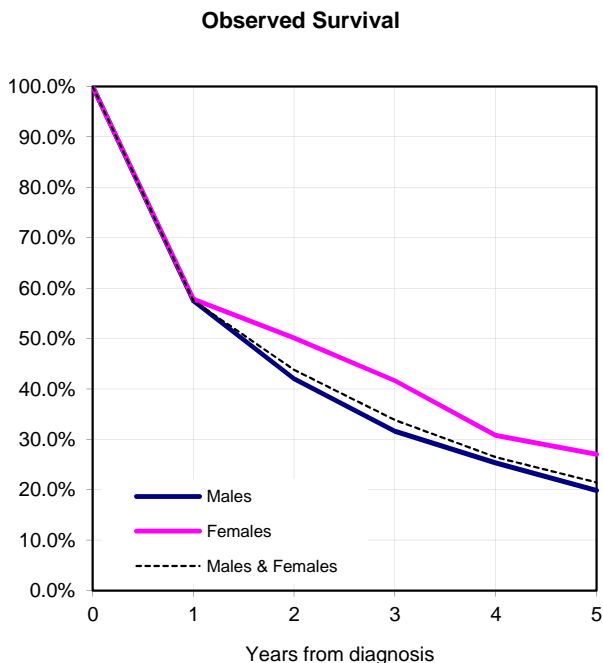
* Age-standardized Relative Survival probability (Corazziari I. et al., EJC 2004) was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). The cohort approach was used for the periods 1996-2000, 2001-2005 and 2006-2010, while for the years 2011-2015 we used the period approach to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

C22 LIVER

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	315	57.5%	51.4% - 63.0%	59.0%	52.8% - 64.7%
	2 years	180	42.0%	36.2% - 47.8%	44.0%	37.9% - 50.0%
	3 years	124	31.6%	26.2% - 37.2%	33.8%	28.0% - 39.8%
	5 years	56	19.9%	15.0% - 25.3%	22.1%	16.7% - 28.2%
Females	1 year	84	57.8%	45.6% - 68.2%	59.4%	46.9% - 70.1%
	2 years	53	50.1%	38.3% - 60.8%	52.5%	40.1% - 63.7%
	3 years	44	41.6%	30.3% - 52.6%	44.6%	32.5% - 56.3%
	5 years	21	27.1%	17.1% - 38.0%	30.1%	19.0% - 42.3%
Males & Females	1 year	399	57.5%	52.2% - 62.5%	58.9%	53.4% - 64.0%
	2 years	233	43.8%	38.6% - 48.9%	45.6%	40.2% - 50.9%
	3 years	168	33.8%	28.9% - 38.8%	35.9%	30.6% - 41.2%
	5 years	77	21.4%	17.0% - 26.3%	23.6%^	18.6% - 28.9%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The period approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

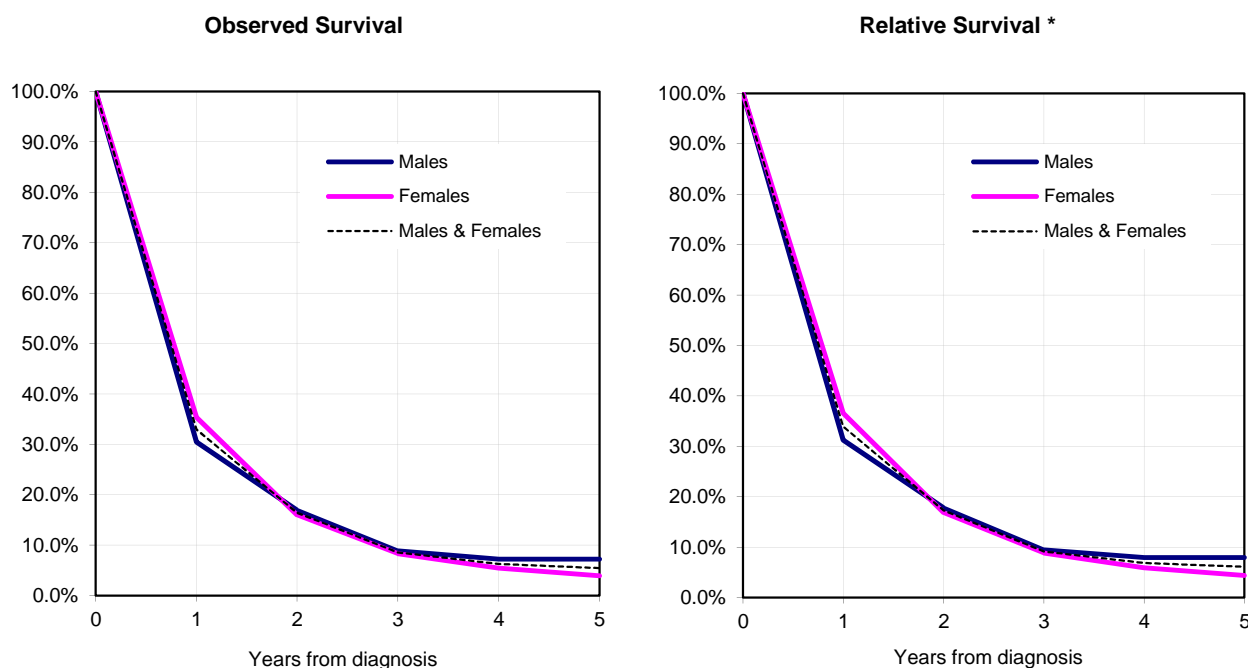
^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 21.5% (CI 95%: 17.3% - 26.7%).

C25 PANCREAS

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	176	30.5%	23.7% - 37.5%	31.3%	24.3% - 38.5%
	2 years	55	17.0%	11.6% - 23.2%	17.8%	12.2% - 24.3%
	3 years	25	8.9%	4.8% - 14.5%	9.5%	5.1% - 15.4%
	5 years	9	7.3%	3.6% - 12.5%	8.0%	4.0% - 13.8%
Females	1 year	174	35.4%	1.6% - 42.6%	36.6%	29.2% - 44.0%
	2 years	62	16.0%	1.6% - 22.0%	16.8%	11.5% - 23.1%
	3 years	27	8.3%	1.6% - 13.3%	8.9%	5.0% - 14.2%
	5 years	9	3.9%	1.2% - 8.0%	4.4%	1.8% - 8.9%
Males & Females	1 year	350	32.9%	28.0% - 38.0%	33.9%	28.8% - 39.1%
	2 years	117	16.5%	12.7% - 20.7%	17.3%	13.3% - 21.7%
	3 years	52	8.6%	5.7% - 12.2%	9.1%	6.1% - 13.0%
	5 years	18	5.5%	3.2% - 8.6%	6.1% ^Λ	3.6% - 9.6%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The period approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

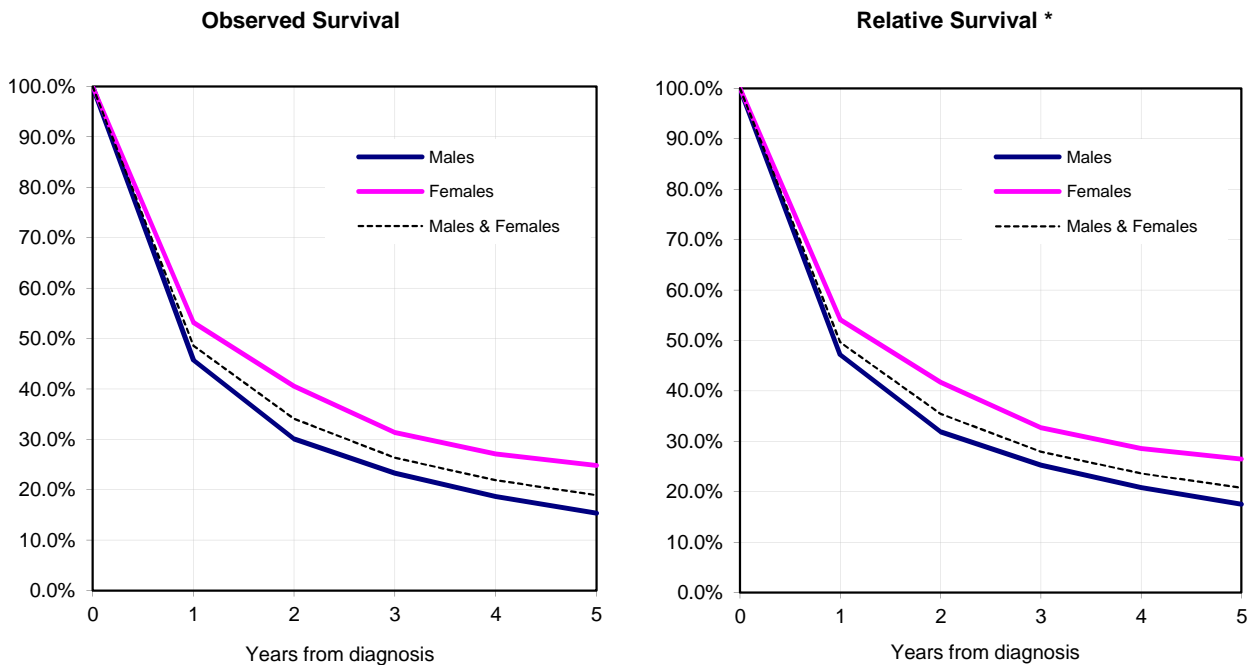
Λ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 8.0% (CI 95%: 4.8% - 13.4%).

C33-34 LUNG, BRONCHUS, TRACHEA

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	852	45.7%	42.2% - 49.2%	47.2%	43.5% - 50.7%
	2 years	393	30.1%	26.9% - 33.4%	31.9%	28.5% - 35.3%
	3 years	248	23.3%	20.3% - 26.4%	25.3%	22.1% - 28.7%
	5 years	139	15.4%	12.8% - 18.2%	17.5%	14.6% - 20.7%
Females	1 year	536	53.2%	48.6% - 57.6%	54.2%	49.5% - 58.6%
	2 years	288	40.5%	36.1% - 45.0%	41.7%	37.1% - 46.2%
	3 years	197	31.4%	27.2% - 35.7%	32.7%	28.3% - 37.2%
	5 years	112	24.8%	20.8% - 29.0%	26.5%	22.2% - 30.9%
Males & Females	1 year	1388	48.5%	45.7% - 51.3%	49.7%	46.8% - 52.5%
	2 years	681	34.1%	31.4% - 36.7%	35.5%	32.7% - 38.2%
	3 years	445	26.4%	23.9% - 28.9%	27.9%	25.3% - 30.6%
	5 years	251	18.9%	16.7% - 21.3%	20.8%^	18.3% - 23.4%



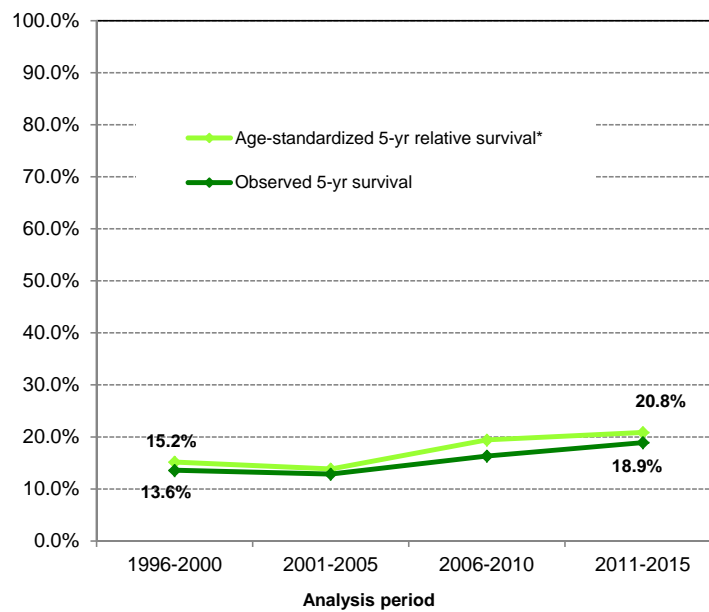
* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The period approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 20.8% (CI 95%: 18.4% - 23.6%).

Survival trend from 1996 to 2015 in Canton Ticino

	Analysis period	Alive at the beginning of the analysis period	Observed 5-yr survival	CI 95%	Age-standardized 5-yr relative survival*	CI 95%
Males & Females	1996-2000	817	13.6%	11.3% - 16.1%	15.2%	12.6% - 18.2%
	2001-2005	913	12.8%	10.8% - 15.1%	13.8%	11.6% - 16.5%
	2006-2010	1065	16.3%	14.2% - 18.6%	19.4%	16.9% - 22.4%
	2011-2015	1388	18.9%	16.7% - 21.3%	20.8%	18.4% - 23.6%

Time trends in 5-year survival rates (Males & Females)



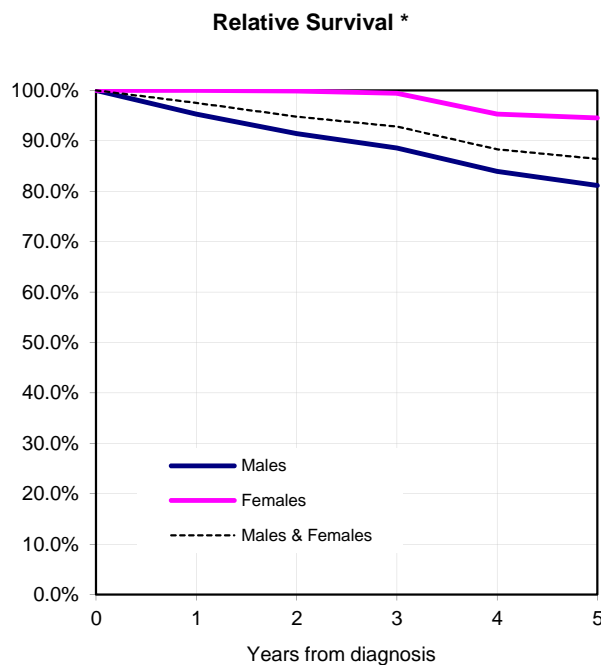
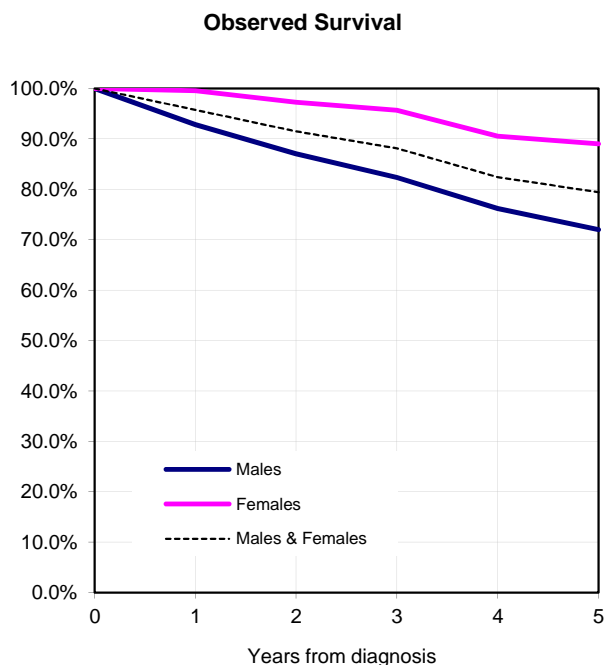
* Age-standardized Relative Survival probability (Corazziari I. et al., EJC 2004) was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). The cohort approach was used for the periods 1996-2000, 2001-2005 and 2006-2010, while for the years 2011-2015 we used the period approach to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

C44 SKIN MELANOMA

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	339	92.8%	89.2% - 95.3%	95.3%	91.6% - 97.8%
	2 years	305	87.0%	82.6% - 90.4%	91.4%	86.7% - 95.0%
	3 years	277	82.4%	77.3% - 86.4%	88.6%	83.2% - 92.9%
	5 years	221	72.0%	66.1% - 77.0%	81.1%	74.5% - 86.8%
Females	1 year	268	99.6%	96.9% - 99.9%	100.0%	#N/D - #N/D
	2 years	249	97.2%	94.0% - 98.7%	99.9%	96.5% - 101.4%
	3 years	228	95.7%	91.8% - 97.7%	99.4%	95.4% - 101.5%
	5 years	215	89.0%	83.8% - 92.6%	94.5%	89.0% - 98.4%
Males & Females	1 year	607	95.8%	93.6% - 97.2%	97.5%	95.3% - 99.0%
	2 years	554	91.5%	88.7% - 93.6%	94.7%	91.9% - 97.0%
	3 years	505	88.1%	84.9% - 90.7%	92.8%	89.4% - 95.5%
	5 years	436	79.5%	75.5% - 82.9%	86.4%^	82.1% - 90.1%



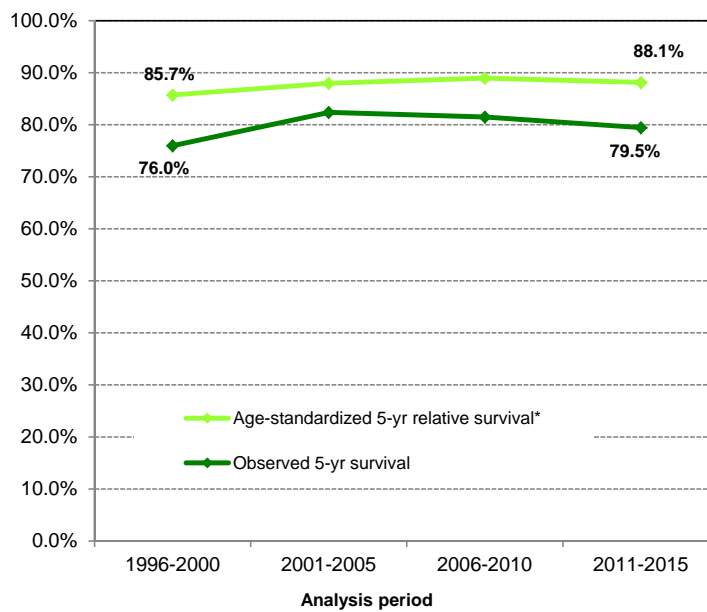
* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The period approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 88.1% (CI 95%: 84.7% - 91.7%).

Survival trend from 1996 to 2015 in Canton Ticino

	Analysis period	Alive at the beginning of the analysis period	Observed 5-yr survival	CI 95%	Age-standardized 5-yr relative survival*	CI 95%
Males & Females	1996-2000	272	76.0%	70.4% - 80.6%	85.7%	81.2% - 90.5%
	2001-2005	419	82.4%	78.4% - 85.7%	88.0%	84.2% - 91.9%
	2006-2010	426	81.5%	77.4% - 84.9%	88.9%	85.6% - 92.5%
	2011-2015	607	79.5%	75.5% - 82.9%	88.1%	84.7% - 91.7%

Time trends in 5-year survival rates (Males & Females)



* Age-standardized Relative Survival probability (Corazziari I. et al., EJC 2004) was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). The cohort approach was used for the periods 1996-2000, 2001-2005 and 2006-2010, while for the years 2011-2015 we used the period approach to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

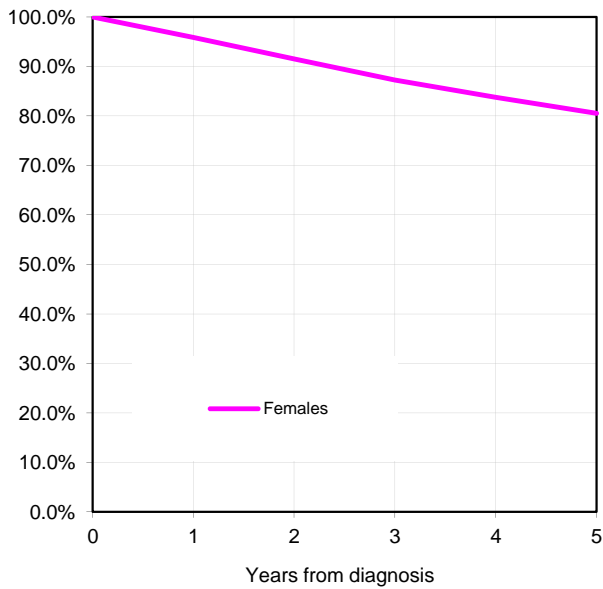
C50 BREAST

Ticino Cancer Registry

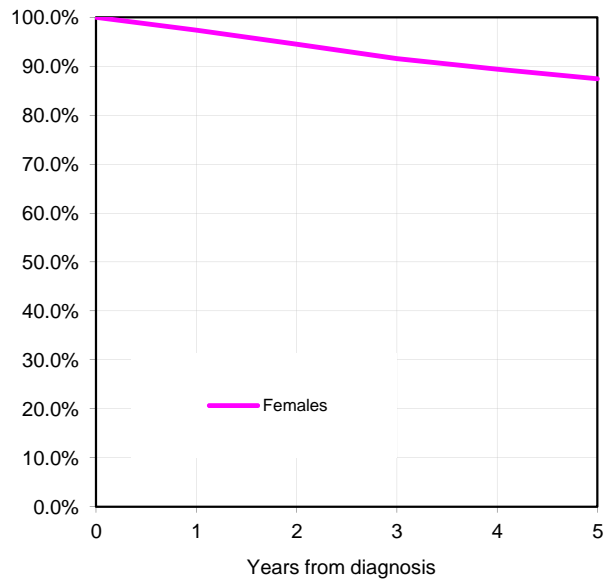
Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Females	1 year	1890	95.8%	94.7% - 96.7%	97.4%	96.2% - 98.2%
	2 years	1763	91.5%	90.0% - 92.8%	94.5%	92.9% - 95.8%
	3 years	1654	87.3%	85.5% - 88.8%	91.6%	89.7% - 93.2%
	5 years	1411	80.5%	78.4% - 82.4%	87.4%^	85.2% - 89.5%

Observed Survival



Relative Survival *



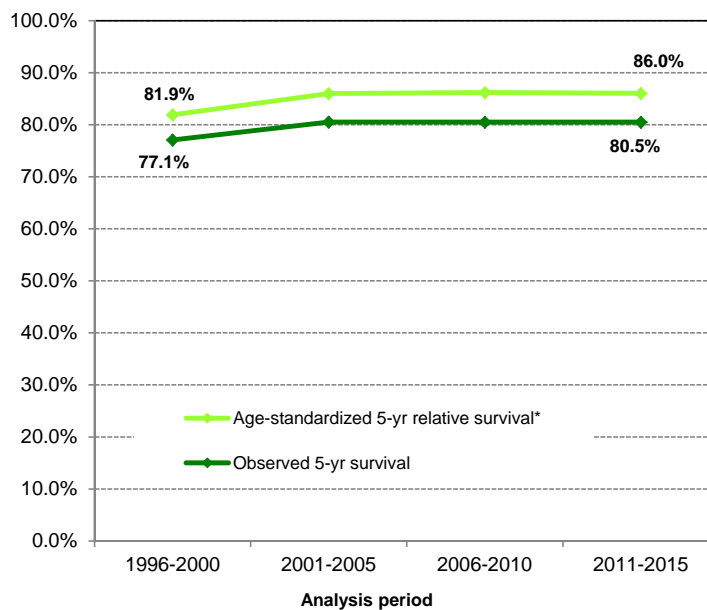
* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 86.0% (CI 95%: 83.6% - 88.5%).

Survival trend from 1996 to 2015 in Canton Ticino

	Analysis period	Alive at the beginning of the analysis period	Observed 5-yr survival	CI 95%	Age-standardized 5-yr relative survival*	CI 95%
Females	1996-2000	1106	77.1%	74.5% - 79.5%	81.9%	78.7% - 85.2%
	2001-2005	1230	80.5%	78.2% - 82.6%	86.0%	83.2% - 88.9%
	2006-2010	1407	80.5%	78.3% - 82.5%	86.2%	83.8% - 88.7%
	2011-2015	1890	80.5%	78.4% - 82.4%	86.0%	83.6% - 88.5%

Time trends in 5-year survival rates (Females)



* Age-standardized Relative Survival probability (Corazziari I. et al., EJC 2004) was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). The cohort approach was used for the periods 1996-2000, 2001-2005 and 2006-2010, while for the years 2011-2015 we used the period approach to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

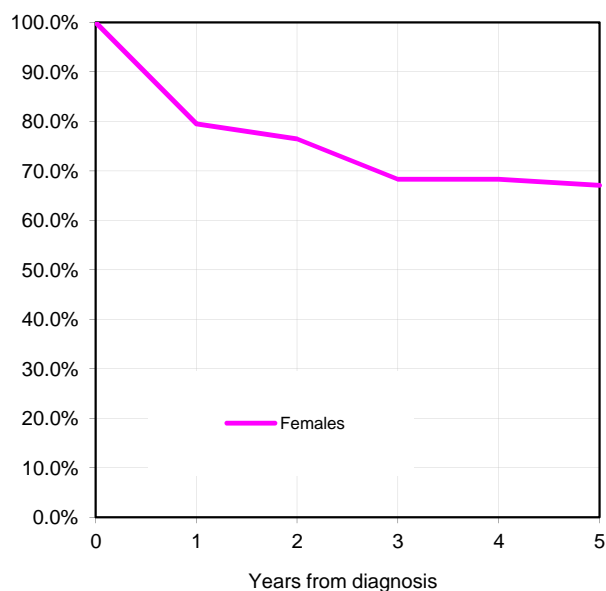
C53 CERVIX UTERI

Ticino Cancer Registry

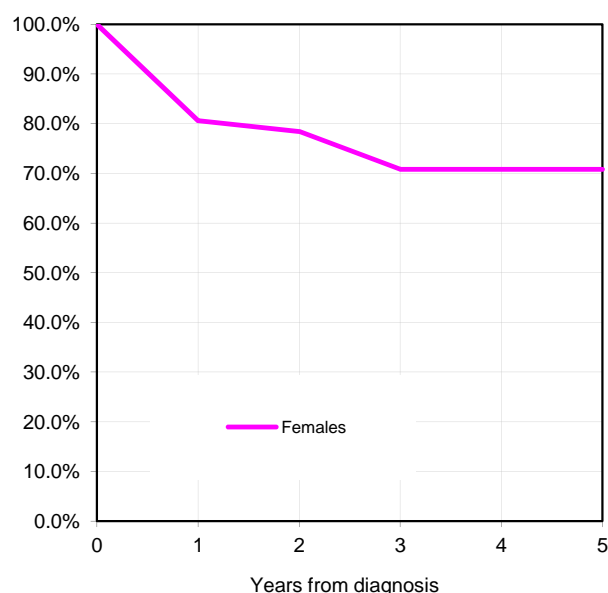
Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Females	1 year	75	79.5%	67.4% - 87.5%	80.6%	68.3% - 88.7%
	2 years	64	76.5%	64.1% - 85.1%	78.4%	65.7% - 87.2%
	3 years	66	68.3%	55.7% - 78.0%	70.8%	57.8% - 80.9%
	5 years	60	67.0%	54.5% - 76.9%	70.8%^	57.8% - 80.9%

Observed Survival



Relative Survival *



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 76.5% (CI 95%: 67.5% - 86.8%).

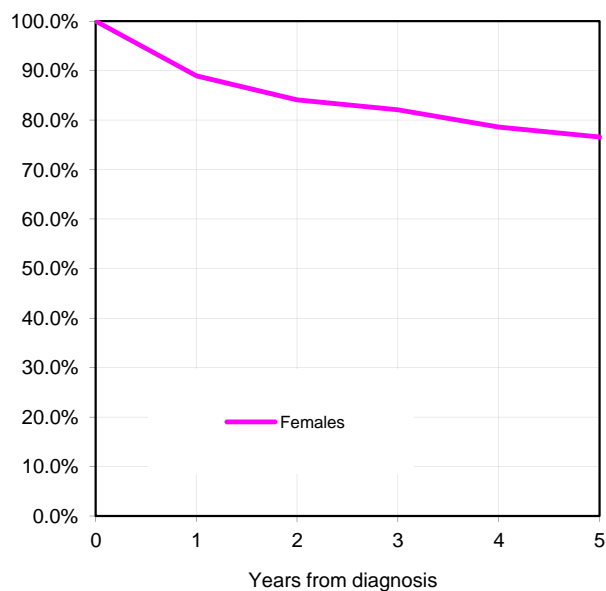
C54-55 CORPUS UTERI, UTERUS NOS

Ticino Cancer Registry

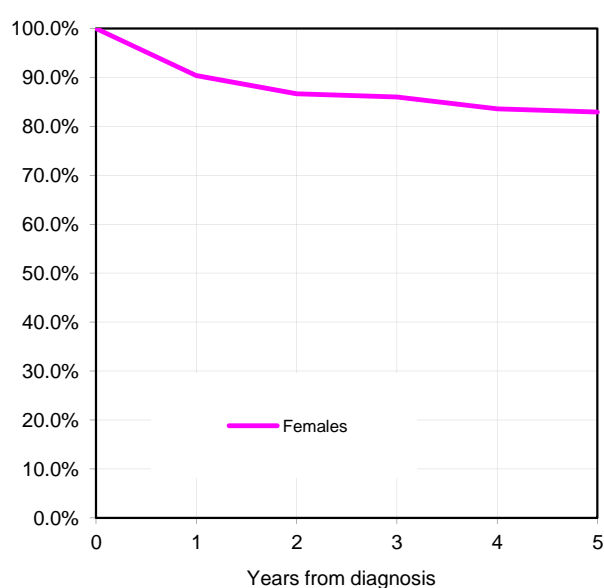
Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Females	1 year	282	88.9%	84.2% - 92.3%	90.3%	85.5% - 93.8%
	2 years	230	84.0%	78.7% - 88.2%	86.7%	81.1% - 90.9%
	3 years	215	82.1%	76.4% - 86.5%	86.0%	80.1% - 90.6%
	5 years	188	76.6%	70.4% - 81.6%	82.9%^	76.2% - 88.4%

Observed Survival



Relative Survival *



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

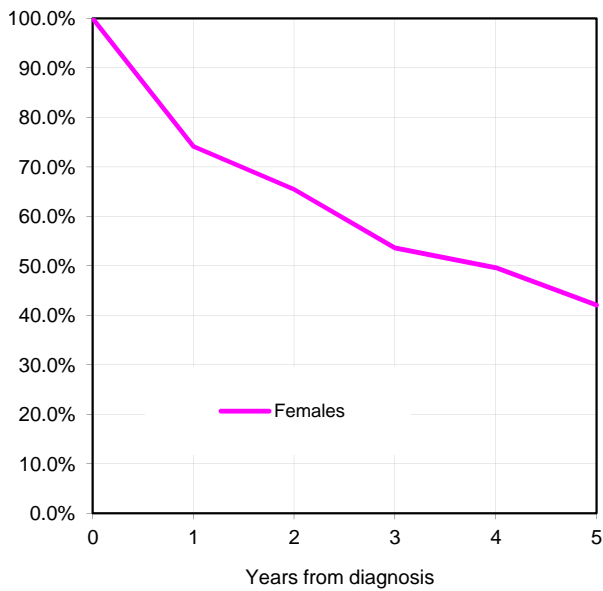
^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 82.0% (CI 95%: 75.9% - 88.5%).

C56 OVARY

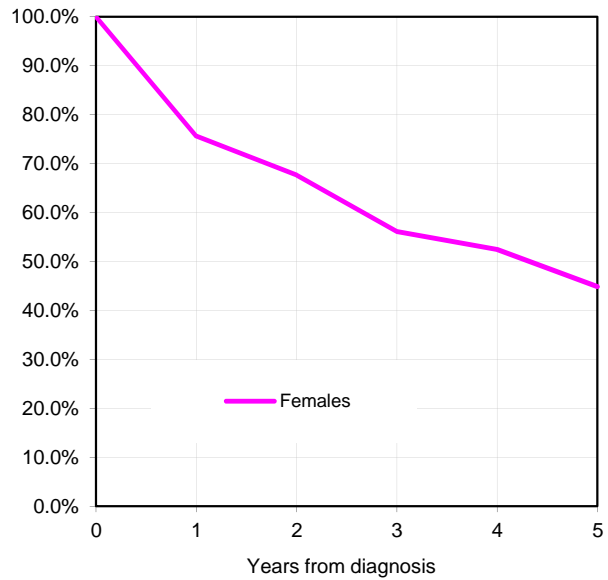
Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Females	1 year	172	74.1%	66.2% - 80.5%	75.6%	67.4% - 82.1%
	2 years	135	65.5%	57.2% - 72.6%	67.6%	59.0% - 74.9%
	3 years	120	53.6%	45.2% - 61.3%	56.1%	47.3% - 64.2%
	5 years	83	42.0%	33.9% - 49.9%	44.9%^	36.3% - 60.7%

Observed Survival



Relative Survival *



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 44.1% (CI 95%: 36.7% - 52.9%).

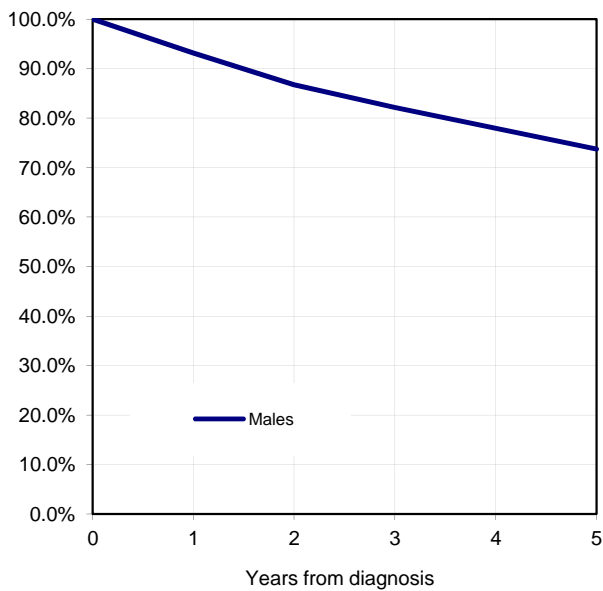
C61 PROSTATE

Ticino Cancer Registry

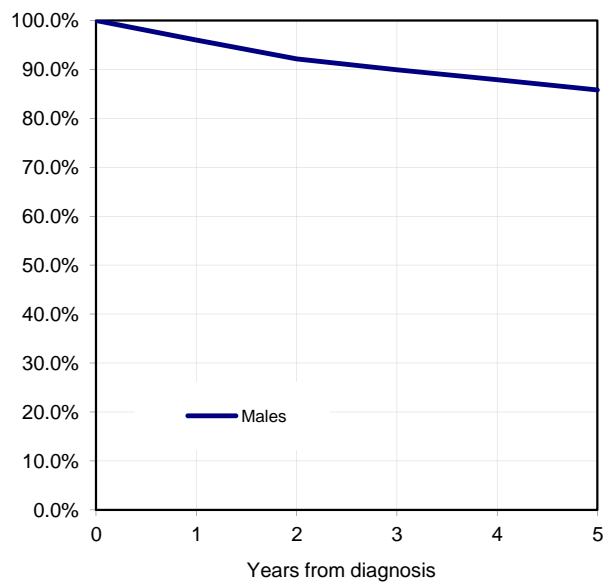
Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	1334	93.1%	91.5% - 94.5%	96.0%	94.3% - 97.4%
	2 years	1252	86.7%	84.6% - 88.6%	92.1%	89.9% - 94.1%
	3 years	1258	82.2%	79.8% - 84.3%	89.9%	87.3% - 92.2%
	5 years	1159	73.7%	71.1% - 76.1%	85.8%^	82.8% - 88.6%

Observed Survival



Relative Survival *



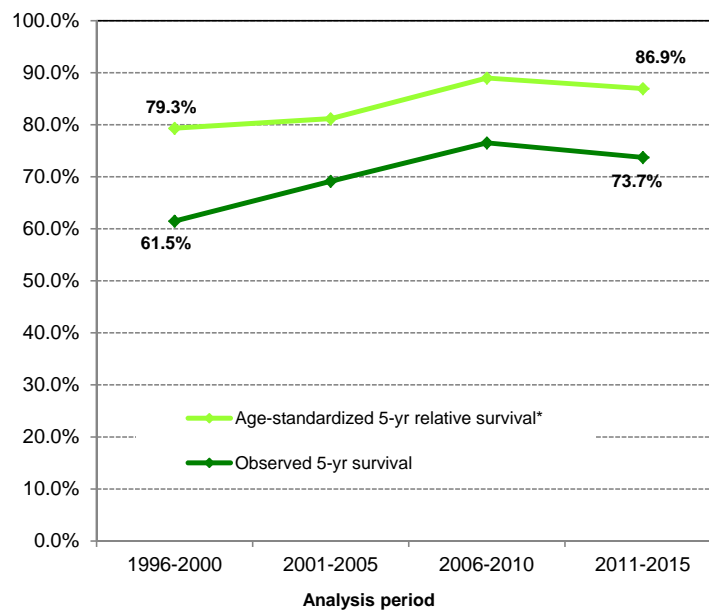
* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazzari I. et al., EJC 2004): (M&F) 86.9% (CI 95%: 84.3% - 89.7%).

Survival trend from 1996 to 2015 in Canton Ticino

	Analysis period	Alive at the beginning of the analysis period	Observed 5-yr survival	CI 95%	Age-standardized 5-yr relative survival*	CI 95%
Males	1996-2000	607	61.5%	57.4% - 65.3%	79.3%	72.9% - 86.3%
	2001-2005	955	69.2%	66.1% - 72.0%	81.2%	77.3% - 85.2%
	2006-2010	1227	76.5%	74.0% - 78.8%	89.0%	86.3% - 91.7%
	2011-2015	1334	73.7%	71.1% - 76.1%	86.9%	84.3% - 89.7%

Time trends in 5-year survival rates (Males)



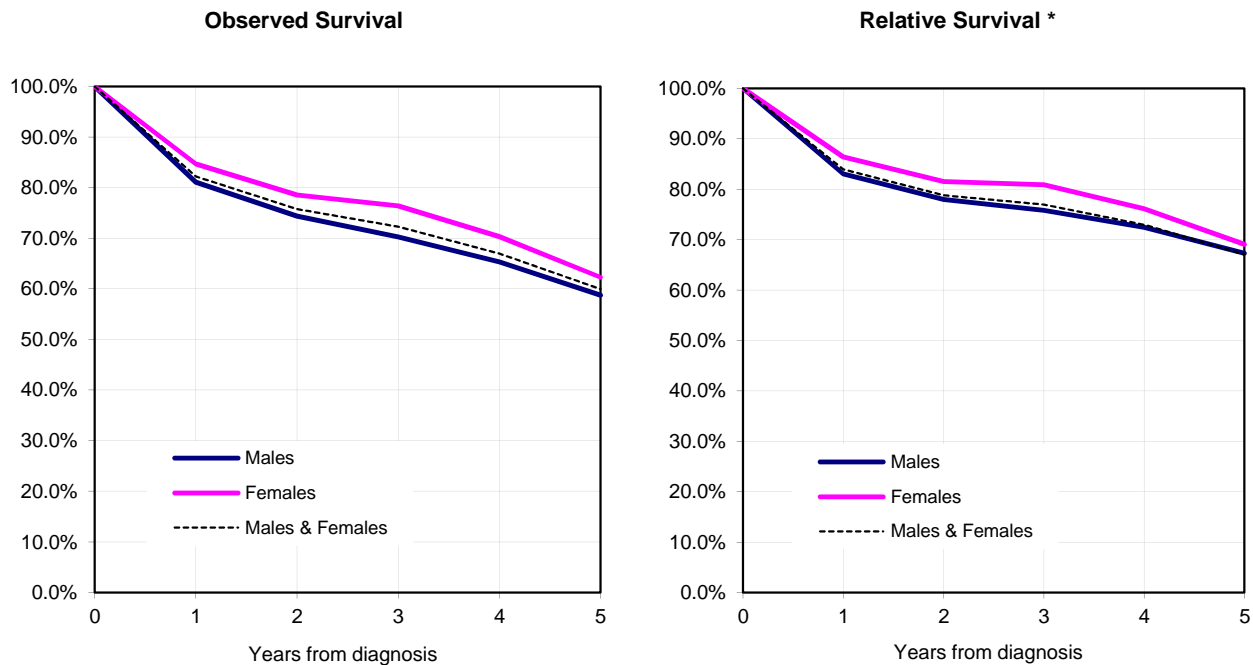
* Age-standardized Relative Survival probability (Corazziari I. et al., EJC 2004) was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). The cohort approach was used for the periods 1996-2000, 2001-2005 and 2006-2010, while for the years 2011-2015 we used the period approach to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

C64 KIDNEY

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	218	81.1%	74.8% - 86.0%	83.0%	76.6% - 88.0%
	2 years	193	74.4%	67.6% - 80.0%	77.9%	70.8% - 83.8%
	3 years	173	70.3%	63.3% - 76.2%	75.8%	68.2% - 82.2%
	5 years	131	58.8%	51.3% - 65.5%	67.3%	58.8% - 75.0%
Females	1 year	109	84.7%	75.5% - 90.6%	86.4%	77.0% - 92.5%
	2 years	96	78.5%	68.7% - 85.6%	81.5%	71.4% - 88.8%
	3 years	86	76.4%	66.5% - 83.8%	80.9%	70.4% - 88.7%
	5 years	54	62.3%	50.7% - 71.9%	69.0%	56.2% - 79.7%
Males & Females	1 year	327	82.2%	77.3% - 86.2%	83.9%	78.8% - 88.0%
	2 years	289	75.7%	70.3% - 80.3%	78.8%	73.2% - 83.5%
	3 years	259	72.3%	66.7% - 77.1%	76.9%	71.0% - 82.0%
	5 years	185	60.0%	53.8% - 65.6%	67.1% ^Λ	60.2% - 73.3%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

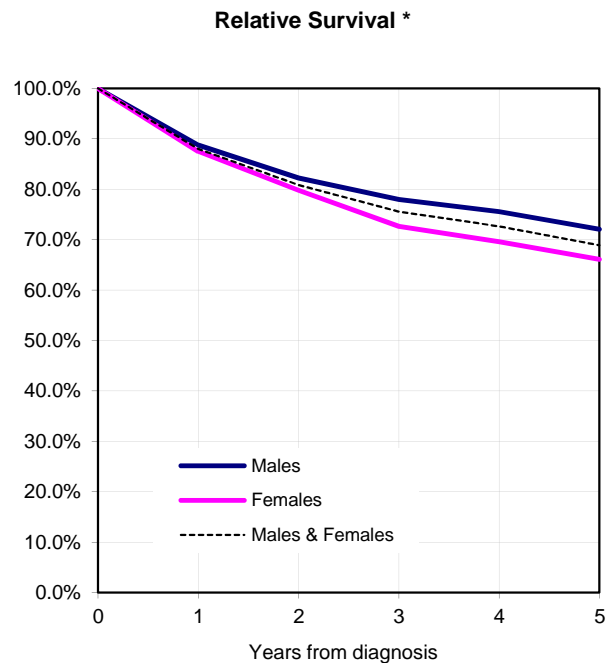
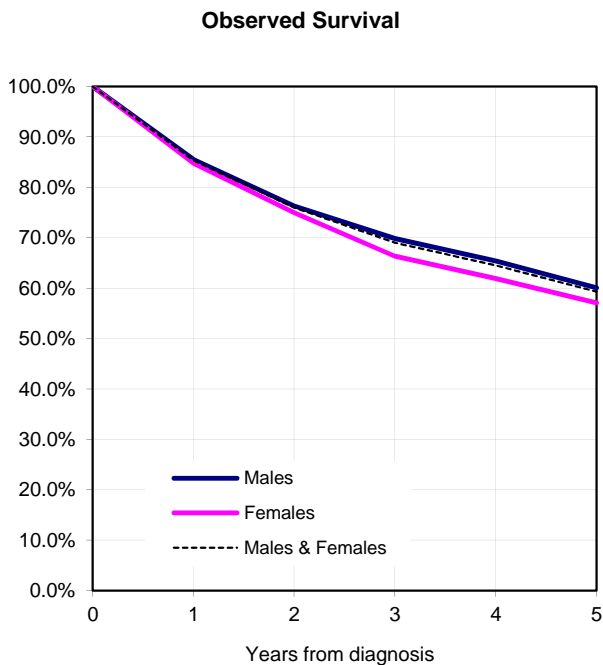
Λ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 67.3% (CI 95%: 61.3% - 73.9%).

C65-68 URINARY TRACT

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	749	85.5%	82.4% - 88.1%	88.7%	85.5% - 91.4%
	2 years	599	76.3%	72.7% - 79.6%	82.2%	78.3% - 85.7%
	3 years	479	69.9%	65.9% - 73.4%	77.9%	73.6% - 81.9%
	5 years	366	60.1%	55.8% - 64.1%	72.0%	66.9% - 76.8%
Females	1 year	241	84.7%	78.8% - 89.1%	87.5%	81.4% - 92.0%
	2 years	185	75.0%	68.1% - 80.7%	79.7%	72.4% - 85.7%
	3 years	161	66.4%	59.0% - 72.7%	72.6%	64.6% - 79.6%
	5 years	115	57.1%	49.5% - 63.9%	66.1%	57.3% - 74.1%
Males & Females	1 year	990	85.3%	82.7% - 87.6%	88.0%	85.3% - 90.3%
	2 years	784	76.0%	72.9% - 78.9%	80.8%	77.4% - 83.8%
	3 years	640	69.0%	65.6% - 72.2%	75.5%	71.8% - 79.0%
	5 years	481	59.3%	55.6% - 62.8%	68.9%^	64.6% - 72.9%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

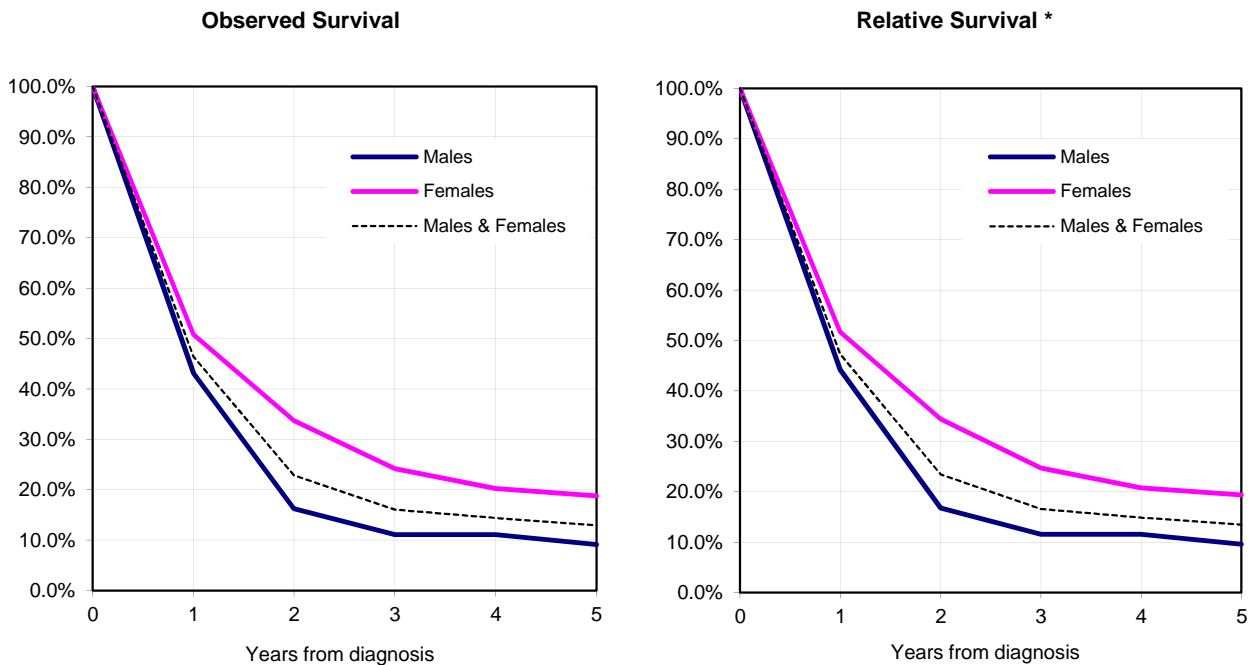
^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 74.1% (CI 95%: 70.7% - 77.8%).

C70-72 BRAIN AND CNS

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	92	43.1%	32.1% - 53.7%	44.2%	32.8% - 55.0%
	2 years	36	16.2%	9.3% - 24.9%	16.8%	9.6% - 25.8%
	3 years	16	11.1%	5.5% - 19.0%	11.6%	5.7% - 19.8%
	5 years	10	9.1%	3.9% - 17.1%	9.6%	4.1% - 18.0%
Females	1 year	59	50.8%	37.3% - 62.9%	51.7%	37.9% - 63.9%
	2 years	31	33.7%	21.3% - 46.5%	34.4%	21.8% - 47.5%
	3 years	21	24.2%	13.6% - 36.3%	24.7%	13.9% - 37.2%
	5 years	15	18.8%	9.7% - 30.2%	19.4%	10.0% - 31.2%
Males & Females	1 year	151	46.4%	37.8% - 54.5%	47.3%	38.5% - 55.6%
	2 years	67	22.9%	16.1% - 30.4%	23.5%	16.5% - 31.1%
	3 years	37	16.1%	10.4% - 22.8%	16.6%	10.7% - 23.5%
	5 years	25	12.9%	7.9% - 19.3%	13.5% [^]	8.2% - 20.1%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

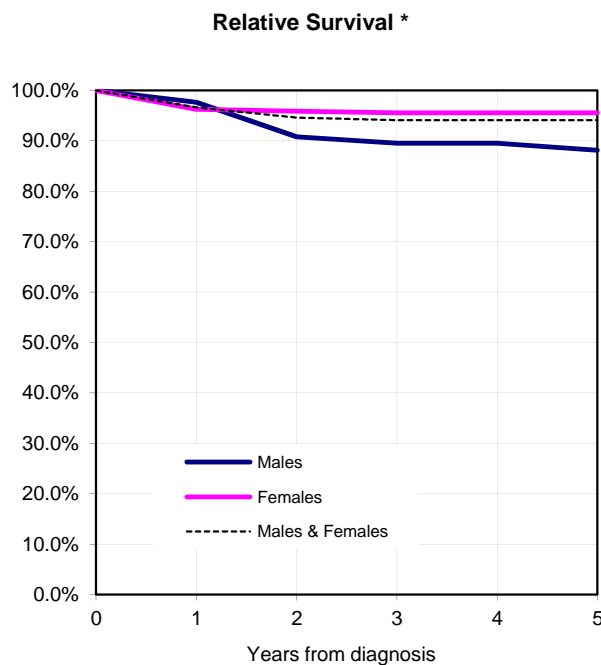
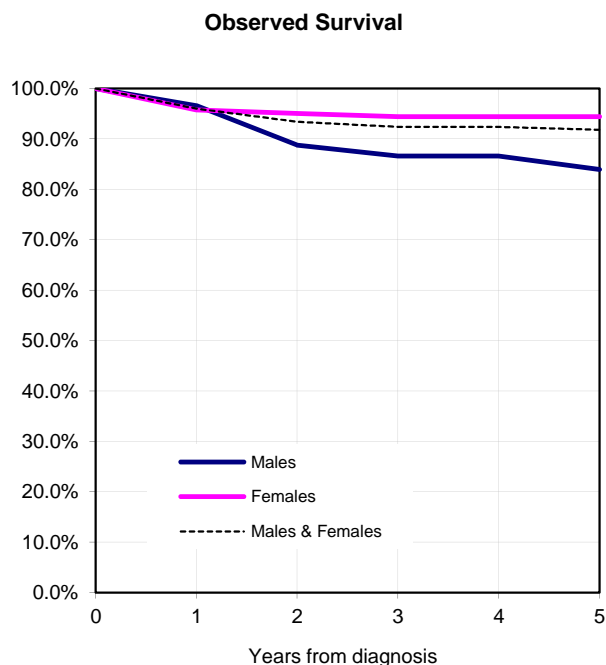
[^] For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 23.9% (CI 95%: 17.3% - 32.9%).

C73 THYROID

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	67	96.6%	87.0% - 99.1%	97.7%	88.0% - 100.2%
	2 years	62	88.8%	76.6% - 94.8%	90.8%	78.4% - 96.9%
	3 years	46	86.6%	73.8% - 93.4%	89.5%	76.3% - 96.5%
	5 years	39	83.9%	70.1% - 91.7%	88.1%	73.6% - 96.3%
Females	1 year	166	95.8%	90.8% - 98.1%	96.2%	91.2% - 98.5%
	2 years	171	95.1%	89.9% - 97.6%	95.8%	90.7% - 98.4%
	3 years	160	94.4%	89.1% - 97.2%	95.6%	90.2% - 98.4%
	5 years	151	94.4%	89.1% - 97.2%	95.6%	90.2% - 98.4%
Males & Females	1 year	233	96.0%	92.2% - 98.0%	96.6%	92.8% - 98.6%
	2 years	233	93.4%	88.9% - 96.1%	94.6%	90.0% - 97.3%
	3 years	206	92.4%	87.7% - 95.3%	94.1%	89.3% - 97.1%
	5 years	190	91.8%	87.0% - 94.9%	94.1%^	89.3% - 97.1%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

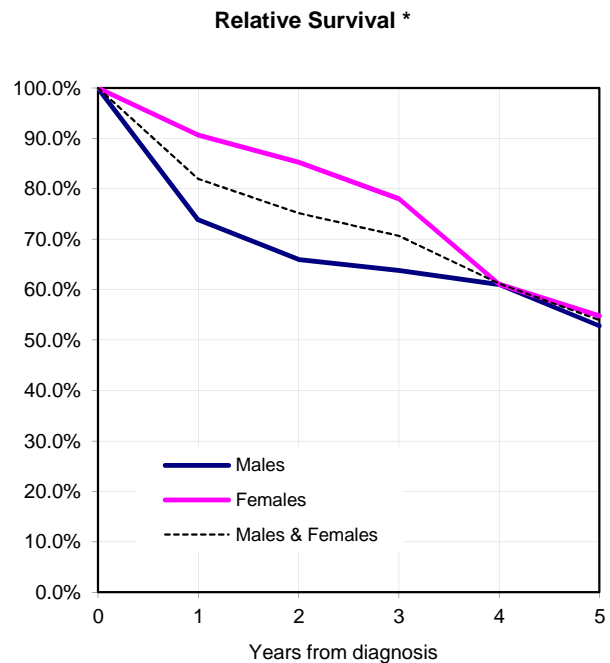
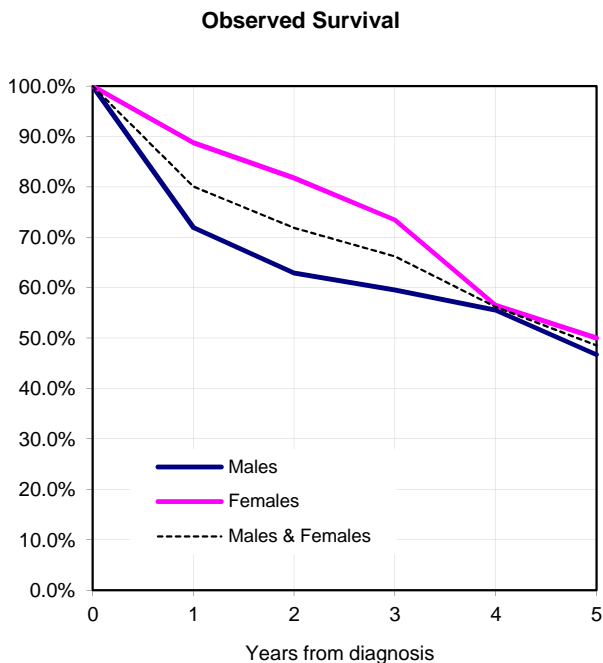
^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 90.1% (CI 95%: 85.0% - 95.4%).

MYELOMA

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	103	71.9%	61.2% - 80.2%	73.8%	62.8% - 82.3%
	2 years	79	62.9%	51.9% - 72.1%	66.0%	54.4% - 75.6%
	3 years	60	59.5%	48.5% - 69.0%	63.8%	52.0% - 73.9%
	5 years	41	46.7%	35.1% - 57.5%	52.8%	39.7% - 65.0%
Females	1 year	95	88.7%	79.5% - 94.0%	90.7%	81.2% - 96.0%
	2 years	80	81.8%	71.1% - 88.8%	85.3%	74.2% - 92.6%
	3 years	69	73.4%	61.8% - 82.0%	78.0%	65.7% - 87.1%
	5 years	38	50.0%	37.6% - 61.2%	54.8%	41.2% - 67.1%
Males & Females	1 year	198	80.0%	73.1% - 85.4%	81.9%	74.8% - 87.4%
	2 years	159	71.9%	64.3% - 78.1%	75.1%	67.2% - 81.7%
	3 years	129	66.2%	58.4% - 72.9%	70.7%	62.3% - 77.8%
	5 years	79	48.6%	40.2% - 56.5%	54.0%^	44.6% - 62.7%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

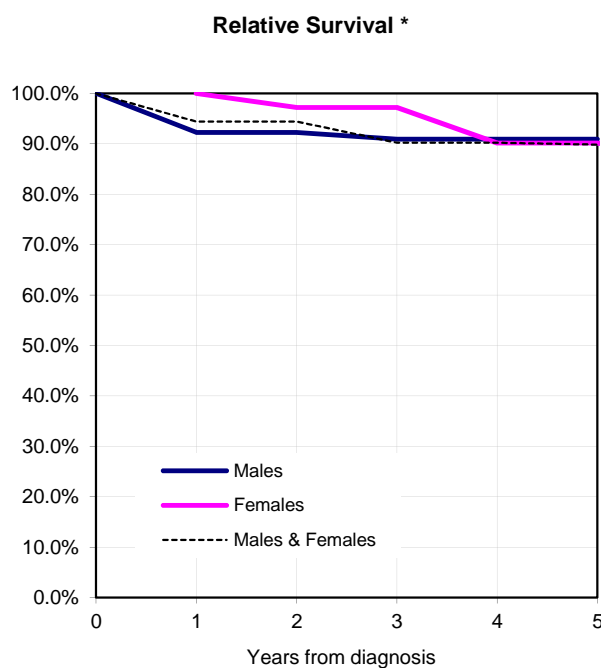
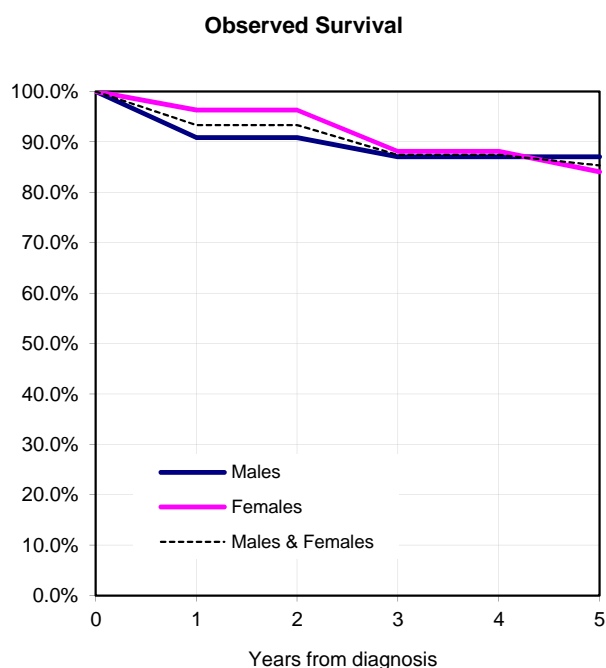
^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 58.5% (CI 95%: 50.4% - 68.0%).

HODGKIN LYMPHOMA

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	39	90.9%	74.4% - 97.0%	92.2%	75.4% - 98.4%
	2 years	34	90.9%	74.4% - 97.0%	92.2%	75.4% - 98.4%
	3 years	29	87.0%	68.8% - 95.0%	90.9%	71.9% - 99.2%
	5 years	25	87.0%	68.8% - 95.0%	90.9%	71.9% - 99.2%
Females	1 year	37	96.3%	76.7% - 99.5%	97.2%	77.4% - 100.3%
	2 years	29	96.3%	76.7% - 99.5%	97.2%	77.4% - 100.3%
	3 years	27	88.1%	67.5% - 96.0%	90.1%	69.0% - 98.2%
	5 years	29	84.0%	62.8% - 93.7%	86.7%	64.8% - 96.7%
Males & Females	1 year	76	93.4%	83.3% - 97.5%	94.4%	84.2% - 98.5%
	2 years	63	93.4%	83.3% - 97.5%	94.4%	84.2% - 98.5%
	3 years	56	87.4%	75.3% - 93.8%	90.2%	77.7% - 96.8%
	5 years	54	85.3%	72.6% - 92.4%	89.8%^	76.5% - 97.3%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

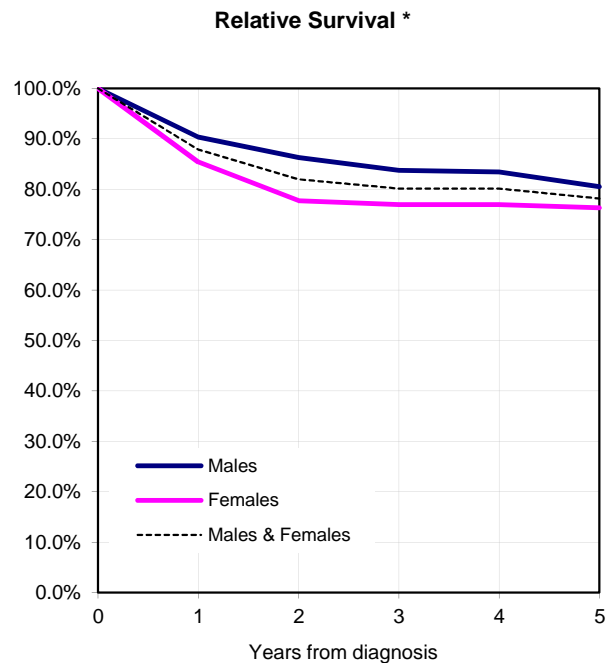
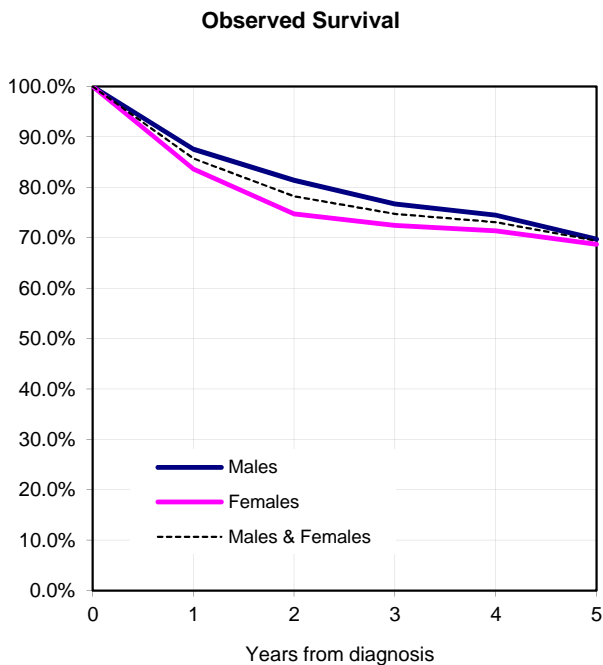
^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 90.0% (CI 95%: 81.6% - 99.3%).

NON HODGKIN LYMPHOMA

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	276	87.6%	82.6% - 91.2%	90.4%	85.2% - 94.1%
	2 years	229	81.4%	75.6% - 85.9%	86.3%	80.2% - 91.1%
	3 years	192	76.7%	70.5% - 81.8%	83.7%	76.9% - 89.3%
	5 years	157	69.7%	62.8% - 75.6%	80.5%	72.5% - 87.2%
Females	1 year	238	83.6%	77.7% - 88.0%	85.4%	79.4% - 89.9%
	2 years	193	74.7%	68.1% - 80.2%	77.7%	70.8% - 83.4%
	3 years	165	72.5%	65.6% - 78.2%	76.9%	69.6% - 83.0%
	5 years	162	68.7%	61.6% - 74.7%	76.3%	68.5% - 83.0%
Males & Females	1 year	514	85.7%	82.1% - 88.7%	87.9%	84.2% - 90.9%
	2 years	422	78.3%	74.0% - 81.9%	82.0%	77.5% - 85.8%
	3 years	357	74.7%	70.2% - 78.6%	80.1%	75.3% - 84.3%
	5 years	319	69.4%	64.6% - 73.7%	78.2%^	72.8% - 83.0%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

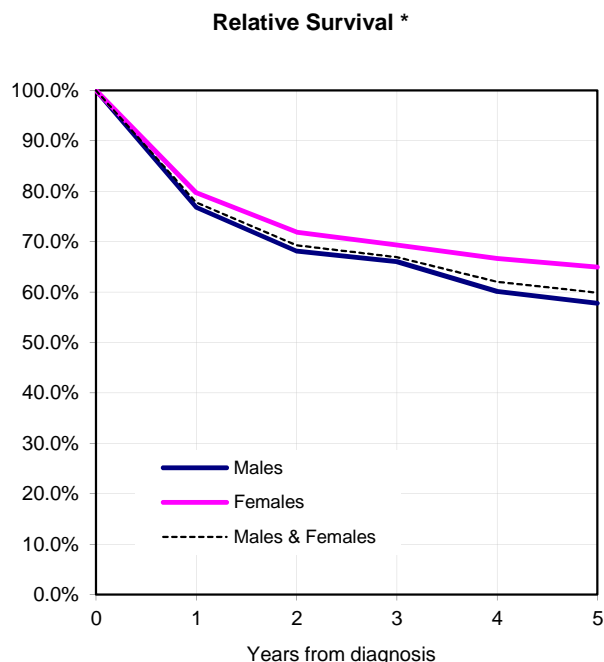
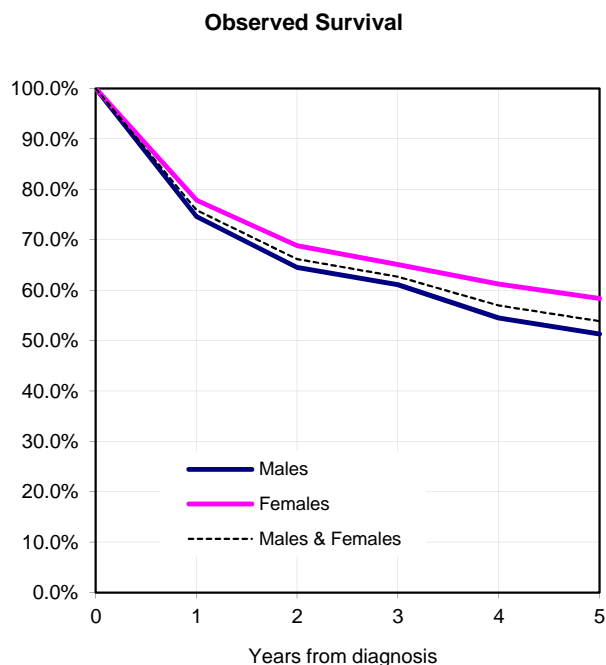
^ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 79.9% (CI 95%: 75.4% - 84.8%).

LEUKAEMIA

Ticino Cancer Registry

Analysis period: 2011-2015

	Years from diagnosis	Alive at start	Observed Survival	CI 95%	Relative Survival *	CI 95%
Males	1 year	181	74.6%	66.6% - 80.9%	76.8%	68.6% - 83.3%
	2 years	131	64.5%	56.1% - 71.7%	68.1%	59.3% - 75.7%
	3 years	113	61.1%	52.7% - 68.5%	66.1%	56.9% - 74.0%
	5 years	98	51.3%	43.0% - 59.0%	57.8%	48.4% - 66.5%
Females	1 year	113	77.8%	68.1% - 84.9%	79.7%	69.7% - 86.9%
	2 years	87	68.8%	58.3% - 77.2%	71.9%	60.9% - 80.6%
	3 years	65	65.0%	54.3% - 73.9%	69.3%	57.8% - 78.7%
	5 years	51	58.4%	47.2% - 68.0%	64.9%	52.5% - 75.6%
Males & Females	1 year	294	75.9%	69.9% - 80.8%	77.8%	71.6% - 82.8%
	2 years	218	66.2%	59.8% - 71.8%	69.3%	62.6% - 75.2%
	3 years	178	62.7%	56.1% - 68.5%	66.9%	60.0% - 73.1%
	5 years	149	53.9%	47.3% - 60.0%	59.9% ^Λ	52.5% - 66.7%



* Relative Survival probability was calculated as the ratio of the observed survival rate in the cancer patients under study to the expected survival rate in the general population with similar gender and age distribution (Ederer II method). Relative survival represents a proxy of the cancer-specific survival. The *period* approach was used to derive more up-to-date relative survival estimates (follow-up period window= 01.01.2011-31.12.2015).

Λ For international comparison consider the 5-yr age-standardized relative survival probability rate (Corazziari I. et al., EJC 2004): (M&F) 62.7% (CI 95%: 56.4% - 69.6%).