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Estimates of cancer burden in Veneto

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ABSTRACT

Aims and background. In Veneto a regional cancer registry has been operating since 1987 which provides incidence and survival data for the region. It currently covers 48% of the regional population. The aim of this paper is to provide estimates of the incidence, mortality and prevalence of the major cancers for the whole Veneto region in the period 1970-2015.

Methods. The estimates were obtained by applying the MIAMOD method, a statistical back-calculation approach to derive incidence and prevalence figures starting from mortality and relative survival data. Survival was modeled on the basis of published data from the Italian cancer registries.

Results. In 2012 the most frequent cancer sites were colon-rectum, prostate and breast with 4,677, 3,760 and 3,729 new diagnosed cases, respectively. The incidence rates were estimated to increase constantly for female lung cancer, prostate cancer, colorectal cancer and melanoma, while they were decreasing for cervical cancer and stomach cancer. For male lung cancer and female breast cancer the rates increased, reaching a peak, and then decreased. In the last years of the period of analysis, mortality declined for all cancers: the highest number of deaths (2,390 in both sexes) was estimated for lung cancer in 2012. Prevalence was increasing for all the considered cancer sites with the exception of lung cancer in men, for which the prevalence was estimated to increase until 2007 and then stabilize. By contrast, the cervical cancer decreased during the whole period. In 2012 breast cancer had the highest prevalence, with about 52,000 cases.

Conclusion. This paper provides a description of the burden of the major cancers in Veneto until 2015. The estimates highlight the continuing reduction of cancer mortality. This decline can be related to the improvement of clinical treatments and to multidisciplinary treatment approaches. In order for this positive trend to continue, implementation and reinforcement of the screening programs is needed, especially for breast and colorectal cancer.

Key words: cancer incidence, Veneto, prevalence, mortality, registries, estimates.

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Introduction

Veneto is the main region in northeastern Italy, with a population of about 4,900,000[1]. It is one of the wealthiest regions in Italy, contributing to the Italian GDP by a proportion of 9.3%[2]. The population is served by 69 public hospitals, 4 specialist research clinics and 17 private hospitals[3]. A specialized cancer hospital, the Istituto Oncologico Veneto, has been active since 2006 and 24 oncology departments exist in the other hospitals. Some of these centers attract sizeable flows of patients from other regions.

Organized screening for cervix, breast and colon cancer has been implemented in the whole region[4]; the periods of activation were 1997-2002, 1998-2008 and 2002-2009, respectively.

Since 1987 a regional population-based cancer registry has been operating which provides incidence and survival data and currently covers 48% of the regional population.

Cancer is the second cause of death in Veneto, with 14,035 deaths in 2008[5]. In the same year, the age-standardized mortality rates for all malignant cancers were 377.6 and 193.4 per 100,000 for men and women, respectively[6]; the male mortality rate is one of the highest in Italy.

Cancer care takes up a substantial share of the regional health care resources; the hospitalization rate for cancer in 2008 was 1,202.8 per 100,000 population[6], corresponding to 11% of the 623,103 hospital discharges in Veneto in that year[7]. This share has been stable during the previous 10 years, but the trend could be partly misleading in indicating the actual uptake of resources. Indeed, it conceals the actual use of chemotherapy, which has been increasingly provided in outpatient structures and is therefore difficult to quantify.

Considering the relevance of cancer care at a population level, the availability of reliable forecasts regarding the main epidemiological indicators is crucial in public health programming. In particular, the growing importance of the management of "cancer-free" cases due to the favorable trend in the survival of cancer patients[8] has led to increasing interest in the prevalence indicator.

The aim of this paper is to describe the time trends of incidence, mortality and prevalence for the major cancer sites (lung, stomach, colon-rectum, breast, prostate, cervix uteri and skin melanoma) and to estimate these epidemiological indicators up to 2015.

Material and methods

Mortality data for all cancers, general mortality and population data by age, calendar year and geographical region for the period 1970-2002 were obtained from the Italian National Institute of Statistics (ISTAT)[5]. Specific mortality data for the subsequent years, i.e. 2003, 2006 and 2007 (data for 2004-2005 were not yet published by ISTAT), were only used to validate the expected mortality projections. Relative survival data for the considered cancers for the period of diagnosis 1985-2002 were obtained from the EUROCARE-4 study[9]. The data refer to the populations covered by 21 cancer registries in Italy jointly covering about 25% of the national population.

Table 1 reports the Veneto population by province, with the respective coverage of the Veneto Cancer Registry (VCR), the percentage of people older than 65 years and the data collection period.

The MIAMOD method[10,11] was used for the estimation of incidence and prevalence. This statistical method is based on a back-calculation approach to estimate and project the morbidity of chronic irreversible diseases from mortality and patient survival. The method relies on the mathematical relationships between mortality, prevalence, incidence and survival. The model's estimation is based on mortality data from ISTAT for the period 1970-2002, with cause of death coded according to the ninth revision of the International Classification of Diseases (ICD-9)[12]. The relative survival of cancer patients was estimated from the observed cancer registry data by means of parametric cure models of the Weibull type at the level of macro area. The geographical area and the age of patients were considered as categorical covariates in the survival model. The covariate year of diagnosis was modeled for each site and sex as continuous or categorical and as unique for all areas or variable by area according to the pattern of observed survival data.

The survival estimates for the northeastern macro area were assigned to Veneto for all cancer sites. The survival time trend after 2002 was assumed to have the same tendency as that estimated over the observation period 1985-2002 for all cancers except prostate cancer, where survival was assumed to be constant from 2005 onwards.

All incidence, mortality and prevalence estimates were carried out for the period 1970-2015 and up to age 99. For cervical cancer, prostate cancer and melanoma additional procedures were applied to account for specific problems related to these sites. For cervical cancer an appropriate methodology[13,14] was used to correct the mortality data provided by the official statistics, as these were flawed by misclassification with uterus not otherwise specified (NOS). This methodology could be applied from 1980 onwards because before that year the ICD-8 classification, which did not distinguish uterus NOS, was adopted in the ISTAT statistics. The corrected mortality data were used as input data for incidence and prevalence estimates by the MIAMOD method. Estimates for this site were carried out up to age 94 because the distinction of uterus NOS cancer deaths into cervix and corpus uteri cancer deaths in women over 94 years old is not very reliable. Furthermore, for cervical cancer only limited-duration prevalence at 15 years was reported. Indeed, complete prevalence is highly sensitive to the past trends. For cervical cancer, incidence estimates before 1980 are unreliable due to the subsequent spread of non-organized early diagnosis and to the fact that neither mortality nor cancer registry data exist to support reliable modeling assumptions. Simple backward linear extrapolation of the decreasing trend estimated during the 1980s and 1990s may inflate the past incidence level and consequently (due to the high survival) the estimated prevalence of women with a diagnosis of cervical cancer.

For prostate cancer, because of the rapid changes in the recent time trends, more up-to-date mortality data were used in order to capture recent variations which could not be modeled with data up to 2002. Since mortality data for 2004-2005 were missing, mortality estimates with projections up to 2010 were preliminarily performed by means of the PIAMOD method[15]. The modeled mortality was then used as input for the MIAMOD method.

The projections of age-specific incidence and mortality rates for melanoma were obtained by linearly pro-

jecting the age-specific annual percent change of incidence and mortality rates estimated in the period 2001-2002. The total rates were obtained by age-specific rates. The age-standardized rates are based on the standard European population.

Results

Table 1 shows that Veneto has a population of about 5 million, 20% of whom are over 65 years of age. The VCR covers about 48% of the regional population and covers all the provinces except that of Padua. Registration began in 1987.

The number of cases and both the crude and age-standardized incidence and mortality rates and prevalence proportions estimated in Veneto for the year 2012 are presented in Tables 2A and 2B for men and women, respectively. In the male population, the most frequent cancer was prostate cancer with 3,760 diagnosed new cases. For colorectal and lung cancer 2,590 and 2,048 new diagnoses were estimated, respectively. Fewer diagnoses of melanoma (668) and stomach cancer (544) were calculated. Among women, breast was the cancer site with the highest estimated number of new cases (3,729), followed by colon-rectum (2,087) and lung (938); the estimated figures for melanoma, stomach and cervix uteri were markedly lower (494, 417 and 111, respectively). The highest prevalence was estimated for breast cancer in women and prostate cancer in men. The highest crude mortality rates were estimated for breast cancer in women (36.2 per 100,000) and lung cancer in men (77.4 per 100,000), the lowest for melanoma in both sexes and cervix uteri in women.

All the indicators were higher in men than women for lung cancer, colorectal cancer, stomach cancer and melanoma, except for the crude prevalence of the latter. The highest male:female ratios were reported for lung cancer (age-standardized mortality 3.3, age-standardized incidence 2.8, crude prevalence 2.3) and the lowest for melanoma (age-standardized mortality 1.8, age-standardized incidence 1.3, crude prevalence 1).

The time trends of the age-standardized incidence and mortality rates and crude prevalence over the period 1970-2015 are shown in Figures 1 to 6 for both sexes. The results will be described below, grouped by cancer site.

Stomach

For stomach cancer, incidence and mortality were estimated to be constantly decreasing in both sexes, but the male figures were twice as high as the female figures. The age-standardized incidence rates decreased from 47 per 100,000 in 1970 to 14 per 100,000 in 2015 in men and from 23 per 100,000 in 1970 to 7 per 100,000 in 2015 in women. In the same period, the mortality declined from 40 to 8 per 100,000/year in men and from 18 to 4 per 100,000/year in women. Conversely, for prevalence a slowly increasing trend was estimated in both sexes: from 78 per 100,000 in 1970 to 101 in 2015 in women and from 71 per 100,000 in 1970 to 133 in 2015 in men.

Colon and rectum

For colorectal cancer the incidence estimates exhibited an increasing trend in both sexes. In men, the rate in 1970 was half the rate in 2015 (36 *versus* 75 per 100,000); in women the increase was less marked but nonetheless considerable (25 against 45 per 100,000). The mortality estimates, after a slight initial increase, presented a decline from the mid 1990s onwards for men and from the late 1980s for women. In 2015, mortality rates of 13 per 100,000 and 22 per 100,000 for women and men, respectively, were estimated. Prevalence was estimated to rise considerably from 1970 to 2015 in both sexes (from 60 to 870 per 100,000/year in men and from 63 to 727 per 100,000/year in women).

Lung

All estimates for lung cancer showed different trends between genders. In men, both mortality and incidence showed a steady increase until the second half of the 1980s, followed by a constant decline to figures lower than the initial rates: incidence was estimated to be about 72 per 100,000 in 1970 and 49 per 100,000 in 2015 and the mortality rates in the same years were 63 and 40 per 100,000. The highest levels, reached in the mid 1980s, were estimated to be equal to 125 and 111 per 100,000/year for incidence and mortality, respectively. Prevalence was estimated to increase steeply until to 2007 (from 38 per 100,000 in 1970 to 247 in 2007) and then stabilized (253 per 100,000 in 2015). Conversely, in women the incidence trend was increasing. The estimate for 2015 was more than twice the rate in 1970 (22 *versus* 10 per 100,000), so the male:female ratio dropped from about 7 to 2. Mortality was estimated to rise until 2000 and then to remain stable at around 14 per 100,000/year. Prevalence was estimated to rise exponentially up to 128 per 100,000 in 2015.

Skin melanoma

The melanoma incidence trend was estimated to overlap between men and women until the late 1990s, while in the subsequent years higher incidence rates in men than women were estimated. The incidence rates were rising constantly from 1970 to 2015, passing from 2.4 to 26 per 100,000 in men and from 2.8 to 19 per 100,000 in women. The mortality trend was estimated to be similar in both genders throughout the study period, although the levels differed in that men presented higher mortality rates than women. The mortality figures were rather low, showing a slight increase between 1970

and the late 1980s, a stabilization during the early 1990s (around 2.7 per 100,000 in men and 1.7 per 100,000 in women) followed by a slow decrease to 1.9 per 100,000 in men and 1.0 per 100,000 in women. Prevalence was expected to rise sharply and reach similar levels in both genders (from 17 per 100,000 in 1970 for both sexes to 364 in men and 345 in women), with a faster rate of increase for men.

Breast

The incidence estimates for female breast cancer showed a sharply increasing trend from 1970 to the early 1990s. In this period the rates doubled, passing from 50 to 104 per 100,000 in 1994. The growth slowed between 1994 and 2001 to 109 per 100,000, while from 2002 onwards a slow decrease was estimated to 100 per 100,000 in 2015. The mortality estimates increased from 25 per 100,000 in 1970 to 31 in the late 1980s, then started to decrease from the 1990s onwards to 16 per 100,000 in 2015. The prevalence figures were steeply increasing and were estimated to reach an extremely high value in 2015 (2,445 per 100,000).

Cervix uteri

The estimated incidence and mortality rates for cervical cancer exhibited a decreasing trend. From 1980 to 2015 incidence dropped from 11 to 3 per 100,000/year and mortality from 5 to 1 per 100,000/year. Also the 15-year limited-duration prevalence was estimated to decrease throughout the study period (from 123 per 100,000 in 1980 to 51 in 2015).

Prostate

The estimated incidence trend for prostate cancer was increasing and characterized by a steep rise between 1986 and 2003 and a lower pace of increase before and after this period. Between 1970 and 2015, the estimated rate increased more than 3-fold, from 30 to 107 per 100,000/year. By contrast, the mortality estimates were comparatively stable: they showed a slight increase until the mid 1980s but from 1986 onwards a slow and progressive decrease was estimated, from 21 per 100,000 in 1986 to 14 in 2015. Prevalence was expected to increase sharply in the forthcoming years (up to 1,347 per 100,000 in 2015).

Discussion

This paper provides a description of the burden of the major cancers in the Veneto region in terms of trends through 2015 and point estimates in 2012. A comparison was made between the estimated Veneto incidence and the corresponding data of the VCR, available from the AIRTUM database, over the time period covered by cancer registration. While the registry did not cover the whole regional population, it included local health areas from 6 out of 7 provinces, with a provincial coverage ranging from 36% to 100%. Therefore, it is expected that the registry-observed data reflected the regional estimated incidence patterns fairly well. In general, good agreement between our regional estimates and the observed registry data was found. The incidence estimates were fully consistent with the observed data for stomach, lung and cervical cancer. Partial disagreement was found for colorectal, breast and prostate cancer, and this will be discussed below. Also the time trends reported by the VCR substantially agreed with those observed for the pool of Italian cancer registries[16] (both for incidence and mortality), as well as with the official mortality figures[6].

Smoke is the major risk factor affecting the observed trends. Smoke is mainly related to lung cancer but also has an influence on stomach, colorectal and cervical cancer[17]. The smoking prevalence in Italy has been decreasing among men since 1970s but is rising in women[18]. The time series on smoking habits for Veneto[6] indicate a proportion of smokers less than the national average, especially in men. The male prevalence declined from 30% in 1995 to 25% in 2010; in that year the national figure was 29.5%. Among women it increased up to 18% in 1999 and then remained stable. The proportion of smokers in 2010 was 16%, *versus* a national figure of 17%.

The trends for lung cancer in Veneto were similar to the national ones, but the incidence and mortality figures were higher than the Italian averages[19], especially in men. The mortality gap between Veneto and the whole country almost vanished in men in recent years, while it persisted in women. The forecast figures for women are compatible with the information presented on smoking trends, and raise some concern.

The estimated incidence rates for colorectal cancer were higher than those reported by the VCR, by about 10% in men and 15% in women. However, the estimated and observed trends were similar, and their increase was consistent with what is known about colorectal cancer risk factors. Apart from smoke, various risk factors play a causal role in developing this cancer: certain dietary habits, obesity, physical inactivity and alcohol abuse. Most of these factors are among the ones also involved in the development of cancer of the breast, cervix uteri, stomach and prostate.

The interpretation of the available data on dietary habits is not straightforward. These data indicated that only 13% of the regional population consumed the recommended daily servings of fresh fruits and vegetables in 2009 (and the national figure was even lower, 8.5%)[20]. In 2010, 35.4% of the Veneto population were overweight and 9.7% were obese, in line with national data (35.6% and 10.3%, respectively); the figures for men were 44.5% overweight and 10.3% obese and the figures for women were 26.8% and 9.1%, respectively[6]. In com-

parison with previous years, a slow rise in overweight women could be noted. In 2009, 1 person out of 4 (25.5%) lived a sedentary lifestyle; the figure in Italy was 30%[20].

Alcohol abuse is of particular concern in Veneto, where 20.4% of the population had dangerous drinking habits in 2010, against a national percentage of 16.1%[21,22]. The difference with national data was greater in men (31.7% *vs* 25.4%) but also considerable in women (9.6% *vs* 7.3%).

Screening programs for colorectal cancer in Veneto started in 2002, but only after 2005 did they cover most parts of the region[4,23]. Their impact cannot therefore substantially have influenced the estimates of the 3 indicators considered. In 2009, screening programs reached a coverage of 62.3%, with a correct attendance of 67.1% (the desirable value is 65%)[4]. It is expected that screening will reinforce the decrease in mortality and will bring in some years' time the stabilization and, hopefully, reduction of the incidence.

Screening programs for breast cancer as well as cervical cancer have been active and widespread in most areas of the region since the late 1990s. In 2009, the extent of mammographic screening was 92%, with a correct attendance of 69.1% (the desirable value is 75%)[4]. The trend of the incidence rates for breast cancer observed in VCR[24] likely reflects the start of mammographic screening in the 1998-2001 period: indeed, in those years the incidence reached the highest values while in later periods a slight decrease was estimated. The sudden incidence rise due to the screening effect is not captured by our modeling approach, as has also been observed in other regions. In the screening peak years, the estimated incidence was 20% lower than the observed rates. Although VCR covers the regional population only partially, the coverage of mammographic screening in the registered population during the observation period was similar to the regional coverage (19%, 48%, 61%, 85% and 92% in 1998-2002): a moderate undercoverage of 78% in the VCR population was observed only in 2001[24-27]. Thus, the observed incidence should not have been distorted by differences in the coverage of screening.

The secular trend, which probably better reflects the underlying disease risk, is, however, clearly consistent between the estimated and observed data. Also the mortality decline is partly influenced by screening programs and the forecasts seem reliable, while prevalence will continue to rise.

Cytological screening programs for cervical cancer started in 1998-99, and in 2009 they reached a coverage of 76.8%, with a correct attendance of 54.5% (the desirable value is 40%)[4]. They should therefore have contributed to the decreasing trends in cervical cancer, where not only incidence and mortality were declining to low levels but even for prevalence a decrease was forecast. For all 3 indicators these results are consistent with the observed data.

The prostate cancer incidence and prevalence have increased dramatically, mostly because of the spread of PSA testing, which started in the late 1980s[28]. The estimated age-standardized incidence more than doubled from 47 per 100,000 in 1990 to about 100 in 2005. The incidence rates reported by VCR increased even more, up to 124 in 2003. After this year there were signs of exhaustion of the increasing trend of incidence, since the average percentage change turned negative, although in a statistically not significant manner[29]. Our model was not able to capture the very narrow incidence peak of the years 2001-2005. However, the subsequent slowing down and leveling off of the incidence rates appears accounted for in the forecasts. Although it is not possible to separate the role of risk factors from that of early diagnosis and overdiagnosis, it is likely that the latter 2 determinants are predominant, since mortality has been showing a steady decline since 1995 rather than an increase. A similar change in trend occurred earlier in the USA and northern European countries[30-32].

The steadily declining trend in stomach cancer incidence and mortality has been observed worldwide and is likely associated with changing dietary habits and progressive eradication of the *Helicobacter pylori* virus[33]. The observed and estimated figures for Veneto do not differ and are consistent with this trend.

The incidence of melanoma of the skin is constantly increasing, not only in Veneto[29] and Italy[16] but in all Western countries[34]. Also its mortality is increasing[35,16], although with a slightly lower slope. Among the risk factors for melanoma, increased ultraviolet exposure is likely to play a prominent role in determining such trends. However, the increased public awareness of the warning signs of melanoma and the increase in screening-like activities by clinicians also have an important impact; a sign of the progress in early diagnosis is the generally observed increase in the incidence of thin lesions[36]. In the absence of any substantial reduction of the rate of increase both in the estimated and VCR-observed data, the incidence forecasts reach high levels in the year 2015. Even if the expectation of a continuing growth in incidence is surely reasonable, such forecasts should be considered with caution because some degree of slowing down of the future trend could be possible.

In conclusion, the most positive aspect highlighted by the estimates is the constantly diminishing cancer mortality. Mortality has been declining for all cancer sites studied, at least in recent observed years and in projections; only the female lung cancer mortality was forecast to become stable. Among the factors contributing to this decline are the reduction of postoperative mortality[37-40], the increasing availability of chemotherapy and radiotherapy (especially for colorectal cancer) and adjuvant hormone therapy (for breast cancer)[41-43], and the higher proportion of breast cancers that are diagnosed early, which is partly an effect of screening. Continuation and reinforcement of the screening programs is needed, es-

pecially for breast and colorectal cancer to continue along this positive pathway. For lung cancer in men, the main explanation of the observed and estimated trends is to be found in the decreased incidence due to reduction of the smoking habit. A critical point is the increasing mortality in women, paired by the increase in incidence, which partly reflects the limited impact of actions favoring smoking reduction among women.

The possible exaggeration of some of the projections as pointed out throughout the discussion does not affect the plausibility of the trends. In the case of prostate cancer, this appears mainly the consequence of a drastic enhancement of diagnostic tools; for breast cancer, only a limited effect may be attributed to the start of screening programs. The colorectal cancer trend is mainly determined by the persistence of risk factors; however, a long-term decline in incidence is expected as an effect of screening.

Table 1 - Veneto population, proportion of the elderly population in 2010 and cancer registry with coverage and beginning of activity by province

		Population	Population ≥65 years of age %	Coverage %	First year of incidence
Region	Veneto	4,912,438	19.9%	48%	1987
Province	Belluno	213,876	22.7%	100%	1987
	Padova	927,730	19.6%	-	-
	Rovigo	247,297	22.6%	100%	1990
	Treviso	883,840	18.8%	63%	1987
	Venezia	858,915	21.5%	67%	1987
	Verona	914,382	19.4%	36%	1988
	Vicenza	866,398	18.6%	53%	1987

Table 2A - Estimated incidence, mortality and prevalence by cancer site for the year 2012 in Veneto. Number of cases and deaths, crude and European age-standardized (age-std) rates per 100,000 person-years and crude prevalence proportion per 100,000 persons. Age 0-99 years, men

	Incidence			Mortality			Prevalence	
Cancer site	Number of cases	Crude rate	Age-std rate	Number of deaths	Crude rate	Age-std rate	Number of cases	Crude proportion
Prostate	3,760	154.9	102.8	557	22.9	14.0	28,287	1,165.5
Stomach	544	24.7	15.6	346	15.7	9.7	2,916	132.2
Colon-rectum	2,590	117.4	75.2	853	38.7	24.0	17,204	779.8
Lung	2,048	92.7	57.2	1,710	77.4	46.8	5,628	254.7
Melanoma	668	30.3	23.4	63	2.9	2.0	6,651	301.5

Table 2B - Estimated incidence, mortality and prevalence by cancer site for the year 2012 in Veneto. Number of cases and deaths, crude and European age-standardized (age-std) rates per 100,000 person-years and crude prevalence proportion per 100,000 persons. Age 0-99 years, women

	Incidence			Mortality			Prevalence	
Cancer site	Number of cases	Crude rate	Age-std rate	Number of deaths	Crude rate	Age-std rate	Number of cases	Crude proportion
Breast	3,729	161.9	103.3	833	36.2	17.5	52,047	2,259.5
Stomach	417	18.1	8.0	265	11.5	4.8	2,312	100.4
Colon-rectum	2,087	90.6	44.3	689	29.9	13.4	15,073	654.4
Lung	938	40.8	20.6	680	29.5	14.0	2,521	109.5
Melanoma	494	21.5	17.4	42	1.8	1.1	6,924	300.7
Cervix	111	4.8	3.6	43	1.9	1.1	1,251*	54.5*

*Limited-duration prevalence at 15 years.

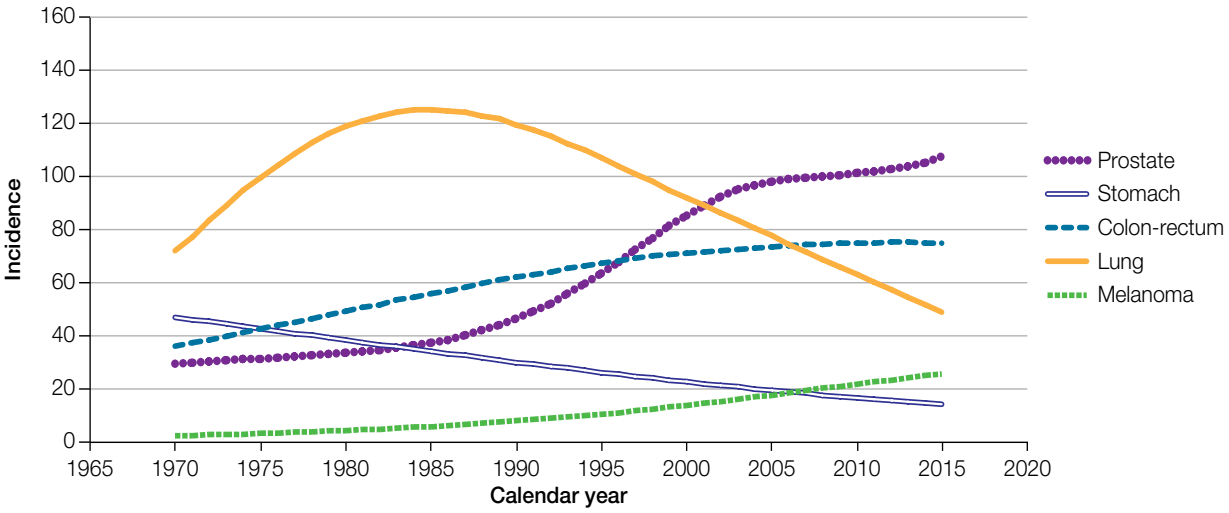


Figure 1 - Incidence estimates by cancer site in Veneto in the period 1970-2015. Age-standardized rates (European population) per 100,000 person-years. Age 0-99 years, men.

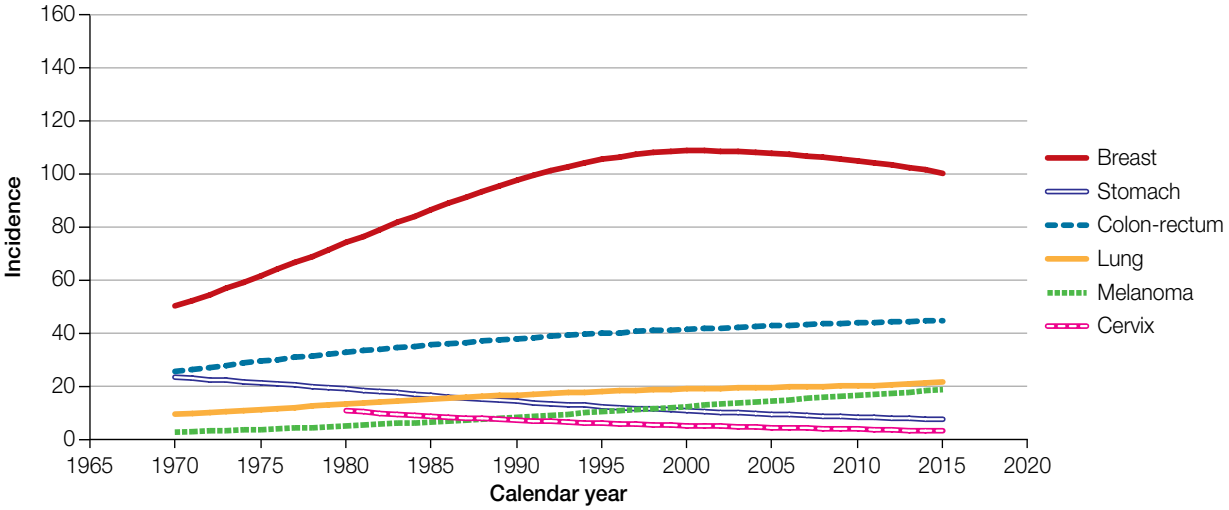


Figure 2 - Incidence estimates by cancer site in Veneto in the period 1970-2015. Age-standardized rates (European population) per 100,000 person-years. Age 0-99 years, women.

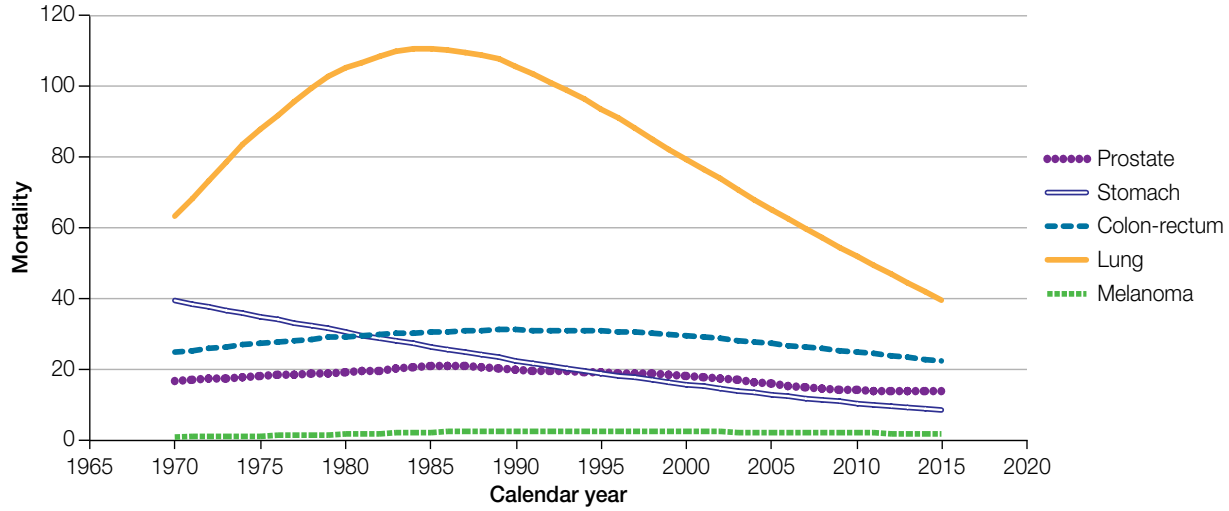


Figure 3 - Mortality estimates by cancer site in Veneto in the period 1970-2015. Age-standardized rates (European population) per 100,000 person-years. Age 0-99 years, men.

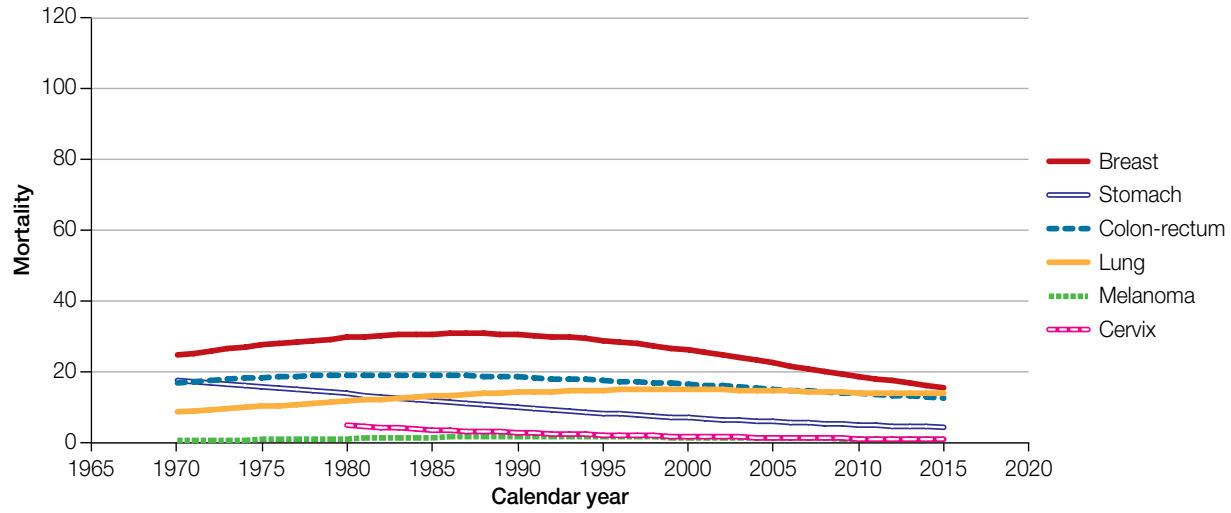


Figure 4 - Mortality estimates by cancer site in Veneto in the period 1970-2015. Age-standardized rates (European population) per 100,000 person-years. Age 0-99 years, women.

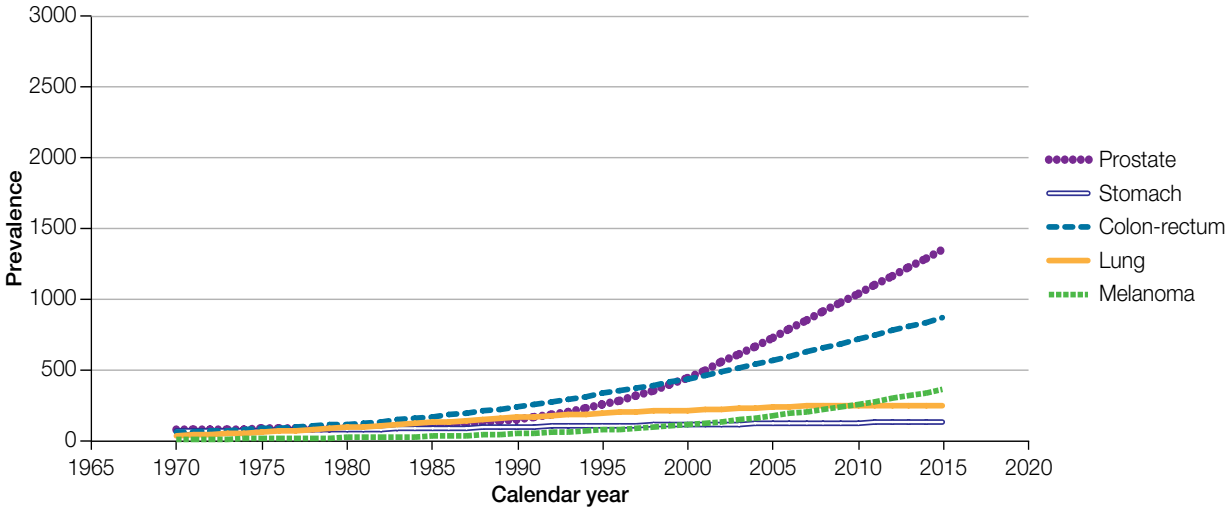
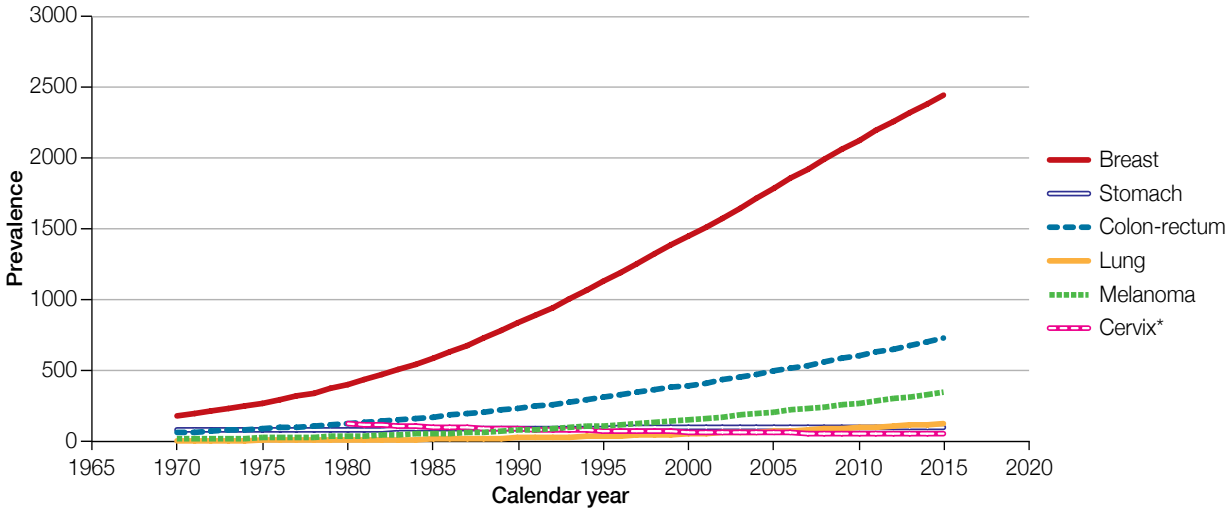


Figure 5 - Prevalence estimates by cancer site in Veneto in the period 1970-2015. Crude proportion per 100,000 persons. Age 0-99 years, men.



limited-duration prevalence at 15 years

Figure 6 - Prevalence estimates by cancer site in Veneto in the period 1970-2015. Crude proportion per 100,000 persons. Age 0-99 years, women.

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