

Belgian Cancer Registry



TRENDS
INCIDENCE
SURVIVAL
PREVALENCE
MORTALITY

Cancer Burden in Belgium

2004-2017

© 2020 Belgian Cancer Registry
Stichting Kankerregister – Fondation Registre du Cancer – Stiftung Krebsregister

Staff at the Belgian Cancer Registry:

Caroline Androgé, Hélène Antoine-Poirel, Lien Asselman, Leen Boesmans, Joanna Bouchat, Frédéric Calay, Aïcha Chihi, Isabel De Brabander, Annelies Debucquoy, Cindy De Gendt, Anke De Geyndt, Petra Denolf, Jonathan De Ro, Harlinde De Schutter, Jeroen Eeckhaut, Katia Emmerechts, Julie Francart, Annelies Goossens, Annemie Haelens, Kris Henau, Marie-José Hoovelts, Méric Klein, Oscar Liessens, Gilles Macq, Lee Mbambu Maswaku, Alice Mertens, Michael Roskamp, Viki Schillemans, Geert Silversmit, Tim Tambuyzer, Linda Thibaut, Inge Truyen, Nancy Van Damme, Kim Vande Look, Danny Vandenberghe, Eva Van der Stock, Jessica Vandeven, Liesbet Van Eycken, Bart Van Gool, Chris Van Hove, Katrijn Vanschoenbeek, Lien van Walle, Julie Verbeeck, Freija Verdoodt, Jérôme Xicluna

D/2020/11.846/1

Responsible editor: Dr. Liesbet Van Eycken, Koningsstraat 215, 1210 Brussels

Editorial team:

Tim Tambuyzer, Kris Henau, Frédéric Calay, Bart Van Gool, Geert Silversmit, Liesbet Van Eycken

Use of data:

The information in this publication may be used freely on condition of correct quotation of the source and reference.

Design adapted from⁽⁷⁾. Original design: www.magelaan.be

Recommended reference:

Cancer burden in Belgium 2004-2017, Belgian Cancer Registry, Brussels, 2020

Additional Information can be requested at:

Tel. 0032-2-250 10 10

Fax 0032-2-250 10 11

E-mail: info@kankerregister.org – info@registreducancer.org

The Belgian Cancer Registry receives financial support of:



service public fédéral
SANTÉ PUBLIQUE,
SECURITE DE LA CHAÎNE ALIMENTAIRE
ET ENVIRONNEMENT



federale overheid
VOLKSgezONDHEID,
VEILIGHEID VAN DE VOEDSELketen
EN LEEFmilIEU



Mit Unterstützung
der Deutschsprachigen
Gemeinschaft Belgiens



CONTENTS

1 Methods and calculations	5
2 Quality of incidence data	10
2.1 Completeness of the Cancer Registry.....	10
2.2 Validity.....	11
3 Cancer Burden in Belgium	15
3.1 Invasive tumours (excl. non-melanoma skin cancer).....	15
3.2 Head and Neck (ICD10: C00-C14, C30-C32).....	22
3.3 Digestive tract.....	30
3.3.1 Oesophagus (ICD10: C15-C16.0).....	30
3.3.2 Stomach (ICD10: C16.1-C16.9).....	38
3.3.3 Colon (ICD10: C18-C19)	44
3.3.4 Rectum (ICD10: C20)	53
3.3.5 Liver (ICD10: C22)	63
3.3.6 Gallbladder and biliary tract (ICD10: C23-C24).....	70
3.3.7 Pancreas (ICD10: C25)	76
3.4 Respiratory tract	83
3.4.1 Lung (ICD10: C34)	83
3.4.2 Mesothelioma (ICD10: C45).....	91
3.5 Melanoma (ICD10: C43).....	97
3.6 Breast (ICD10: C50)	105
3.7 Female genital organs	115
3.7.1 Cervix (ICD10: C53)	115
3.7.2 Corpus Uteri (ICD10: C54)	123
3.7.3 Ovary (ICD10: C56)	130
3.8 Male genital organs.....	137
3.8.1 Prostate (ICD10: C61)	137
3.8.2 Testis (ICD10: C62).....	144
3.9 Urinary tract	151
3.9.1 Kidney (ICD10: C64)	151
3.9.2 Bladder (ICD10: C67)	159
3.10 Central nervous system (ICD10: C71-C72)	167
3.11 Thyroid (ICD10: C73)	172
4 Reference list	181

1 METHODS AND CALCULATIONS

1.1 INCIDENCE AND MORTALITY

Incidence is the number of new cases occurring in a given time period in a specific population. It can be used to estimate the probability or risk of illness, and can be expressed in different ways. The incidence data presented in the current publication encompass the time period 2004-2017.

- The **crude incidence rate (CR)** is calculated by dividing the number of new cases observed during a given time period by the corresponding population time at risk in that time period. The crude rate is expressed as the number of new cases per 100,000 person years.
- The **age-specific incidence rate** is the crude incidence rate in a particular 5-year age group and expressed per 100,000 person years.
- The **age-standardised incidence rate** is a weighted average of the individual age-specific rates using an external standard population. It is the incidence that would be observed if the population had the age structure of the standard population (European or World Standard Population). Since age has a powerful influence on the risk of cancer, this standardisation is necessary when comparing several populations that differ with respect to their age structure. In this publication, the World Standard Population is used for standardisation and consequently World Standardised incidence Rates (WSR) are reported. These are expressed as the number of new cases per 100,000 person years.

The same principles are applied to calculate mortality data. Mortality represents the number of persons who died due to a malignancy in a given time period in a specific population.

Mortality statistics in Belgium are collected and treated by the three regions (Flemish Region: Agentschap Zorg en Gezondheid ⁽¹⁾, Brussels-Capital Region: Observatorium voor Gezondheid en Welzijn van Brussel-Hoofdstad / l'Observatoire de la Santé et du Social de Bruxelles-Capitale ⁽²⁾, Walloon Region: Agence wallonne de la santé, de la protection sociale, du handicap et des familles (AViQ) ⁽³⁾). The Directorate General Statistics Belgium ⁽⁴⁾ is responsible to collect and merge the data coming from the regional agencies. Mortality data used in this publication are collected from the Directorate General Statistics Belgium, and encompasses the time period 2004-2016.

A comparison of our Belgian incidence data with a selection of European countries is included. Whenever possible, national estimates of cancer incidence in 2018 have been retrieved from the website of ECIS (European Cancer Information System) ⁽⁵⁾ and compared with the real data for Belgium in 2017.

For selected tumour sites, a brief overview is presented of the incidence of stage at diagnosis (by sex, histology, age group, ...). Unless otherwise stated, the results are always based on combining information from the clinical and the pathological stage.

When the proportion of unknown stage (X) is represented, it refers to the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X). The proportion of diagnoses with unknown clinical stage is shown as a measure for data completeness, since this type of information should, for almost every cancer patient, be registered by the clinical network. The proportion of unknown pathological stage is not shown in the publication because it is not a measure of missing information. The pTNM ⁽⁶⁾ only applies to the patients who received surgery as part of their main cancer treatment, which means that patients who received only radiotherapy or chemotherapy as main treatment cannot have a pathological stage. Since we do not know the treatment for all patients, we cannot differentiate between patients with missing pTNM and patients without surgery.

The cancer registry validates the data quality on a regular basis ⁽⁷⁾. In the context of several specific projects, BCR performed a thorough analysis of the proportion of unknown pathological stage for several tumour categories (lung, rectum, colon, prostate, head and neck) ⁽⁸⁻¹⁰⁾. Based on the obtained results, it is expected that the proportion of unknown pathological stage is minimal for patients who underwent surgery. This was confirmed by linking the BCR dataset with treatment information from administrative data gathered by the InterMutualistic Agency (IMA-AIM) ⁽¹⁰⁾.

1.2 PREVALENCE

Prevalence is the number of persons who are still alive at a given index date, and who received a cancer diagnosis during a specified time period preceding the index date. For example, 5-year prevalence is the number of persons who received at least one new diagnosis of cancer during a specific five year period and who are still alive at the end of the five year period. The 5-year prevalence data in this publication were estimated with an index date of 31st December 2017, representing people living in Belgium who were diagnosed with at least one invasive malignancy in the period from 1st January 2013 to 31st December 2017 and who were still alive at the end of 2017 (index date). Persons with more than one malignancy were included as prevalent cases in each cancer type, but were counted only once in analyses regrouping multiple tumour sites.

The methodology used was described in detail in our publication ‘Cancer Prevalence in Belgium 2010’ ⁽¹²⁾.

1.3 CANCER MAPS

Incidence maps for Belgium were created using the methodology developed at the Finnish Cancer Registry ⁽¹³⁾. The algorithm for this methodology was incorporated into an in house developed software application of the BCR. The geographic representations use municipality specific age standardised rates (WSR). Cities with at least 100,000 inhabitants are directly represented on the map as circles with a diameter relative to the population size and a colour shading indicating the actual calculated WSR in that city. The 19 municipalities of the Brussels Capital Region (more than 1,000,000 inhabitants) were divided in three separate circles. This division was based on socio-economic parameters ⁽¹⁴⁾. The socio-economic status is lowest in the westernmost circle and highest in the easternmost circle. Rates (WSR) from the remaining municipalities were smoothed. For each grid (0.25 km²) on the map, a rate was calculated as a weighted average of the WSR in all neighbouring municipalities within 150 km from the centre of the grid. The weights were inversely associated with the distance, the weight being halved at a distance of 25 km. In addition, the weights were directly proportional to the sizes of populations of the municipalities within the radius of 150 km. A relative scale was applied. A change in colour level corresponds to a 1.05 fold change in the WSR.

The incidence maps presented in the current publication encompass the period 2013-2017. The cancer maps provided in this publication have to be considered additional to the tables with the incidence data per region as they also unveil small or large incidence patterns within the Belgian regions. Although these maps may generate numerous hypotheses, their discussion is beyond the scope of this publication.

1.4 INCIDENCE TRENDS

Trends in age-standardised incidence and mortality rate (WSR) were quantified by the Annual Percentage Change (APC), which expresses a mean multiplicative change per year. Trends and APC calculations are given by sex and age group. Stratification by stage, localisation or morphology is given for some selected cancer sites. The APC is estimated from a least squares regression on the logarithm of the age-standardised rate (WSR) versus incidence year. Due to the log transformation, no APC can be obtained if the WSR is zero for at least one year. In cases where the relation of the WSR with incidence year cannot be adequately fit with a log-linear model (i.e. a constant APC for the full data range cannot be assumed), a piecewise log-linear model was estimated in which

the different linear segments are connected at certain joinpoints. This model results in an estimated APC per time segment of which an Average Annual Percentage Change (AAPC) is calculated as the average of the APC estimates per segment weighted by the corresponding segment length ⁽¹⁵⁾.

The model building process on the logarithm of the WSR was fully automated in SAS (version 9.3) and consists of the following steps:

1. The simple linear regression model, assuming a normal error structure, was compared with a non-parametric smoother fit (PROC REG and PROC LOESS respectively) using an F-test on the residual sets for both models. When the linear regression model was not significantly different from the smoother at the 5% level, the linear model was accepted as final model and a single APC value resulted to quantify the trend over the full time range.
2. When the linear model at the log scale was rejected, a piecewise model with one joinpoint was fitted. The optimal position of the joinpoint was determined using a non-linear optimisation procedure (PROC NLIN). Joinpoints were not allowed to be the first or second time point or the before last and last time point, as those endpoints can be influential points and induce spurious segments. The estimated joinpoint position was rounded to the nearest integer value and fixed in a re-estimation of the piecewise model with PROC GENMOD. As in the previous step, an F-test was used to accept or reject the piecewise model against the smoother. When the regression model was accepted, the final model consisted of a piecewise model with two connected linear segments each quantified by their own APC and a weighted overall AAPC.
3. When the piecewise model with one joinpoint was not accepted, the process continues to evaluate two joinpoints in the same way as described in step 2. As an additional restriction, the difference in position between the two joinpoints should be at least three years. If the two joinpoints were closer, the piecewise model with only one joinpoint from the previous step was retained.

A 95% confidence interval (CI) and p-value for the individual segments and the overall AAPC were calculated from the final regression model. The loss in degrees of freedom due to the optimisation of the joinpoint position(s) was not taken into account for the construction of the CI and final p-values. When the 95% CI for the AAPC contains the value zero, no significant trend with incidence year is observed.

Combined changes in trends of incidence, mortality and survival can have various causes and are often difficult to interpret and are not considered as an objective of this publication. However, a manuscript by Karim-Kos et al. on trends of cancer in Europe provides an excellent framework to help gaining insights and provide possible explanations for the observed trends ⁽¹⁶⁾.

1.5 RELATIVE SURVIVAL

The relative survival ratio gives an estimate of the net survival, which is the survival when causes of death not related to the cancer have been eliminated. The relative survival is calculated as the ratio of the observed survival and the expected survival for a comparable group of the general population matched for age, sex, region and calendar period. The expected survival was obtained with the Ederer II method ⁽¹⁷⁾.

In this publication, 5-year and 10-year relative survival ratios are reported stratified by age group, sex and tumour type. For all survival analyses cases with age younger than 15 years were excluded (Exception: Table 2 in chapter 3.1). The methodology was described in detail in our publication 'Cancer Survival in Belgium' ⁽¹⁸⁾.

The empirical life tables (by sex, age, region and calendar-year) ⁽⁴⁾, used in the calculation for expected survival, vary considerably by year of age for young (<30 years) and old ages (>90 years). To reduce the sampling variability and to ensure that death probabilities evolve consistently from one age and calendar year to another, the life tables were smoothed on age and calendar year using the LOESS-method ⁽¹⁹⁻²²⁾.

All relative survival results are shown with the corresponding 95% confidence intervals (95% CI).

1.6 RELATIVE SURVIVAL TRENDS

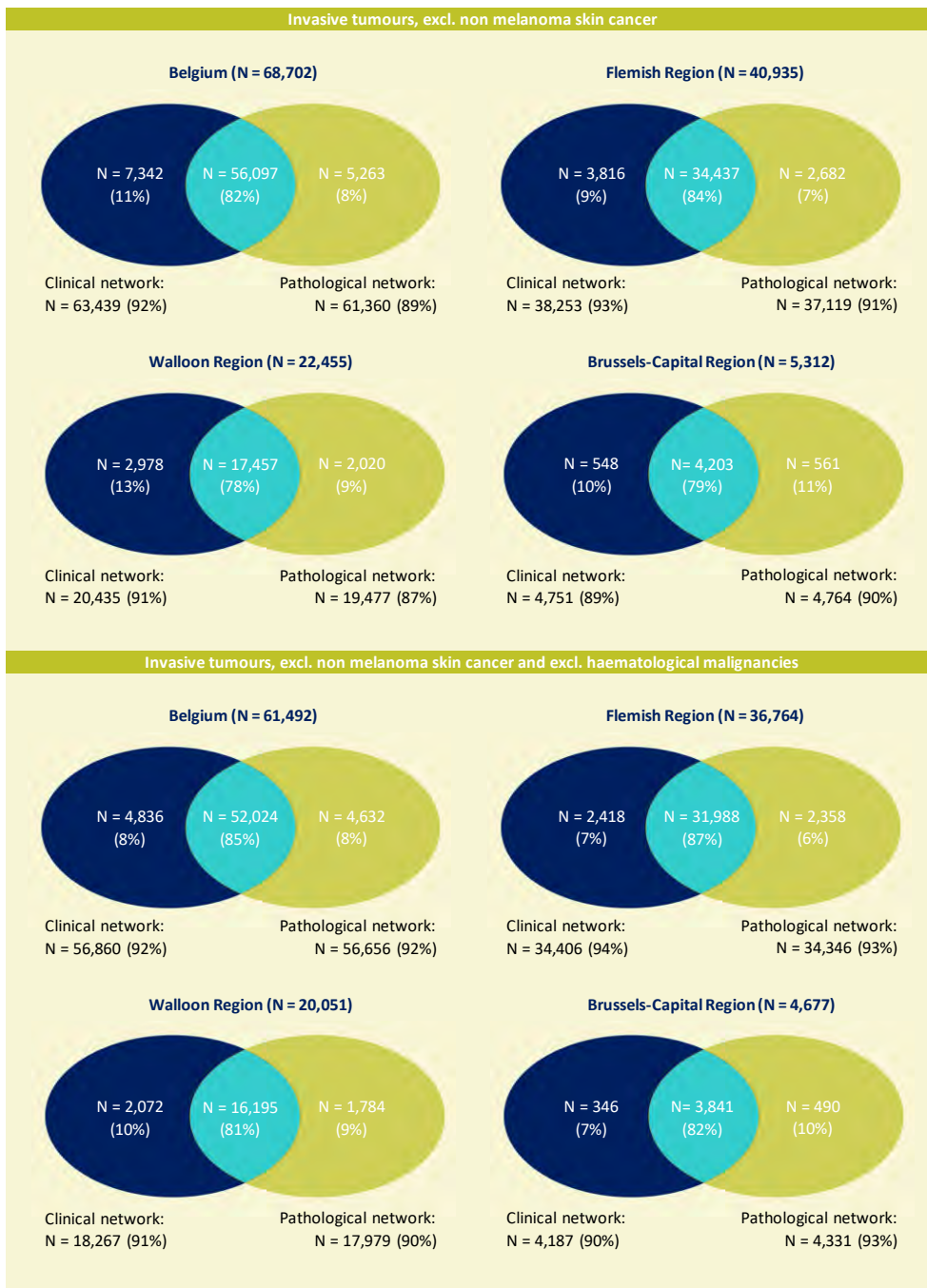
Relative survival between the cohorts 2004-2007, 2008-2012 and 2013-2017 has been compared. Remark that the follow-up period for the cohorts is not the same, as with a last date of follow-up at the 1st of July 2019. In addition, it should also be noted that the time period 2004-2007 consists of 4 years, whereas it is 5 years for the other time periods (2008-2012 and 2013-2017).

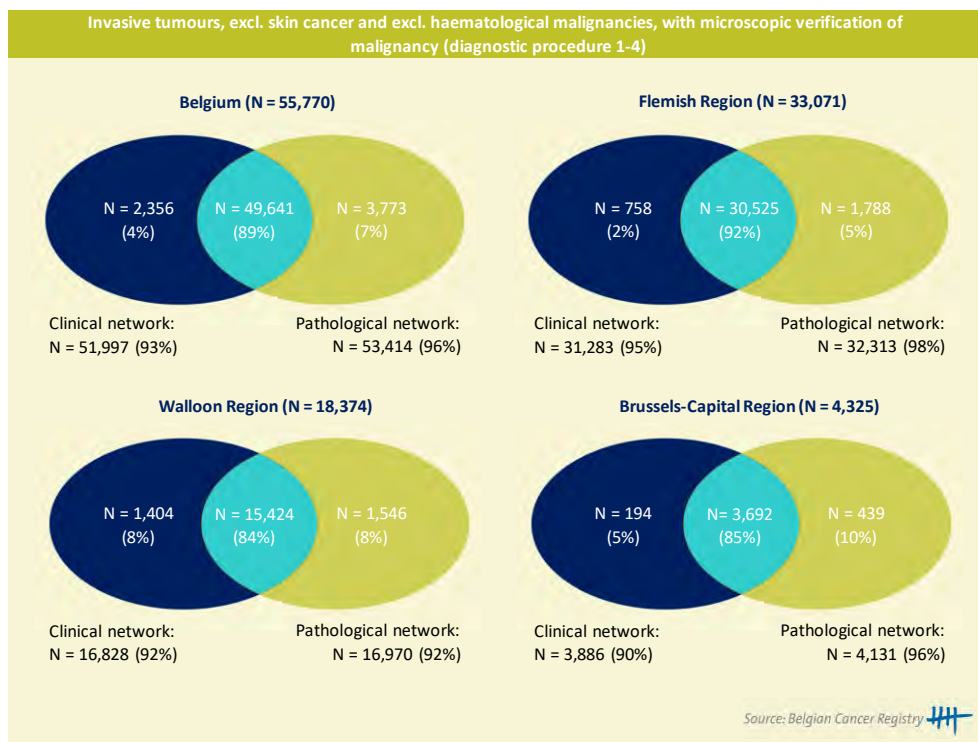
2 QUALITY OF INCIDENCE DATA

2.1 COMPLETENESS OF THE CANCER REGISTRY

2.1.1 Overlap between clinical and pathological

Figure 1 Combination of notifications by source type and region, 2017





2.2 VALIDITY

2.2.1 MICROSCOPICALLY VERIFIED TUMOURS

Table 1 Microscopic verification (MV%) by region and tumour type, 2017

ICD10	Tumour type	Belgium	Flemish Region	Walloon Region	Brussels-Capital Region
C00-C43,C45-C97, MDS and MPN	Invasive tumours (excl. non melanoma skin cancer)	96.5	96.1	97.3	97.3
C00-C14,C30-C32	Head and neck	98.7	98.6	98.6	99.1
C15-C16.0	Oesophagus	99.4	99.5	99.0	100.0
C16.1-C16.9	Stomach	98.8	98.7	98.9	98.9
C18-C19	Colon	98.6	98.4	98.8	99.1
C20	Rectum	99.5	99.5	99.6	99.4
C22	Liver	66.2	65.4	68.9	60.2
C23-C24	Gallbladder and biliary tract	89.6	87.1	91.8	97.2
C25	Pancreas	87.3	84.3	90.7	93.9
C34	Lung	90.6	88.2	93.6	94.5
C43	Malignant melanoma	100.0	100.0	100.0	100.0
C45	Mesothelioma *	100.0	100.0	100.0	100.0
C50	Breast	99.7	99.6	99.9	99.8
C53	Cervix uteri	99.5	99.4	100.0	98.1
C54	Corpus uteri	99.1	99.0	99.1	100.0
C56	Ovary	96.3	95.8	96.3	100.0
C61	Prostate	98.4	98.3	98.6	98.0
C62	Testis	100.0	100.0	100.0	100.0
C64	Kidney	87.2	84.5	92.7	89.2
C67	Bladder	99.0	98.6	99.5	100.0
C70-C72	Central nervous system	90.3	90.2	92.0	85.7
C73	Thyroid	99.9	99.8	100.0	100.0

MDS: Myelodysplastic syndrome

MPN: Myeloproliferative neoplasms

* Due to registration guidelines a diagnosis of mesothelioma only possible after microscopic confirmation

Source: Belgian Cancer Registry

2.2.2 AVAILABILITY OF INFORMATION ON STAGE

Table 2 Availability of information on basis of stage (clinical, pathological and combined)^{a,b}, Belgium 2017

Tumour localisation	Total	cTNM ^c		pTNM ^d		Combined TNM stage	
		N	%	N	%	N	%
C00 Lip	32	17	53.1%	25		26	81.3%
C01 Base of tongue	191	170	89.0%	39		177	92.7%
C02 Tongue	270	209	77.4%	198		256	94.8%
C03-C06 Oral cavity	492	391	79.5%	297		449	91.3%
C07-C08 Salivary glands	101	60	59.4%	61		85	84.2%
C09 Tonsil	304	275	90.5%	71		290	95.4%
C10 Oropharynx	164	143	87.2%	35		154	93.9%
C11 Nasopharynx	63	52	82.5%	4		53	84.1%
C12 Pyriform sinus	202	185	91.6%	48		196	97.0%
C13 Hypopharynx	99	91	91.9%	16		94	94.9%
C15 Oesophagus	960	765	79.7%	298		816	85.0%
C16 Stomach	1,156	831	71.9%	584		961	83.1%
C17 Small intestine	266	109	41.0%	196		219	82.3%
C18-C19 Colon	5,929	2,720	45.9%	5,105		5,622	94.8%
C20 Rectum	2,116	1,863	88.0%	1,532		2,003	94.7%
C22-C24 Liver, gallbladder and bile ducts	1,166	616	52.8%	336		780	66.9%
C25 Pancreas	1,854	1,384	74.6%	672		1,590	85.8%
C30-C31 Nasal cavity, middle ear and sinuses	99	60	60.6%	43		73	73.7%
C32 Larynx	583	505	86.6%	181		539	92.5%
C34 Bronchus and lung	8,432	7,744	91.8%	2,331		7,961	94.4%
C40-C41 Bone and articular cartilage	60	25	41.7%	26		33	55.0%
C43 Malignant melanoma of skin	3,259	1,283	39.4%	3,208		3,213	98.6%
C50 Breast	10,283	9,839	95.7%	8,679		10,022	97.5%
C51 Vulva	213	99	46.5%	161		186	87.3%
C52 Vagina	43	27	62.8%	14		34	79.1%
C53 Cervix uteri	613	355	57.9%	335		549	89.6%
C54 Corpus uteri	1,315	632	48.1%	1,125		1,188	90.3%
C56 Ovary	767	395	51.5%	466		621	81.0%
C60 Penis	104	38	36.5%	94		99	95.2%
C61 Prostate	9,554	8,367	87.6%	3,635		8,776	91.9%
C62 Testis	379	263	69.4%	368		373	98.4%
C64 Kidney	1,744	1,091	62.6%	1,364		1,650	94.6%
C67 Bladder	2,272	844	37.1%	1,908		2,067	91.0%
C69 Eye and adnexa	118	84	71.2%	26		103	87.3%
C73 Thyroid	1,028	388	37.7%	952		972	94.6%

^a Only if TNM is applicable.

^b The proportion of known stage is defined as the number of diagnoses with stage I-IV divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with known clinical stage is a measure for data completeness.

^d The proportion of diagnoses with known pathological stage is not shown (see methodology).


Source: Belgian Cancer Registry 

2.2.3 STABILITY OF INCIDENCE DATA OVER TIME

Table 3 All invasive tumours (ICD10: C00-C97, MDS and MPN)*: Stability of incidence data (N) over time, 2004-2017

Belgium		Incidence year													
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Publication year	2004	60,047													
	2005	59,976	59,478												
	2006	60,740	60,618	60,046											
	2008	61,480	61,482	61,246	63,170	63,738									
	2009	61,507	61,482	61,266	63,189	64,096	64,526								
	2010	61,496	61,416	61,252	63,236	64,087	64,720	66,331							
	2011	61,424	61,363	61,202	63,183	64,041	64,770	66,667	69,062						
	2012	61,293	61,265	61,090	63,090	63,966	64,768	66,664	69,719	70,992					
	2013	61,299	61,317	61,183	63,214	64,127	64,904	66,692	69,761	71,068	71,536				
	2014	61,306	61,305	61,223	63,262	64,207	64,950	66,756	69,804	71,120	71,697	74,423			
	2015	61,272	61,278	61,192	63,219	64,154	64,893	66,711	69,749	71,072	71,624	74,429	73,879		
	2016	61,229	61,234	61,161	63,126	64,089	64,826	66,630	69,681	71,002	71,569	74,369	73,905	75,696	
	2017	61,209	61,193	61,166	63,105	64,062	64,805	66,606	69,656	70,981	71,567	74,374	73,960	75,850	76,633

* Excl. basocellular carcinomas of skin

Source: Belgian Cancer Registry 

3 CANCER BURDEN IN BELGIUM

3.1 INVASIVE TUMOURS (EXCL. NON-MELANOMA SKIN CANCER)

3.1.1 Incidence

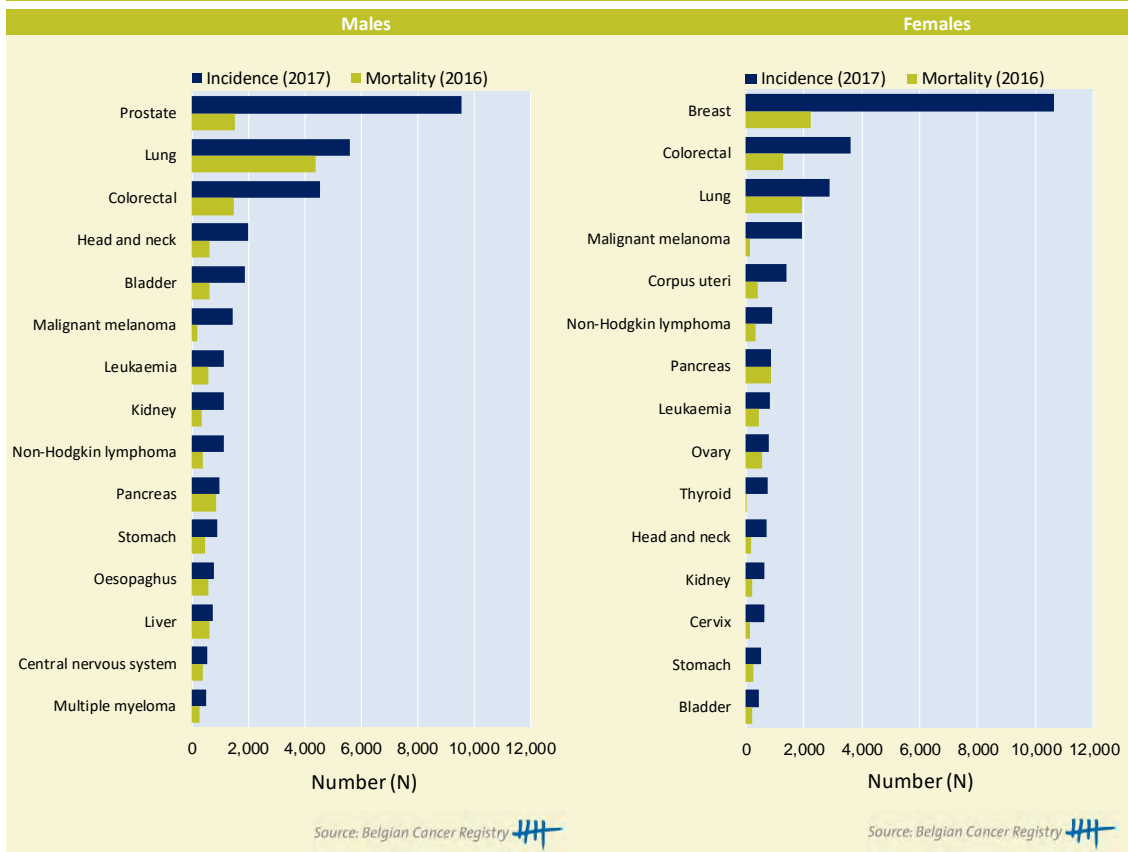
Table 1 Invasive tumours (excl. non-melanoma skin cancer): Overview of incidence, mortality, prevalence and survival by sex and region						
Invasive tumours (excl. non-melanoma skin cancer)	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	36,977	664.1	341.2	31,725	551.3	288.7
Flemish Region	22,412	695.7	332.7	18,523	562.2	282.5
Brussels-Capital Region	2,606	447.5	314.6	2,706	444.2	283.2
Walloon Region	11,959	677.8	364.6	10,496	567.3	302.2
Mortality, 2016						
Belgium	15,178	274.1	122.5	11,929	208.2	78.3
Flemish Region	8,952	279.7	114.2	6,805	207.7	74.2
Brussels-Capital Region	1,130	194.9	119.7	1,010	166.1	77.5
Walloon Region	5,096	290.1	139.1	4,114	222.9	86.0
Prevalence (5 years), 2013-2017						
Belgium	109,807	1,961.6	1,006.4	112,078	1,939.7	1,039.7
Flemish Region	68,682	2,119.1	1,013.6	66,143	1,997.2	1,029.0
Brussels-Capital Region	7,523	1,282.4	906.9	9,464	1,546.2	1,000.4
Walloon Region	33,618	1,899.1	1,019.0	36,476	1,967.2	1,073.4
5-year Relative survival, 2013-2017						
Belgium	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	167,164	61.9	[61.5;62.2]	151,066	70.9	[70.5;71.2]
Flemish Region	102,460	63.4	[63.0;63.9]	88,098	71.6	[71.2;72.0]
Brussels-Capital Region	11,952	59.4	[58.2;60.7]	12,955	71.1	[70.0;72.2]
Walloon Region	52,777	59.3	[58.7;60.0]	50,024	69.4	[68.8;69.9]
10-year Relative survival, 2008-2017						
Belgium	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	316,637	56.0	[55.7;56.4]	284,913	64.9	[64.6;65.3]
Flemish Region	194,418	57.7	[57.2;58.1]	165,599	65.2	[64.8;65.6]
Brussels-Capital Region	23,160	53.1	[51.8;54.5]	25,037	65.0	[63.9;66.2]
Walloon Region	99,187	53.4	[52.8;54.1]	94,352	64.5	[63.9;65.1]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry 

Figure 1 Incidence (N) and mortality (N) for the 15 most frequently diagnosed malignancies (excl. non-melanoma skin cancer) by sex in Belgium*



* Oesophagus (C15) is defined without 'gastro-oesophageal junction (C16.0)'. The latter is included with stomach (C16). The results for corpus uteri (C54-C55) include the data for 'uterus, NOS'. Central nervous system is defined as C70-C72 (meningioma included).

Figure 2 Invasive tumours (excl. non-melanoma skin cancer): Age-specific incidence rates (N/100,000) and age-specific 5-year relative survival (%) by sex, Belgium 2013-2017

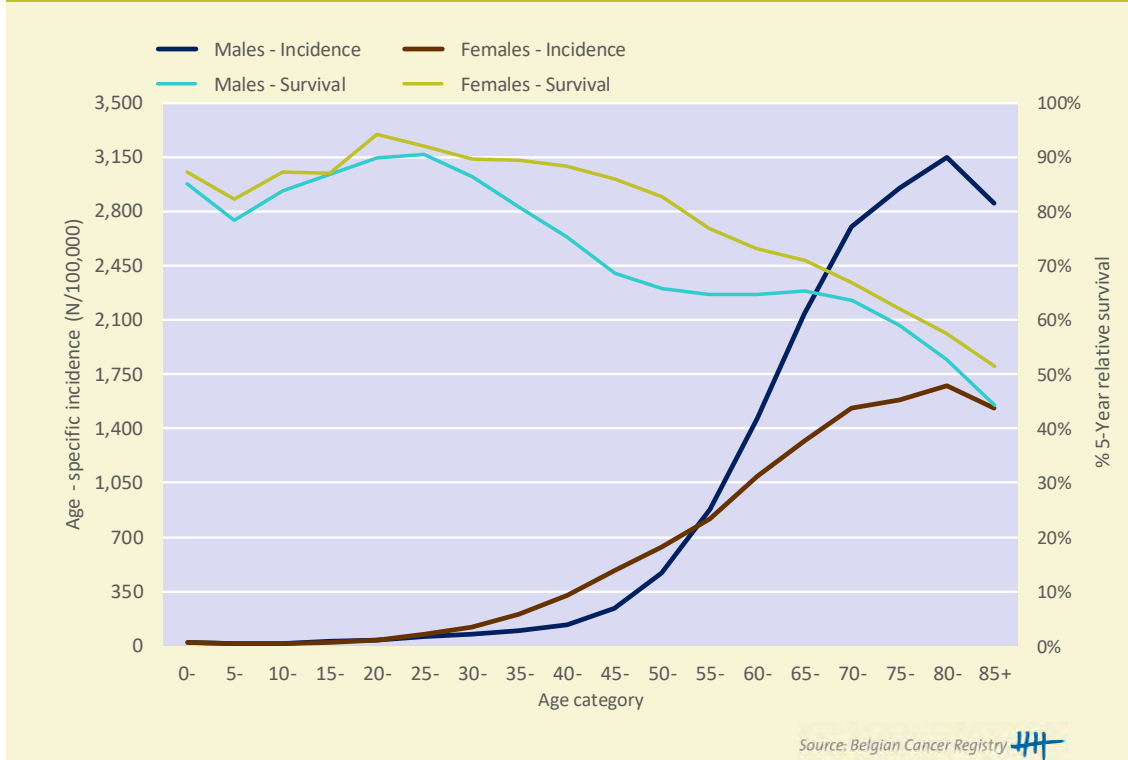


Table 2 Incidence (N, 2017) and 5-year relative survival (5y-RS(%), 2013-2017) of the five most frequently occurring tumours by sex and age group in Belgium*					
Boys (0-19y)	N (2017)	5y-RS (%)	Girls (0-19y)	N (2017)	5y-RS (%)
Invasive tumours	230	84.3	Invasive tumours	193	86.3
1) Leukaemia	58	86.8	1) Leukaemia	46	88.1
2) Central nervous system	34	59.6	2) Hodgkin lymphoma	27	98.0
3) Hodgkin lymphoma	31	97.2	3) Central nervous system	25	70.4
4) Non-Hodgkin lymphoma	17	93.0	4) Malignant melanoma	13	89.8
5) Malignant bone tumours	15	71.9	5) Kidney	10	96.0
Males (20-34y)	N (2017)	5y-RS (%)	Females (20-34y)	N (2017)	5y-RS (%)
Invasive tumours	617	88.6	Invasive tumours	778	91.2
1) Testis	189	98.9	1) Malignant melanoma	177	97.9
2) Malignant melanoma	70	96.9	2) Breast	176	89.8
3) Hodgkin lymphoma	57	96.2	3) Thyroid	118	99.7
4) Central nervous system	46	67.7	4) Cervix uteri	55	88.0
5) Colorectal	45	84.0	5) Colorectal	45	88.1
Males (35-49y)	N (2017)	5y-RS (%)	Females (35-49y)	N (2017)	5y-RS (%)
Invasive tumours	1,868	72.8	Invasive tumours	3,794	87.4
1) Malignant melanoma	248	93.2	1) Breast	1,845	93.8
2) Colorectal	195	73.7	2) Malignant melanoma	470	97.9
3) Testis	146	98.9	3) Thyroid	233	99.6
4) Lung	145	23.3	4) Cervix uteri	192	84.5
5) Head and neck	135	62.5	5) Colorectal	173	76.4
Males (50-69y)	N (2017)	5y-RS (%)	Females (50-69y)	N (2017)	5y-RS (%)
Invasive tumours	16,295	64.9	Invasive tumours	13,391	75.2
1) Prostate	4,579	96.7	1) Breast	5,063	93.6
2) Lung	2,526	21.9	2) Lung	1,564	30.1
3) Colorectal	1,893	75.6	3) Colorectal	1,241	77.0
4) Head and neck	1,253	51.2	4) Malignant melanoma	735	96.5
5) Malignant melanoma	660	91.7	5) Corpus uteri	598	86.1
Males (70+)	N (2017)	5y-RS (%)	Females (70+)	N (2017)	5y-RS (%)
Invasive tumours	17,967	56.0	Invasive tumours	13,569	59.0
1) Prostate	4,885	94.1	1) Breast	3,542	85.1
2) Lung	2,919	14.2	2) Colorectal	2,165	66.6
3) Colorectal	2,413	68.0	3) Lung	1,171	20.8
4) Bladder	1,243	51.5	4) Corpus uteri	750	75.8
5) Head and neck	583	49.7	5) Pancreas	544	5.8

Source: Belgian Cancer Registry 

* The results for corpus uteri (C54-C55) include the data for 'uterus, NOS'. Central nervous system is defined as C70-C72 (meningioma included). All results are represented in the ICD-10 classification, including the results of children and adolescents (0-19 years). The most recent results of cancer in children and adolescents according to the ICC-3 classification can be found in the following publication: *Cancer in children and adolescents in Belgium 2004-2016* ⁽²³⁾

3.1.2 Incidence trends

Figure 3 Invasive tumours (excl. non-melanoma skin cancer): Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

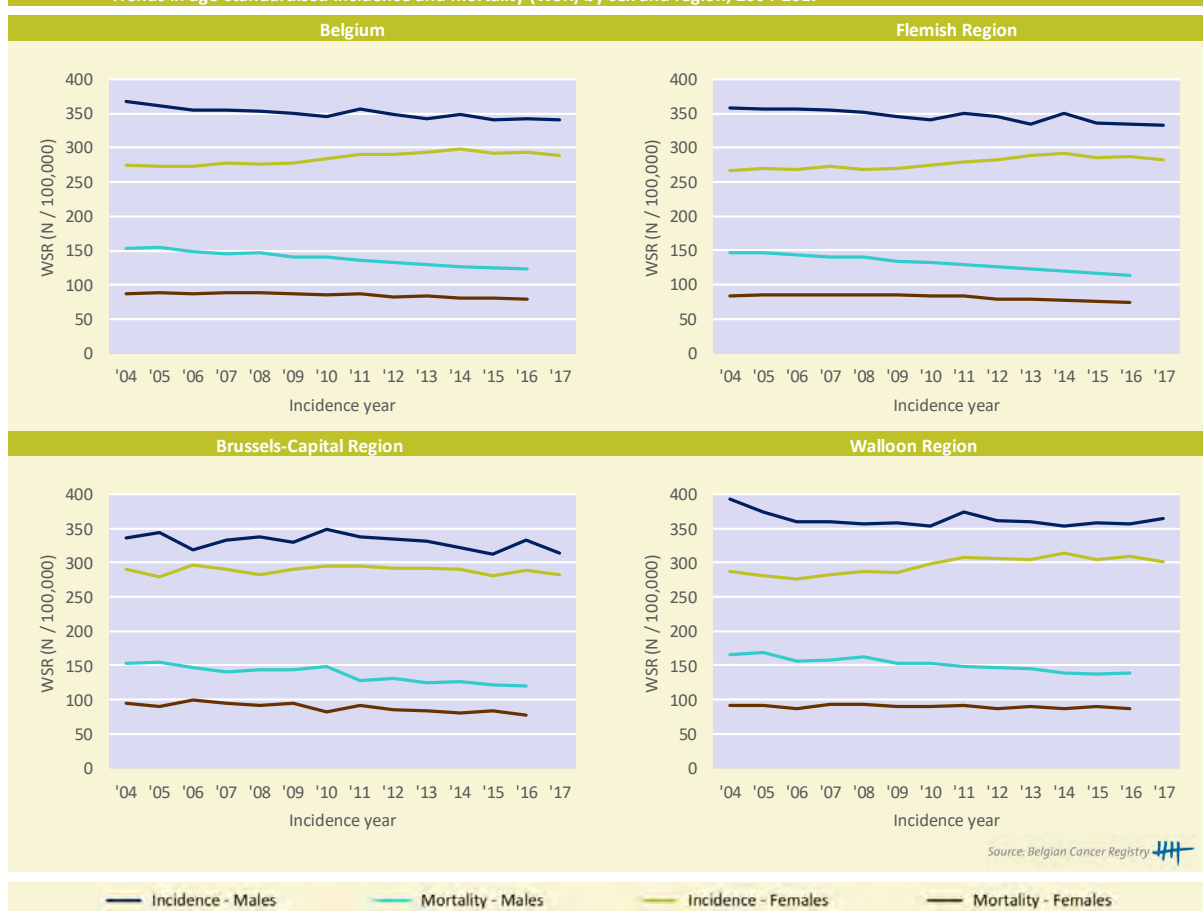


Table 3 Invasive tumours (excl. non-melanoma skin cancer): AAPC(%) by sex and region in Belgium

Invasive tumours (excl. non-melanoma skin cancer)	Males			Females		
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Incidence	-0.5	[-0.6; -0.3]	2004-2017	0.5	[0.3; 0.6]	2004-2017
				0.3	[-0.1; 0.7]	2004-2009
				1.6	[1.2; 2.1]	2009-2013
				-0.6	[-1.1; -0.1]	2013-2017
Flemish Region	-0.6	[-0.8; -0.4]	2004-2017	0.4	[0.3; 0.5]	2004-2017
				0.3	[-0.0; 0.6]	2004-2009
				1.4	[1.2; 1.7]	2009-2014
				-1.0	[-1.6; -0.5]	2014-2017
Brussels-Capital Region	-0.4	[-0.8; 0.1]	2004-2017	-0.1	[-0.3; 0.2]	2004-2017
				0.3	[-0.2; 0.9]	2004-2011
				-0.5	[-1.2; 0.1]	2011-2017
				0.7	[0.4; 1.0]	2004-2017
Walloon Region	-0.5	[-0.8; -0.3]	2004-2017	1.2	[0.8; 1.6]	2004-2014
				0.1	[-0.2; 0.5]	2004-2007
				-0.8	[-2.3; 0.8]	2014-2017
				-0.8	[-2.3; 0.8]	2014-2017
Mortality	-1.8	[-2.0; -1.6]	2004-2016	-0.9	[-1.0; -0.7]	2004-2016
				-1.4	[-1.8; -1.0]	2004-2010
				-2.2	[-2.5; -1.8]	2010-2016
				-1.8	[-2.2; -1.3]	2011-2016
Flemish Region	-2.0	[-2.1; -1.9]	2004-2016	-1.0	[-1.2; -0.9]	2004-2016
				-1.6	[-1.8; -1.4]	2004-2011
				-2.5	[-2.8; -2.2]	2011-2016
				0.0	[-0.3; 0.3]	2004-2010
Brussels-Capital Region	-1.9	[-2.5; -1.4]	2004-2016	-2.1	[-2.4; -1.7]	2010-2016
				-1.5	[-2.1; -0.8]	2004-2016
Walloon Region	-1.5	[-1.8; -1.2]	2004-2016	-0.3	[-0.6; 0.1]	2004-2016

Source: Belgian Cancer Registry

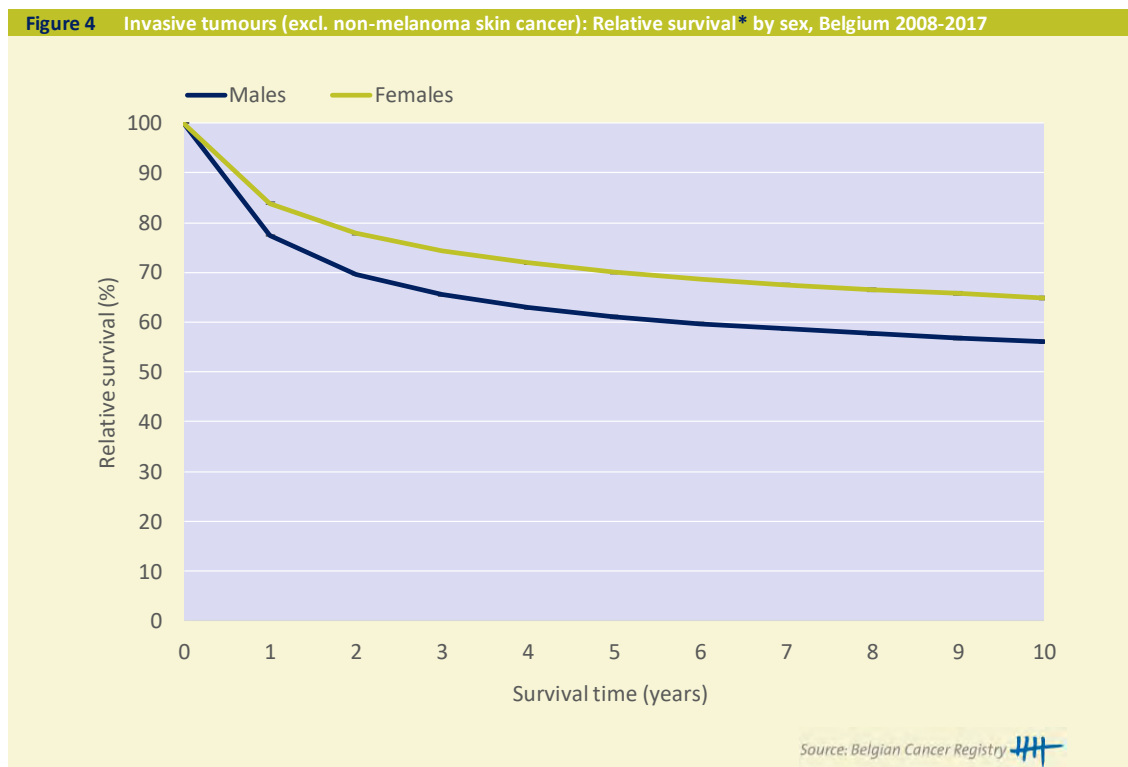
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.1.3 Survival

Figure 4 Invasive tumours (excl. non-melanoma skin cancer): Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.1.4 Survival trends

Figure 5 Invasive tumours (excl. non-melanoma skin cancer): 1-, 3-, 5- and 10-year relative survival (RS)* by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.2 HEAD AND NECK (ICD-10: C00-C14, C30-C32)

3.2.1 Incidence

Table 1 Head and Neck cancer: Overview of incidence, mortality, prevalence and survival by sex and region

Head and neck cancer	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	1,984	35.6	20.1	698	12.1	6.3
Flemish Region	1,095	34.0	18.1	349	10.6	5.0
Brussels-Capital Region	148	25.4	18.9	67	11.0	7.3
Walloon Region	741	42.0	24.3	282	15.2	8.2
Mortality, 2016						
Belgium	603	10.9	5.7	191	3.3	1.5
Flemish Region	376	11.7	5.8	115	3.5	1.5
Brussels-Capital Region	53	9.1	6.3	28	4.6	2.7
Walloon Region	174	9.9	5.5	48	2.6	1.2
Prevalence (5 years), 2013-2017						
Belgium	6,081	108.6	60.2	2,274	39.4	20.9
Flemish Region	3,471	107.1	55.3	1,228	37.1	18.5
Brussels-Capital Region	481	82.0	60.6	193	31.5	21.9
Walloon Region	2,129	120.3	69.2	853	46.0	24.6
5-year Relative survival, 2013-2017						
	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	9,635	51.9	[50.5;53.2]	3,370	59.0	[56.9;61.2]
Flemish Region	5,321	54.4	[52.6;56.2]	1,762	62.2	[59.1;65.1]
Brussels-Capital Region	792	53.0	[48.0;57.8]	302	57.0	[49.5;64.0]
Walloon Region	3,522	47.8	[45.6;50.0]	1,306	55.3	[51.8;58.7]
10-year Relative survival, 2008-2017						
	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	18,934	38.3	[37.0;39.6]	6,446	45.3	[43.1;47.4]
Flemish Region	10,311	41.8	[40.0;43.5]	3,292	47.6	[44.5;50.7]
Brussels-Capital Region	1,565	36.7	[32.2;41.4]	618	40.2	[32.9;47.6]
Walloon Region	7,064	33.6	[31.7;35.6]	2,537	43.4	[40.1;46.7]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry 

Figure 1 Head and Neck cancer: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017

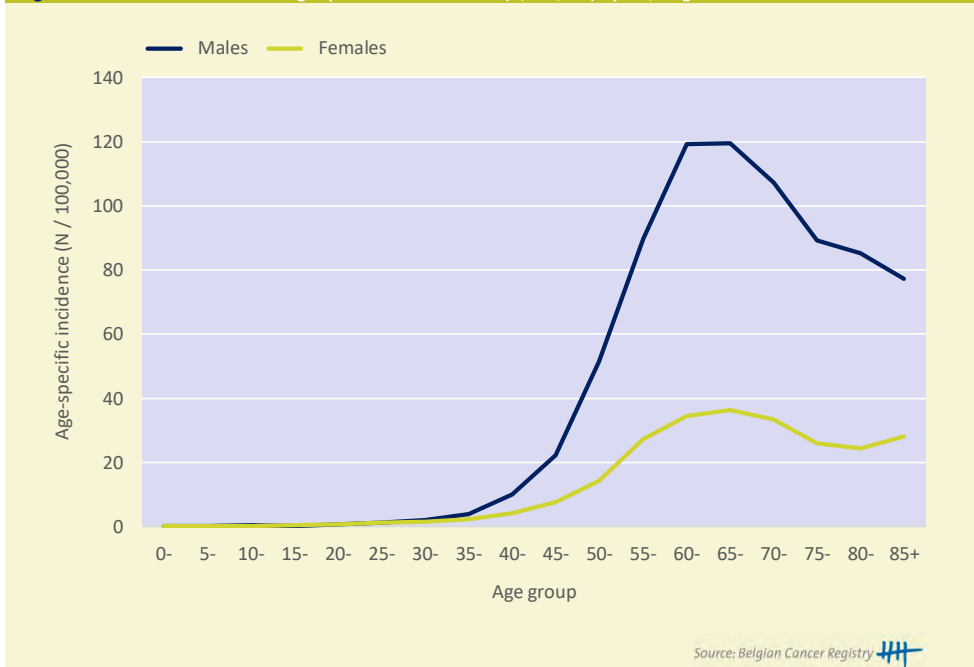
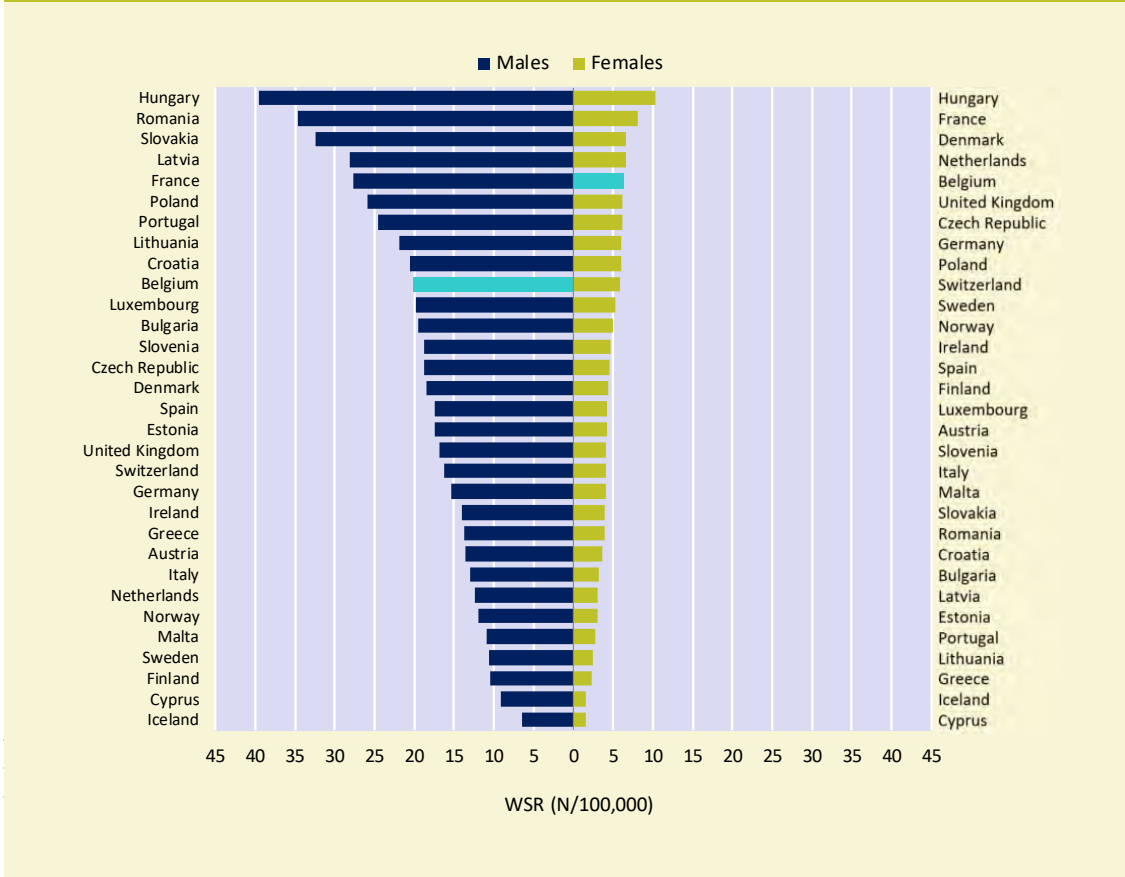


Figure 2 Head and Neck cancer: Comparison of age-standardised incidence rates (WSR)
 (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Includes ICD10 C00-C06; C09-C14 and C30-C32
 Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Head and Neck cancer: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

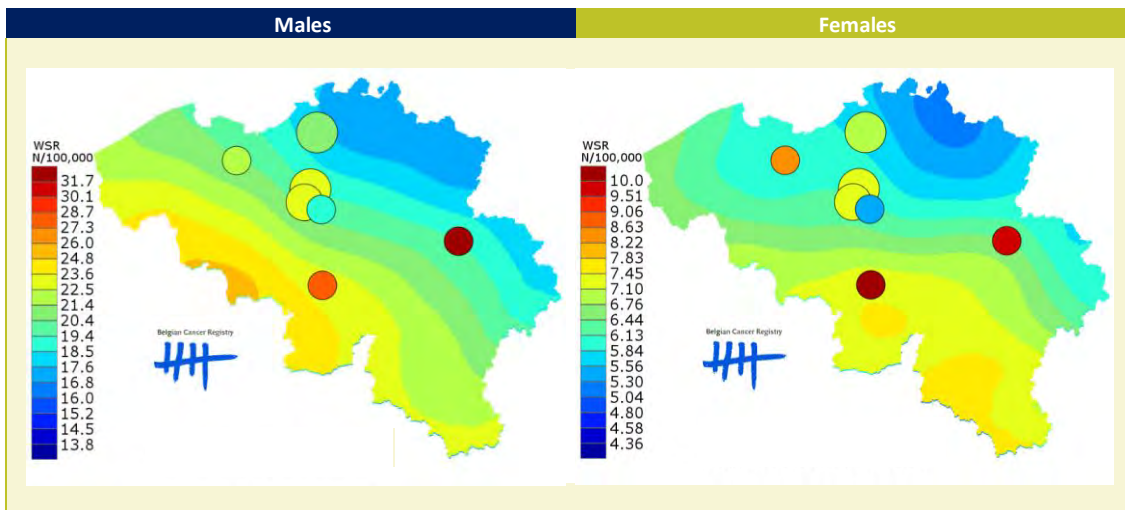
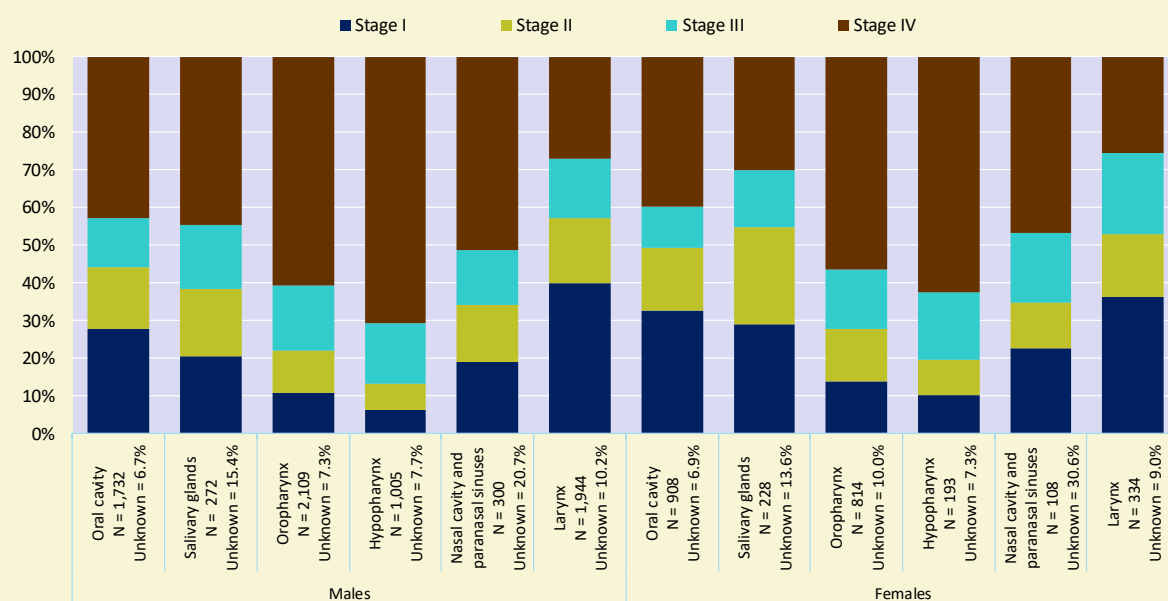


Table 2 Head and neck cancer: Incidence by primary site and sex, Belgium 2017

Belgium 2017	Total		Males		Females	
	N	%	N	%	N	%
Lip (C00)	32	1.2	23	1.2	9	1.3
Oral cavity (C02-C050,C06)	666	24.8	449	22.6	217	31.1
Tongue (C02)	271	10.1	188	9.5	83	11.9
Gum (C03)	101	3.8	54	2.7	47	6.7
Floor of mouth (C04)	197	7.3	143	7.2	54	7.7
Hard palate (C050)	23	0.9	13	0.7	10	1.4
Mouth, NOS (C06)	74	2.8	51	2.6	23	3.3
Pharynx (C01;C051-C059;C09-C13)	1,144	42.7	868	43.8	276	39.5
Oropharynx (C01;C051-C059;C09-C10)	779	29.0	574	28.9	205	29.4
Base of tongue (C01)	191	7.1	140	7.1	51	7.3
Soft palate, uvula and palate NOS (C051-C059)	100	3.7	74	3.7	26	3.7
Tonsil (C09)	304	11.3	224	11.3	80	11.5
Oropharynx, other and NOS (C10)	184	6.9	136	6.9	48	6.9
Nasopharynx (C11)	63	2.3	50	2.5	13	1.9
Hypopharynx (C12-C13)	302	11.3	244	12.3	58	8.3
Pyriformis sinus (C12)	202	7.5	165	8.3	37	5.3
Hypopharynx, other and NOS (C13)	100	3.7	79	4.0	21	3.0
Larynx (C32)	590	22.0	495	24.9	95	13.6
Glottis (C320)	350	13.0	307	15.5	43	6.2
Supraglottis (C321)	192	7.2	152	7.7	40	5.7
Larynx, other and NOS (C322-C329)	48	1.8	36	1.8	12	1.7
Nasal cavity and paranasal sinuses (C30-C31)	123	4.6	84	4.2	39	5.6
Nasal cavity and middle ear (C30)	57	2.1	31	1.6	26	3.7
Accessory sinuses (C31)	66	2.5	53	2.7	13	1.9
Salivary glands (C07-C08)	111	4.1	52	2.6	59	8.5
Parotid gland (C07)	89	3.3	46	2.3	43	6.2
Salivary glands, NOS (C08)	22	0.8	6	0.3	16	2.3
Lip, oral cavity and pharynx, NOS (C14)	16	0.6	13	0.7	3	0.4
Head and neck (C00-C14;C30-C32)	2,682	100.0	1,984	100.0	698	100.0

Source: Belgian Cancer Registry

Figure 4 Head and Neck cancer: Stage distribution^{a,b} by sex and localisation, Belgium 2014-2017

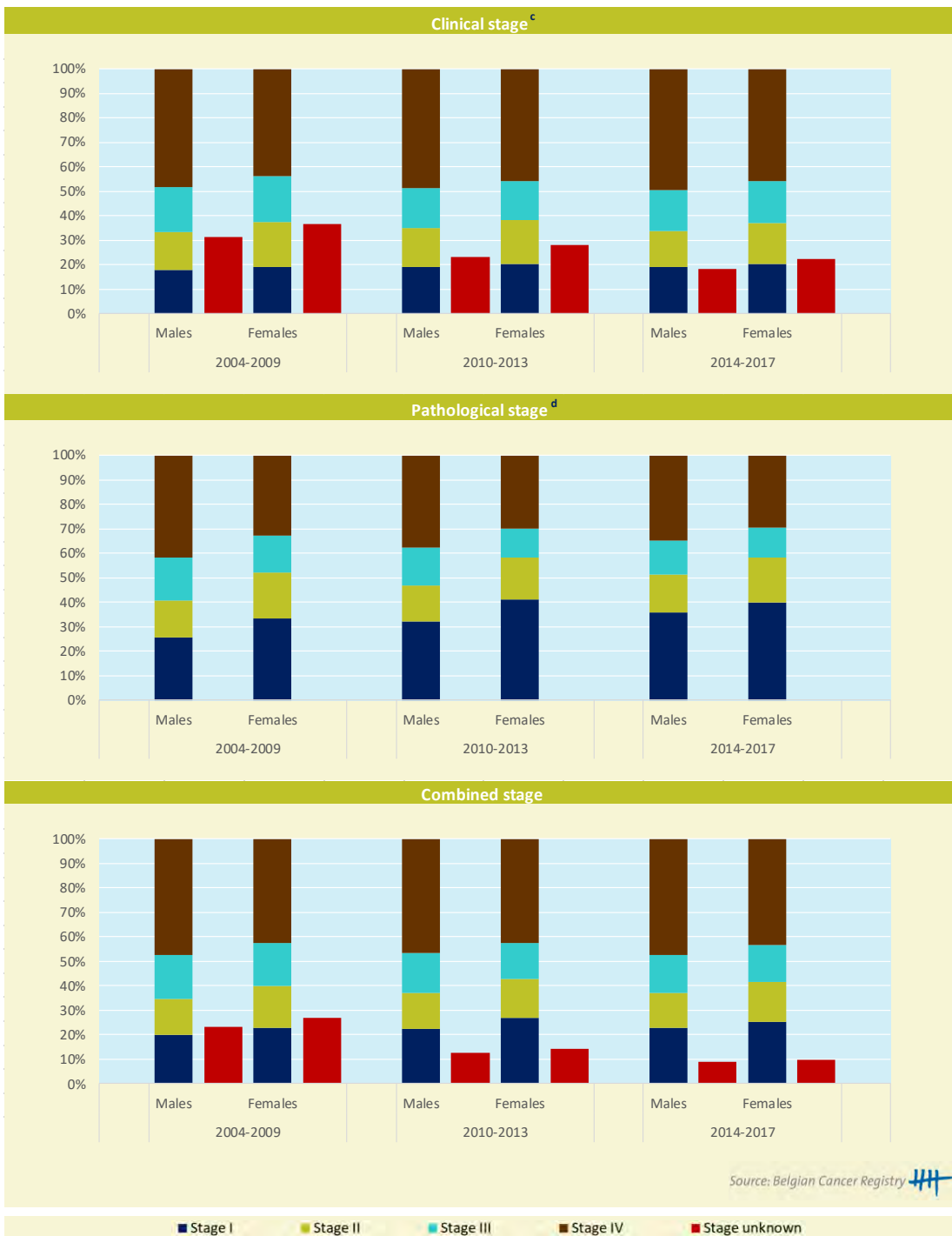


Source: Belgian Cancer Registry

^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Head and Neck cancer: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.2.2 Incidence trends

Figure 6 Head and Neck cancer: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

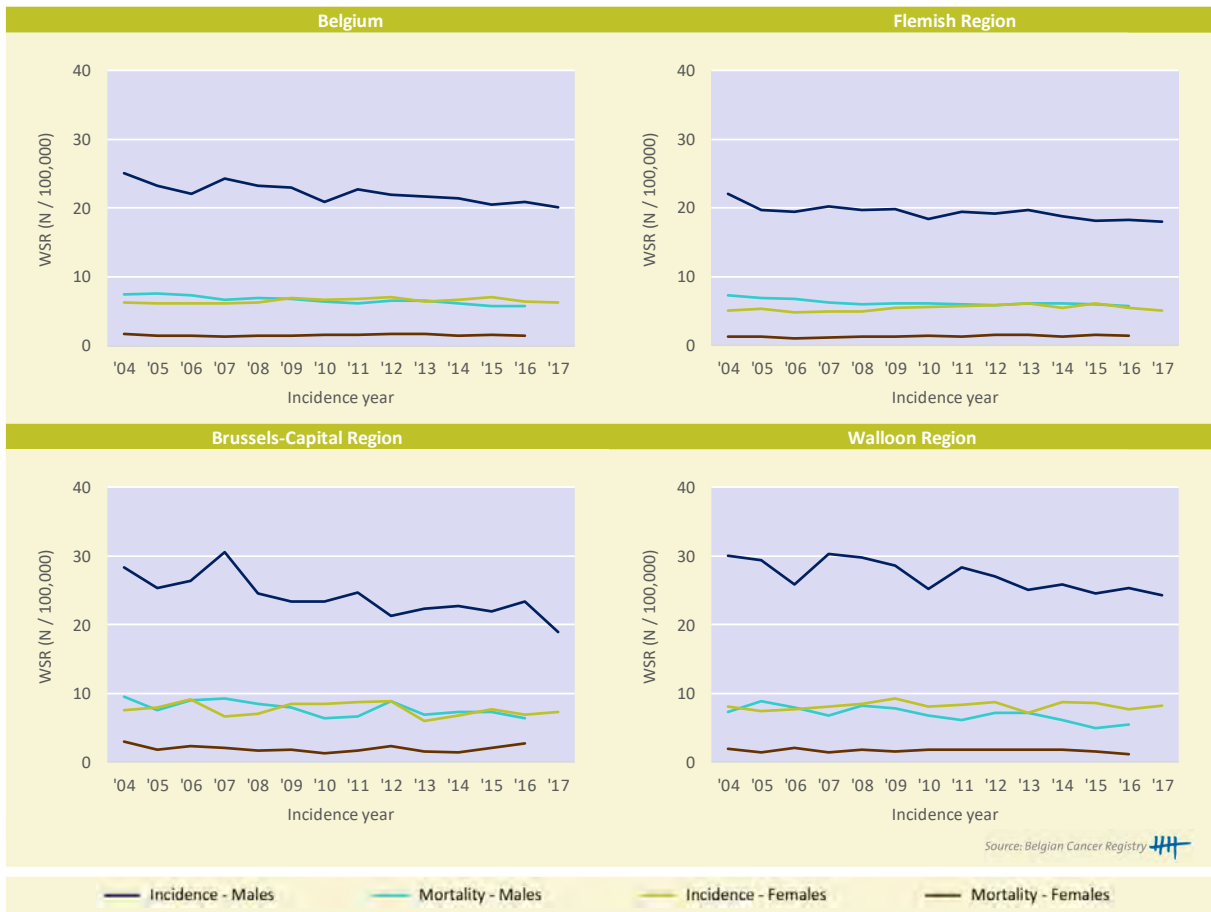


Figure 7 Head and Neck cancer: Trends in age-standardised incidence (WSR) by localisation and sex, Belgium 2004-2017

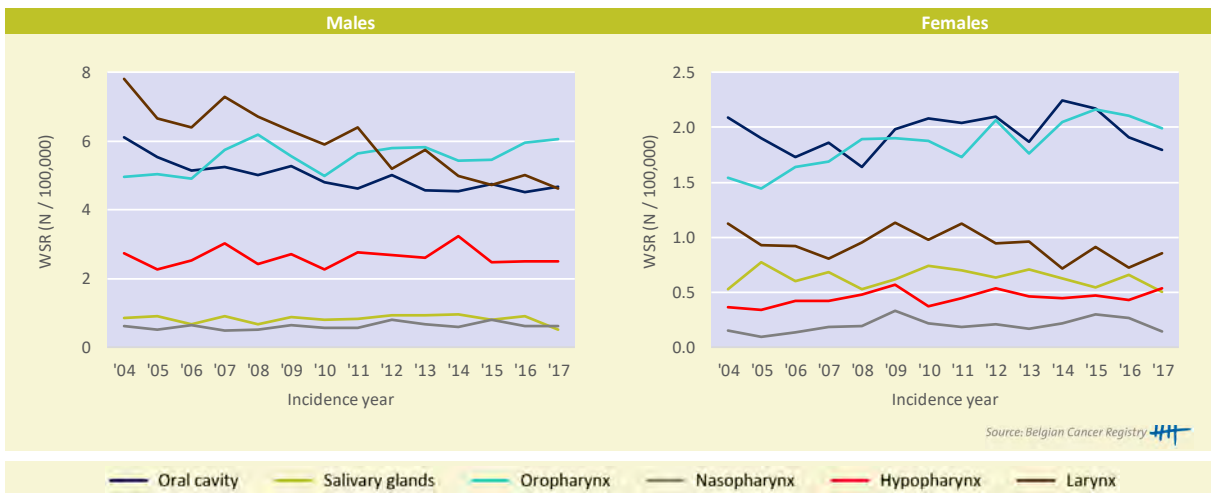


Table 3 Head and Neck cancer: AAPC(%) by sex, region and localisation in Belgium						
Head and neck cancer	Males			Females		
Incidence	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Belgium	-1.3	[-1.8; -0.8]	2004-2017	0.4	[-0.2; 1.0]	2004-2017
				1.7	[0.6; 2.7]	2004-2012
				-1.5	[-3.2; 0.2]	2012-2017
				0.1	[-0.8; 0.9]	2004-2017
				-1.6	[-5.1; 2.1]	2004-2007
Flemish Region	-1.0	[-1.5; -0.5]	2004-2017	3.8	[2.1; 5.4]	2007-2013
				-4.1	[-6.5; -1.6]	2013-2017
Brussels-Capital Region	-2.3	[-3.3; -1.3]	2004-2017	-0.9	[-2.6; 0.8]	2004-2017
Walloon Region	-1.5	[-2.2; -0.7]	2004-2017	0.3	[-0.7; 1.4]	2004-2017
Mortality	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Belgium	-2.1	[-2.7; -1.5]	2004-2016	0.2	[-1.0; 1.4]	2004-2016
				-2.9	[-7.9; 2.5]	2004-2007
Flemish Region	-1.7	[-2.0; -1.4]	2004-2016	1.3	[-0.3; 2.9]	2007-2016
	-4.5	[-5.5; -3.4]	2004-2008	2.1	[0.6; 3.7]	2004-2016
	-0.2	[-0.7; 0.3]	2008-2016			
Brussels-Capital Region	-2.4	[-4.1; -0.6]	2004-2016	-1.1	[-4.5; 2.3]	2004-2016
				-9.3	[-16.0; -2.0]	2004-2010
				7.7	[-0.2; 16.3]	2010-2016
Walloon Region	-3.3	[-4.9; -1.6]	2004-2016	-1.2	[-3.7; 1.4]	2004-2016
Incidence by tumour localisation	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Oral cavity	-2.0	[-2.5; -1.4]	2004-2017	-0.9	[-2.3; 0.5]	2004-2017
	-3.1	[-4.4; -1.9]	2004-2010	-4.3	[-8.9; 0.6]	2004-2008
	-0.9	[-2.0; 0.2]	2010-2017	5.5	[1.1; 10.2]	2008-2012
Salivary glands	-0.6	[-3.6; 2.5]	2004-2017	-3.0	[-6.6; 0.7]	2012-2017
	0.3	[-13.4; 16.1]	2004-2007	-0.5	[-2.5; 1.5]	2004-2017
	-0.8	[-4.5; 3.0]	2007-2017			
Oropharynx	1.3	[0.3; 2.3]	2004-2017	3.3	[2.3; 4.2]	2004-2017
				6.2	[3.3; 9.2]	2004-2009
Nasopharynx				1.5	[-0.2; 3.1]	2009-2017
	1.6	[-0.4; 3.7]	2004-2017	4.5	[0.6; 8.6]	2004-2017
				16.0	[3.7; 29.6]	2004-2009
Hypopharynx	0.2	[-1.3; 1.7]	2004-2017	-2.0	[-8.3; 4.6]	2009-2017
Larynx	-3.6	[-4.5; -2.7]	2004-2017	1.9	[0.0; 3.9]	2004-2017
				-1.7	[-3.5; 0.2]	2004-2017

Source: Belgian Cancer Registry 

AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.2.3 Survival

Figure 8 Head and Neck cancer: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.2.4 Survival trends

Figure 9 Head and Neck cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.3 DIGESTIVE TRACT

3.3.1 OESOPHAGUS (ICD-10: C15-C16.0)

3.3.1.1 Incidence

Table 1 Oesophageal cancer: Overview of incidence, mortality, prevalence and survival by sex and region

Oesophageal cancer	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	1,148	20.6	10.5	368	6.4	2.7
Flemish Region	677	21.0	9.8	206	6.3	2.6
Brussels-Capital Region	82	14.1	10.3	29	4.8	2.3
Walloon Region	389	22.0	12.0	133	7.2	3.2
Mortality, 2016						
Belgium	586	10.6	5.3	207	3.6	1.3
Flemish Region	378	11.8	5.6	98	3.0	1.0
Brussels-Capital Region	23	4.0	2.8	25	4.1	2.3
Walloon Region	185	10.5	5.4	84	4.6	1.7
Prevalence (5 years), 2013-2017						
Belgium	2,214	39.6	20.4	736	12.7	5.8
Flemish Region	1,347	41.6	19.9	428	12.9	5.6
Brussels-Capital Region	141	24.0	17.6	47	7.7	4.5
Walloon Region	726	41.0	22.1	261	14.1	6.5
5-year Relative survival, 2013-2017	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	5,463	24.8	[23.3;26.3]	1,881	25.8	[23.3;28.3]
Flemish Region	3,339	24.8	[22.9;26.7]	1,065	25.0	[21.7;28.3]
Brussels-Capital Region	356	27.9	[21.9;34.3]	143	23.1	[15.3;32.0]
Walloon Region	1,768	24.2	[21.5;27.0]	673	27.7	[23.7;32.0]
10-year Relative survival, 2008-2017	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	10,465	18.3	[17.1;19.6]	3,499	21.1	[18.9;23.4]
Flemish Region	6,318	18.6	[17.1;20.3]	1,980	20.8	[18.0;23.9]
Brussels-Capital Region	701	19.7	[14.6;25.7]	297	17.7	[10.5;27.0]
Walloon Region	3,447	17.4	[15.2;19.8]	1,222	22.3	[18.6;26.3]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry

Figure 1 Oesophageal cancer: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017

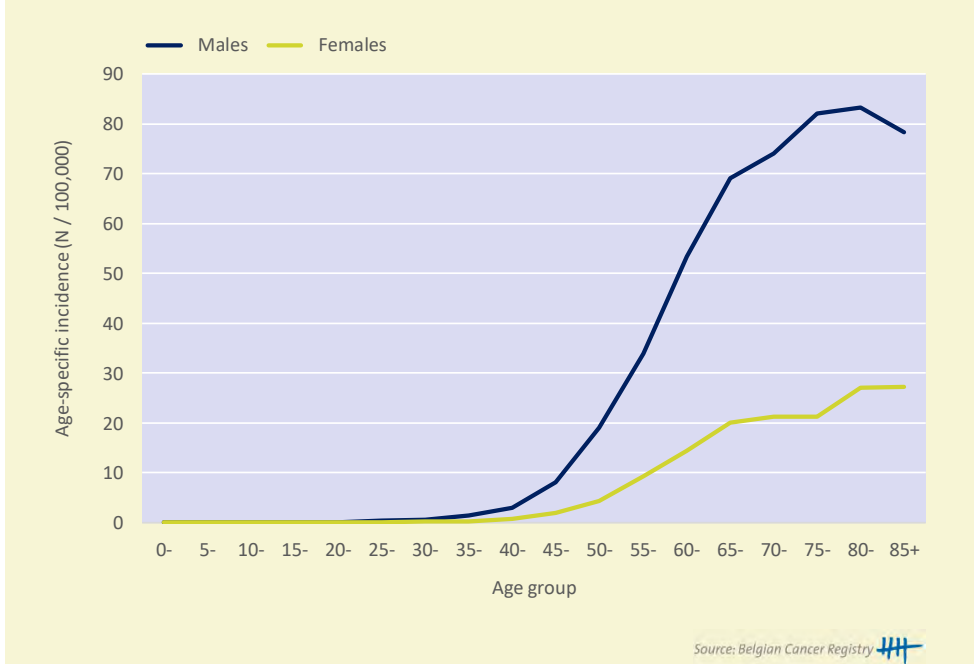
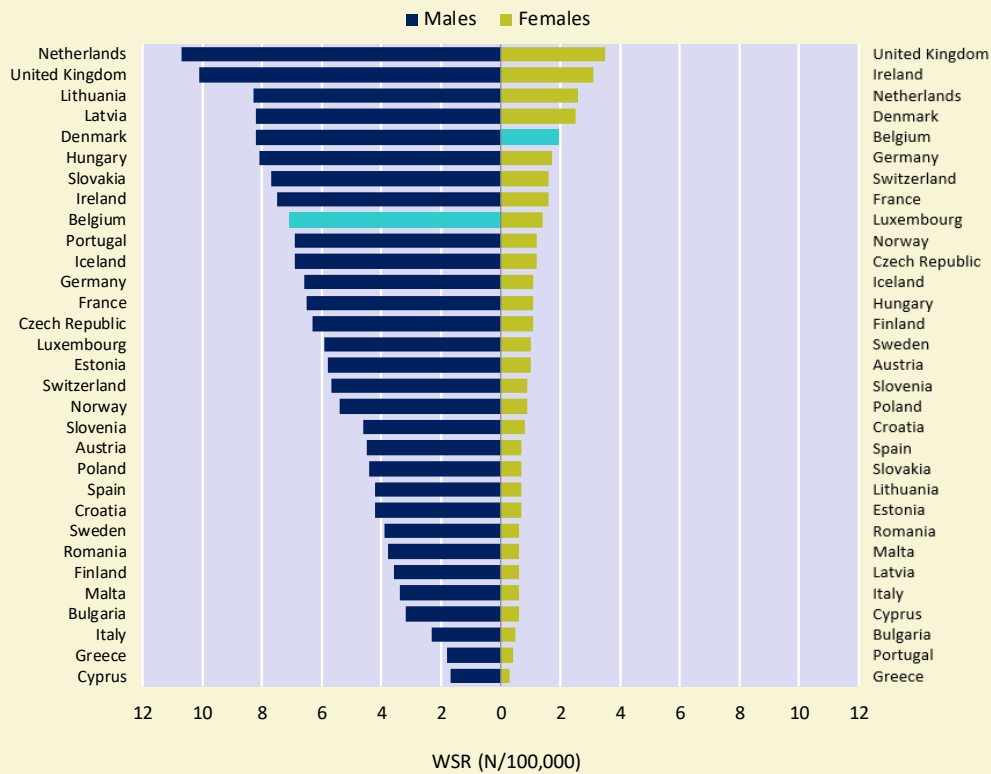


Figure 2 Oesophageal cancer (C15): Comparison of age-standardised incidence rates (WSR)
 (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Oesophageal cancer: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

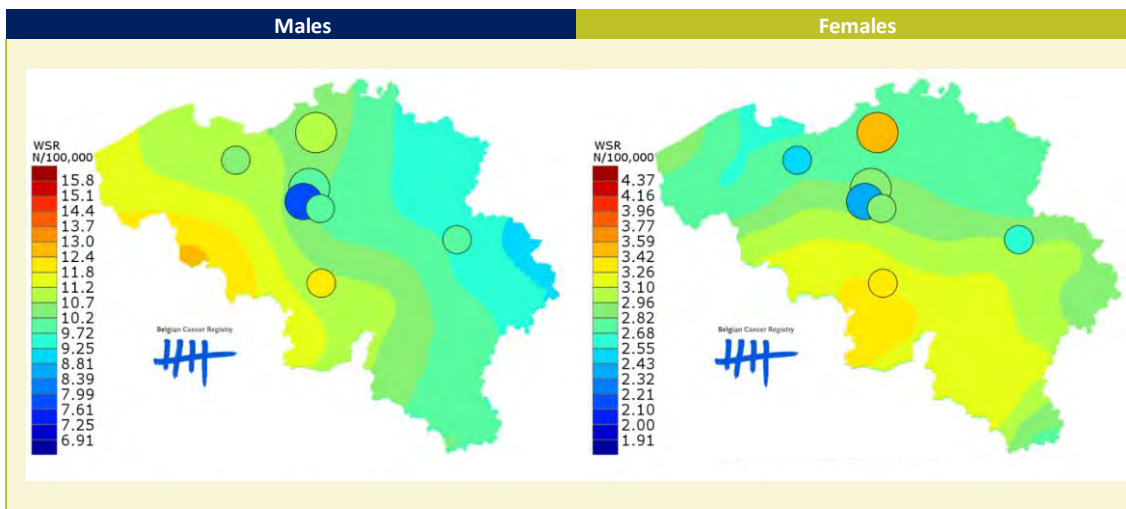
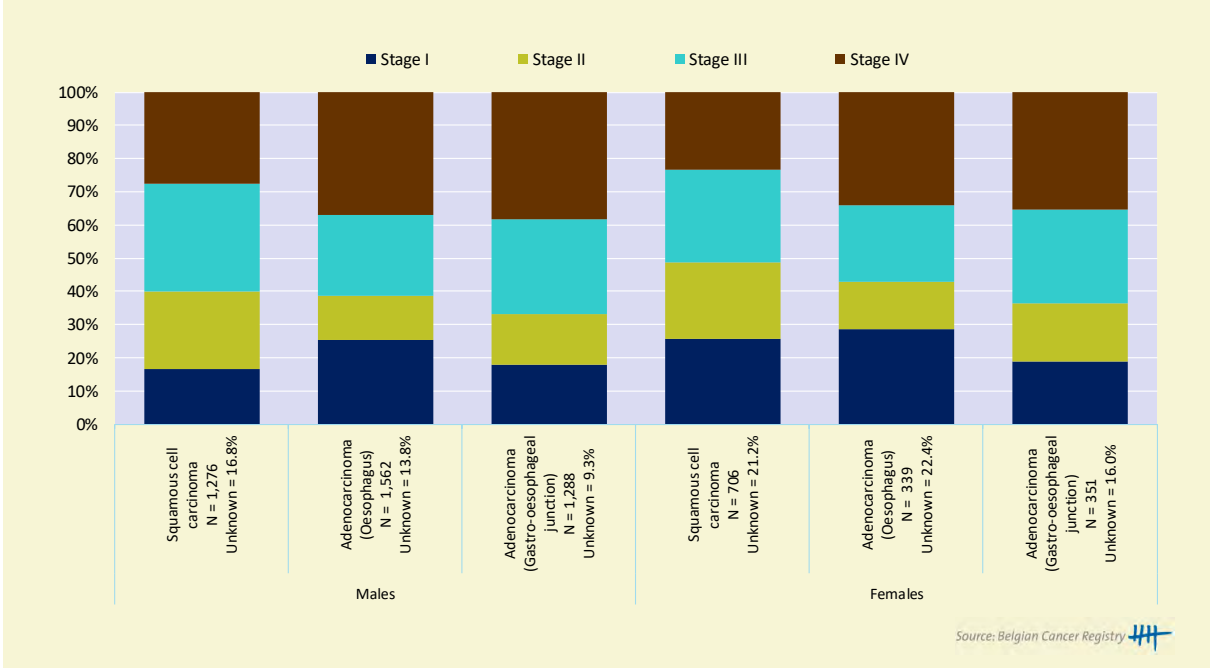


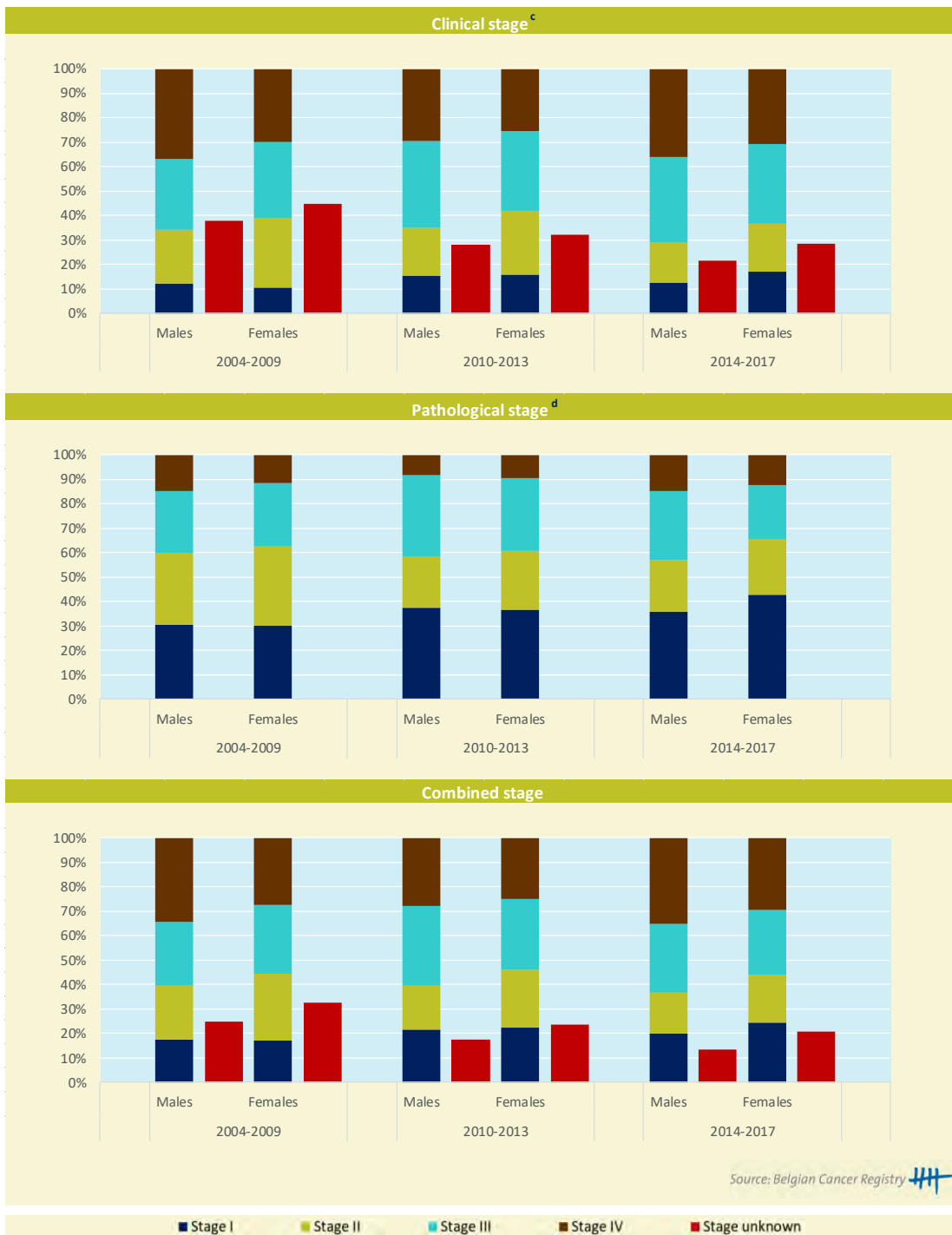
Figure 4 Oesophageal cancer: Stage distribution^{a b} by sex and histology, Belgium 2014-2017



^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Oesophageal cancer: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.3.1.2 Incidence trends

Figure 6 Oesophageal cancer: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

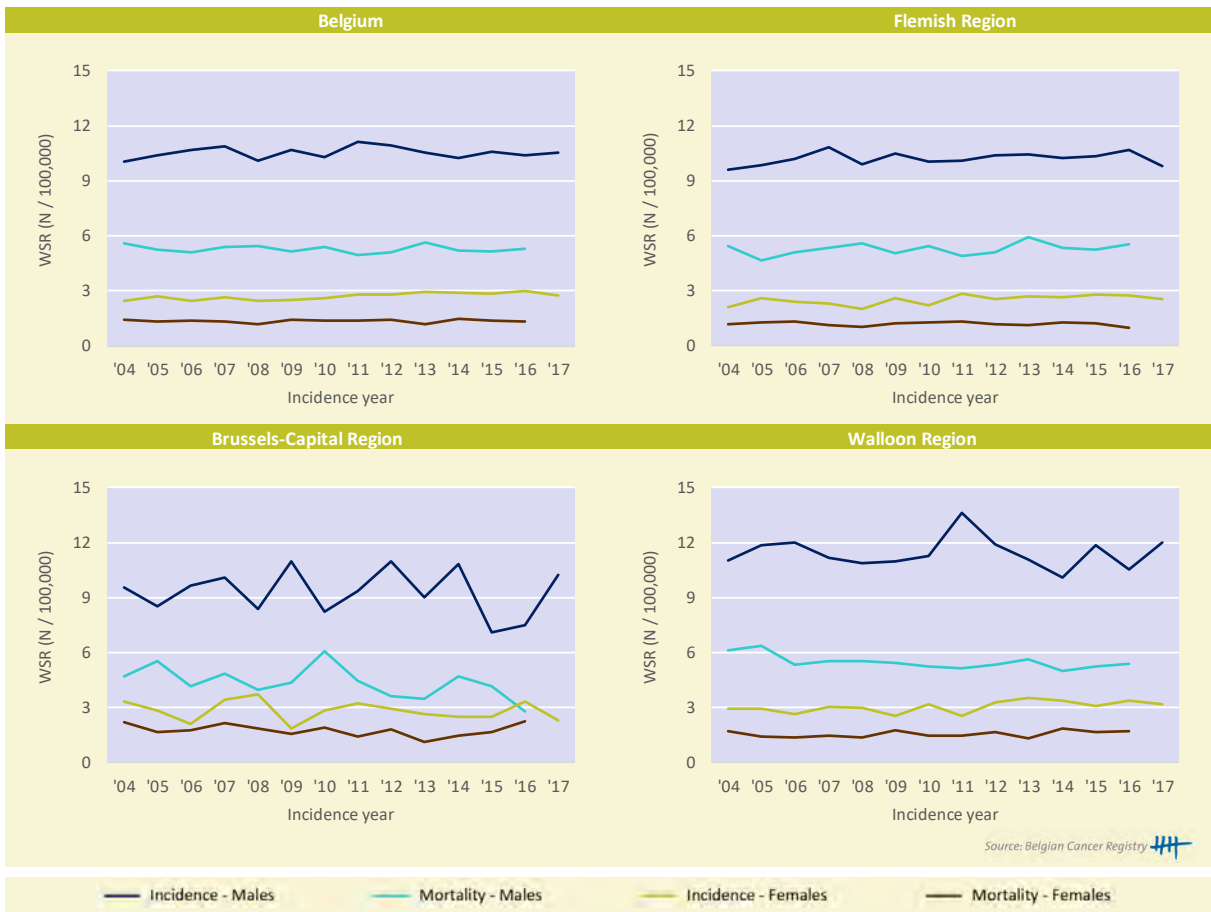


Figure 7 Oesophageal cancer: Trends in age-standardised incidence (WSR) by stage and sex, Belgium 2004-2017

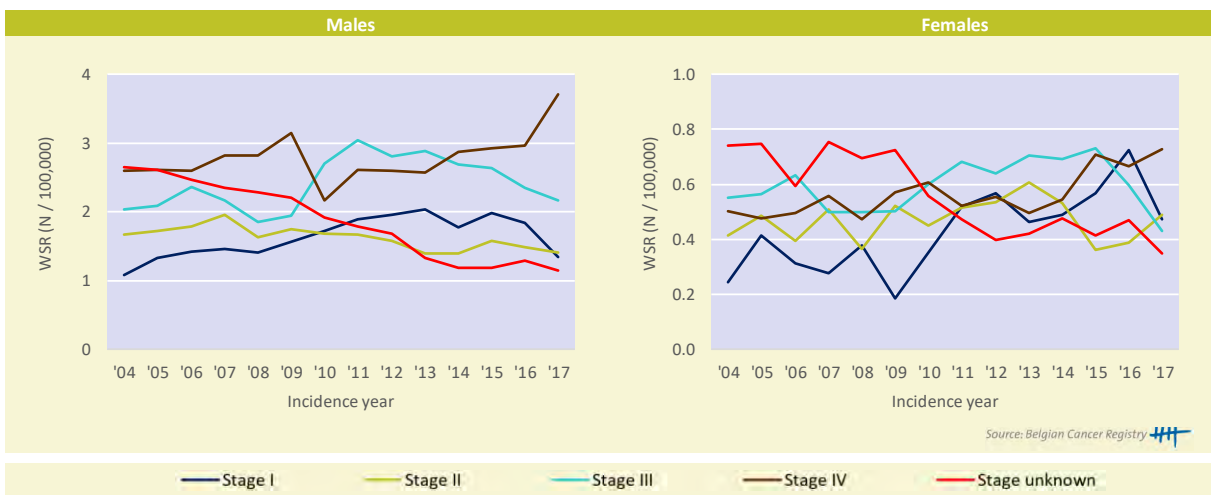


Figure 8 Oesophageal cancer: Trends in age-standardised incidence (WSR) by histology and sex, Belgium 2004-2017

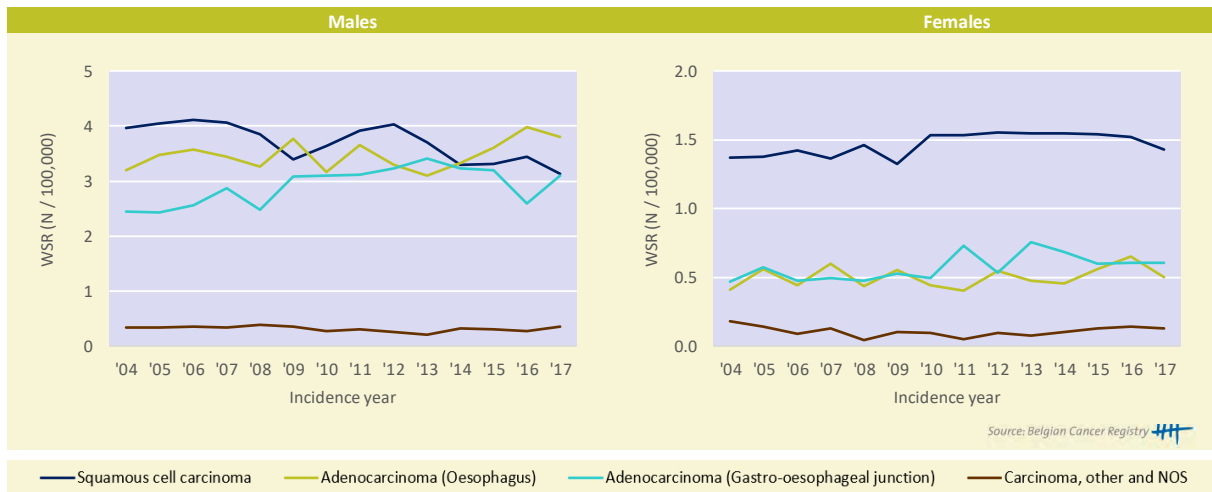


Table 2 Oesophageal cancer: AAPC(%) by sex, region, stage and histology in Belgium

Oesophageal cancer	Males			Females		
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Incidence						
Belgium	0.1	[-0.3; 0.5]	2004-2017	1.2	[0.5; 1.9]	2004-2017
Flemish Region	0.3	[-0.2; 0.7]	2004-2017	1.6	[0.3; 2.9]	2004-2017
Brussels-Capital Region	-0.5	[-2.5; 1.6]	2004-2017	-0.8	[-3.7; 2.1]	2004-2017
Walloon Region	-0.1	[-1.2; 1.0]	2004-2017	1.4	[0.1; 2.7]	2004-2017
Mortality						
Belgium	-0.2	[-0.9; 0.4]	2004-2016	-0.1	[-1.1; 1.0]	2004-2016
Flemish Region	0.5	[-0.5; 1.5]	2004-2016	-0.7	[-2.2; 0.8]	2004-2016
Brussels-Capital Region	-2.8	[-5.5; -0.1]	2004-2016	-1.4	[-4.5; 1.8]	2004-2016
Walloon Region	-1.1	[-1.9; -0.4]	2004-2016	1.1	[-0.6; 2.8]	2004-2016
	-2.6	[-4.2; -1.0]	2004-2010			
	0.3	[-1.3; 2.0]	2010-2016			
Incidence by stage						
Stage I	2.0	[0.8; 3.3]	2004-2017	6.6	[2.5; 10.8]	2004-2017
	6.7	[4.8; 8.6]	2004-2013			
	-7.7	[-11.7; -3.6]	2013-2017			
Stage II	-1.8	[-2.7; -0.9]	2004-2017	0.4	[-2.0; 2.9]	2004-2017
Stage III	0.1	[-1.4; 1.7]	2004-2017	0.7	[-2.0; 3.5]	2004-2017
	-2.1	[-7.3; 3.3]	2004-2008	-0.2	[-12.3; 13.6]	2004-2007
	11.5	[6.3; 17.0]	2008-2012	1.0	[-2.4; 4.4]	2007-2017
Stage IV	-6.4	[-10.2; -2.5]	2012-2017			
	1.9	[0.5; 3.4]	2004-2017	2.6	[1.2; 4.0]	2004-2017
	-0.5	[-2.6; 1.5]	2004-2013			
	7.8	[2.4; 13.4]	2013-2017			
Stage unknown	-6.8	[-7.9; -5.6]	2004-2017	-5.5	[-7.3; -3.7]	2004-2017
	-3.2	[-8.7; 2.6]	2004-2007			
	-7.8	[-9.2; -6.4]	2007-2017			
Incidence by histology						
Squamous cell carcinoma	-1.8	[-2.7; -1.0]	2004-2017	0.6	[-0.0; 1.2]	2004-2017
	-0.9	[-2.3; 0.6]	2004-2012	1.5	[0.8; 2.3]	2004-2014
	-3.4	[-5.7; -1.0]	2012-2017	-2.6	[-5.3; 0.1]	2014-2017
Adenocarcinoma (Oesophagus)	0.7	[-0.4; 1.8]	2004-2017	1.0	[-1.1; 3.2]	2004-2017
Adenocarcinoma (Gastro-oesophageal junction)	1.3	[0.3; 2.4]	2004-2017	2.5	[0.6; 4.4]	2004-2017
	3.9	[2.3; 5.5]	2004-2013			
	-4.1	[-7.7; -0.4]	2013-2017			
Carcinoma, other and NOS	-1.5	[-4.0; 1.2]	2004-2017	-2.3	[-6.6; 2.1]	2004-2017
	-1.2	[-12.9; 12.1]	2004-2007	-23.1	[-34.6; -9.6]	2004-2008
	-1.5	[-4.7; 1.8]	2007-2017	8.6	[1.7; 15.9]	2008-2017

Source: Belgian Cancer Registry

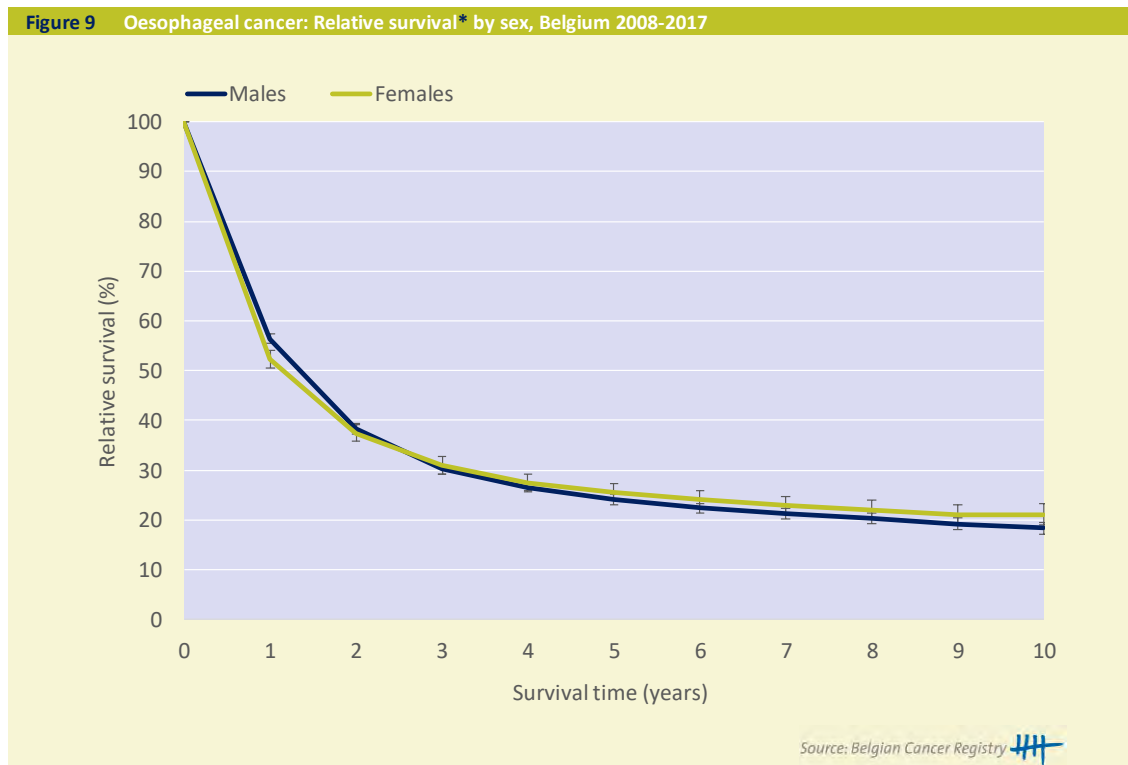
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.3.1.3 Survival

Figure 9 Oesophageal cancer: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.3.1.4 Survival trends

Figure 10 Oesophageal cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.3.2 STOMACH (ICD-10: C16.1-C16.9)

3.3.2.1 Incidence

Table 1 Stomach cancer: Overview of incidence, mortality, prevalence and survival by sex and region

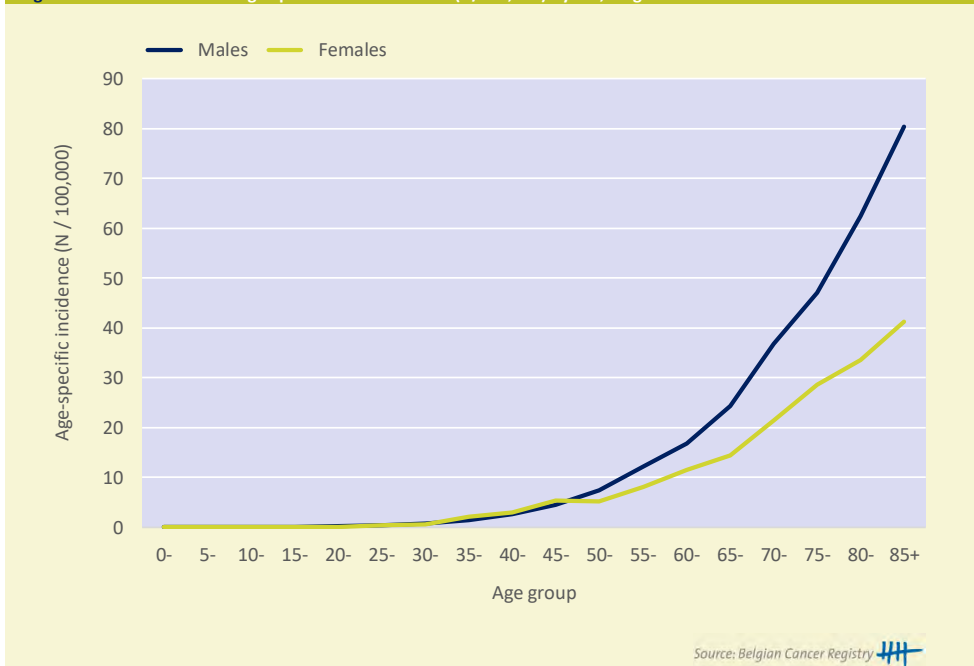
Stomach cancer	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	536	9.6	4.6	396	6.9	2.9
Flemish Region	321	10.0	4.2	233	7.1	2.7
Brussels-Capital Region	47	8.1	5.9	47	7.7	4.8
Walloon Region	168	9.5	4.9	116	6.3	2.8
Mortality, 2016						
Belgium	443	8.0	3.7	270	4.7	1.6
Flemish Region	257	8.0	3.4	171	5.2	1.6
Brussels-Capital Region	50	8.6	5.7	16	2.6	1.0
Walloon Region	136	7.7	3.7	83	4.5	1.7
Prevalence (5 years), 2013-2017						
Belgium	1,284	22.9	11.1	1,144	19.8	9.1
Flemish Region	753	23.2	10.2	676	20.4	8.6
Brussels-Capital Region	105	17.9	13.1	117	19.1	12.2
Walloon Region	426	24.1	12.4	351	18.9	9.1
5-year Relative survival, 2013-2017						
Belgium	N at risk: 2,713	40.9	95%CI: [38.3;43.4]	N at risk: 2,174	47.6	95%CI: [44.9;50.4]
Flemish Region	1,680	36.7	[33.6;39.9]	1,298	46.5	[42.9;50.1]
Brussels-Capital Region	253	33.7	[26.2;41.6]	222	52.6	[44.3;60.5]
Walloon Region	780	52.6	[47.6;57.6]	654	48.5	[43.6;53.5]
10-year Relative survival, 2008-2017						
Belgium	N at risk: 5,674	32.1	95%CI: [29.8;34.5]	N at risk: 4,504	41.3	95%CI: [38.6;43.9]
Flemish Region	3,549	29.5	[26.7;32.4]	2,717	40.6	[37.2;44.0]
Brussels-Capital Region	506	27.1	[20.2;34.9]	450	45.9	[37.5;54.5]
Walloon Region	1,619	40.0	[35.1;45.0]	1,337	41.1	[36.3;46.1]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

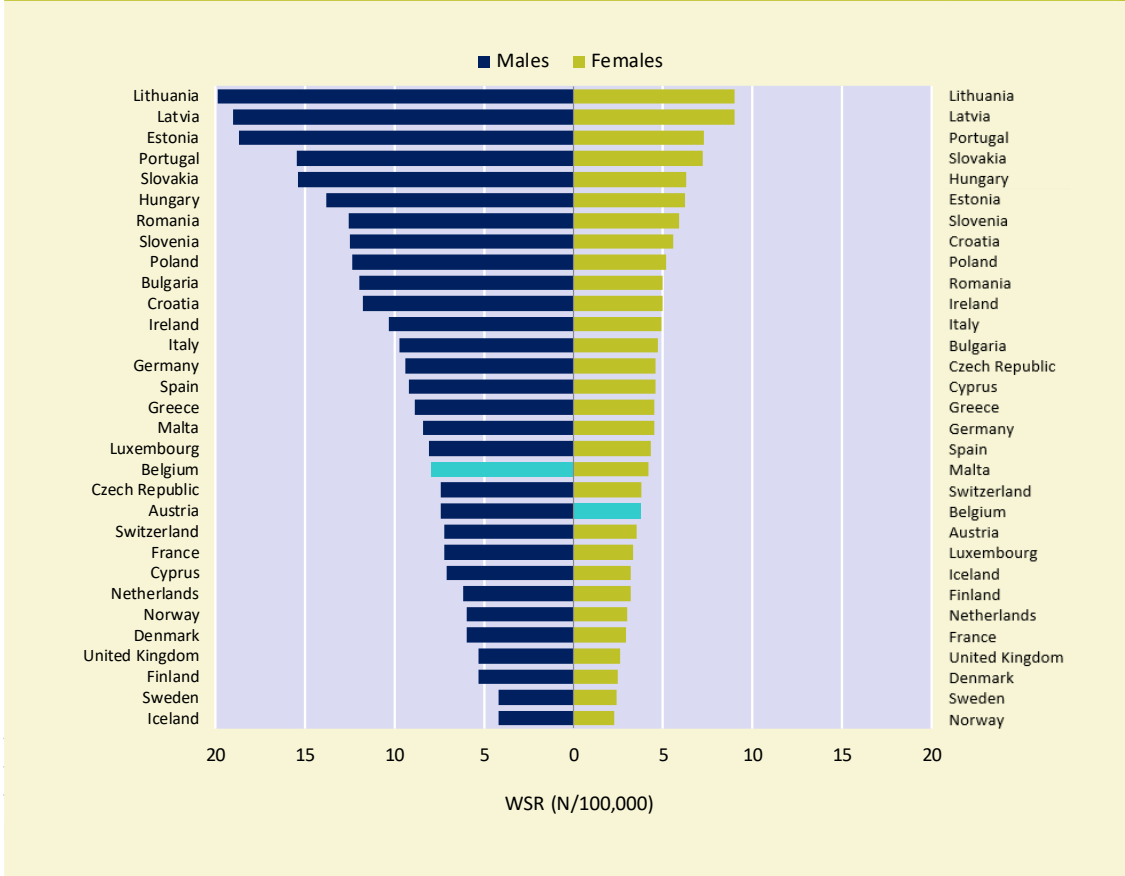
Source: Belgian Cancer Registry

Figure 1 Stomach cancer: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017



Source: Belgian Cancer Registry

Figure 2 Stomach cancer (C16): Comparison of age-standardised incidence rates (WSR) (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Stomach cancer: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

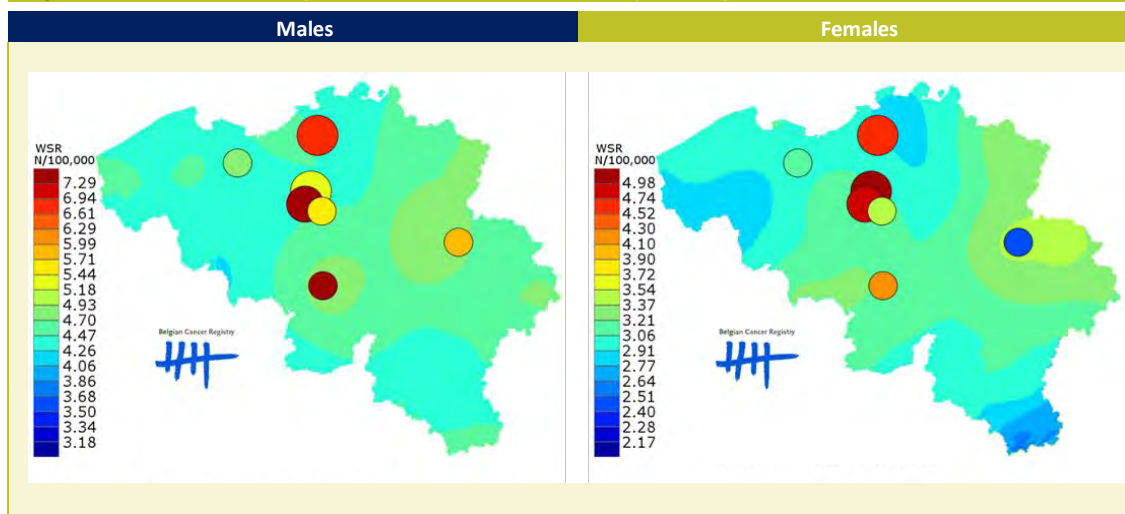
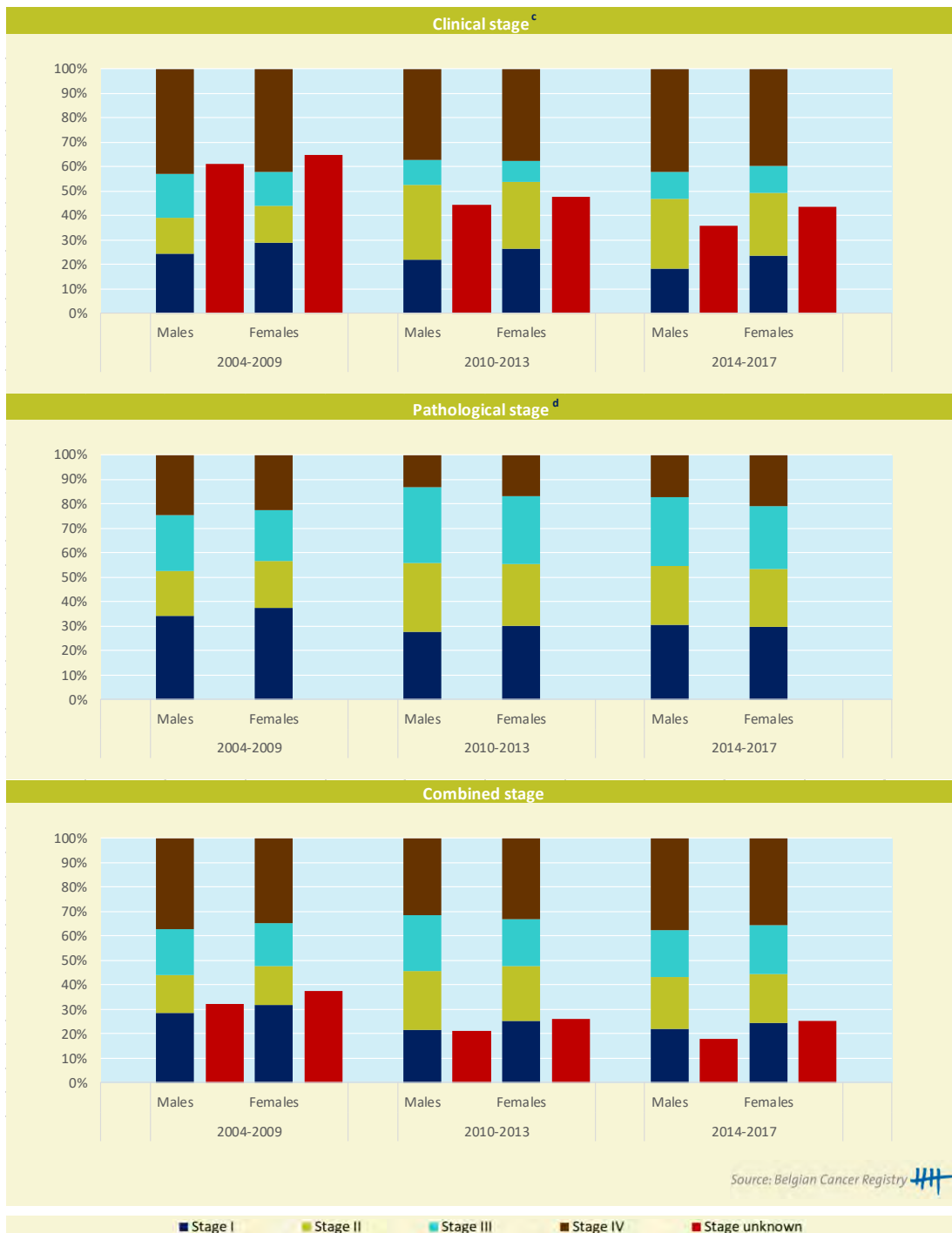


Figure 4 Stomach cancer: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.3.2.2 Incidence trends

Figure 5 Stomach cancer: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

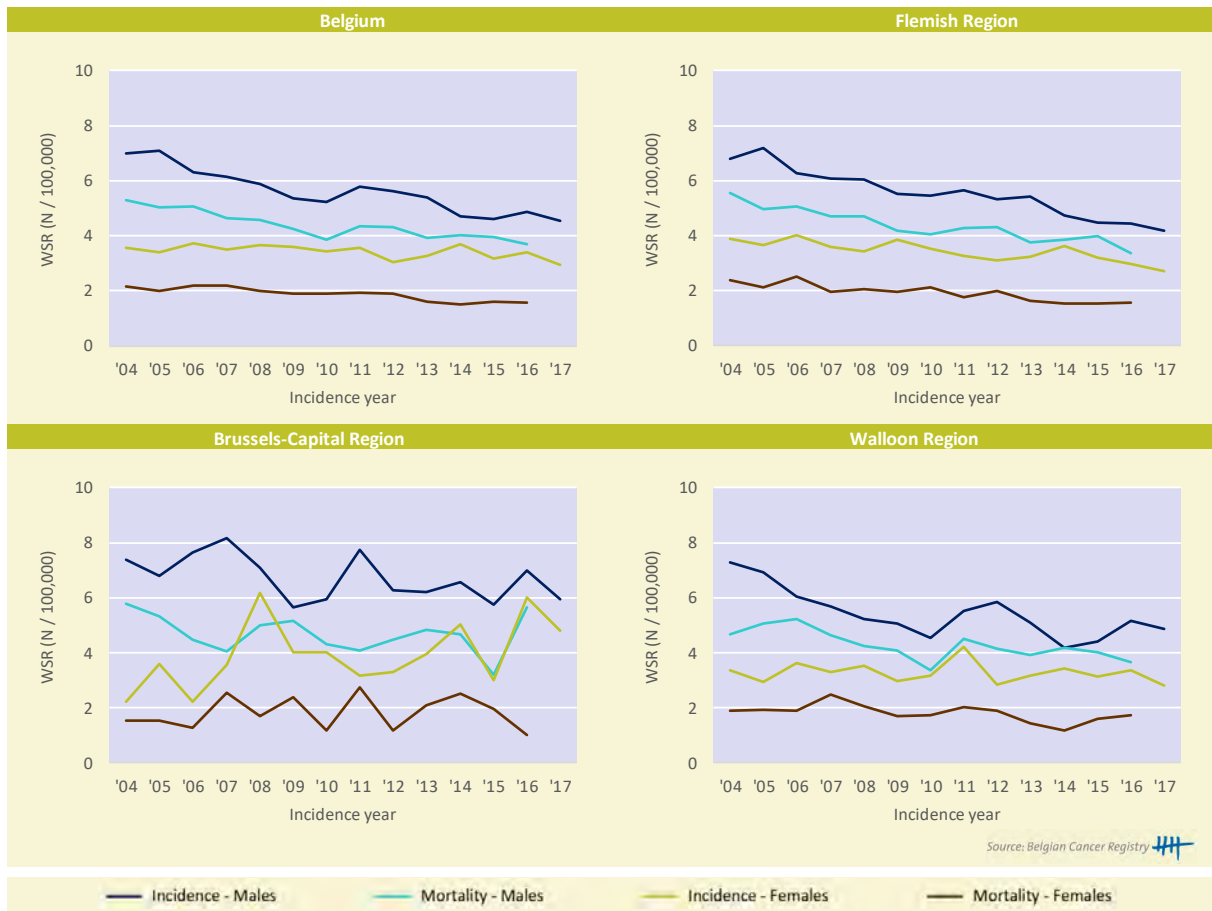


Table 2 Stomach cancer: AAPC(%) by sex and region in Belgium

Stomach cancer	Males			Females		
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Incidence						
Belgium	-3.2	[-3.9; -2.4]	2004-2017	-1.0	[-1.9; -0.1]	2004-2017
Flemish Region	-3.7	[-4.3; -3.1]	2004-2017	-2.2	[-3.1; -1.2]	2004-2017
Brussels-Capital Region	-1.5	[-2.9; 0.1]	2004-2017	4.0	[-0.1; 8.2]	2004-2017
Walloon Region	-3.3	[-4.6; -2.0]	2004-2017	-0.5	[-2.0; 1.1]	2004-2017
	-8.5	[-13.0; -3.7]	2004-2008			
	-0.9	[-2.9; 1.1]	2008-2017			
Mortality						
Belgium	-2.7	[-3.3; -2.0]	2004-2016	-3.0	[-3.9; -2.1]	2004-2016
	-4.0	[-5.5; -2.5]	2004-2010			
	-1.3	[-2.8; 0.2]	2010-2016			
Flemish Region	-3.2	[-4.0; -2.4]	2004-2016	-3.7	[-4.9; -2.5]	2004-2016
Brussels-Capital Region	-1.3	[-3.8; 1.2]	2004-2016	0.1	[-5.5; 6.0]	2004-2016
Walloon Region	-2.2	[-3.6; -0.7]	2004-2016	-2.7	[-5.1; -0.2]	2004-2016

Source: Belgian Cancer Registry

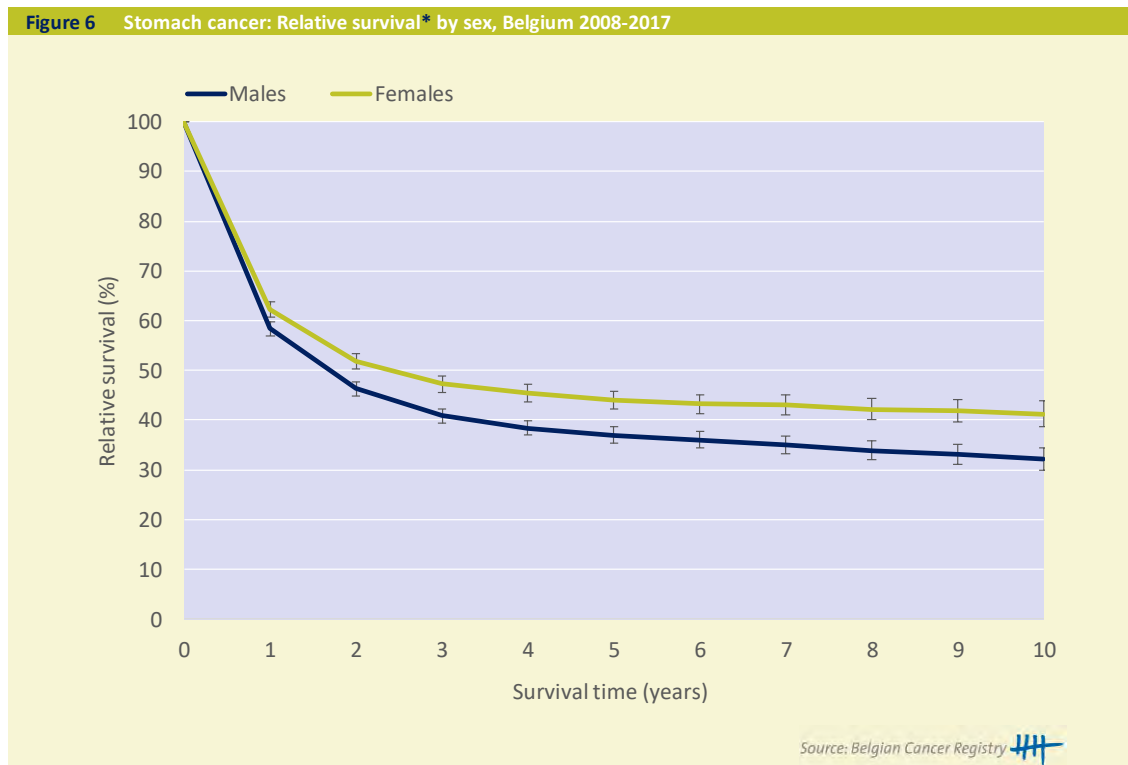
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.3.2.3 Survival

Figure 6 Stomach cancer: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.3.2.4 Survival trends

Figure 7 Stomach cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.3.3 COLON (ICD-10: C18-C19)

3.3.3.1 Incidence

Table 1 Colon cancer: Overview of incidence, mortality, prevalence and survival by sex and region

Colon cancer	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	3,157	56.7	27.1	2,788	48.5	19.4
Flemish Region	1,919	59.6	26.3	1,675	50.8	19.8
Brussels-Capital Region	226	38.8	24.6	230	37.8	18.6
Walloon Region	1,012	57.4	29.3	883	47.7	19.2
Mortality, 2016						
Belgium	1,165	21.0	8.8	1,045	18.2	5.7
Flemish Region	684	21.4	8.1	609	18.6	5.6
Brussels-Capital Region	94	16.2	9.1	68	11.2	3.9
Walloon Region	387	22.0	10.1	368	19.9	6.3
Prevalence (5 years), 2013-2017						
Belgium	11,802	210.8	97.7	10,150	175.7	71.2
Flemish Region	7,928	244.6	105.2	6,550	197.8	76.8
Brussels-Capital Region	725	123.6	81.1	766	125.1	63.7
Walloon Region	3,149	177.9	86.6	2,834	152.8	63.0
5-year Relative survival, 2013-2017						
Belgium	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	16,495	71.6	[70.5;72.7]	14,258	70.8	[69.7;72.0]
Flemish Region	10,812	74.0	[72.6;75.3]	8,939	73.9	[72.4;75.3]
Brussels-Capital Region	1,097	62.4	[57.8;67.0]	1,115	68.2	[63.5;72.7]
Walloon Region	4,586	67.8	[65.5;70.0]	4,204	64.8	[62.5;67.0]
10-year Relative survival, 2008-2017						
Belgium	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	31,740	63.4	[62.1;64.7]	27,877	64.8	[63.4;66.1]
Flemish Region	20,608	65.6	[64.0;67.2]	17,366	65.8	[64.1;67.5]
Brussels-Capital Region	2,252	51.1	[46.1;56.1]	2,267	67.4	[62.6;72.1]
Walloon Region	8,881	61.3	[58.7;63.8]	8,246	62.1	[59.6;64.6]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry 

Figure 1 Colon cancer: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017

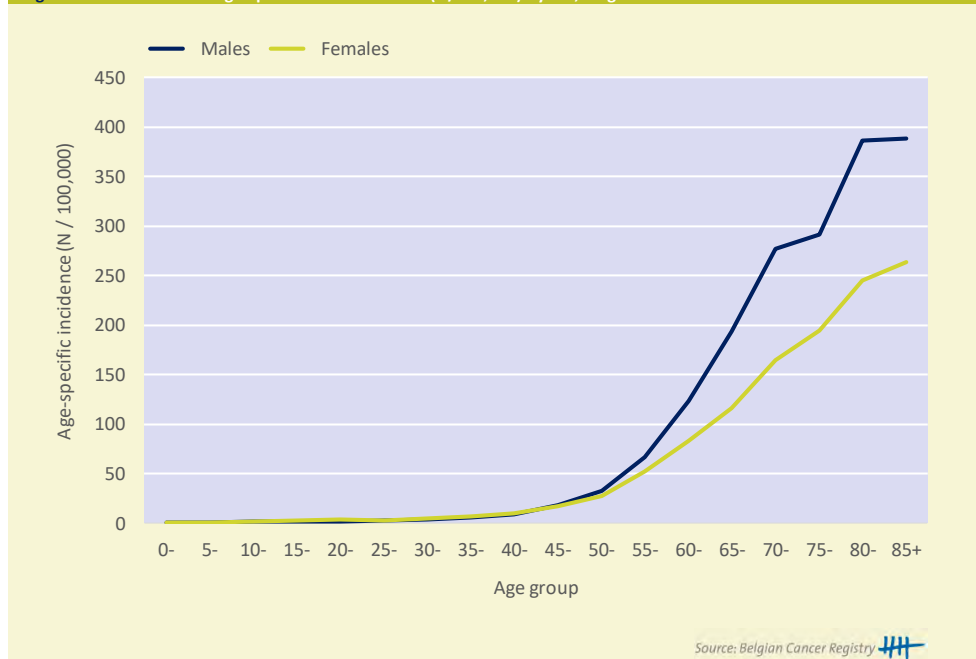
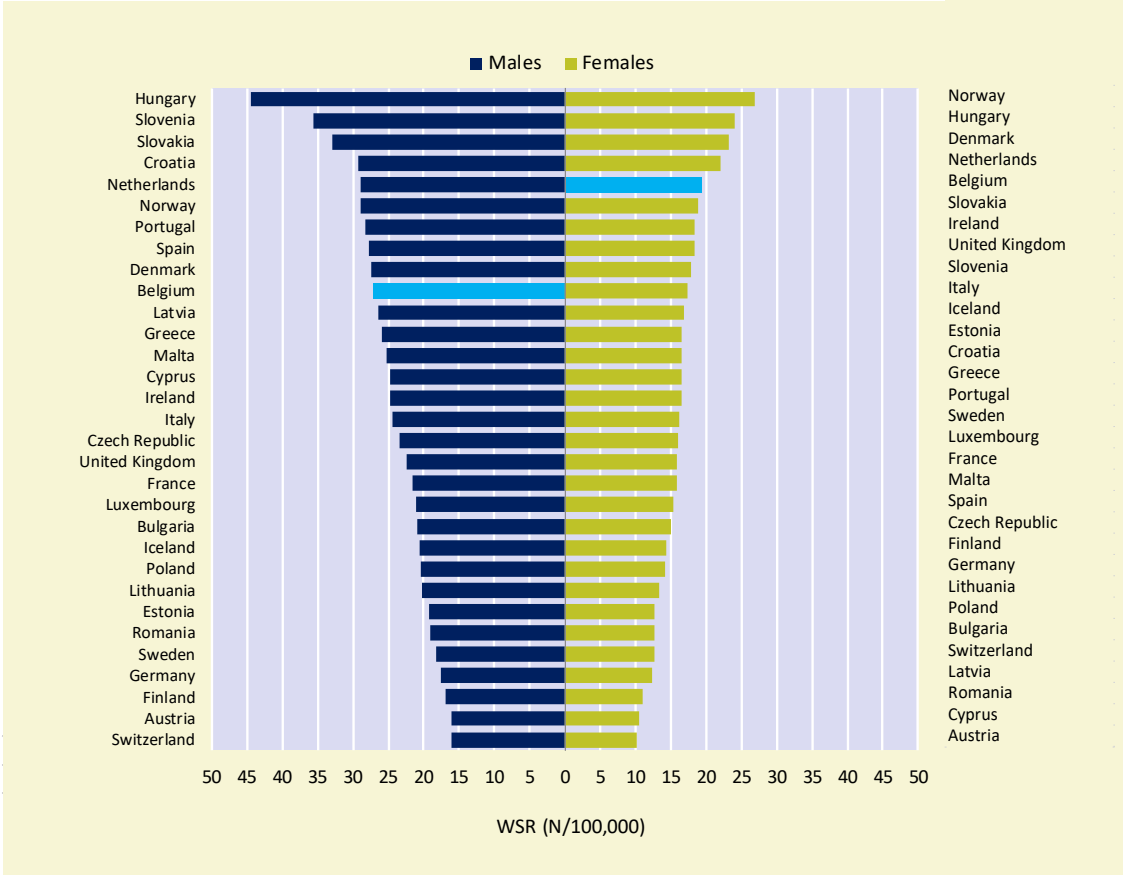


Figure 2 Colon cancer: Comparison of age-standardised incidence rates (WSR)
 (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Colon cancer: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

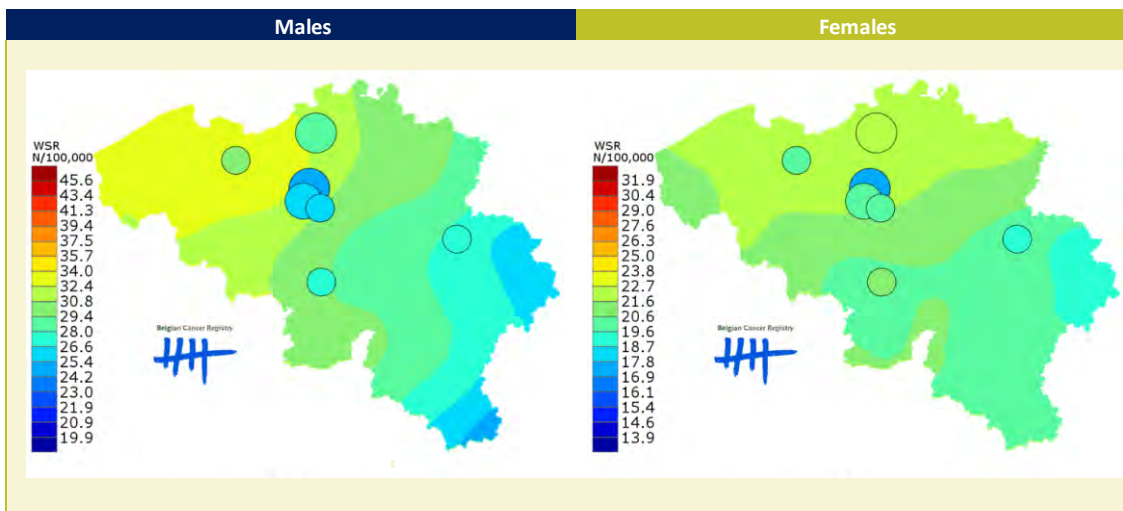
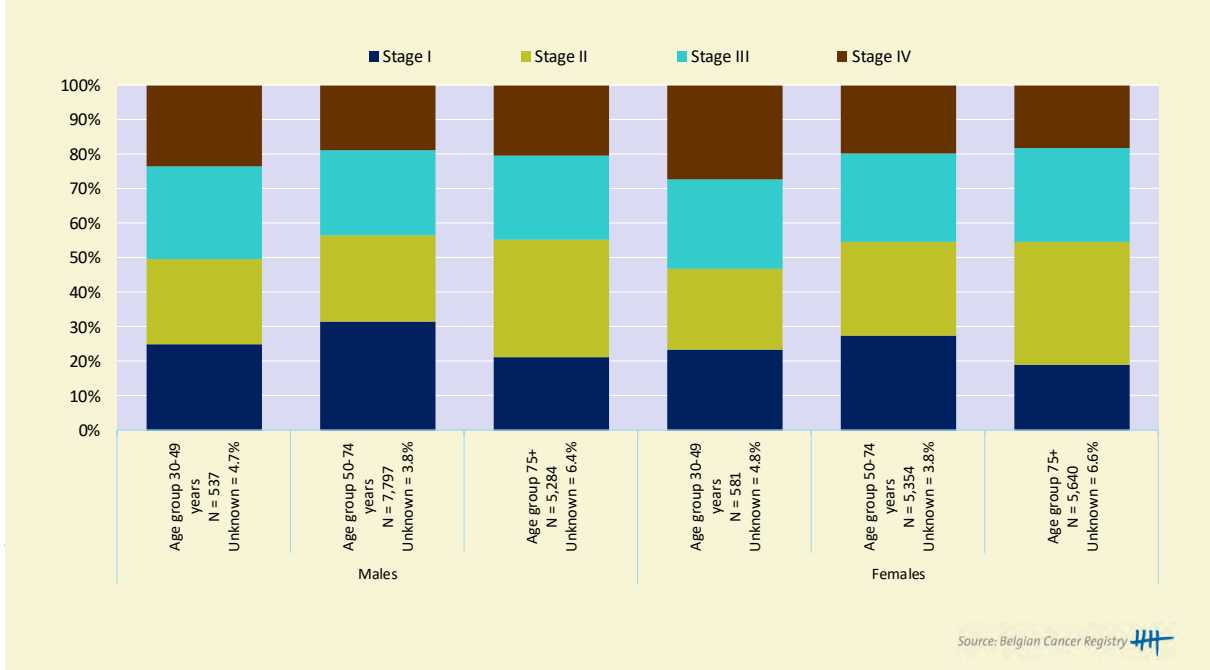


Figure 4 Colon cancer: Stage distribution^{a,b} by sex and age group, Belgium 2014-2017



^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Colon cancer: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is considered as a measure for missing information.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.3.3.2 Incidence trends

Figure 6 Colon cancer: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

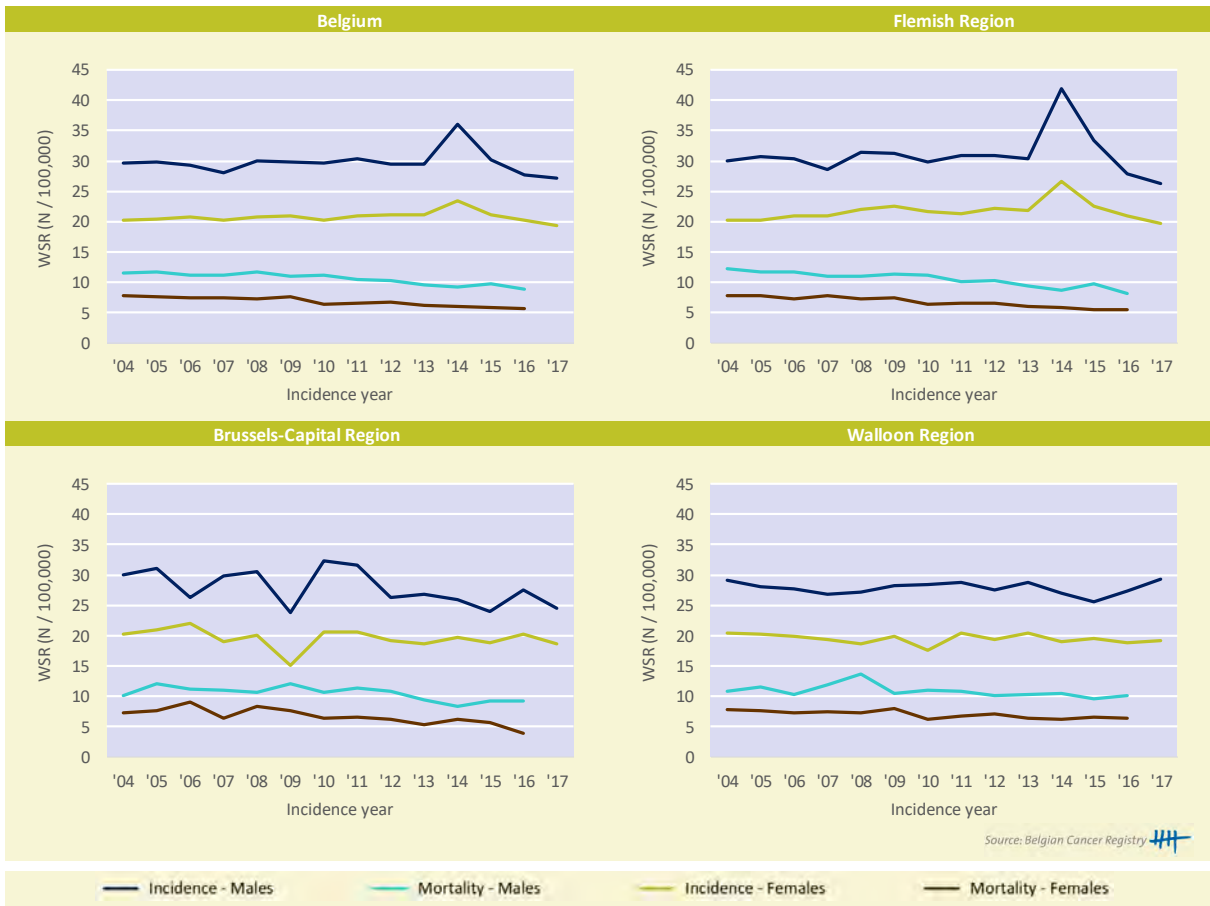


Figure 7 Colon cancer: Trends in age-standardised incidence (WSR) by sex, age group and region, 2004-2017

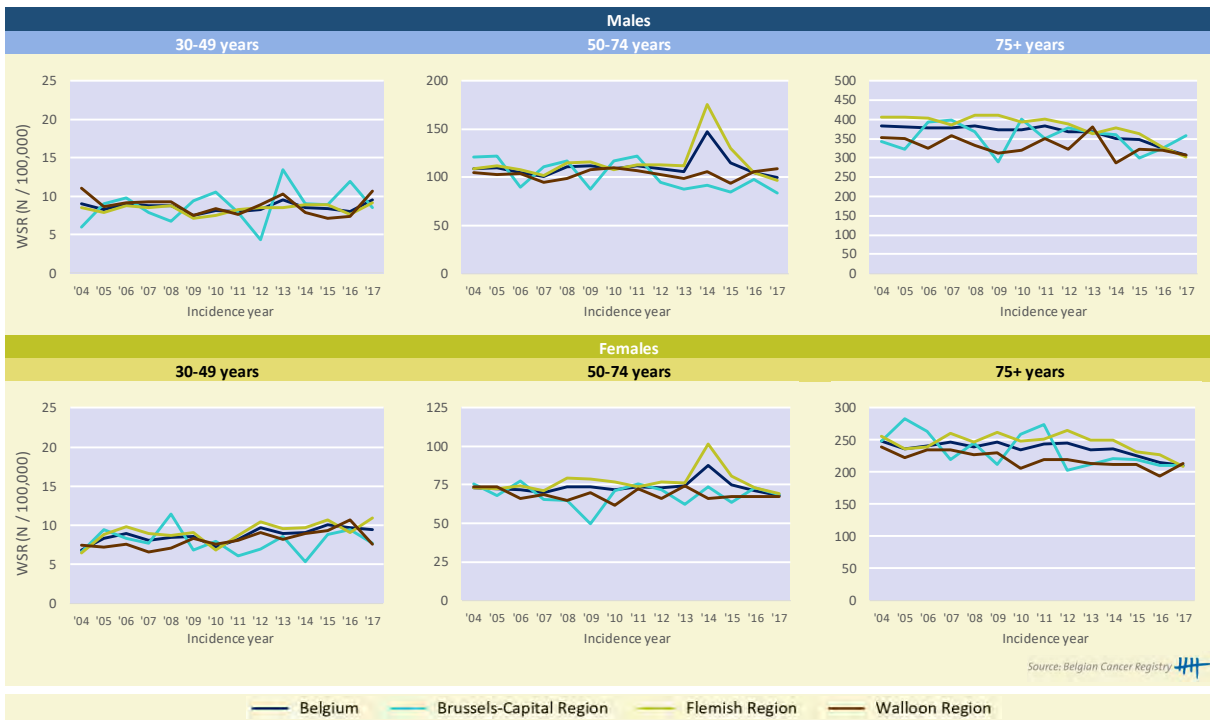


Figure 8 Colon cancer: Trends in age-standardised incidence (WSR) by stage and sex, Belgium 2004-2017

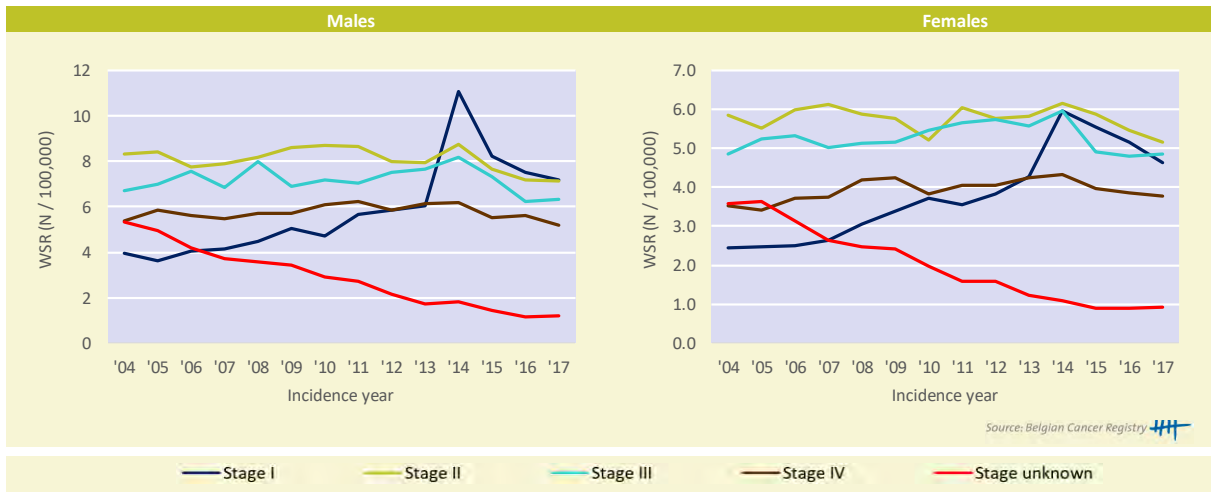


Figure 9 Colon cancer: Trends in age-standardised incidence (WSR) by sex, age group and stage, Belgium 2004-2017

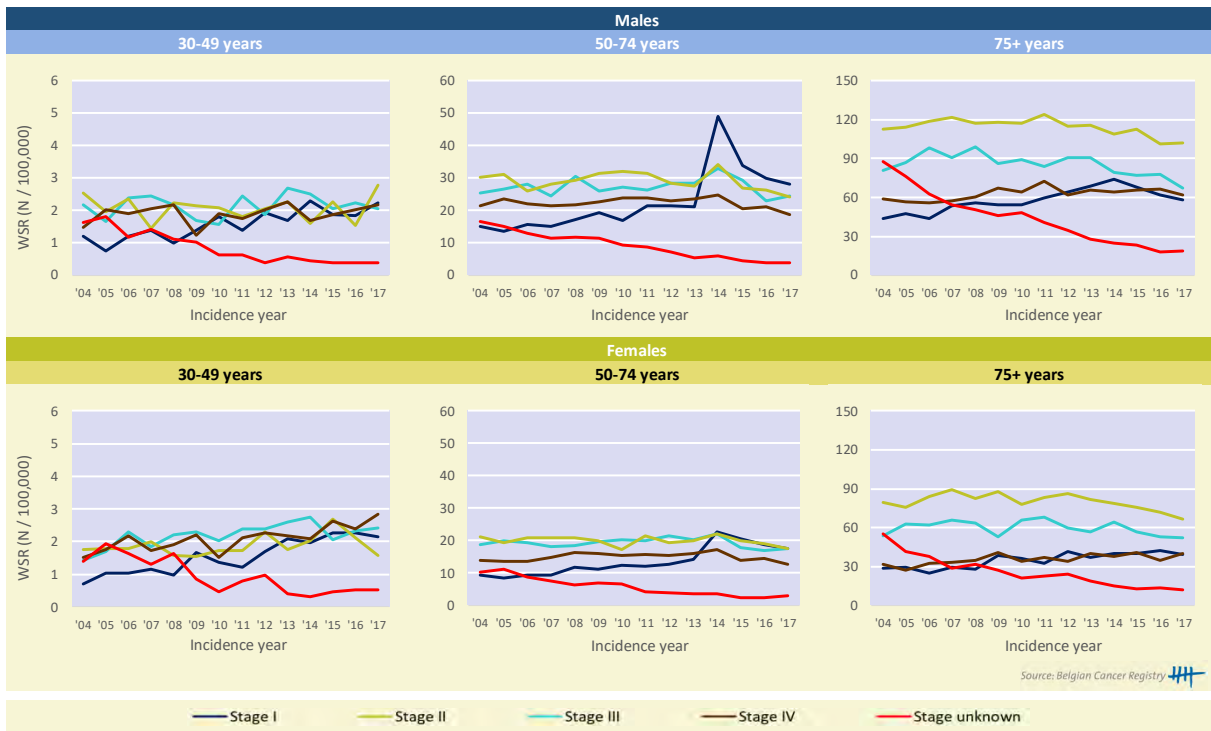


Table 2 Colon cancer: AAPC(%) by sex, region, age group and stage in Belgium						
Colon cancer	Males			Females		
Incidence	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Belgium	0.0	[-1.0; 1.0]	2004-2017	-0.2	[-0.7; 0.3]	2004-2017
				0.9	[0.3; 1.5]	2004-2014
				-3.9	[-6.0; -1.7]	2014-2017
Flemish Region	0.2	[-1.4; 1.7]	2004-2017	-0.1	[-0.9; 0.6]	2004-2017
				1.7	[0.8; 2.7]	2004-2014
				-6.0	[-9.3; -2.5]	2014-2017
Brussels-Capital Region	-1.3	[-2.6; -0.0]	2004-2017	-0.5	[-1.7; 0.8]	2004-2017
Walloon Region	-0.1	[-0.7; 0.4]	2004-2017	-0.3	[-0.9; 0.3]	2004-2017
Incidence by age group and region	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
30-49 years						
Belgium	-0.1	[-1.0; 0.9]	2004-2017	1.9	[0.8; 3.1]	2004-2017
	-2.3	[-5.1; 0.5]	2004-2009			
	1.4	[-0.3; 3.1]	2009-2017			
Flemish Region	0.4	[-0.7; 1.4]	2004-2017	2.2	[0.4; 4.0]	2004-2017
Brussels-Capital Region	1.9	[-2.2; 6.2]	2004-2017	-0.3	[-3.2; 2.6]	2004-2017
Walloon Region	-1.0	[-2.9; 1.0]	2004-2017	2.1	[0.7; 3.5]	2004-2017
50-74 years						
Belgium	0.4	[-1.0; 1.7]	2004-2017	-0.2	[-0.9; 0.5]	2004-2017
				1.0	[0.1; 2.0]	2004-2014
				-4.3	[-7.6; -0.9]	2014-2017
Flemish Region	0.7	[-1.3; 2.8]	2004-2017	0.5	[-0.8; 1.8]	2004-2017
Brussels-Capital Region	-2.2	[-3.9; -0.5]	2004-2017	-0.1	[-1.8; 1.6]	2004-2017
Walloon Region	0.1	[-0.6; 0.9]	2004-2017	-0.4	[-1.2; 0.4]	2004-2017
75+ years						
Belgium	-1.6	[-1.8; -1.4]	2004-2017	-1.0	[-1.3; -0.8]	2004-2017
	-0.4	[-0.7; -0.1]	2004-2013	0.0	[-0.5; 0.5]	2004-2012
	-4.3	[-4.9; -3.6]	2013-2017	-2.8	[-3.6; -1.9]	2012-2017
Flemish Region	-1.9	[-2.4; -1.5]	2004-2017	-1.1	[-1.6; -0.6]	2004-2017
	-0.3	[-1.1; 0.6]	2004-2012	0.5	[-0.2; 1.3]	2004-2013
	-4.6	[-5.9; -3.2]	2012-2017	-4.7	[-6.5; -3.0]	2013-2017
Brussels-Capital Region	-0.4	[-1.9; 1.1]	2004-2017	-1.7	[-3.0; -0.4]	2004-2017
Walloon Region	-0.8	[-1.8; 0.2]	2004-2017	-1.1	[-1.6; -0.6]	2004-2017
Mortality	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Belgium	-2.1	[-2.6; -1.6]	2004-2016	-2.7	[-3.3; -2.1]	2004-2016
	0.0	[-1.6; 1.6]	2004-2008			
	-3.1	[-3.8; -2.4]	2008-2016			
Flemish Region	-2.9	[-3.6; -2.1]	2004-2016	-3.0	[-3.6; -2.5]	2004-2016
	-1.6	[-3.3; 0.2]	2004-2010			
	-4.1	[-5.8; -2.4]	2010-2016			
Brussels-Capital Region	-2.0	[-3.1; -0.8]	2004-2016	-4.3	[-6.4; -2.1]	2004-2016
	0.4	[-2.2; 3.1]	2004-2010			
	-4.3	[-6.8; -1.8]	2010-2016			
Walloon Region	-1.2	[-2.5; 0.1]	2004-2016	-1.8	[-2.7; -0.9]	2004-2016
Incidence by stage	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Stage I	7.1	[4.7; 9.5]	2004-2017	6.4	[4.8; 7.9]	2004-2017
				8.6	[6.7; 10.6]	2004-2014
				-0.8	[-7.6; 6.4]	2014-2017
Stage II	-0.8	[-1.5; -0.1]	2004-2017	-0.4	[-1.2; 0.4]	2004-2017
	1.0	[-0.4; 2.4]	2004-2011			
	-2.9	[-4.5; -1.2]	2011-2017			
Stage III	-0.9	[-1.8; -0.0]	2004-2017	-0.6	[-1.3; 0.1]	2004-2017
	1.2	[0.0; 2.3]	2004-2014	1.4	[0.5; 2.2]	2004-2014
	-7.6	[-11.5; -3.5]	2014-2017	-6.7	[-9.8; -3.6]	2014-2017
Stage IV	-0.5	[-1.0; 0.1]	2004-2017	0.7	[0.0; 1.4]	2004-2017
	1.1	[0.4; 1.8]	2004-2014	4.2	[2.0; 6.5]	2004-2008
	-5.5	[-7.8; -3.0]	2014-2017	0.7	[-0.6; 2.0]	2008-2014
				-3.7	[-6.6; -0.8]	2014-2017
Stage Unknown	-11.3	[-12.2; -10.5]	2004-2017	-11.5	[-12.6; -10.4]	2004-2017
	-9.4	[-11.5; -7.3]	2004-2010			
	-12.9	[-14.6; -11.2]	2010-2017			

Incidence by age group and stage	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
30-49 years						
Stage I	6.5	[3.8; 9.3]	2004-2017	8.6	[6.3; 10.9]	2004-2017
Stage II	-0.3	[-3.1; 2.5]	2004-2017	1.3	[-0.9; 3.6]	2004-2017
Stage III	0.7	[-1.8; 3.2]	2004-2017	2.6	[0.9; 4.3]	2004-2017
				5.5	[2.5; 8.6]	2004-2012
Stage IV	1.1	[-1.3; 3.5]	2004-2017	-1.9	[-6.6; 3.1]	2012-2017
Stage Unknown	-12.5	[-15.4; -9.5]	2004-2017	3.5	[1.6; 5.4]	2004-2017
	-13.3	[-26.2; 1.8]	2004-2007	-11.2	[-15.6; -6.7]	2004-2017
	-12.3	[-15.8; -8.5]	2007-2017			
50-74 years						
Stage I	7.7	[4.5; 10.9]	2004-2017	5.8	[3.4; 8.2]	2004-2017
				3.9	[-1.8; 9.9]	2004-2009
				12.1	[6.3; 18.2]	2009-2014
				-1.0	[-10.6; 9.7]	2014-2017
Stage II	-0.9	[-2.1; 0.3]	2004-2017	-0.6	[-1.6; 0.4]	2004-2017
	1.2	[-1.2; 3.8]	2004-2011			
	-3.3	[-6.1; -0.4]	2011-2017			
Stage III	0.1	[-1.3; 1.5]	2004-2017	-0.9	[-1.7; -0.1]	2004-2017
				1.1	[0.1; 2.1]	2004-2014
				-7.3	[-10.8; -3.6]	2014-2017
Stage IV	-1.1	[-1.8; -0.5]	2004-2017	-0.7	[-1.5; 0.1]	2004-2017
	0.9	[0.1; 1.8]	2004-2014	1.8	[0.8; 2.8]	2004-2014
	-7.6	[-10.6; -4.6]	2014-2017	-8.8	[-12.2; -5.2]	2014-2017
Stage Unknown	-11.1	[-12.0; -10.1]	2004-2017	-11.2	[-13.0; -9.5]	2004-2017
	-8.2	[-10.6; -5.8]	2004-2010			
	-13.4	[-15.3; -11.5]	2010-2017			
75+ years						
Stage I	2.3	[1.5; 3.1]	2004-2017	3.6	[2.2; 5.1]	2004-2017
	5.1	[4.1; 6.1]	2004-2014			
	-6.6	[-9.9; -3.2]	2014-2017			
Stage II	-0.9	[-1.3; -0.6]	2004-2017	-1.2	[-1.9; -0.6]	2004-2017
	0.8	[0.0; 1.6]	2004-2011	0.8	[-0.3; 2.0]	2004-2012
	-2.9	[-3.8; -2.0]	2011-2017	-4.5	[-6.3; -2.6]	2012-2017
Stage III	-1.4	[-2.4; -0.5]	2004-2017	-0.8	[-1.9; 0.3]	2004-2017
	1.3	[-1.1; 3.7]	2004-2010	1.4	[-0.9; 3.8]	2004-2011
	-3.7	[-5.6; -1.7]	2010-2017	-3.4	[-6.0; -0.8]	2011-2017
Stage IV	1.0	[0.3; 1.7]	2004-2017	2.0	[0.7; 3.3]	2004-2017
	2.7	[1.2; 4.2]	2004-2011			
	-1.0	[-2.7; 0.7]	2011-2017			
Stage Unknown	-11.3	[-12.3; -10.3]	2004-2017	-10.3	[-11.7; -8.8]	2004-2017

Source: Belgian Cancer Registry 

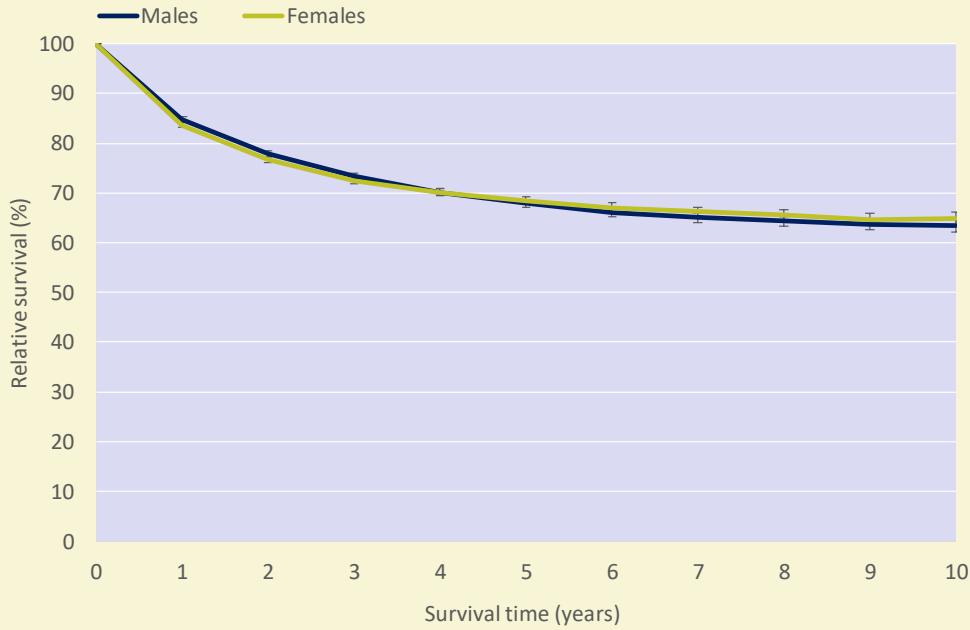
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.3.3.3 Survival

Figure 10 Colon cancer: Relative survival* by sex, Belgium 2008-2017

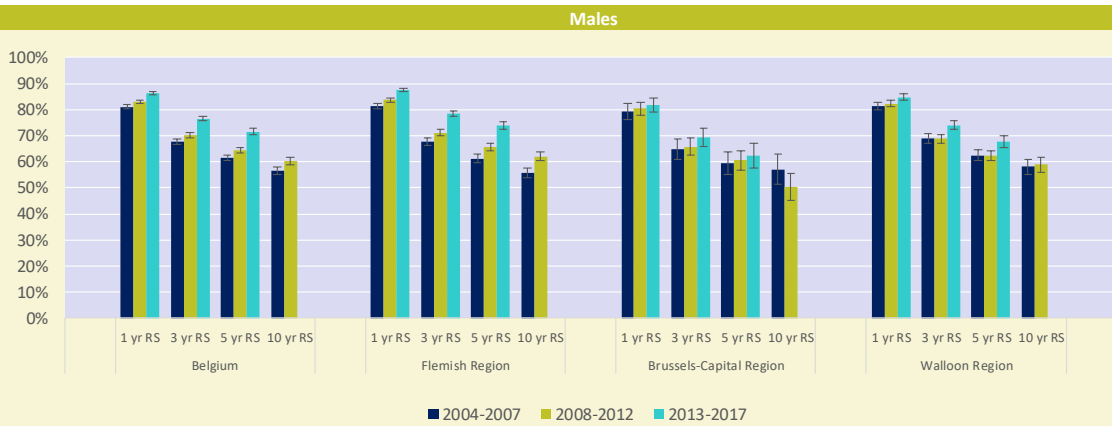


Source: Belgian Cancer Registry

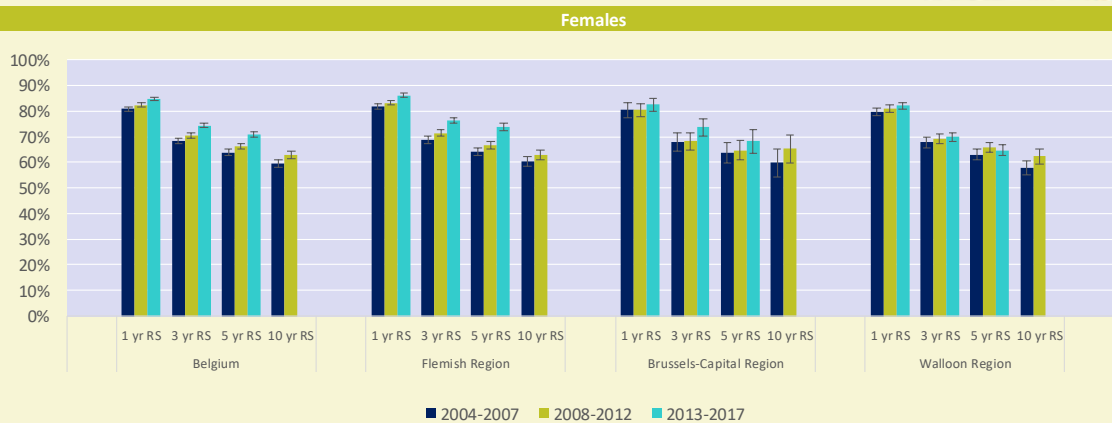
* The relative survival values are represented with 95% Confidence Intervals

3.3.3.4 Survival trends

Figure 11 Colon cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by sex and region



Source: Belgian Cancer Registry



Source: Belgian Cancer Registry

* The relative survival values are represented with 95% Confidence Intervals

3.3.4 RECTUM (ICD-10: C20)

3.3.4.1 Incidence

Table 1 Rectal cancer: Overview of incidence, mortality, prevalence and survival by sex and region

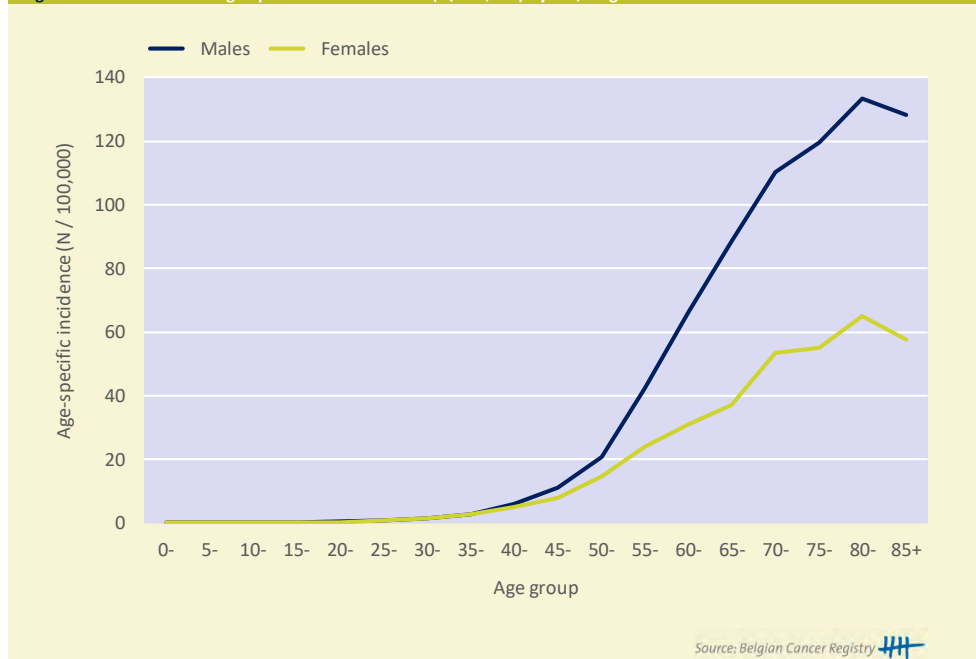
Rectal cancer	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	1,402	25.2	12.6	844	14.7	6.7
Flemish Region	844	26.2	12.2	504	15.3	6.7
Brussels-Capital Region	97	16.7	12.0	60	9.8	6.2
Walloon Region	461	26.1	13.6	280	15.1	6.9
Mortality, 2016						
Belgium	317	5.7	2.6	227	4.0	1.3
Flemish Region	200	6.2	2.6	129	3.9	1.2
Brussels-Capital Region	22	3.8	2.3	22	3.6	1.9
Walloon Region	95	5.4	2.6	76	4.1	1.4
Prevalence (5 years), 2013-2017						
Belgium	5,563	99.4	48.8	3,401	58.9	26.5
Flemish Region	3,667	113.1	51.4	2,097	63.3	27.6
Brussels-Capital Region	303	51.7	36.7	239	39.0	22.6
Walloon Region	1,593	90.0	46.4	1,065	57.4	25.7
5-year Relative survival, 2013-2017						
Belgium	N at risk: 7,538	71.2	[69.5;72.7]	N at risk: 4,599	71.3	[69.3;73.2]
Flemish Region	4,833	74.3	[72.3;76.2]	2,780	73.6	[71.1;75.9]
Brussels-Capital Region	440	64.5	[57.5;71.0]	336	70.2	[62.4;77.3]
Walloon Region	2,265	65.5	[62.4;68.6]	1,483	67.1	[63.5;70.6]
10-year Relative survival, 2008-2017						
Belgium	N at risk: 14,852	61.3	[59.5;63.0]	N at risk: 9,310	62.9	[60.9;64.9]
Flemish Region	9,591	64.4	[62.3;66.6]	5,643	65.2	[62.7;67.7]
Brussels-Capital Region	888	55.8	[48.3;63.2]	674	60.2	[51.8;68.4]
Walloon Region	4,373	55.1	[51.7;58.5]	2,993	59.0	[55.3;62.6]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

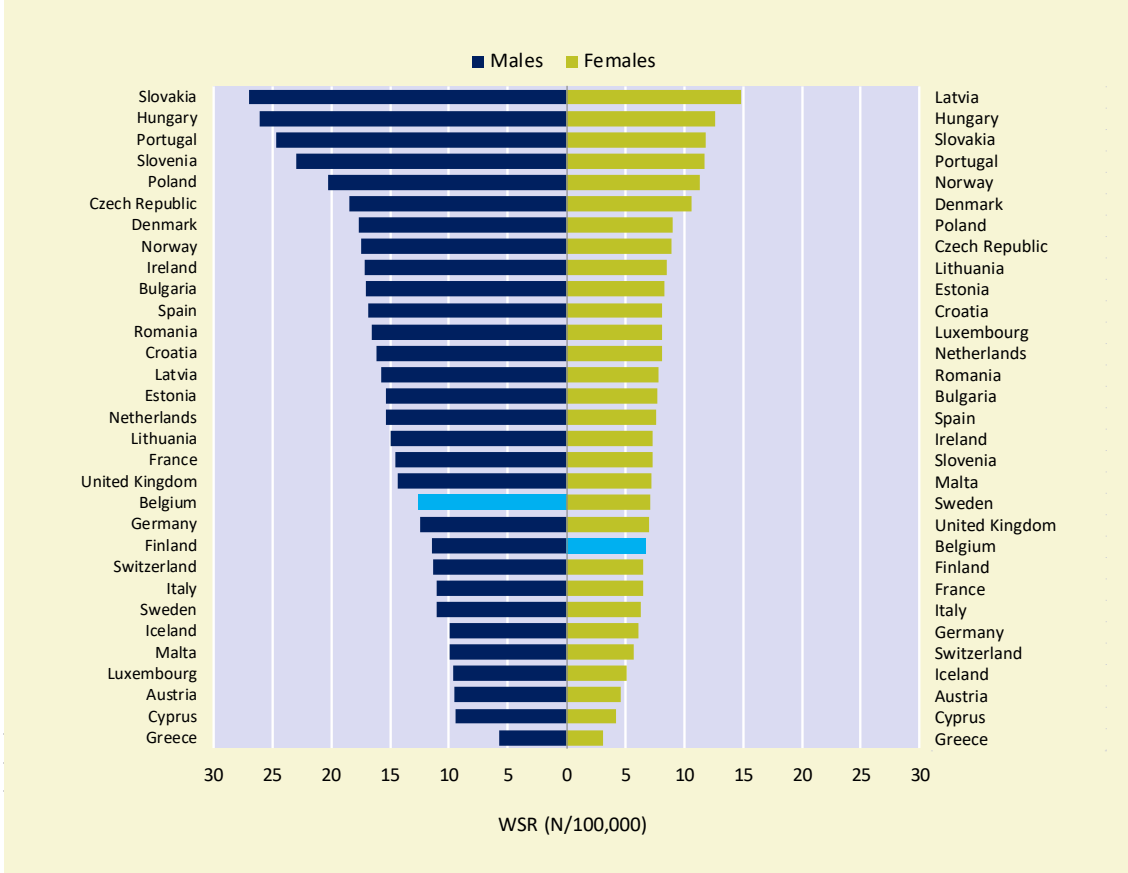
Source: Belgian Cancer Registry

Figure 1 Rectal cancer: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017



Source: Belgian Cancer Registry

Figure 2 Rectal cancer: Comparison of age-standardised incidence rates (WSR)
 (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Rectal cancer: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

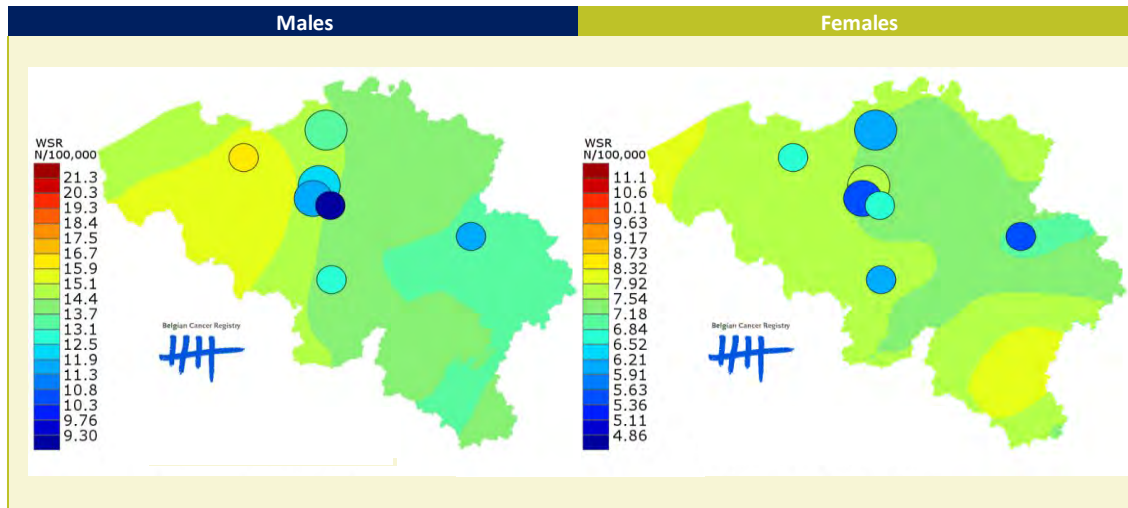
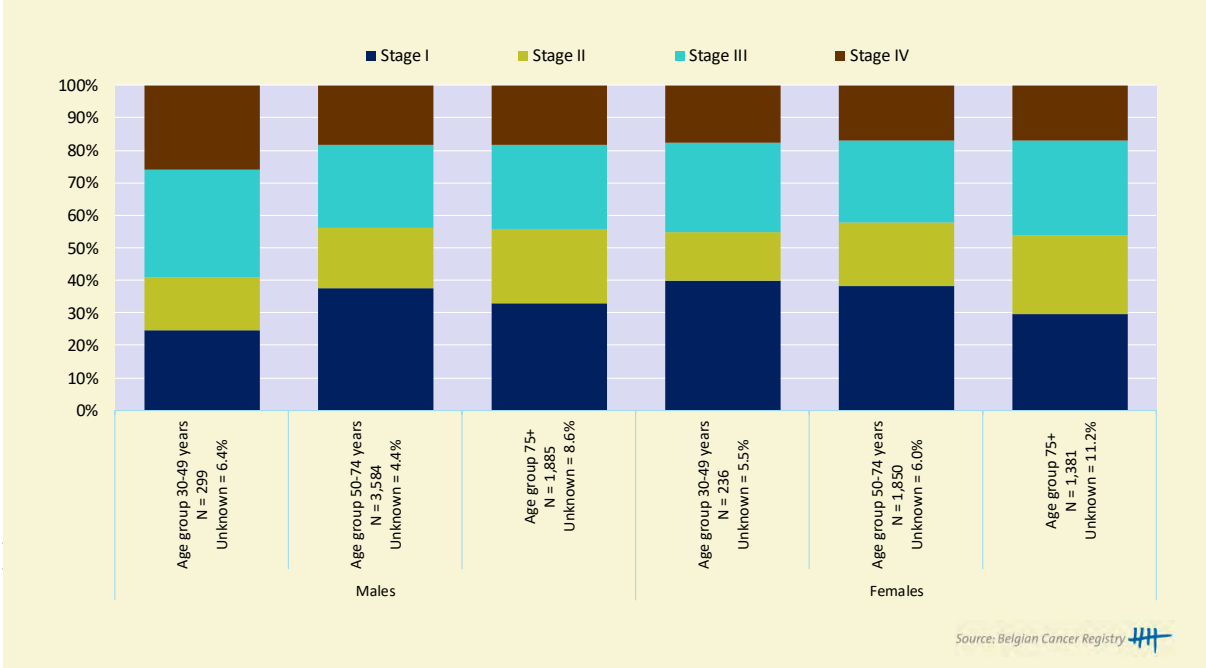


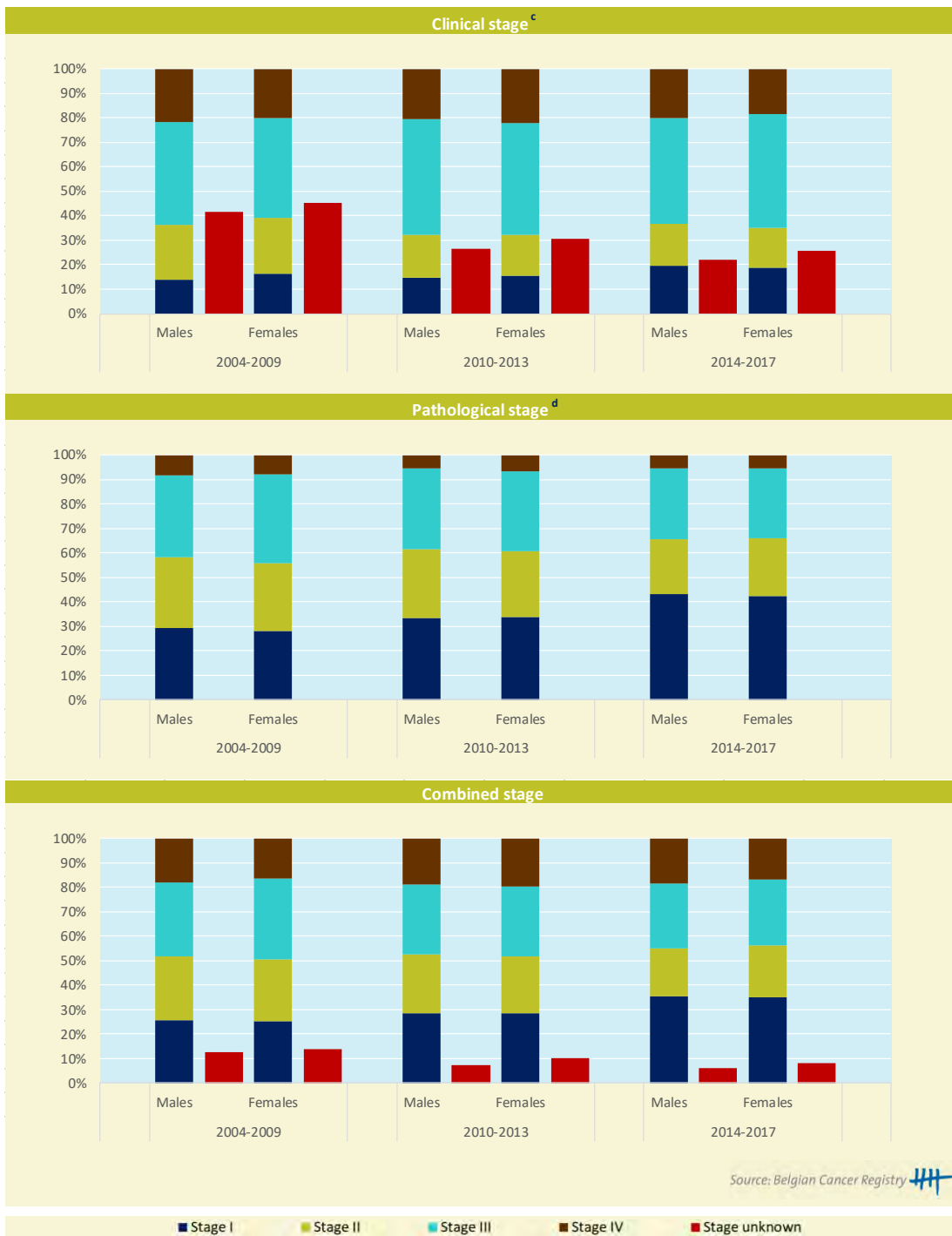
Figure 4 Rectal cancer: Stage distribution^{a,b} by sex and age group, Belgium 2014-2017



^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Rectal cancer: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.3.4.2 Incidence trends

Figure 6 Rectal cancer: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

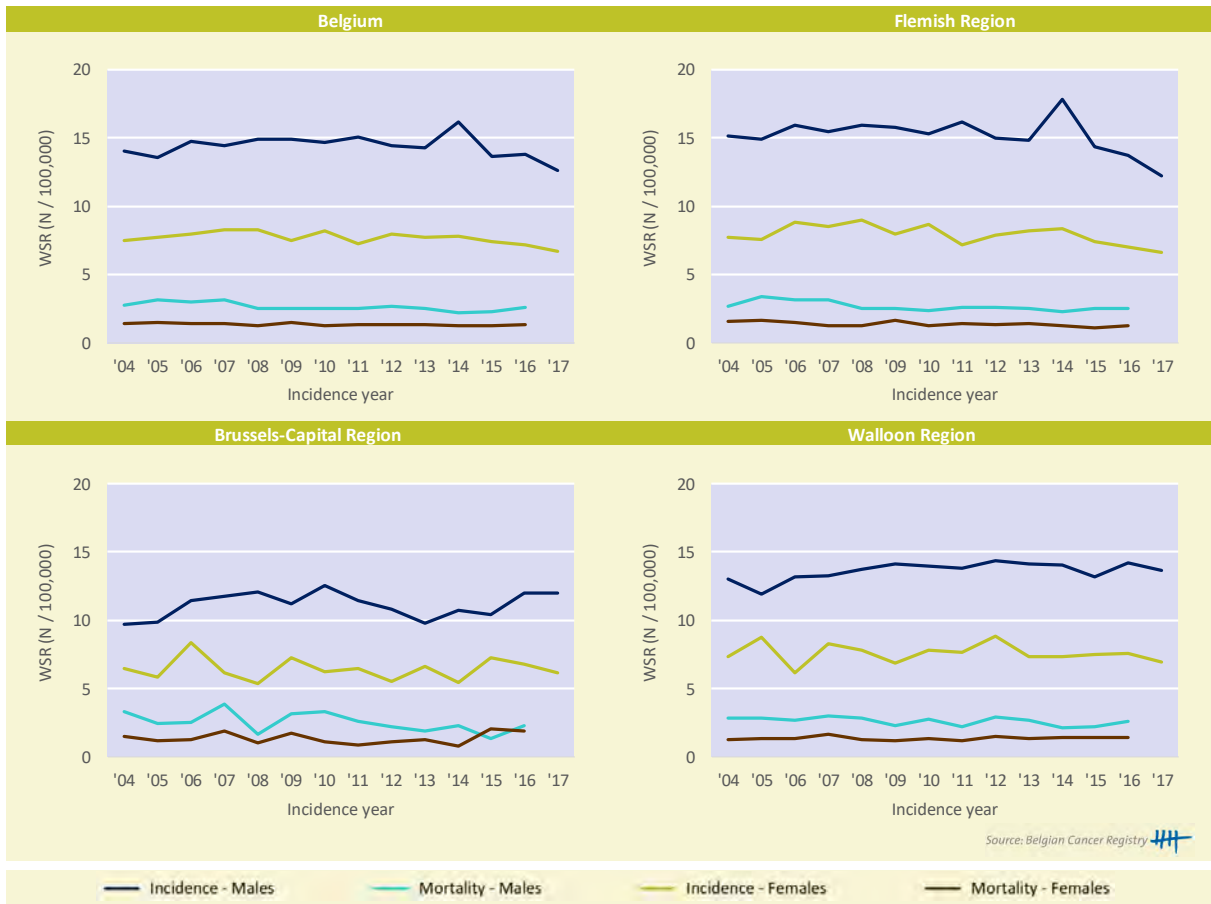


Figure 7 Rectal cancer: Trends in age-standardised incidence (WSR) by sex, age group and region, 2004-2017

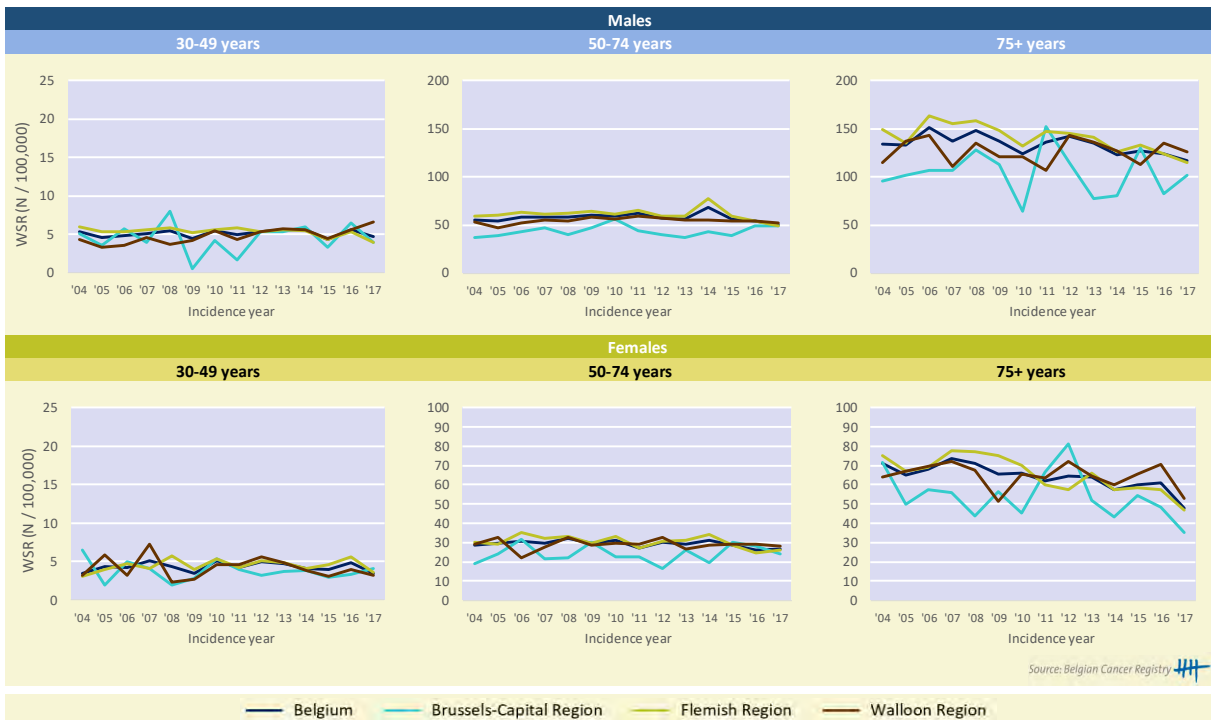


Figure 8 Rectal cancer: Trends in age-standardised incidence (WSR) by stage and sex, Belgium 2004-2017

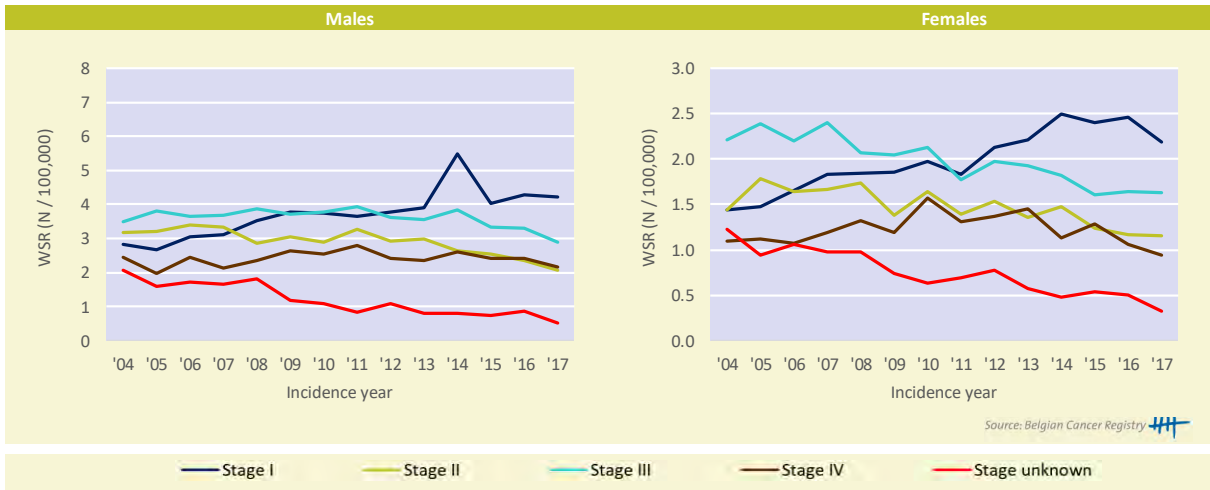


Figure 9 Rectal cancer: Trends in age-standardised incidence (WSR) by sex, age group and stage, Belgium 2004-2017

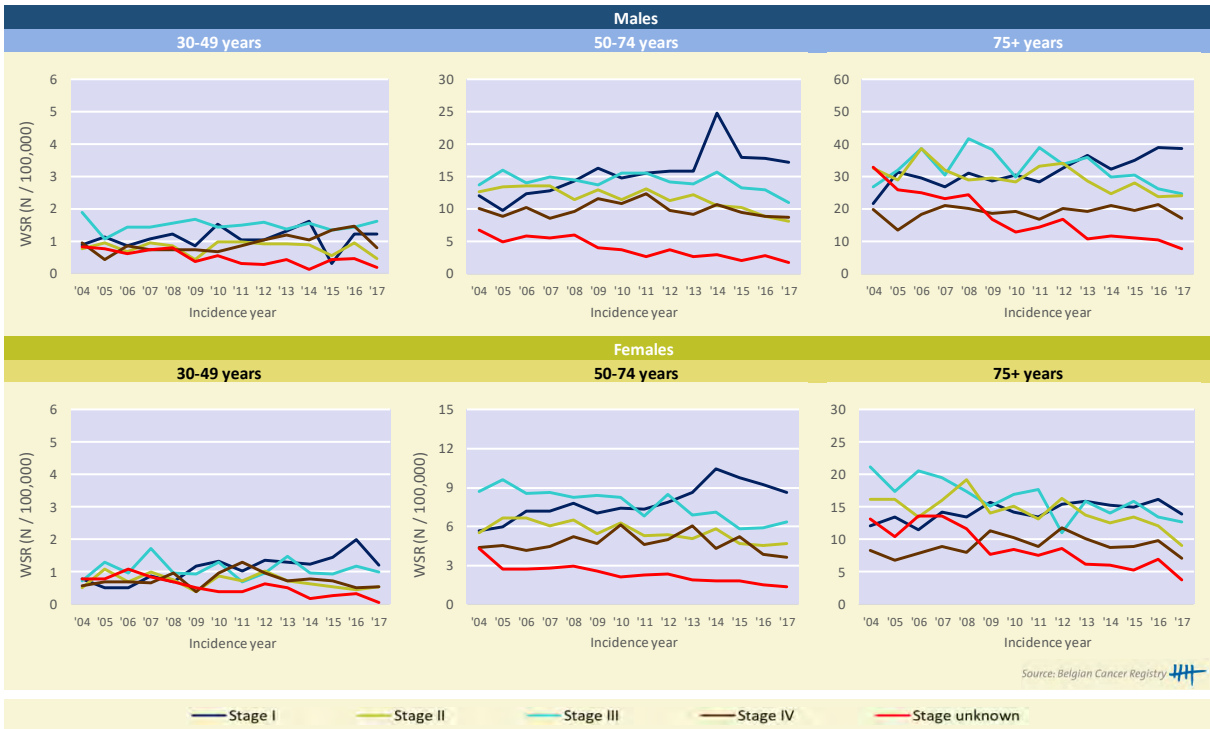


Table 2 Rectal cancer: AAPC(%) by sex, region, age group and stage in Belgium							
Rectal cancer	Males			Females			
Incidence	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period	
Belgium	-0.5	[-1.2; 0.2]	2004-2017	-0.8	[-1.4; -0.1]	2004-2017	
	1.0	[-0.2; 2.2]	2004-2012	0.7	[-0.9; 2.3]	2004-2010	
	-2.8	[-4.7; -0.8]	2012-2017	-2.0	[-3.3; -0.7]	2010-2017	
Flemish Region	-1.6	[-2.3; -0.8]	2004-2017	-0.6	[-1.6; 0.5]	2004-2017	
	0.6	[-0.4; 1.5]	2004-2014	5.0	[-0.2; 10.5]	2004-2007	
Brussels-Capital Region	-8.5	[-11.7; -5.1]	2014-2017	-2.2	[-3.5; -0.9]	2007-2017	
	0.8	[-0.3; 1.9]	2004-2017	-0.2	[-2.0; 1.7]	2004-2017	
	4.5	[0.3; 8.9]	2004-2008				
Walloon Region	-0.8	[-2.4; 0.9]	2008-2017				
	0.8	[0.3; 1.3]	2004-2017	-0.2	[-1.6; 1.2]	2004-2017	
	2.5	[1.1; 4.0]	2004-2009				
	-0.3	[-1.1; 0.6]	2009-2017				
Incidence by age group and region	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period	
30-49 years							
Belgium	0.2	[-1.2; 1.5]	2004-2017	0.1	[-2.0; 2.3]	2004-2017	
Flemish Region	-2.3	[-3.5; -1.0]	2004-2017	2.0	[-0.4; 4.3]	2004-2017	
	-0.4	[-1.9; 1.2]	2004-2014	10.5	[1.7; 20.1]	2004-2008	
	-8.4	[-13.9; -2.6]	2014-2017	-1.6	[-4.9; 1.7]	2008-2017	
Brussels-Capital Region	1.1	[-8.5; 11.8]	2004-2017	-0.5	[-5.3; 4.7]	2004-2017	
Walloon Region	3.8	[1.8; 5.8]	2004-2017	-0.7	[-5.3; 4.1]	2004-2017	
50-74 years							
Belgium	-0.3	[-1.2; 0.6]	2004-2017	-0.5	[-1.2; 0.2]	2004-2017	
	1.7	[-0.2; 3.5]	2004-2011	1.7	[-0.9; 4.4]	2004-2008	
	-2.5	[-4.6; -0.4]	2011-2017	-1.4	[-2.5; -0.4]	2008-2017	
Flemish Region	-1.5	[-2.5; -0.4]	2004-2017	-1.2	[-2.5; 0.2]	2004-2017	
	1.1	[-0.2; 2.4]	2004-2014				
Brussels-Capital Region	-9.6	[-14.0; -4.9]	2014-2017				
	2.4	[0.3; 4.5]	2004-2017	0.5	[-2.3; 3.4]	2004-2017	
	9.5	[0.7; 19.0]	2004-2007				
	-2.3	[-5.3; 0.8]	2007-2014				
Walloon Region	6.9	[-1.7; 16.2]	2014-2017				
	0.4	[-0.2; 0.9]	2004-2017	0.1	[-1.4; 1.6]	2004-2017	
	2.1	[1.0; 3.3]	2004-2011				
	-1.7	[-3.0; -0.3]	2011-2017				
75+ years							
Belgium	-1.1	[-2.0; -0.3]	2004-2017	-2.0	[-2.9; -1.1]	2004-2017	
				-0.5	[-2.7; 1.8]	2004-2010	
				-3.3	[-5.1; -1.5]	2010-2017	
Flemish Region	-1.9	[-2.8; -1.0]	2004-2017	-2.4	[-3.5; -1.3]	2004-2017	
	-0.5	[-2.1; 1.1]	2004-2012	1.7	[-2.3; 6.0]	2004-2008	
	-4.2	[-6.7; -1.6]	2012-2017	-4.2	[-5.8; -2.7]	2008-2017	
Brussels-Capital Region	-0.7	[-4.0; 2.7]	2004-2017	-2.1	[-4.9; 0.9]	2004-2017	
Walloon Region	0.1	[-1.4; 1.5]	2004-2017	-0.7	[-2.1; 0.8]	2004-2017	
Mortality	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period	
Belgium	-2.1	[-3.2; -0.9]	2004-2016	-0.9	[-1.8; -0.0]	2004-2016	
Flemish Region	-2.0	[-3.5; -0.5]	2004-2016	-2.0	[-3.5; -0.5]	2004-2016	
Brussels-Capital Region	-4.0	[-8.1; 0.1]	2004-2016	0.4	[-4.6; 5.8]	2004-2016	
Walloon Region	-1.7	[-3.4; -0.0]	2004-2016	0.5	[-1.0; 1.9]	2004-2016	
Incidence by stage	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period	
Stage I	3.9	[2.4; 5.4]	2004-2017	4.4	[3.3; 5.4]	2004-2017	
				8.2	[3.1; 13.5]	2004-2007	
				3.2	[2.0; 4.5]	2007-2017	
Stage II	-3.3	[-4.0; -2.5]	2004-2017	-2.6	[-3.8; -1.4]	2004-2017	
	-1.1	[-2.2; 0.0]	2004-2013	-0.4	[-3.3; 2.7]	2004-2010	
Stage III	-8.0	[-10.5; -5.4]	2013-2017	-4.4	[-6.8; -2.0]	2010-2017	
	-1.2	[-1.8; -0.5]	2004-2017	-2.9	[-3.7; -2.1]	2004-2017	
	1.2	[-0.2; 2.6]	2004-2011				
Stage IV	-3.9	[-5.4; -2.3]	2011-2017				
	0.3	[-0.8; 1.4]	2004-2017	-0.6	[-1.9; 0.6]	2004-2017	
	2.6	[0.2; 5.0]	2004-2011	3.9	[1.7; 6.2]	2004-2012	
Stage Unknown	-2.3	[-5.0; 0.4]	2011-2017	-7.5	[-10.9; -4.1]	2012-2017	
	-8.9	[-10.8; -6.9]	2004-2017	-7.9	[-9.6; -6.2]	2004-2017	

Incidence by age group and stage	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
30-49 years						
Stage I	-0.1	[-5.8; 5.9]	2004-2017	8.1	[4.6; 11.8]	2004-2017
Stage II	-1.4	[-5.4; 2.8]	2004-2017	-2.7	[-6.9; 1.7]	2004-2017
Stage III	0.1	[-1.9; 2.0]	2004-2017	0.1	[-3.6; 4.0]	2004-2017
Stage IV	4.7	[0.9; 8.6]	2004-2017	-0.6	[-4.4; 3.5]	2004-2017
				7.7	[-0.7; 16.8]	2004-2011
				-9.4	[-17.7; -0.2]	2011-2017
Stage Unknown	-9.5	[-14.5; -4.1]	2004-2017	-13.4	[-18.7; -7.8]	2004-2017
50-74 years						
Stage I	4.4	[2.4; 6.4]	2004-2017	2.9	[1.4; 4.5]	2004-2017
				3.6	[-0.3; 7.6]	2004-2009
				5.7	[2.0; 9.6]	2009-2014
				-2.6	[-9.2; 4.4]	2014-2017
Stage II	-3.6	[-4.5; -2.8]	2004-2017	-2.5	[-3.7; -1.3]	2004-2017
				-1.3	[-2.5; 0.0]	2004-2013
				-8.8	[-11.7; -5.8]	2013-2017
Stage III	-1.5	[-2.5; -0.4]	2004-2017	-3.3	[-4.4; -2.3]	2004-2017
				0.7	[-1.1; 2.5]	2004-2012
				-4.7	[-7.6; -1.8]	2012-2017
Stage IV	-0.4	[-1.8; 0.9]	2004-2017	-1.3	[-2.9; 0.4]	2004-2017
				2.7	[-0.1; 5.6]	2004-2011
				-3.9	[-7.1; -0.7]	2011-2017
Stage Unknown	-8.8	[-11.1; -6.5]	2004-2017	-6.6	[-8.1; -5.0]	2004-2017
75+ years						
Stage I	3.1	[1.7; 4.5]	2004-2017	1.8	[0.7; 2.9]	2004-2017
				4.1	[0.9; 7.4]	2004-2009
				0.4	[-1.4; 2.3]	2009-2017
Stage II	-2.2	[-3.7; -0.7]	2004-2017	-2.5	[-4.3; -0.7]	2004-2017
				2.5	[-4.2; 9.6]	2004-2008
				-4.7	[-7.2; -2.1]	2008-2017
Stage III	-1.5	[-3.2; 0.2]	2004-2017	-3.3	[-5.0; -1.6]	2004-2017
				3.2	[-0.4; 6.9]	2004-2011
				-6.8	[-10.6; -2.8]	2011-2017
Stage IV	0.8	[-0.9; 2.5]	2004-2017	0.8	[-1.1; 2.7]	2004-2017
				5.5	[1.5; 9.7]	2004-2011
				-4.4	[-8.8; 0.1]	2011-2017
Stage Unknown	-9.3	[-11.1; -7.6]	2004-2017	-8.0	[-10.2; -5.7]	2004-2017

Source: Belgian Cancer Registry 

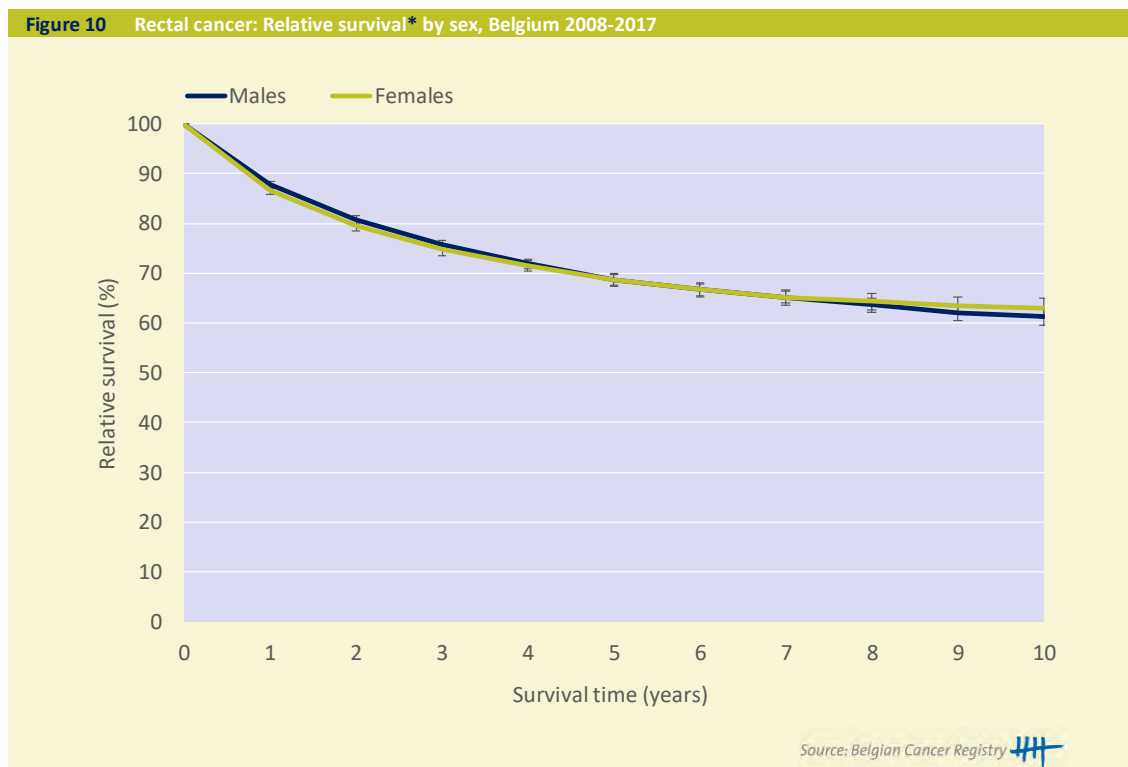
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.3.4.3 Survival

Figure 10 Rectal cancer: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.3.4.4 Survival trends

Figure 11 Rectal cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.3.5 LIVER (ICD-10: C22)

3.3.5.1 Incidence

Table 1 Liver cancer: Overview of incidence, mortality, prevalence and survival by sex and region

Liver cancer	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	717	12.9	6.6	263	4.6	2.0
Flemish Region	342	10.6	5.0	146	4.4	1.9
Brussels-Capital Region	74	12.7	9.2	29	4.8	2.1
Walloon Region	301	17.1	9.3	88	4.8	2.2
Mortality, 2016						
Belgium	601	10.9	5.0	314	5.5	1.8
Flemish Region	281	8.8	3.7	169	5.2	1.6
Brussels-Capital Region	53	9.1	5.6	30	4.9	2.1
Walloon Region	267	15.2	7.4	115	6.2	2.1
Prevalence (5 years), 2013-2017						
Belgium	1,237	22.1	11.6	495	8.6	4.4
Flemish Region	593	18.3	8.8	268	8.1	4.0
Brussels-Capital Region	131	22.3	16.4	50	8.2	4.6
Walloon Region	513	29.0	15.9	177	9.5	5.0
5-year Relative survival, 2013-2017						
Belgium	N at risk: 3,245	%: 21.3	95%CI: [19.4;23.2]	N at risk: 1,304	%: 21.2	95%CI: [18.5;24.2]
Flemish Region	1,561	21.7	[19.1;24.4]	700	20.1	[16.4;24.1]
Brussels-Capital Region	306	25.1	[18.7;32.1]	132	21.5	[13.3;31.2]
Walloon Region	1,378	20.0	[17.2;23.0]	472	23.0	[18.4;27.9]
10-year Relative survival, 2008-2017						
Belgium	N at risk: 5,659	%: 14.7	95%CI: [13.1;16.5]	N at risk: 2,334	%: 14.1	95%CI: [11.7;16.6]
Flemish Region	2,787	14.3	[12.0;16.7]	1,230	13.2	[10.3;16.6]
Brussels-Capital Region	562	20.8	[15.9;26.3]	255	18.7	[11.3;27.9]
Walloon Region	2,310	13.9	[11.3;16.9]	849	14.2	[10.3;18.7]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry

Figure 1 Liver cancer: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017

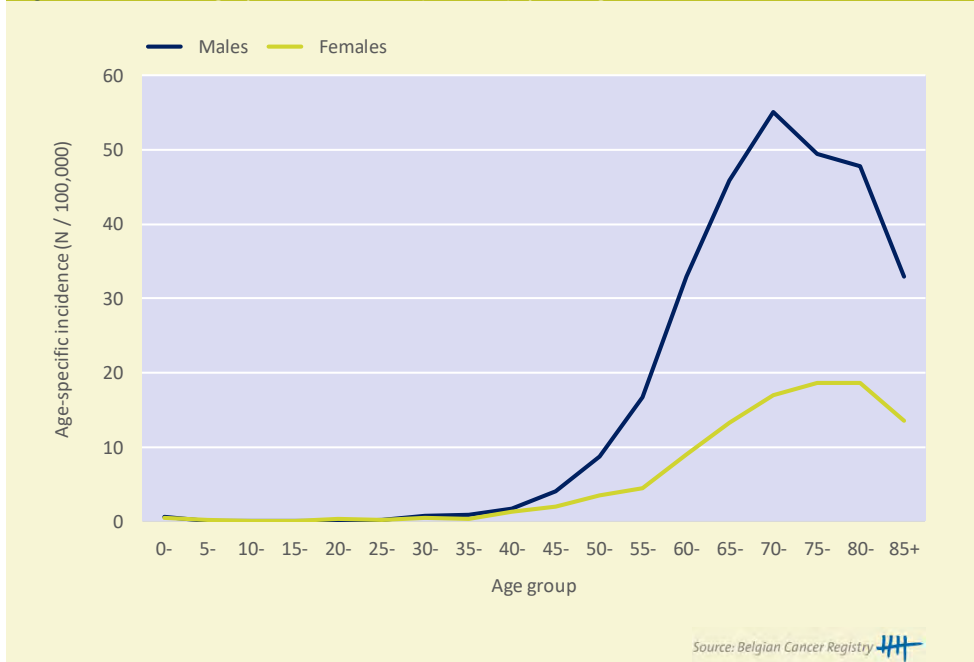
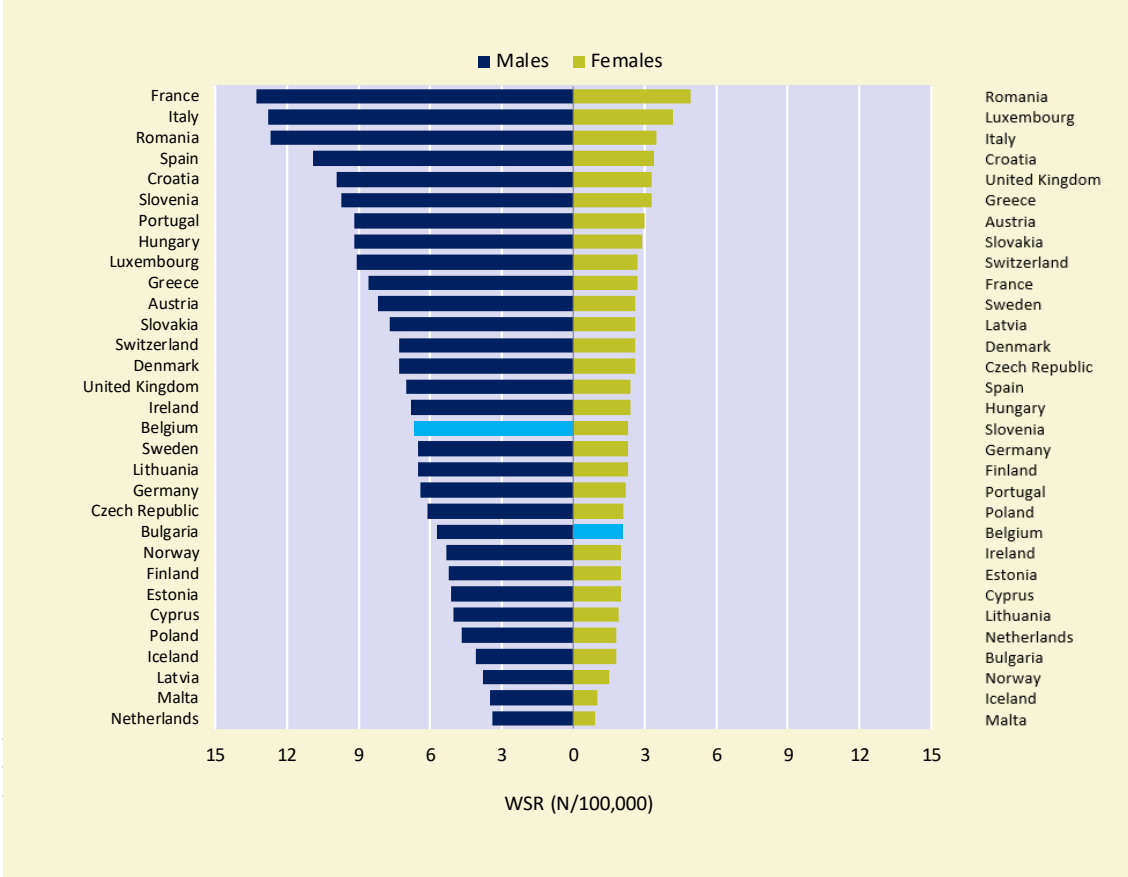


Figure 2 Liver cancer: Comparison of age-standardised incidence rates (WSR)
 (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Liver cancer: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

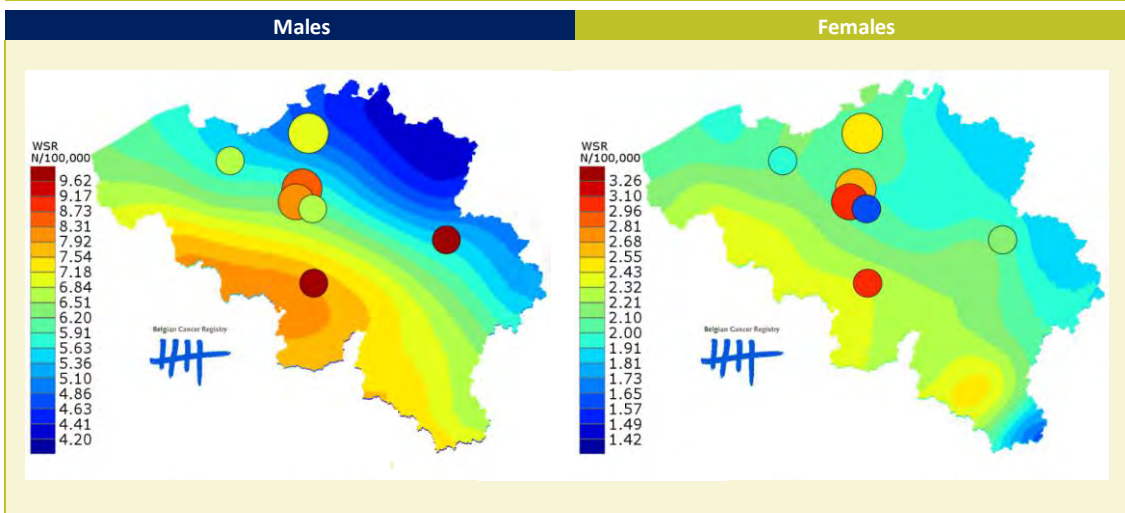
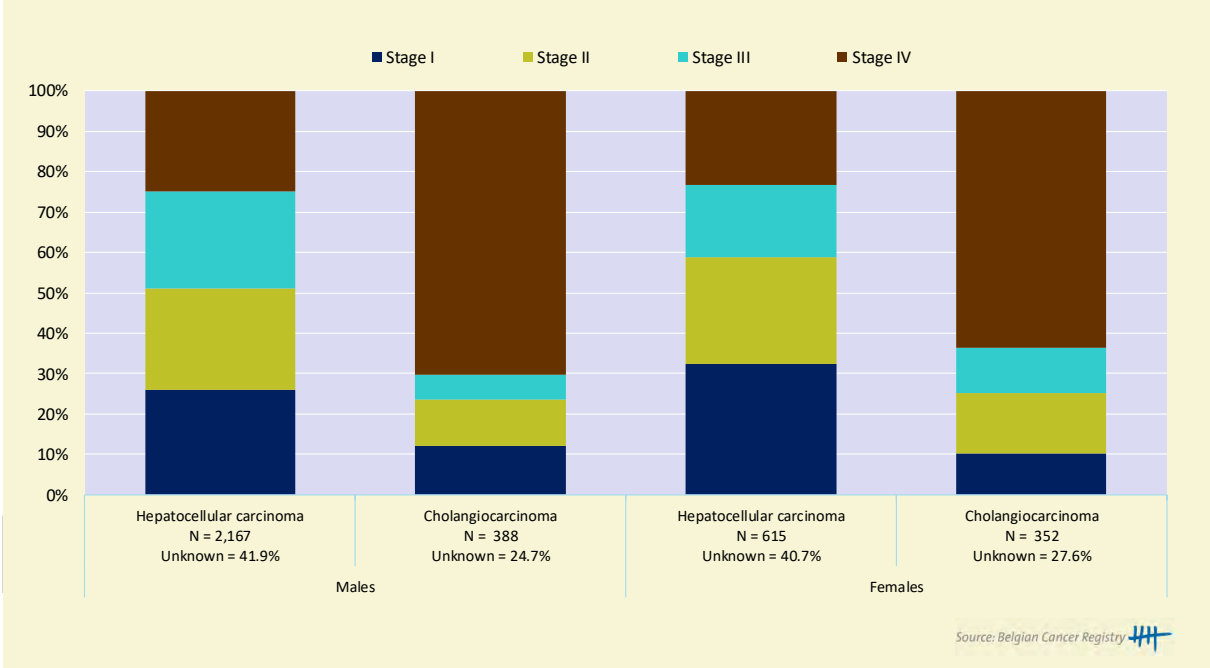


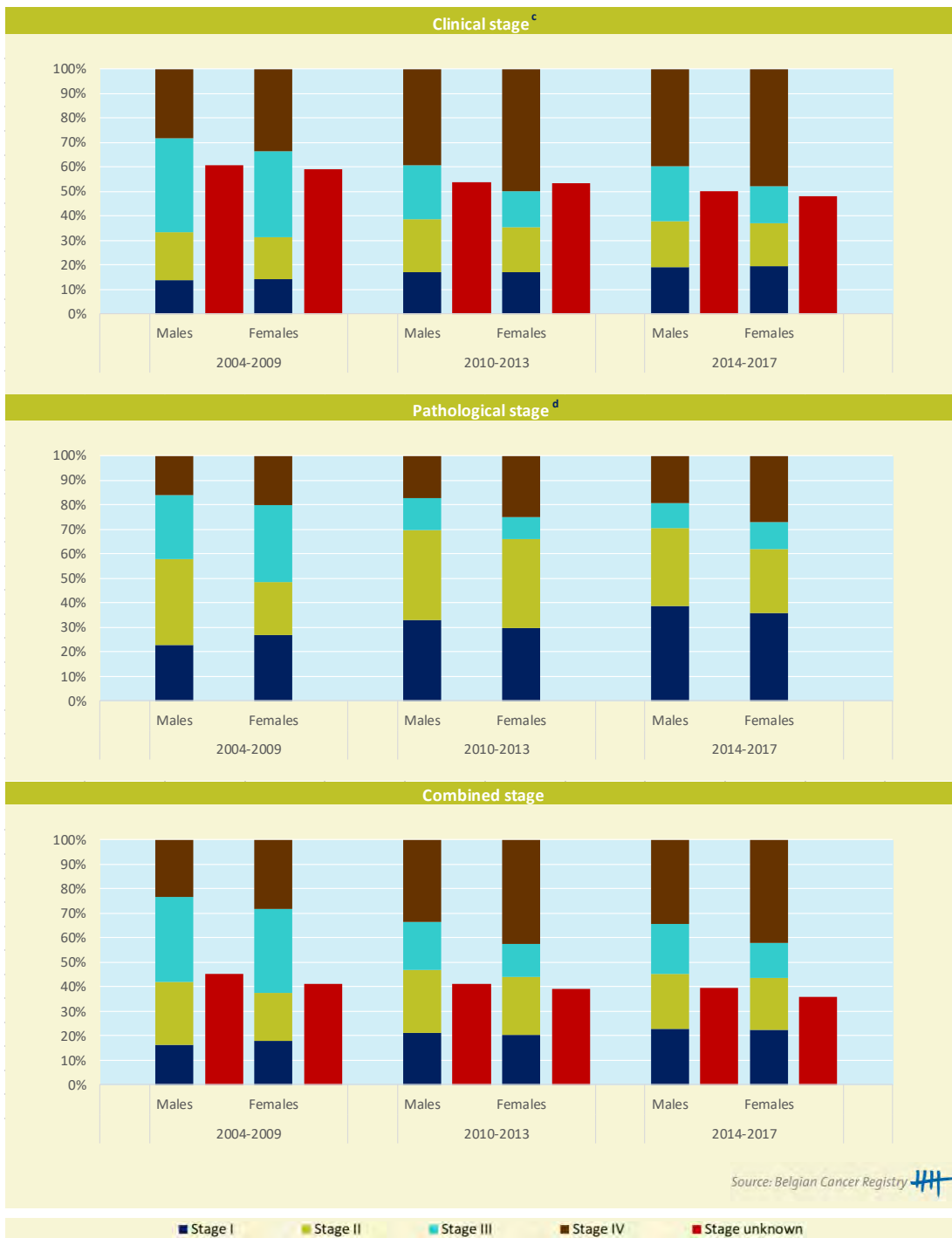
Figure 4 Liver cancer: Stage distribution^{a,b} by sex and histology, Belgium 2014-2017



^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Liver cancer: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.3.5.2 Incidence trends

Figure 6 Liver cancer: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

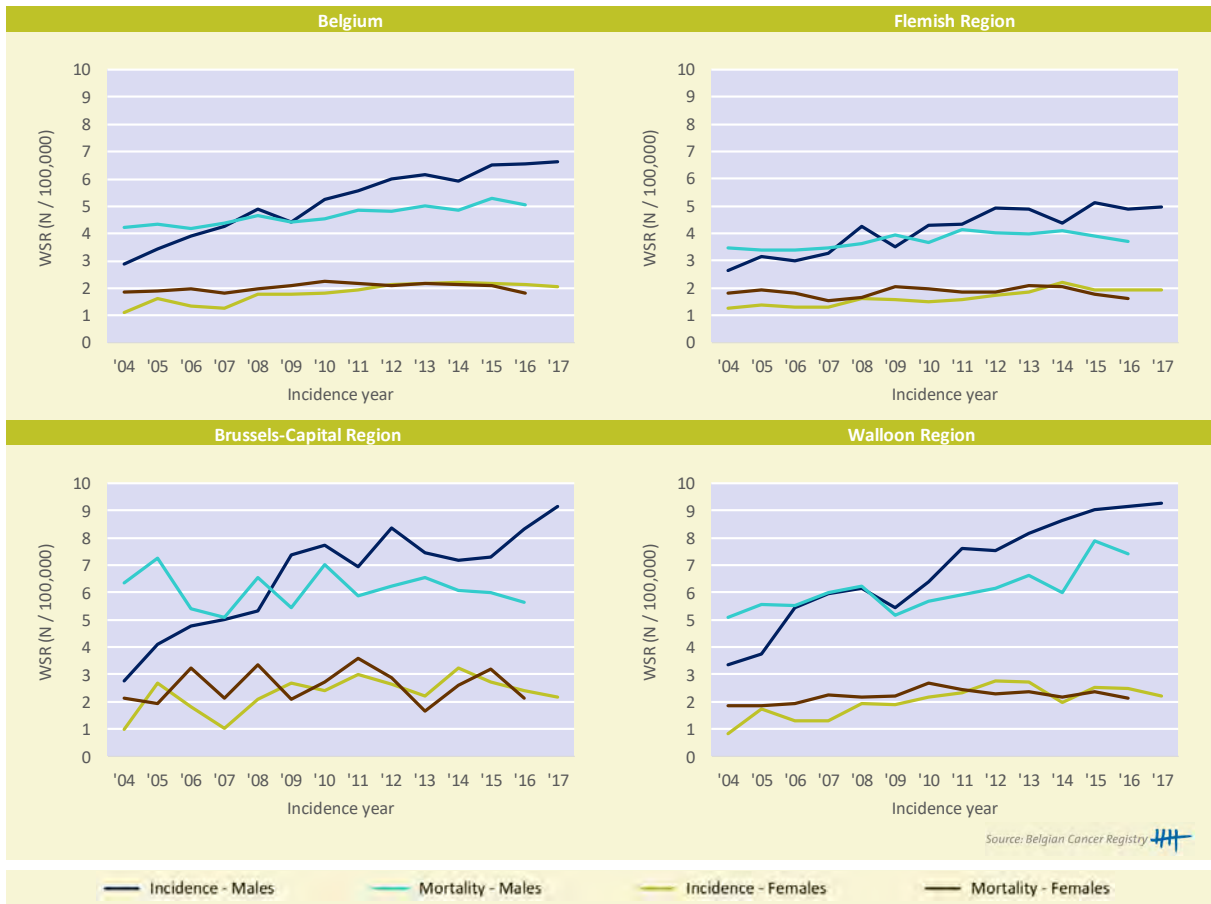


Figure 7 Liver cancer: Trends in age-standardised incidence (WSR) by sex and histology, Belgium 2004-2017

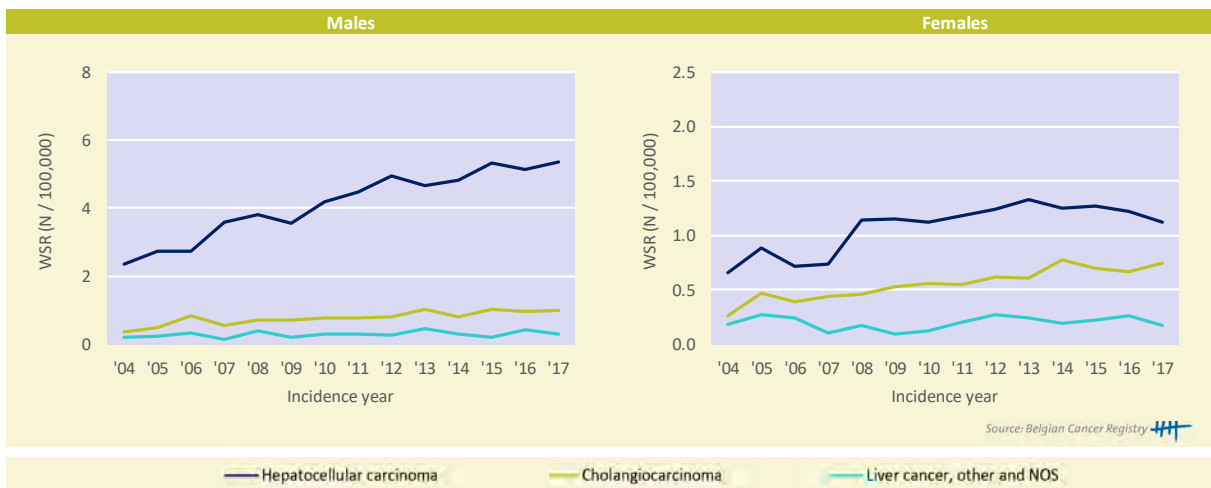


Table 2 Liver cancer: AAPC(%) by sex, region and histology in Belgium							
Liver cancer	Males			Females			
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period	
Incidence	Belgium	6.5	[5.6; 7.4]	2004-2017	4.2	[2.6; 5.7]	2004-2017
		13.8	[9.6; 18.1]	2004-2007	6.9	[4.6; 9.3]	2004-2013
		6.3	[4.3; 8.4]	2007-2012	-1.8	[-7.0; 3.7]	2013-2017
	Flemish Region	2.5	[0.4; 4.6]	2012-2017			
		4.6	[3.4; 5.7]	2004-2017	4.0	[2.8; 5.1]	2004-2017
		7.2	[5.1; 9.2]	2004-2012			
	Brussels-Capital Region	0.6	[-2.7; 3.9]	2012-2017			
		7.9	[6.4; 9.4]	2004-2017	4.5	[0.2; 9.0]	2004-2017
		17.9	[13.2; 22.9]	2004-2009	11.4	[2.2; 21.5]	2004-2011
	Walloon Region	2.0	[-0.4; 4.6]	2009-2017	-3.1	[-12.5; 7.4]	2011-2017
7.4		[5.8; 9.0]	2004-2017	5.7	[3.1; 8.5]	2004-2017	
10.4		[7.1; 13.8]	2004-2011	12.0	[7.2; 17.1]	2004-2012	
3.9		[0.2; 7.7]	2011-2017	-3.6	[-10.6; 3.8]	2012-2017	
Mortality	Belgium	1.8	[1.3; 2.2]	2004-2016	0.5	[-0.3; 1.3]	2004-2016
					2.9	[1.4; 4.4]	2004-2011
	Flemish Region				-2.6	[-4.7; -0.5]	2011-2016
		1.0	[0.3; 1.7]	2004-2016	0.3	[-1.3; 1.9]	2004-2016
		2.4	[1.5; 3.3]	2004-2013			
	Brussels-Capital Region	-3.1	[-5.9; -0.2]	2013-2016			
		-0.3	[-2.0; 1.5]	2004-2016	0.7	[-3.4; 4.9]	2004-2016
	Walloon Region	2.6	[1.3; 4.0]	2004-2016	1.6	[0.7; 2.4]	2004-2016
					5.5	[3.6; 7.5]	2004-2010
					-2.2	[-4.0; -0.4]	2010-2016
Incidence by histology	Cholangiocarcinoma	7.6	[4.9; 10.3]	2004-2017	6.6	[4.6; 8.6]	2004-2017
		20.4	[6.8; 35.8]	2004-2007			
		4.0	[0.8; 7.3]	2007-2017			
	Hepatocellular carcinoma	6.2	[5.3; 7.1]	2004-2017	4.4	[2.8; 6.1]	2004-2017
		9.4	[7.5; 11.3]	2004-2011	9.4	[5.9; 13.1]	2004-2011
		2.6	[0.5; 4.7]	2011-2017	-1.1	[-4.9; 2.8]	2011-2017
	Liver cancer, other and NOS	3.5	[-1.2; 8.3]	2004-2017	-0.2	[-5.4; 5.2]	2004-2017
					-19.1	[-37.2; 4.1]	2004-2007
					6.3	[-0.5; 13.5]	2007-2017

Source: Belgian Cancer Registry

AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.3.5.3 Survival

Figure 8 Liver cancer: Relative survival* by sex, Belgium 2008-2017



Source: Belgian Cancer Registry

* The relative survival values are represented with 95% Confidence Intervals

3.3.5.4 Survival trends

Figure 9 Liver cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.3.6 GALLBLADDER AND BILIARY TRACT (ICD-10: C23-C24)

3.3.6.1 Incidence

Table 1 Cancer of the gallbladder and biliary tract: Overview of incidence, mortality, prevalence and survival by sex and region

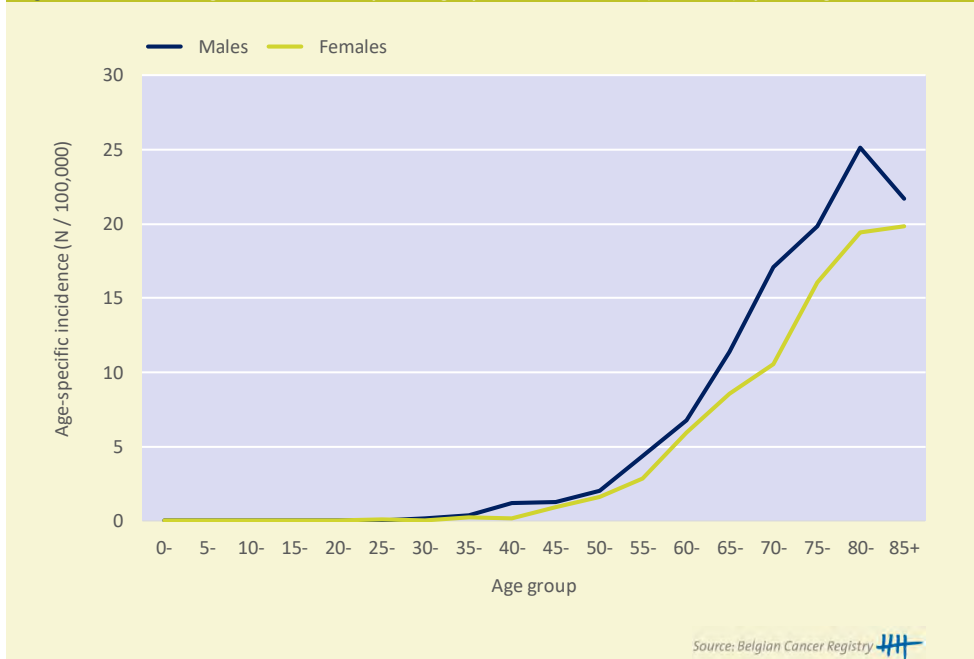
Cancer of the gallbladder and biliary tract	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	222	4.0	1.8	202	3.5	1.4
Flemish Region	128	4.0	1.7	113	3.4	1.2
Brussels-Capital Region	18	3.1	2.1	18	3.0	1.9
Walloon Region	76	4.3	2.1	71	3.8	1.4
Mortality, 2016						
Belgium	68	1.2	0.5	96	1.7	0.5
Flemish Region	40	1.2	0.5	54	1.6	0.5
Brussels-Capital Region	7	1.2	0.7	9	1.5	0.6
Walloon Region	21	1.2	0.6	33	1.8	0.4
Prevalence (5 years), 2013-2017						
Belgium	407	7.3	3.5	319	5.5	2.3
Flemish Region	257	7.9	3.6	196	5.9	2.3
Brussels-Capital Region	28	4.8	3.2	33	5.4	3.5
Walloon Region	122	6.9	3.6	90	4.9	2.0
5-year Relative survival, 2013-2017						
Belgium	N at risk: 1,051	%: 22.4	95%CI: [19.1;26.0]	N at risk: 1,025	%: 18.7	95%CI: [15.9;21.9]
Flemish Region	630	23.1	[18.7;27.8]	601	17.9	[14.2;22.0]
Brussels-Capital Region	76	19.0	[8.9;32.7]	98	21.3	[12.6;31.9]
Walloon Region	345	22.1	[16.6;28.3]	326	19.3	[14.4;25.0]
10-year Relative survival, 2008-2017						
Belgium	N at risk: 1,977	%: 17.0	95%CI: [14.1;20.1]	N at risk: 2,060	%: 15.6	95%CI: [13.2;18.2]
Flemish Region	1,192	16.8	[13.3;20.9]	1,231	16.0	[12.9;19.3]
Brussels-Capital Region	152	13.1	[6.2;23.3]	188	15.7	[9.3;23.8]
Walloon Region	633	19.1	[14.3;24.7]	641	15.2	[11.0;20.3]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

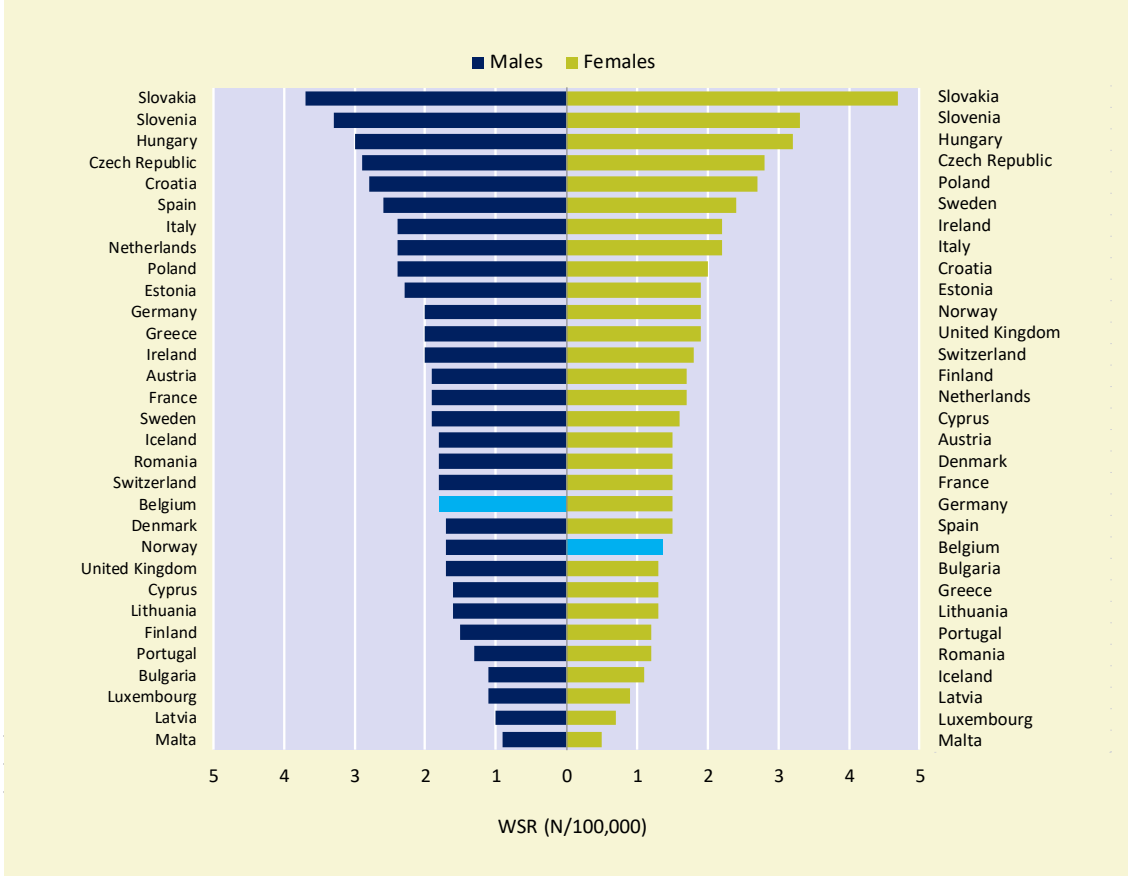
Source: Belgian Cancer Registry

Figure 1 Cancer of the gallbladder and biliary tract: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017



Source: Belgian Cancer Registry

Figure 2 Cancer of the gallbladder and biliary tract: Comparison of age-standardised incidence rates (WSR) (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System

From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019

© European Union, 2019

Figure 3 Cancer of the gallbladder and biliary tract: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

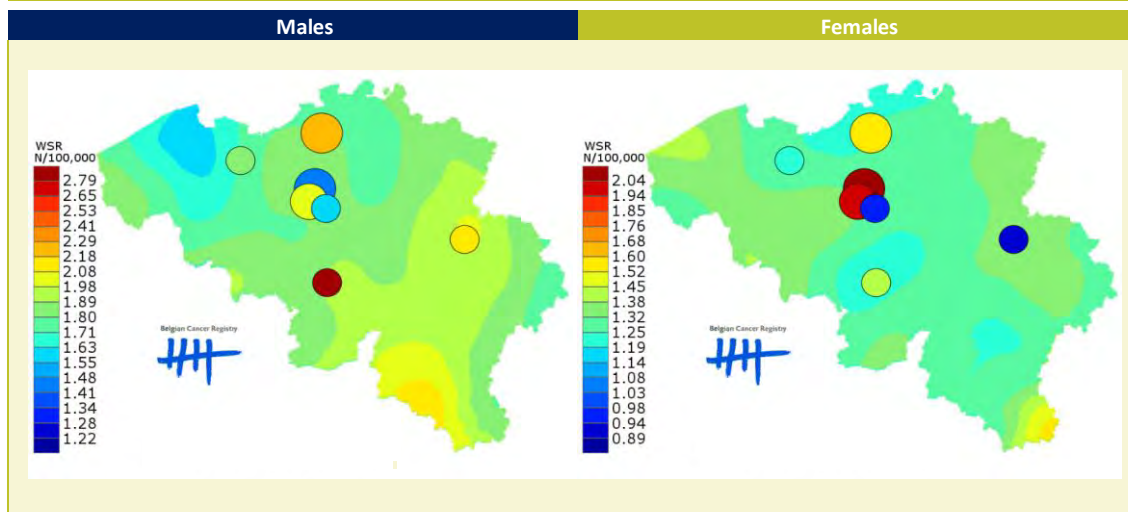
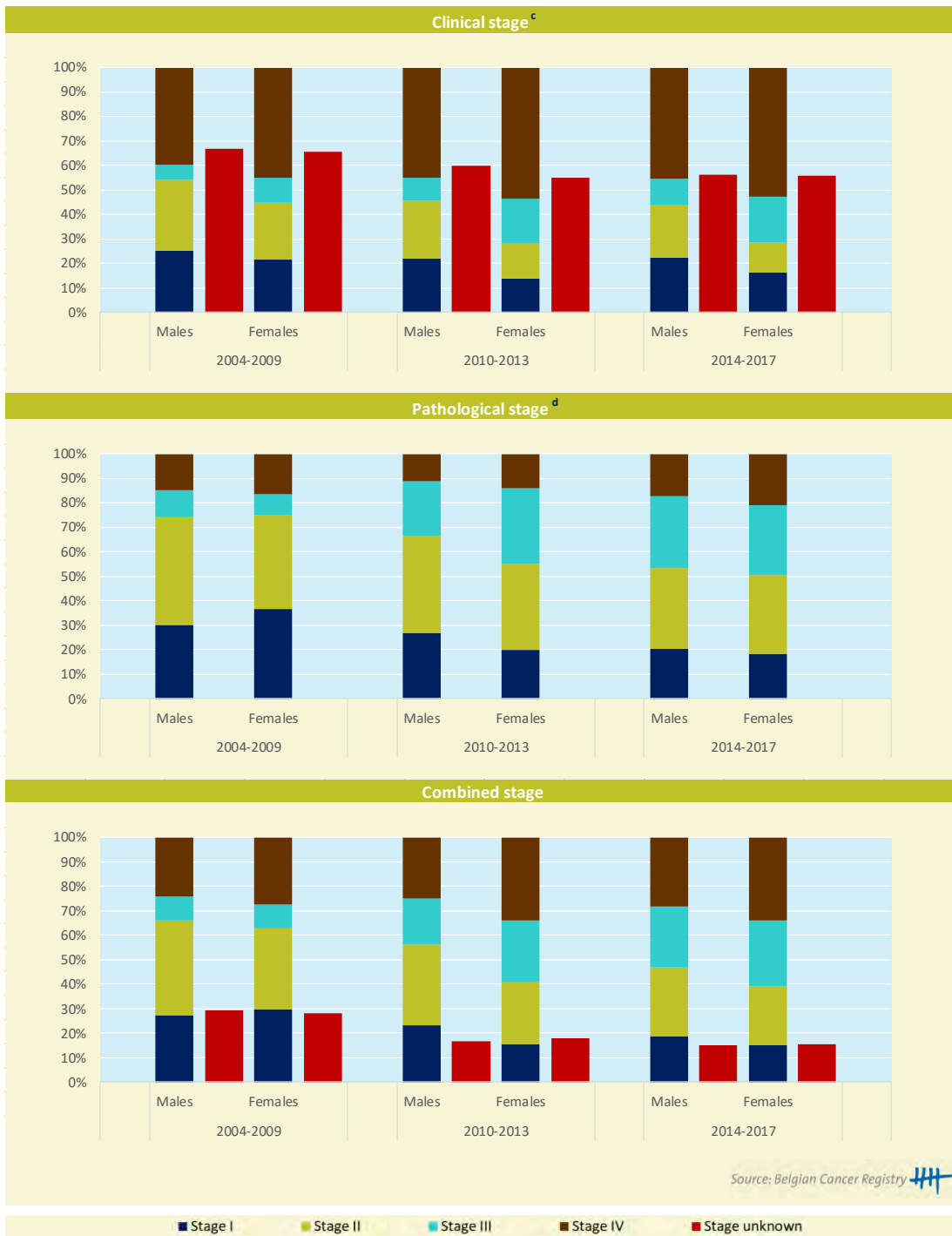


Figure 4 Cancer of the gallbladder and biliary tract:
Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.3.6.2 Incidence trends

Figure 5 Cancer of the gallbladder and biliary tract: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

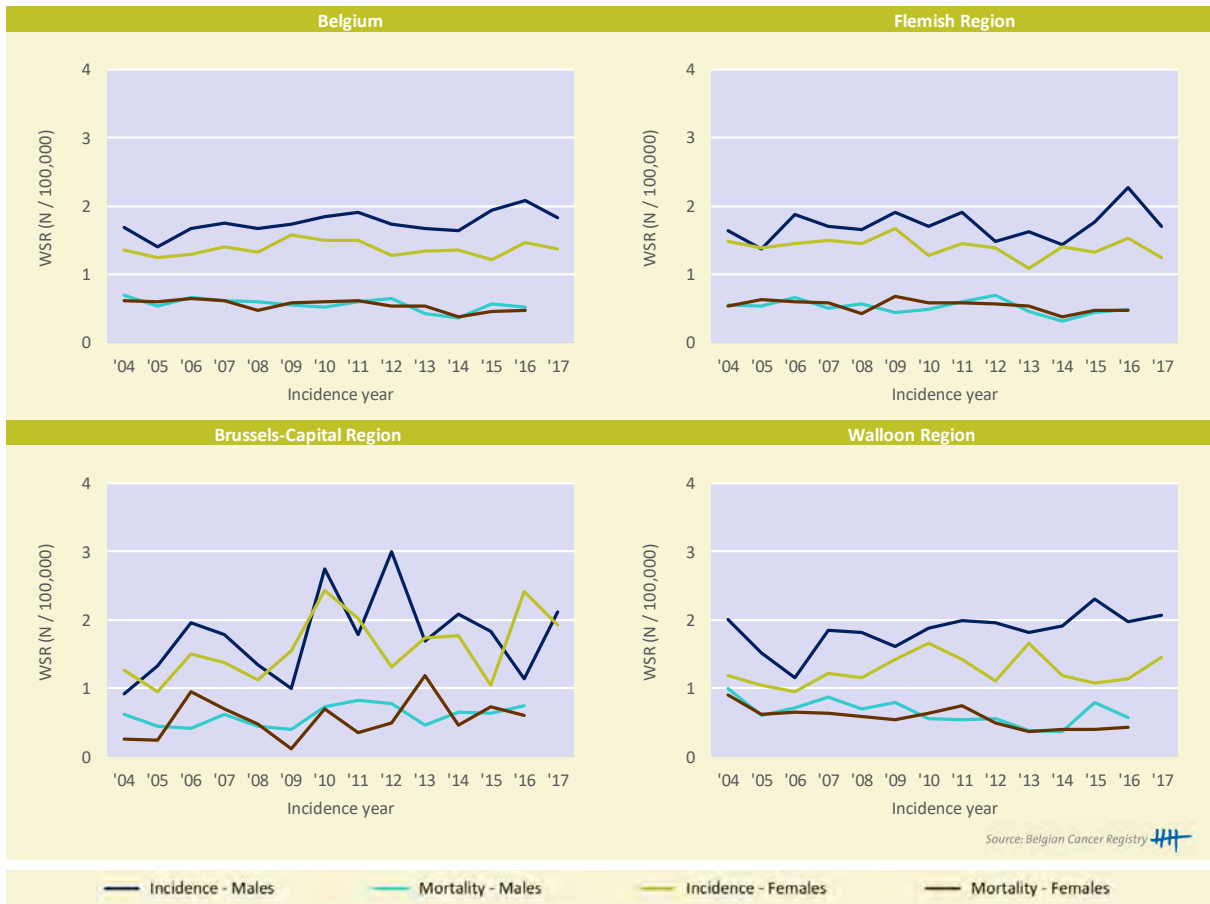


Table 2 Cancer of the gallbladder and biliary tract: AAPC(%) by sex and region in Belgium

Cancer of the gallbladder and biliary tract	Males			Females		
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Incidence						
Belgium	1.4	[0.3, 2.5]	2004-2017	0.1	[-1.0, 1.3]	2004-2017
Flemish Region	0.8	[-1.1, 2.7]	2004-2017	-1.0	[-2.4, 0.5]	2004-2017
Brussels-Capital Region	3.1	[-1.9, 8.3]	2004-2017	3.5	[-0.4, 7.6]	2004-2017
Walloon Region	2.3	[0.3, 4.4]	2004-2017	1.3	[-0.9, 3.7]	2004-2017
				5.8	[0.2, 11.8]	2004-2010
				-2.4	[-6.8, 2.3]	2010-2017
Mortality						
Belgium	-2.6	[-5.0, -0.1]	2004-2016	-2.8	[-4.5, -1.0]	2004-2016
Flemish Region	-2.4	[-5.3, 0.7]	2004-2016	-2.1	[-4.4, 0.3]	2004-2016
Brussels-Capital Region	3.2	[-0.7, 7.2]	2004-2016	6.0	[-4.0, 17.1]	2004-2016
Walloon Region	-4.3	[-8.2, -0.3]	2004-2016	-5.5	[-7.9, -3.0]	2004-2016

Source: Belgian Cancer Registry

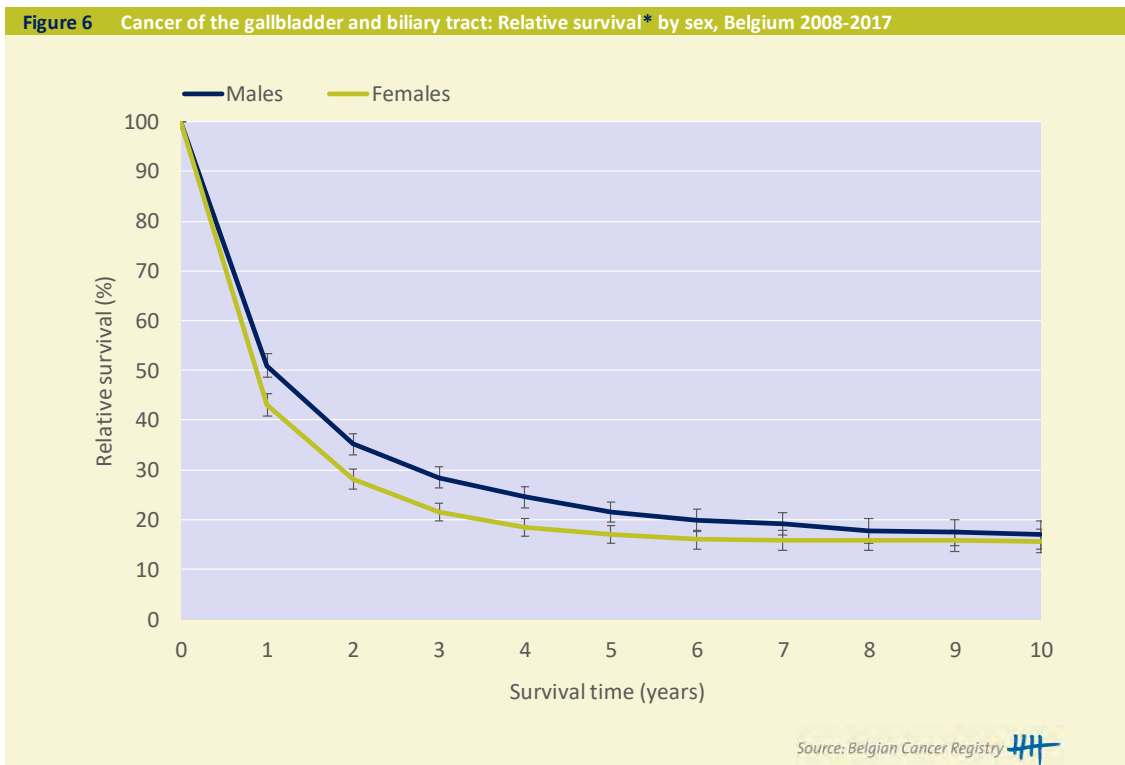
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.3.6.3 Survival

Figure 6 Cancer of the gallbladder and biliary tract: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.3.6.4 Survival trends

Figure 7 Cancer of the gallbladder and biliary tract: 1-, 3-, 5- and 10-year relative survival (RS) * by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.3.7 PANCREAS (ICD-10: C25)

3.3.7.1 Incidence

Table 1 Pancreatic cancer: Overview of incidence, mortality, prevalence and survival by sex and region

Pancreatic cancer	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	971	17.4	8.6	884	15.4	6.3
Flemish Region	563	17.5	8.0	504	15.3	5.9
Brussels-Capital Region	81	13.9	9.7	83	13.6	7.7
Walloon Region	327	18.5	9.5	297	16.1	6.7
Mortality, 2016						
Belgium	856	15.5	7.1	855	14.9	5.3
Flemish Region	486	15.2	6.3	506	15.4	5.3
Brussels-Capital Region	73	12.6	8.7	70	11.5	5.1
Walloon Region	297	16.9	8.4	279	15.1	5.6
Prevalence (5 years), 2013-2017						
Belgium	1,171	20.9	10.8	1,149	19.9	9.8
Flemish Region	721	22.2	10.7	682	20.6	9.6
Brussels-Capital Region	80	13.6	10.4	94	15.4	10.0
Walloon Region	370	20.9	11.2	373	20.1	10.1
5-year Relative survival, 2013-2017						
Belgium	N at risk: 4,449	10.7	95%CI: [9.6;11.9]	N at risk: 4,304	11.5	95%CI: [10.4;12.7]
Flemish Region	2,588	12.2	[10.7;13.9]	2,459	12.0	[10.5;13.6]
Brussels-Capital Region	355	7.4	[4.6;11.2]	383	10.2	[6.9;14.3]
Walloon Region	1,506	8.9	[7.1;11.0]	1,462	11.0	[9.1;13.1]
10-year Relative survival, 2008-2017						
Belgium	N at risk: 8,086	8.6	95%CI: [7.7;9.7]	N at risk: 7,760	8.5	95%CI: [7.6;9.5]
Flemish Region	4,672	9.2	[7.8;10.6]	4,414	8.9	[7.6;10.3]
Brussels-Capital Region	679	5.5	[3.5;8.3]	705	9.8	[7.3;12.8]
Walloon Region	2,735	8.5	[6.9;10.4]	2,641	7.8	[6.4;9.4]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry 

Figure 1 Pancreatic cancer: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017

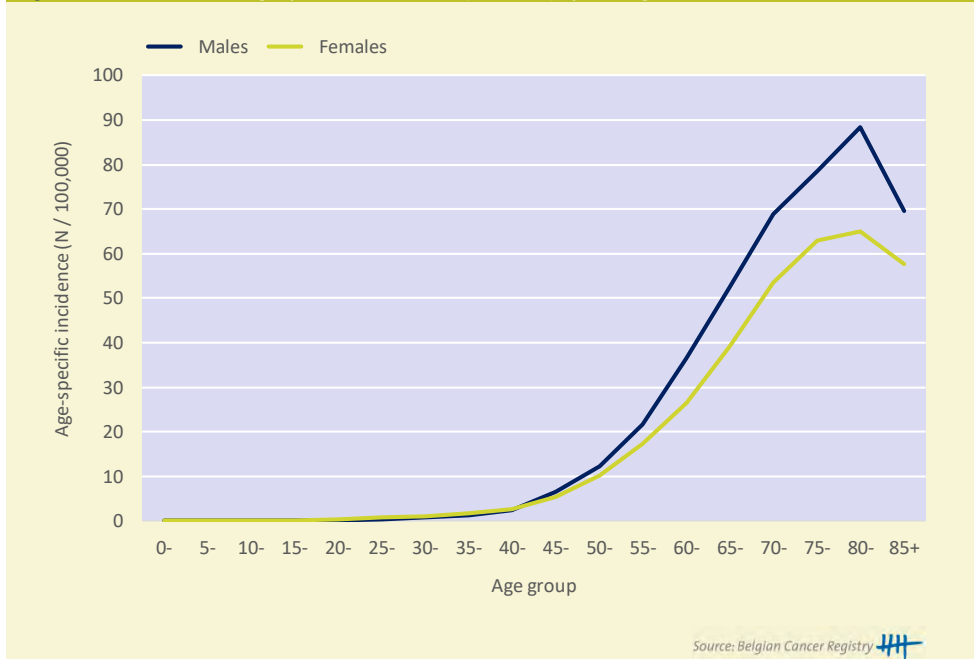
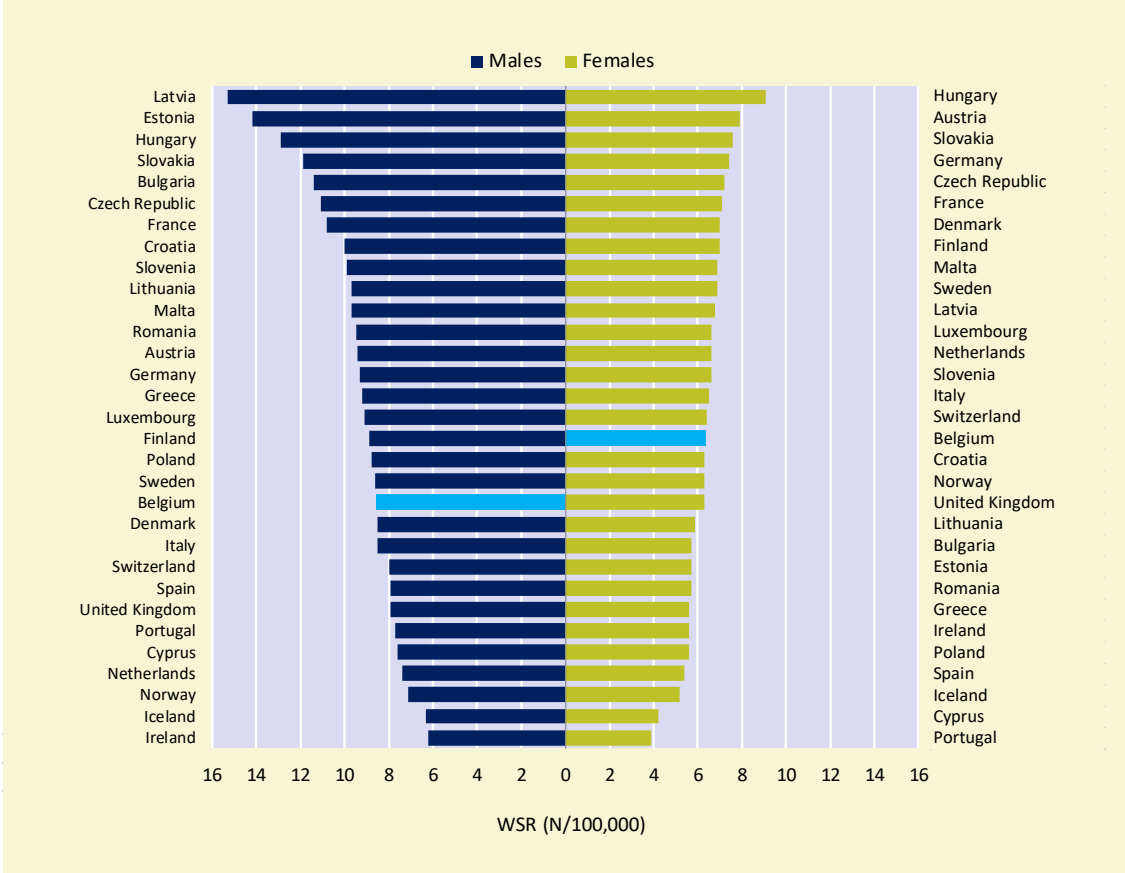


Figure 2 Pancreatic cancer: Comparison of age-standardised incidence rates (WSR)
 (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Pancreatic cancer: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

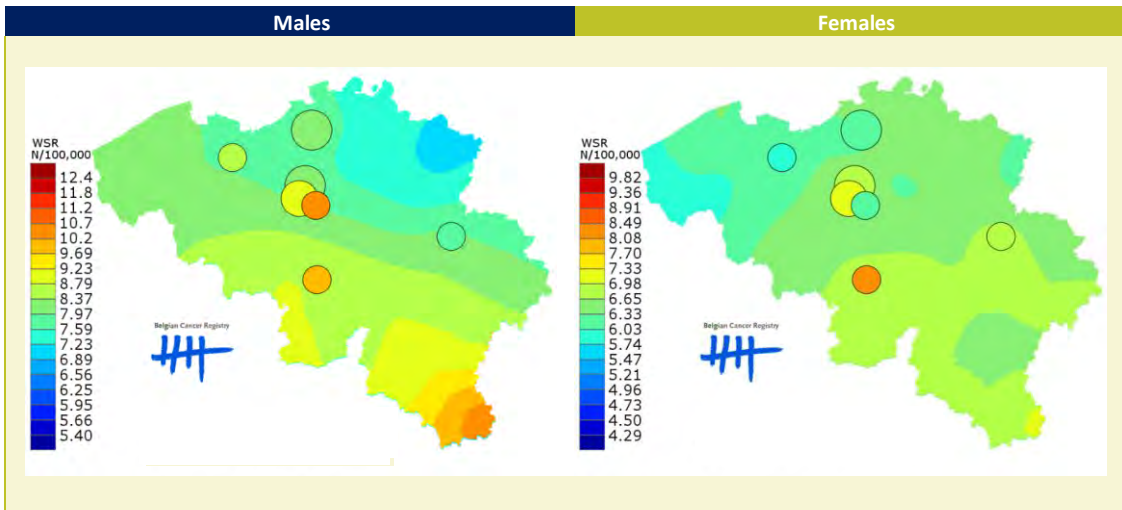
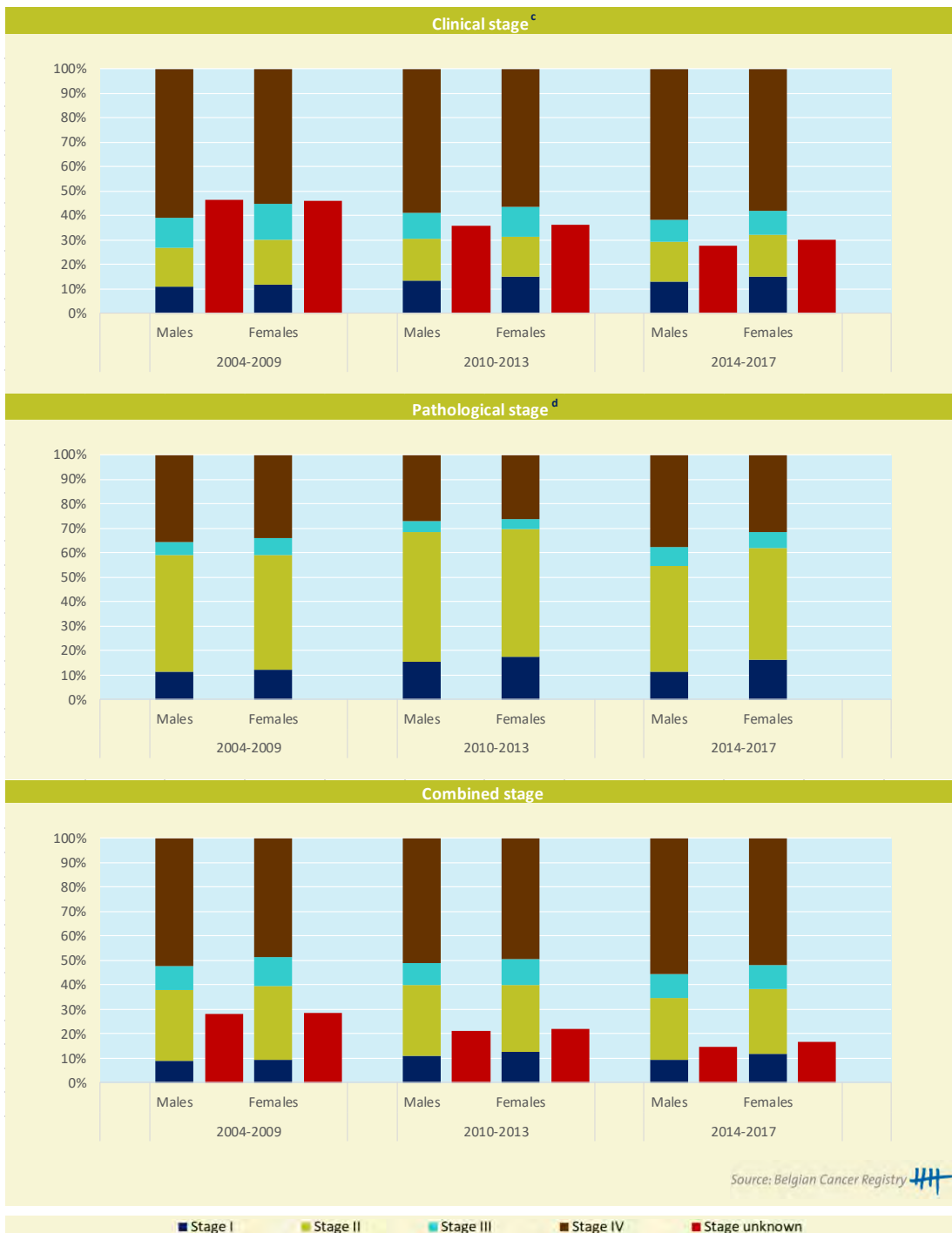


Figure 4 Pancreatic cancer: Stage distribution ^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.3.7.2 Incidence trends

Figure 5 Pancreatic cancer: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

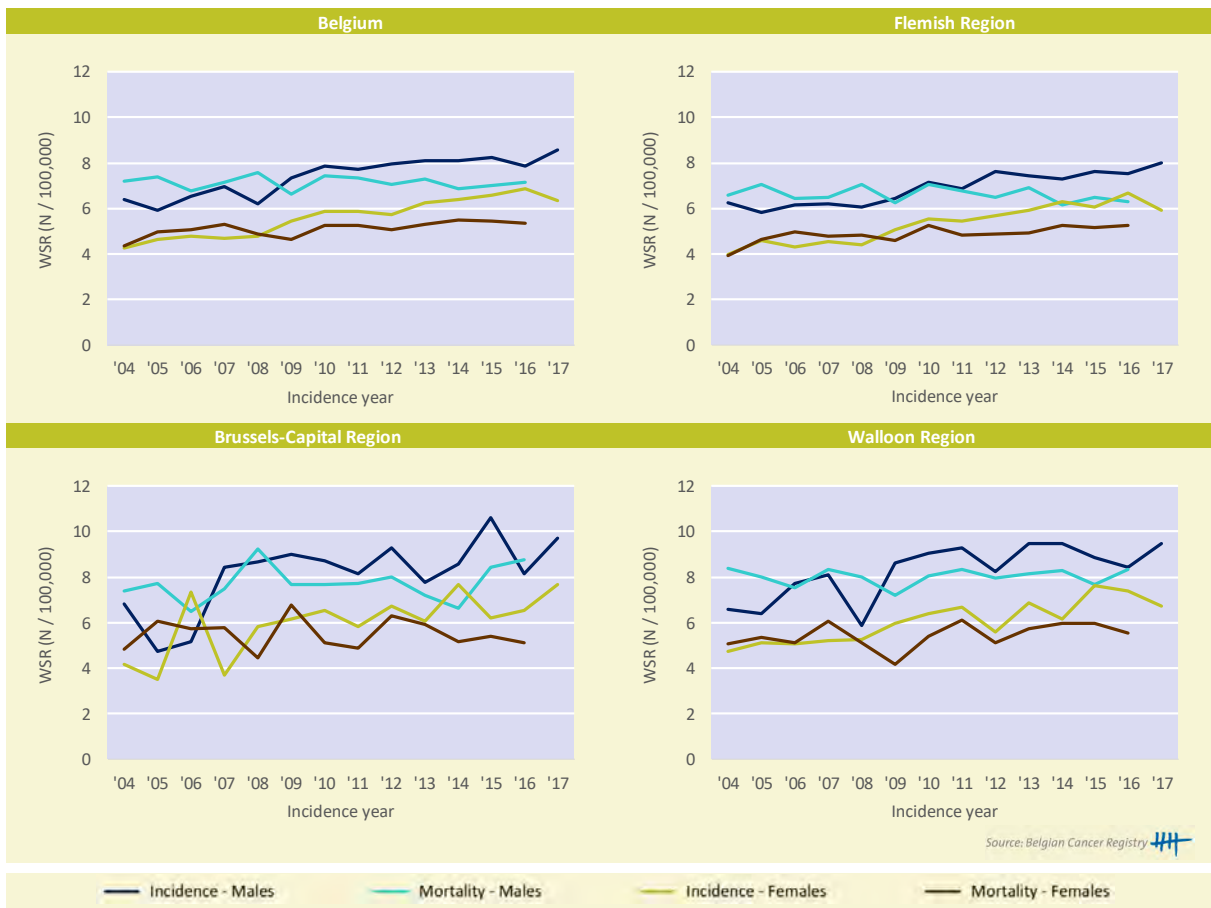


Figure 6 Pancreatic cancer: Trends in age-standardised incidence (WSR) by stage and sex, Belgium 2004-2017

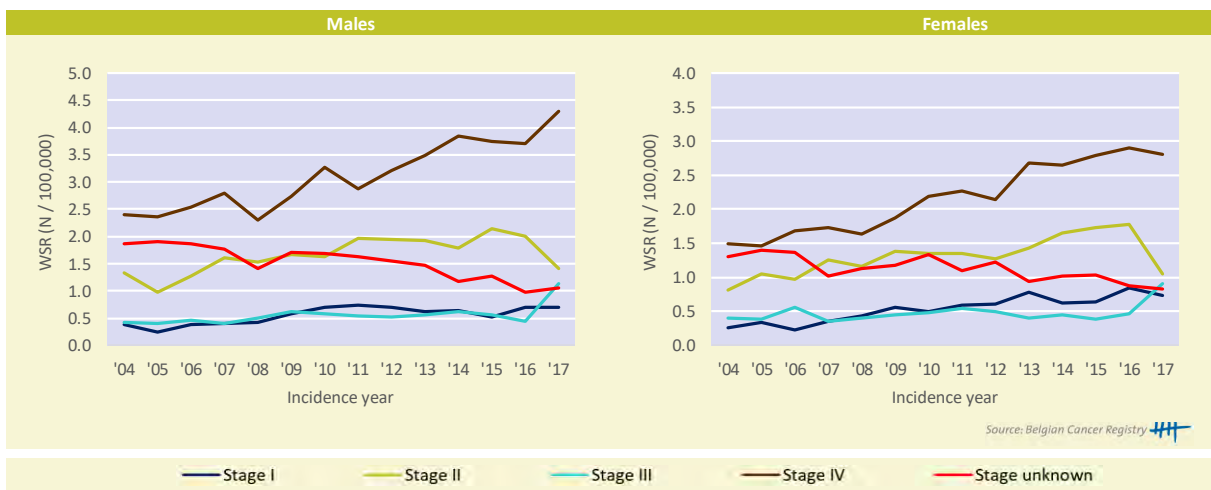


Figure 7 Pancreatic cancer: Trends in age-standardised incidence (WSR) by histology and sex, Belgium 2004-2017

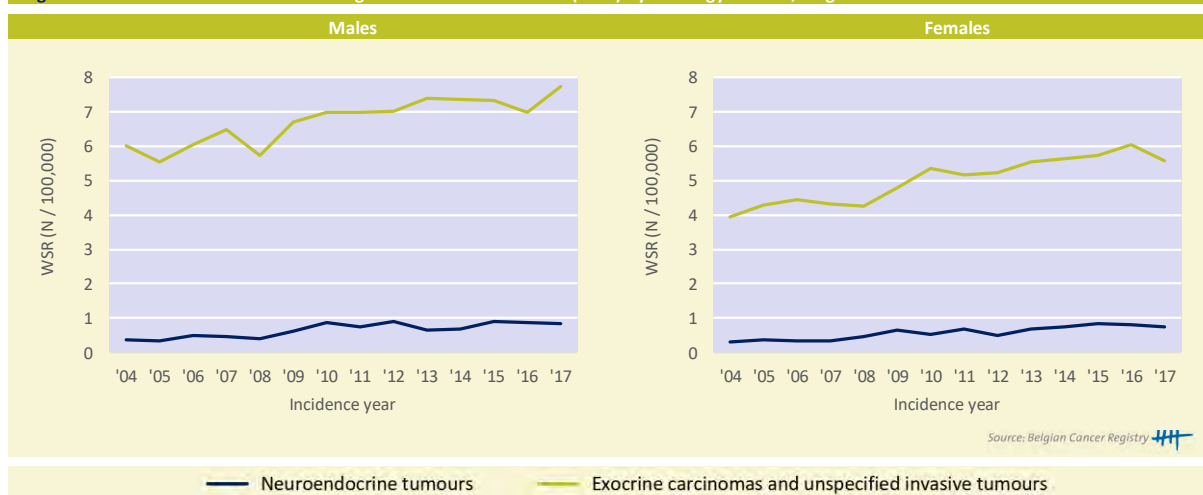


Table 2 Pancreatic cancer: AAPC(%) by sex, region and stage in Belgium

Pancreatic cancer	Males			Females		
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Incidence						
Belgium	2.5	[1.7; 3.2]	2004-2017	3.6	[2.9; 4.2]	2004-2017
	3.5	[2.2; 4.9]	2004-2012	4.6	[3.4; 5.9]	2004-2011
	0.8	[-1.4; 3.1]	2012-2017	2.3	[0.8; 3.8]	2011-2017
Flemish Region	2.2	[1.5; 2.9]	2004-2017	3.7	[2.8; 4.6]	2004-2017
	0.9	[-2.3; 4.1]	2004-2007			
	2.6	[1.8; 3.5]	2007-2017			
Brussels-Capital Region	3.7	[1.2; 6.3]	2004-2017	4.2	[1.3; 7.1]	2004-2017
Walloon Region	2.8	[1.1; 4.5]	2004-2017	3.3	[2.2; 4.4]	2004-2017
Mortality						
Belgium	-0.1	[-0.8; 0.5]	2004-2016	1.2	[0.4; 2.0]	2004-2016
Flemish Region	-0.4	[-1.2; 0.4]	2004-2016	1.5	[0.6; 2.4]	2004-2016
Brussels-Capital Region	0.6	[-1.0; 2.3]	2004-2016	-0.1	[-2.1; 2.0]	2004-2016
Walloon Region	0.1	[-0.7; 0.9]	2004-2016	1.1	[-0.6; 2.7]	2004-2016
Incidence by stage						
Stage I	6.0	[3.6; 8.5]	2004-2017	9.1	[6.7; 11.7]	2004-2017
	13.0	[7.9; 18.5]	2004-2011	13.8	[8.6; 19.3]	2004-2011
	-1.6	[-6.9; 4.0]	2011-2017	4.0	[-1.7; 9.9]	2011-2017
Stage II	2.7	[0.7; 4.7]	2004-2017	4.3	[1.9; 6.7]	2004-2017
	6.7	[3.6; 9.8]	2004-2013	9.8	[2.7; 17.4]	2004-2009
	-5.8	[-12.4; 1.2]	2013-2017	0.9	[-3.0; 5.0]	2009-2017
Stage III	4.2	[1.2; 7.3]	2004-2017	2.5	[-0.7; 5.8]	2004-2017
Stage IV	4.7	[3.6; 5.8]	2004-2017	5.9	[5.0; 6.9]	2004-2017
Stage unknown	-4.8	[-6.0; -3.6]	2004-2017	-3.1	[-4.5; -1.7]	2004-2017
	-2.5	[-4.6; -0.4]	2004-2012			
	-8.4	[-11.6; -5.0]	2012-2017			
Incidence by histology						
Neuroendocrine tumours	7.5	[4.8; 10.3]	2004-2017	7.9	[5.8; 10.0]	2004-2017
	13.4	[6.6; 20.5]	2004-2010			
	2.8	[-2.4; 8.2]	2010-2017			
Exocrine carcinomas and unspecified invasive tumours	2.2	[1.5; 2.9]	2004-2017	3.1	[2.5; 3.8]	2004-2017
				4.1	[2.8; 5.5]	2004-2011
				1.9	[0.4; 3.5]	2011-2017

Source: Belgian Cancer Registry

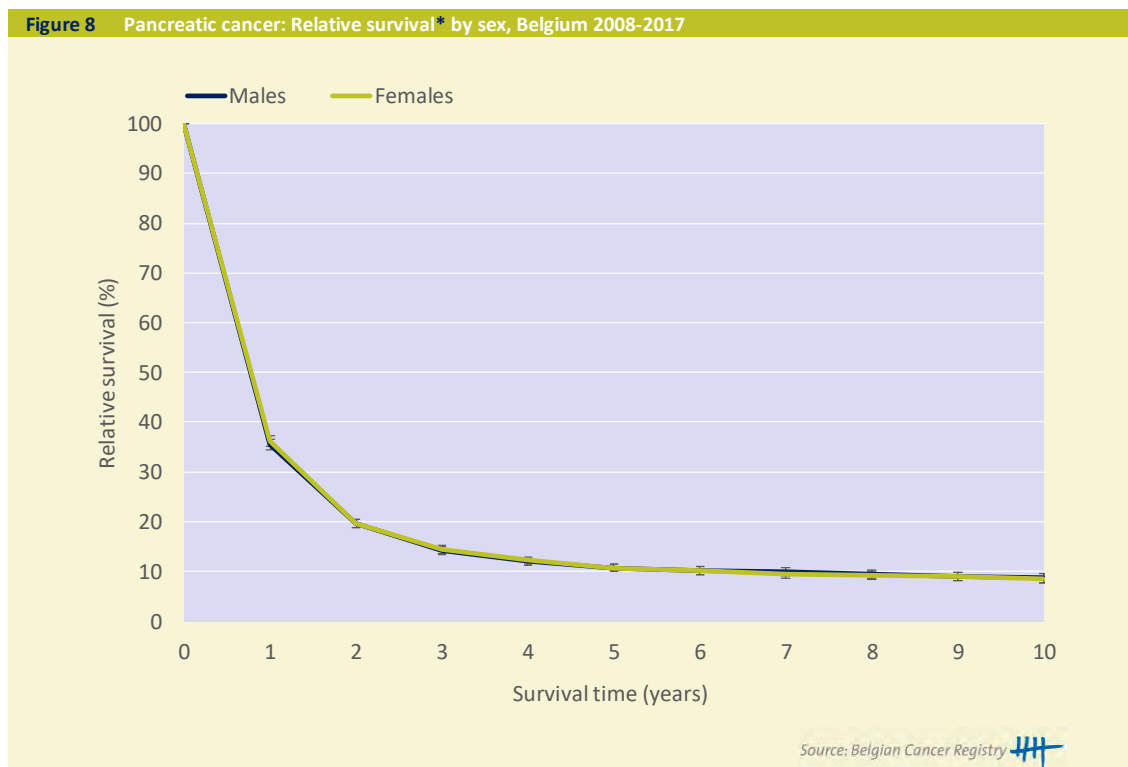
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.3.7.3 Survival

Figure 8 Pancreatic cancer: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.3.7.4 Survival trends

Figure 9 Pancreatic cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.4 RESPIRATORY TRACT

3.4.1 LUNG (ICD-10: C34)

3.4.1.1 Incidence

Table 1 Lung cancer: Overview of incidence, mortality, prevalence and survival by sex and region

Lung cancer	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	5,599	100.6	48.9	2,873	49.9	25.1
Flemish Region	3,257	101.1	44.9	1,558	47.3	22.3
Brussels-Capital Region	377	64.7	46.2	239	39.2	25.4
Walloon Region	1,965	111.4	57.1	1,076	58.2	30.0
Mortality, 2016						
Belgium	4,375	79.0	36.4	1,950	34.0	15.5
Flemish Region	2,599	81.2	33.8	1,047	32.0	13.8
Brussels-Capital Region	286	49.3	32.6	182	29.9	15.6
Walloon Region	1,490	84.8	42.1	721	39.1	18.6
Prevalence (5 years), 2013-2017						
Belgium	9,172	163.8	80.1	5,674	98.2	49.7
Flemish Region	5,361	165.4	74.2	3,089	93.3	44.7
Brussels-Capital Region	614	104.7	75.3	462	75.5	47.6
Walloon Region	3,197	180.6	92.3	2,123	114.5	59.2
5-year Relative survival, 2013-2017	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	27,994	18.3	[17.7;18.9]	13,286	27.1	[26.1;28.0]
Flemish Region	16,541	18.2	[17.5;19.0]	7,207	27.0	[25.8;28.4]
Brussels-Capital Region	1,893	18.9	[16.6;21.3]	1,130	25.7	[22.4;29.1]
Walloon Region	9,560	18.2	[17.2;19.2]	4,949	27.4	[25.8;29.0]
10-year Relative survival, 2008-2017	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	55,671	11.1	[10.7;11.6]	23,975	18.0	[17.1;18.8]
Flemish Region	33,001	11.3	[10.7;11.9]	12,912	18.1	[17.0;19.3]
Brussels-Capital Region	3,816	9.8	[8.1;11.7]	2,128	17.0	[14.3;19.9]
Walloon Region	18,855	11.1	[10.3;11.9]	8,936	18.0	[16.6;19.4]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry 

Figure 1 Lung cancer: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017

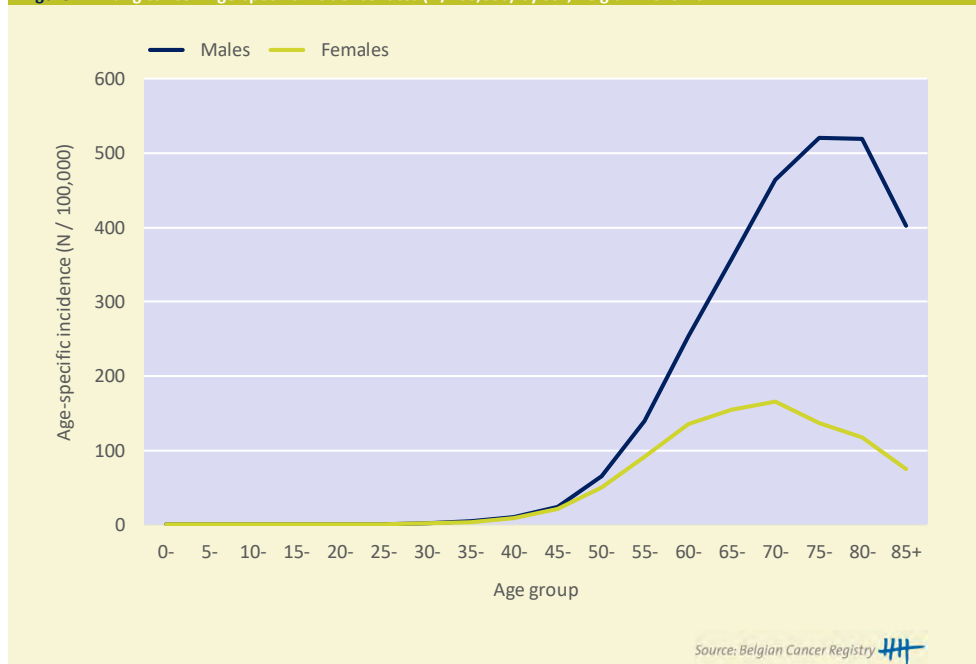
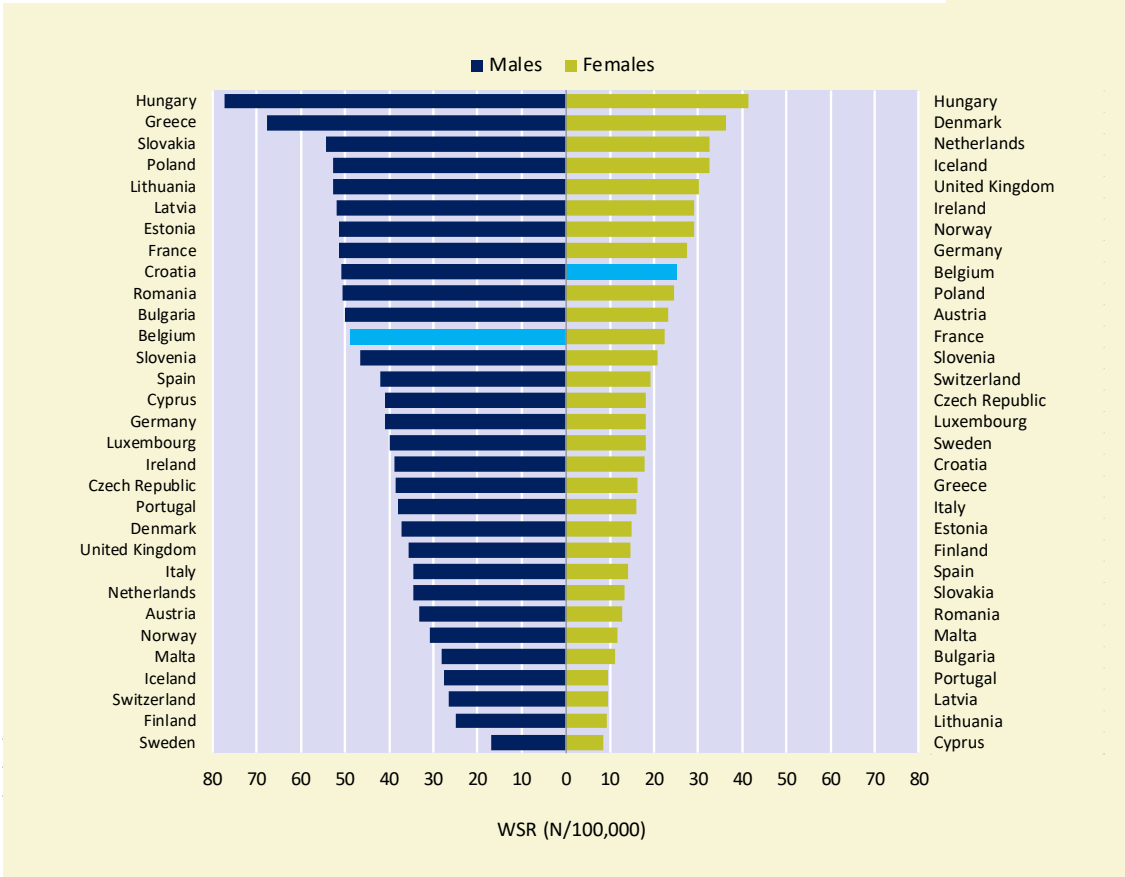


Figure 2 Lung cancer: Comparison of age-standardised incidence rates (WSR)
 (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Lung cancer: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

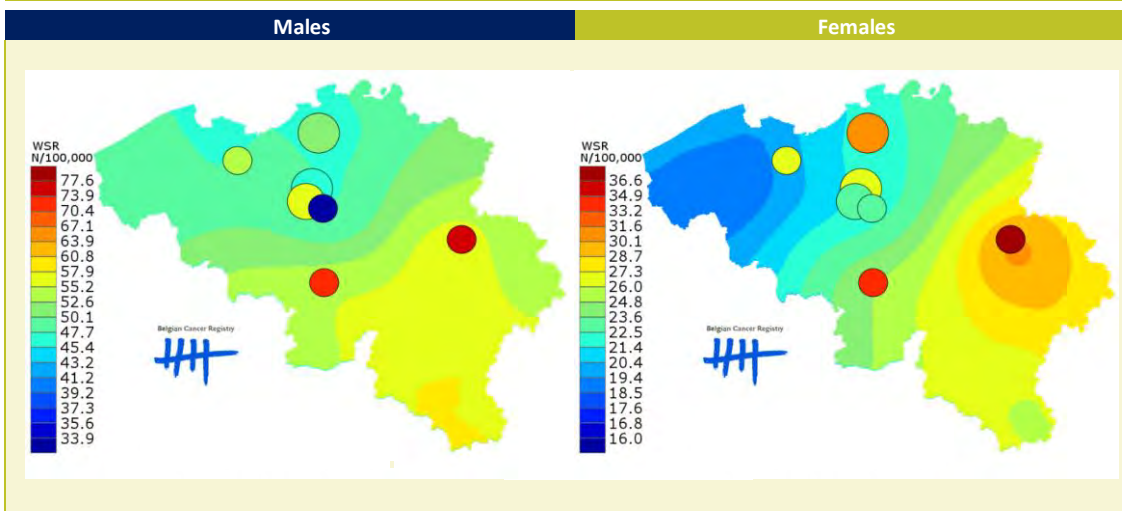
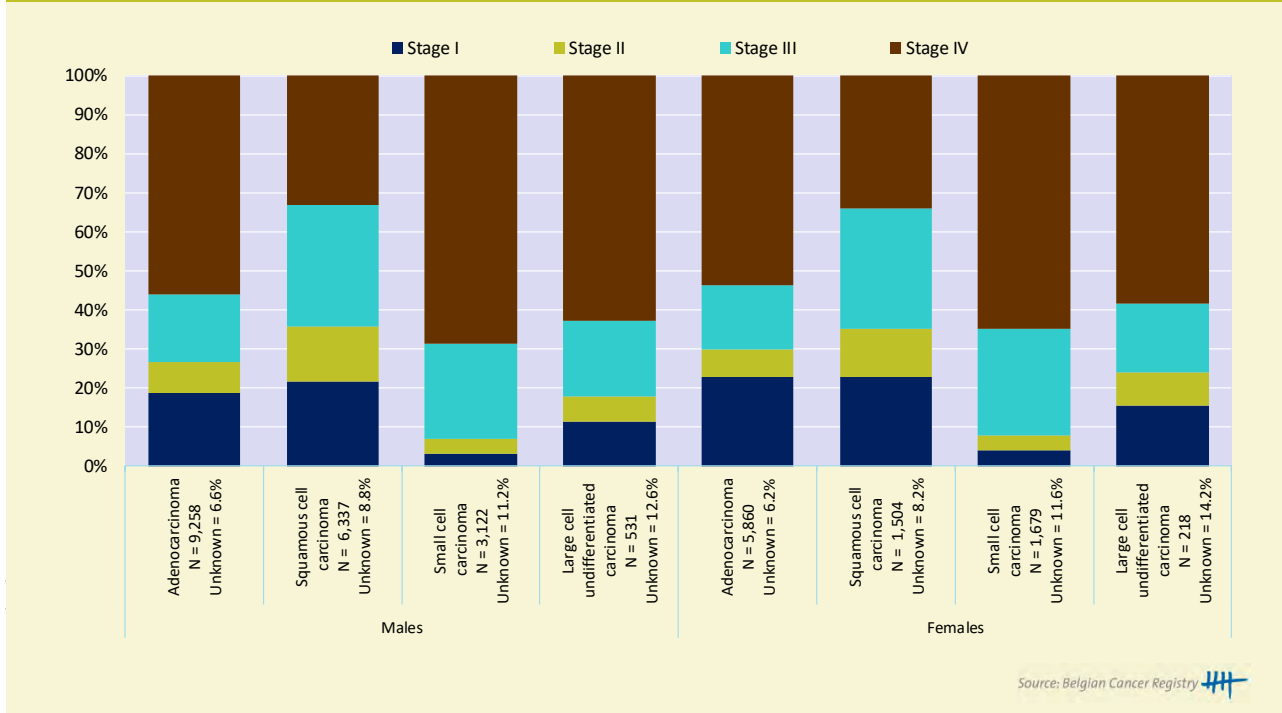


Figure 4 Lung cancer: Stage distribution^{a,b} by sex and histology, Belgium 2014-2017

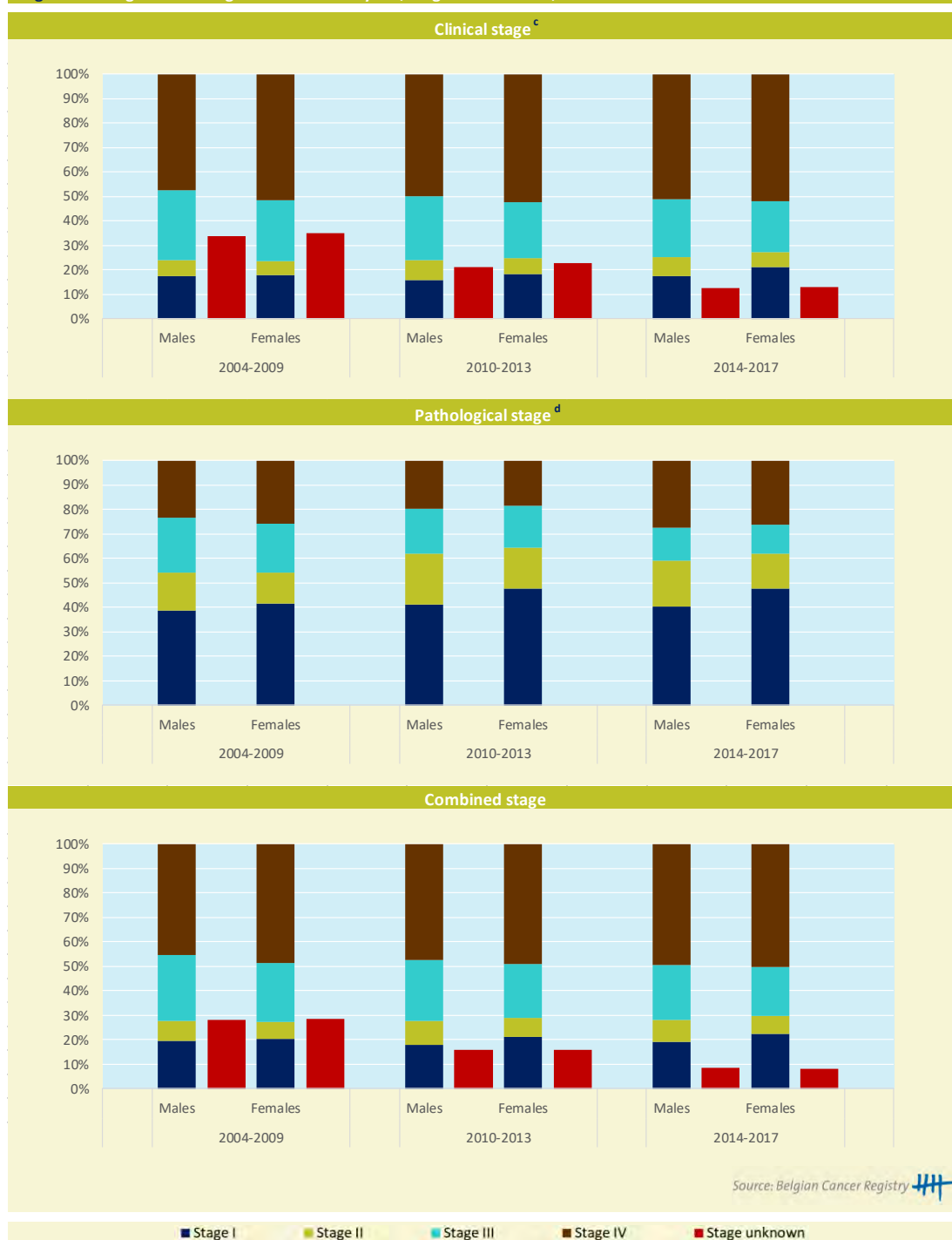


^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Source: Belgian Cancer Registry

Figure 5 Lung cancer: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.4.1.2 Incidence trends

Figure 6 Lung cancer: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

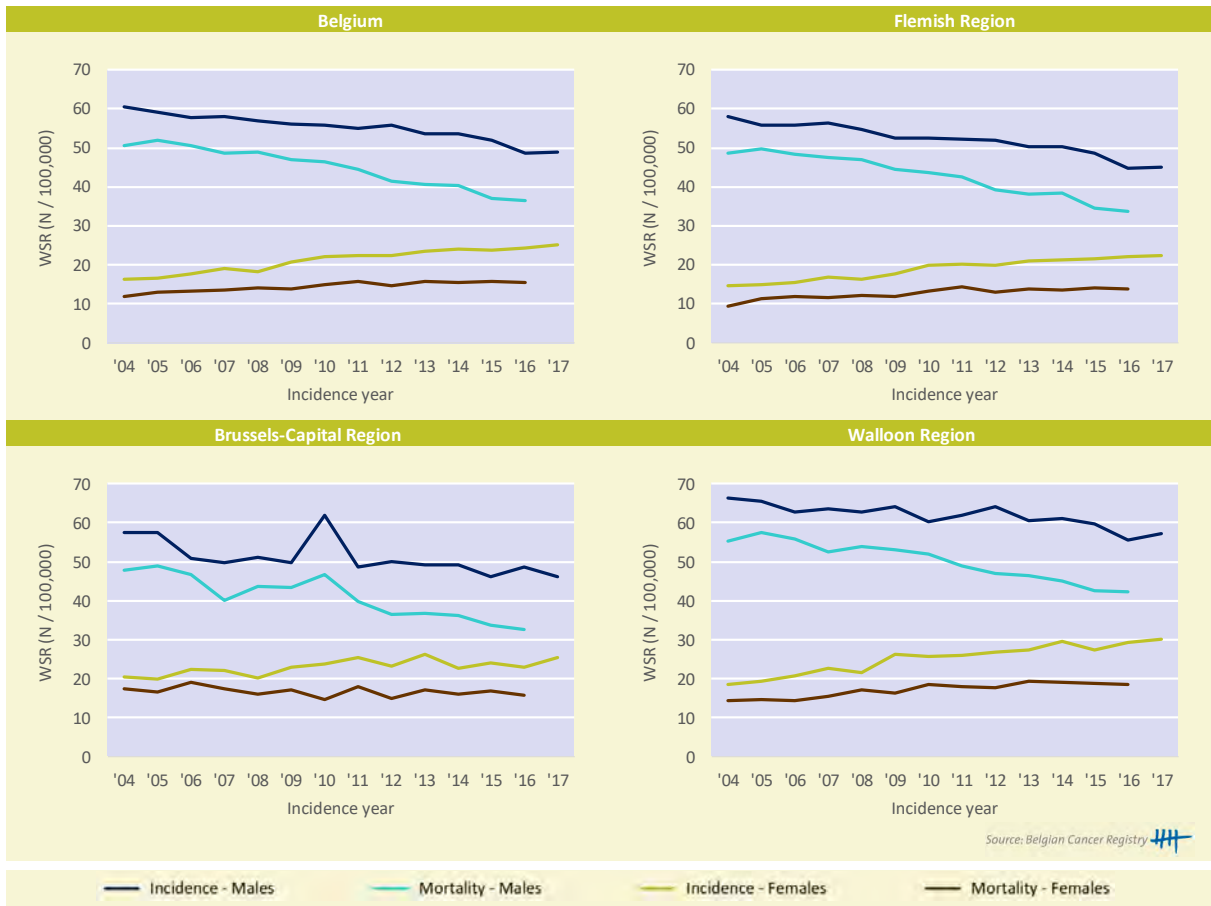


Figure 7 Lung cancer: Trends in age-standardised incidence (WSR) by histology and sex, Belgium 2004-2017

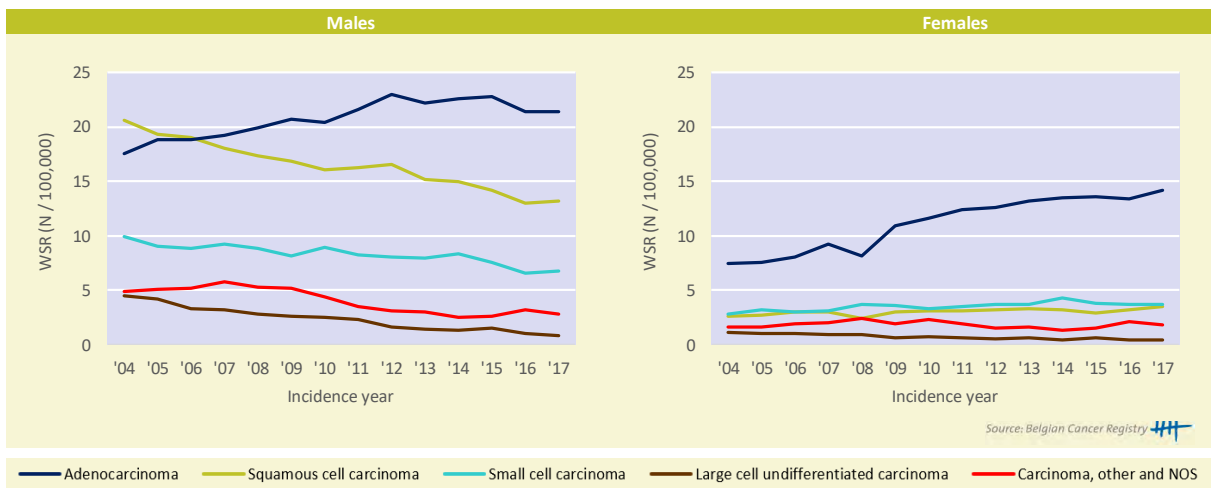


Table 2 Lung cancer: AAPC(%) by sex, region and histology in Belgium							
Lung cancer	Males			Females			
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period	
Incidence							
Belgium	-1.6	[-1.9, -1.4]	2004-2017	3.4	[3.0, 3.8]	2004-2017	
	-1.1	[-1.4, -0.9]	2004-2014	4.9	[4.1, 5.7]	2004-2011	
	-3.3	[-4.3, -2.3]	2014-2017	1.7	[0.8, 2.7]	2011-2017	
Flemish Region	-2.0	[-2.2, -1.7]	2004-2017	3.6	[3.2, 4.0]	2004-2017	
	-1.4	[-1.7, -1.1]	2004-2014	4.9	[4.1, 5.7]	2004-2011	
	-3.9	[-5.1, -2.8]	2014-2017	2.0	[1.0, 3.0]	2011-2017	
Brussels-Capital Region	-1.3	[-2.3, -0.4]	2004-2017	1.5	[0.6, 2.4]	2004-2017	
Walloon Region	-1.0	[-1.4, -0.6]	2004-2017	3.9	[3.3, 4.5]	2004-2017	
				6.5	[4.8, 8.3]	2004-2009	
				2.3	[1.3, 3.3]	2009-2017	
Mortality							
Belgium	-2.9	[-3.2, -2.6]	2004-2016	2.1	[1.7, 2.6]	2004-2016	
	-1.5	[-2.4, -0.7]	2004-2009	3.5	[2.6, 4.4]	2004-2011	
	-3.9	[-4.4, -3.3]	2009-2016	0.3	[-0.9, 1.6]	2011-2016	
Flemish Region	-3.2	[-3.5, -2.8]	2004-2016	2.5	[1.7, 3.3]	2004-2016	
	-1.7	[-2.7, -0.7]	2004-2009	4.2	[2.7, 5.7]	2004-2011	
	-4.2	[-4.8, -3.5]	2009-2016	0.1	[-1.9, 2.2]	2011-2016	
Brussels-Capital Region	-3.2	[-4.1, -2.3]	2004-2016	-0.7	[-1.9, 0.4]	2004-2016	
Walloon Region	-2.5	[-2.8, -2.2]	2004-2016	2.6	[2.0, 3.2]	2004-2016	
	-1.2	[-2.1, -0.4]	2004-2009	4.2	[2.9, 5.6]	2004-2010	
	-3.3	[-3.9, -2.8]	2009-2016	1.0	[-0.3, 2.3]	2010-2017	
Incidence by histology							
Adenocarcinoma	1.4	[1.1, 1.8]	2004-2017	5.4	[4.5, 6.3]	2004-2017	
	2.8	[2.3, 3.3]	2004-2013	7.8	[6.2, 9.5]	2004-2012	
	-1.6	[-2.8, -0.4]	2013-2017	1.6	[-0.9, 4.2]	2012-2017	
Small cell carcinoma	-2.4	[-3.2, -1.7]	2004-2017	2.1	[1.1, 3.1]	2004-2017	
				3.4	[1.3, 5.4]	2004-2011	
				0.7	[-1.7, 3.1]	2011-2017	
Large cell undifferentiated carcinoma	-11.7	[-13.0, -10.3]	2004-2017	-7.7	[-9.6, -5.8]	2004-2017	
Squamous cell carcinoma	-3.3	[-3.7, -2.9]	2004-2017	1.6	[0.6, 2.6]	2004-2017	
	-2.9	[-3.5, -2.4]	2004-2014				
	-4.5	[-6.4, -2.5]	2014-2017				
Carcinoma, other and NOS	-4.1	[-5.5, -2.7]	2004-2017	1.3	[-0.7, 3.3]	2004-2017	
	1.0	[-2.8, 5.0]	2004-2009	5.2	[1.0, 9.6]	2004-2010	
	-15.8	[-19.5, -11.9]	2009-2013	-12.0	[-17.2, -6.6]	2010-2014	
	2.2	[-2.8, 7.6]	2013-2017	13.3	[3.1, 24.6]	2014-2017	

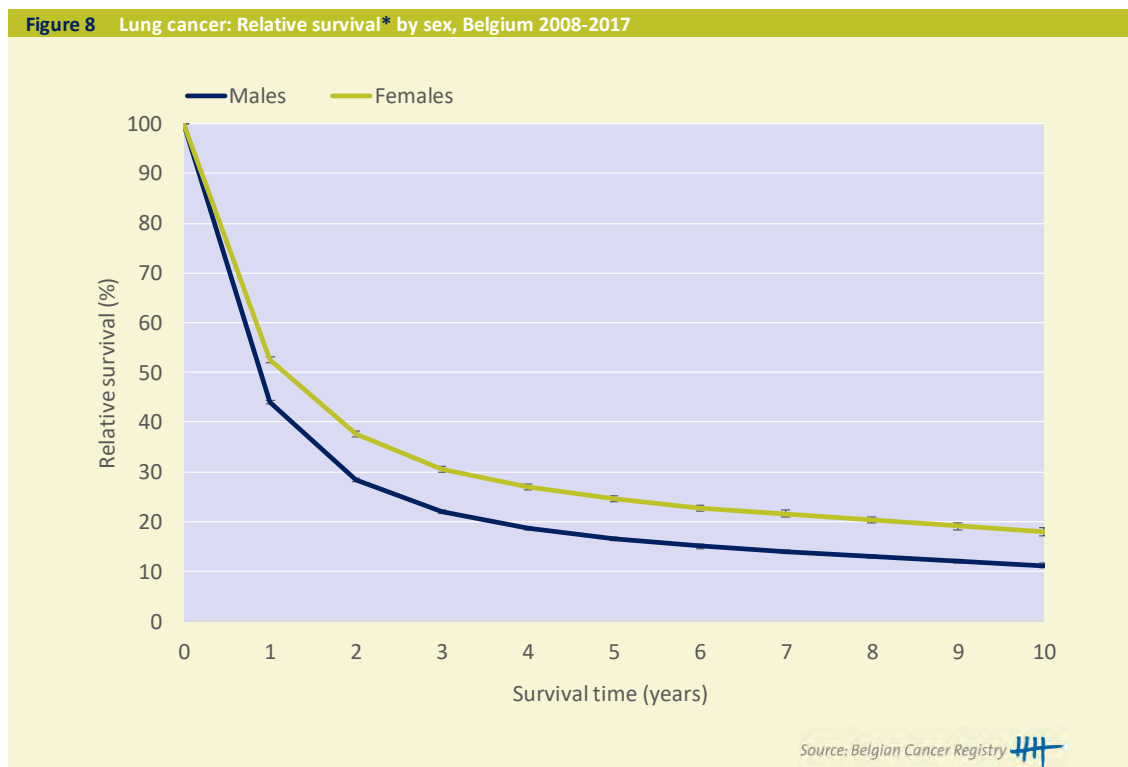
Source: Belgian Cancer Registry 

AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval. AAPC's are always calculated over the entire study-period.

3.4.1.3 Survival

Figure 8 Lung cancer: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.4.1.4 Survival trends

Figure 9 Lung cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.4.2 MESOTHELIOMA (ICD-10: C45)

3.4.2.1 Incidence

Table 1 Mesothelioma: Overview of incidence, mortality, prevalence and survival by sex and region

Mesothelioma	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	238	4.3	1.8	61	1.1	0.4
Flemish Region	157	4.9	1.9	37	1.1	0.4
Brussels-Capital Region	6	1.0	0.8	2	0.3	0.2
Walloon Region	75	4.3	1.9	22	1.2	0.4
Mortality, 2016						
Belgium	207	3.7	1.6	46	0.8	0.3
Flemish Region	131	4.1	1.6	34	1.0	0.4
Brussels-Capital Region	10	1.7	0.9	1	0.2	0.1
Walloon Region	66	3.8	1.7	11	0.6	0.2
Prevalence (5 years), 2013-2017						
Belgium	321	5.7	2.6	93	1.6	0.7
Flemish Region	219	6.8	2.9	57	1.7	0.8
Brussels-Capital Region	8	1.4	0.9	8	1.3	0.7
Walloon Region	94	5.3	2.4	28	1.5	0.6
5-year Relative survival, 2013-2017						
Belgium	N at risk 1,162	% 8.6	95%CI [6.5;11.0]	N at risk 271	% 14.1	95%CI [9.3;20.1]
Flemish Region	794	9.2	[6.8;12.0]	176	13.1	[7.6;20.2]
Brussels-Capital Region	43	-	-	18	-	-
Walloon Region	325	7.6	[3.4;14.2]	77	15.6	[6.6;28.6]
10-year Relative survival, 2008-2017						
Belgium	N at risk 2,217	% 2.6	95%CI [1.5;4.1]	N at risk 508	% 4.0	95%CI [1.3;9.2]
Flemish Region	1,547	2.8	[1.6;4.6]	343	-	-
Brussels-Capital Region	74	-	-	33	-	-
Walloon Region	596	-	-	132	9.0	[3.4;18.5]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry 

Figure 1 Mesothelioma: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017

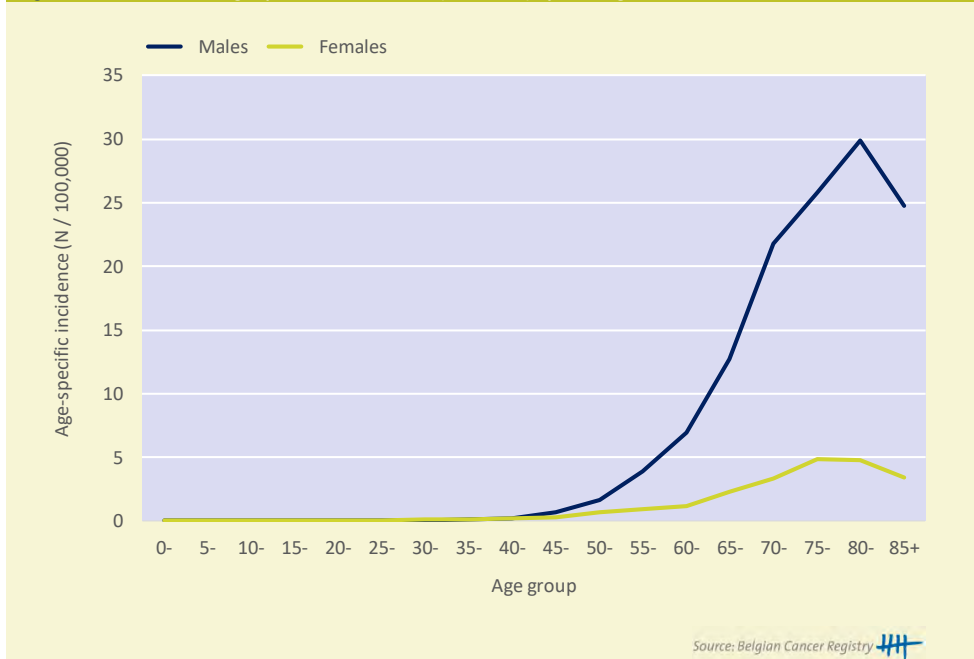


Figure 2 Mesothelioma: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

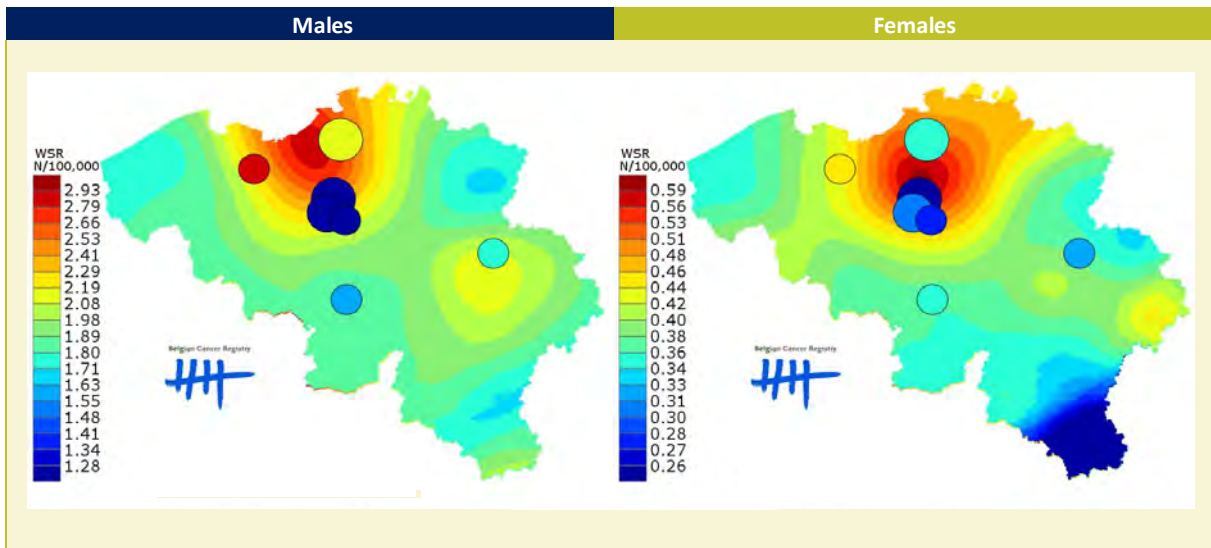
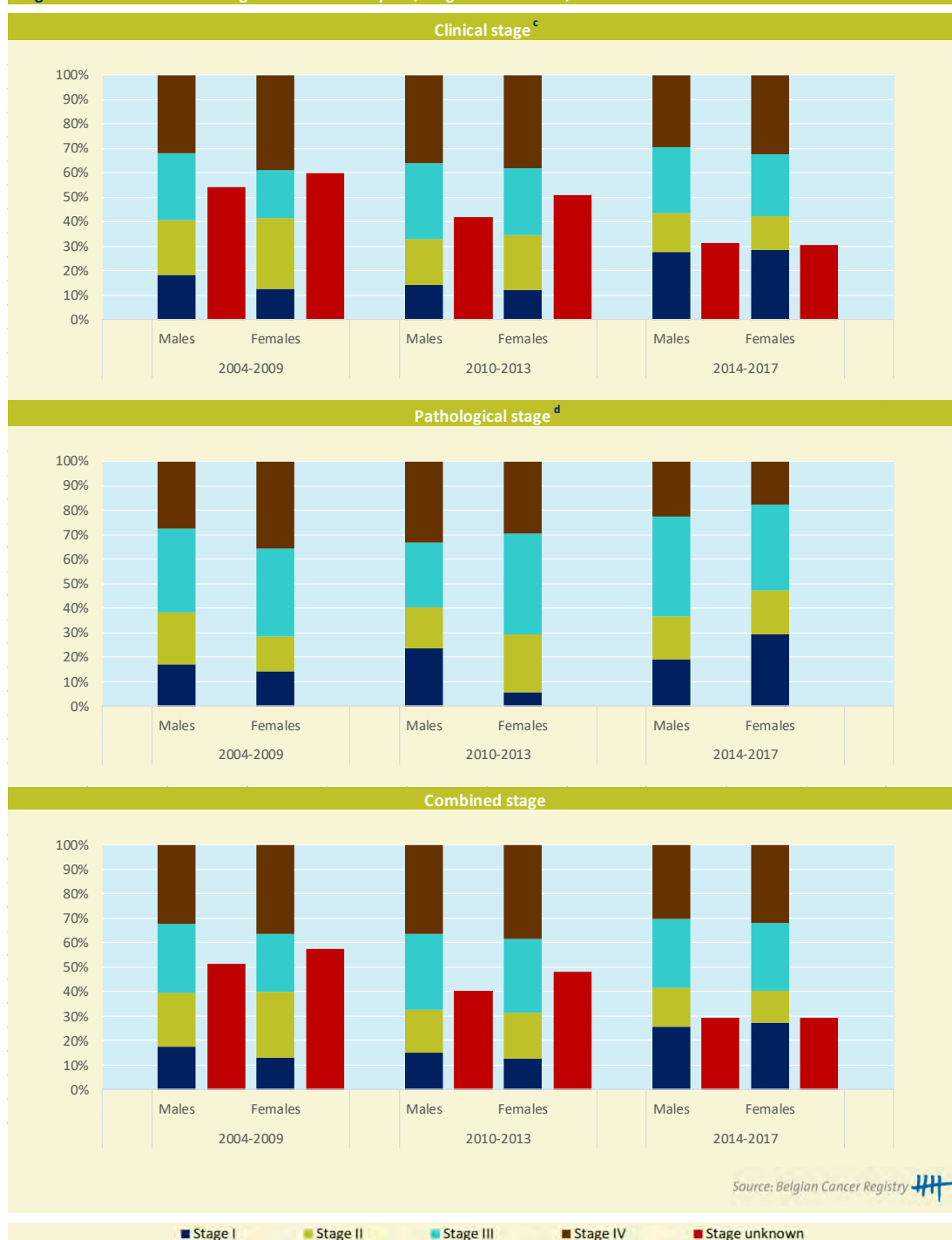


Figure 3 Mesothelioma: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.4.2.2 Incidence trends

Figure 4 Mesothelioma: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

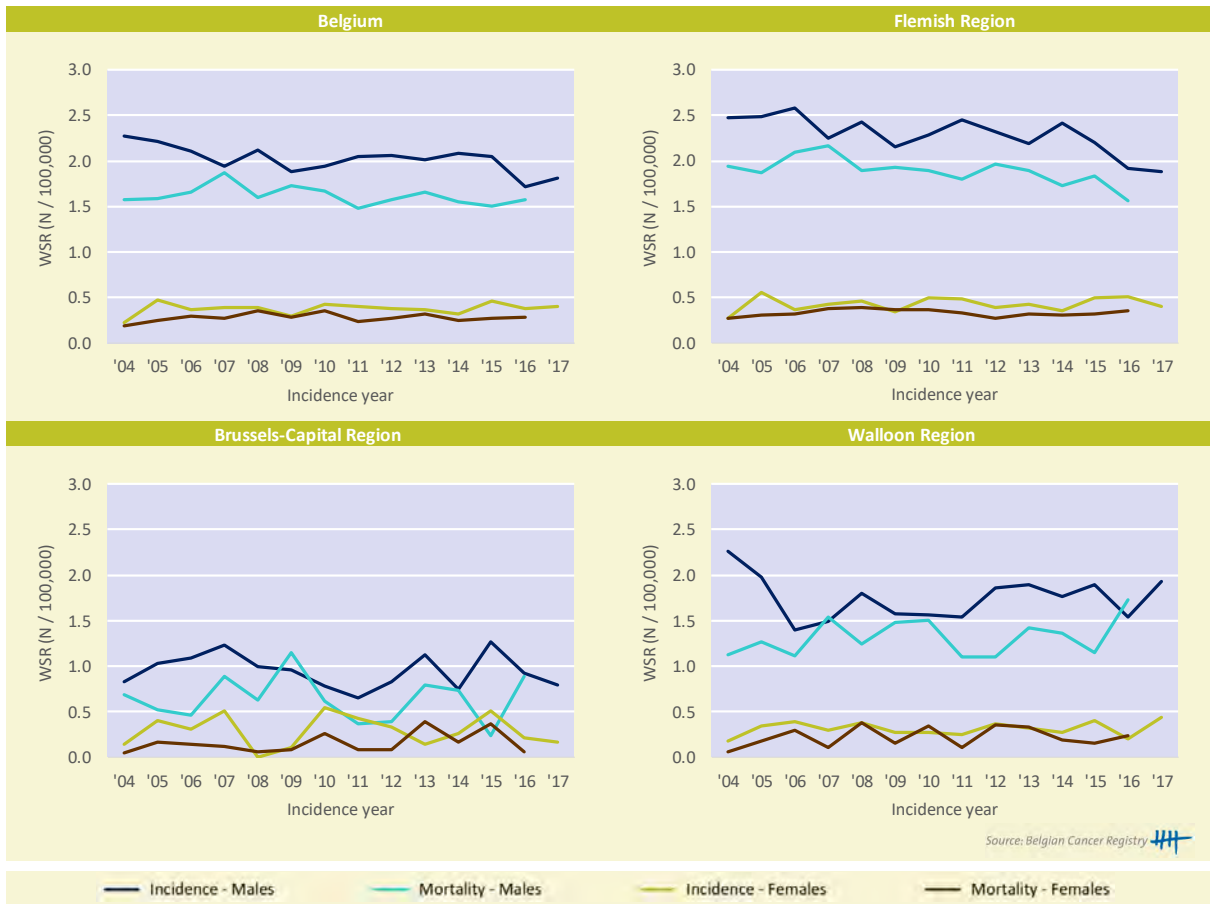


Table 2 Mesothelioma: AAPC(%) by sex and region in Belgium

Mesothelioma	Males			Females		
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Belgium	-1.4	[-2.3, -0.5]	2004-2017	1.3	[-1.4, 4.1]	2004-2017
	-3.7	[-7.8, 0.6]	2004-2007			
	-0.7	[-1.8, 0.4]	2007-2017			
Flemish Region	-2.1	[-2.9, -1.3]	2004-2017	1.1	[-1.7, 4.0]	2004-2017
	-0.7	[-1.7, 0.3]	2004-2014			
	-6.6	[-10.3, -2.8]	2014-2017			
Brussels-Capital Region	-0.9	[-3.7, 2.0]	2004-2017	-	-	-
Walloon Region	-1.1	[-2.8, 0.6]	2004-2017	1.4	[-2.5, 5.5]	2004-2017
	-11.0	[-18.0, -3.4]	2004-2007			
	2.1	[-0.1, 4.3]	2007-2017			
Mortality	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Belgium	-0.6	[-1.6, 0.3]	2004-2016	2.0	[-0.3, 4.4]	2004-2016
				11.5	[3.2, 20.5]	2004-2008
				-2.4	[-5.8, 1.1]	2008-2016
Flemish Region	-1.4	[-2.4, -0.4]	2004-2016	0.5	[-1.1, 2.2]	2004-2016
				6.8	[1.0, 13.0]	2004-2008
				-2.4	[-4.9, 0.1]	2008-2016
Brussels-Capital Region	-1.5	[-8.4, 5.8]	2004-2016	6.0	[-5.1, 18.4]	2004-2016
Walloon Region	1.2	[-1.2, 3.7]	2004-2016	4.7	[-4.5, 14.7]	2004-2016

AAPC: average annual percentage change

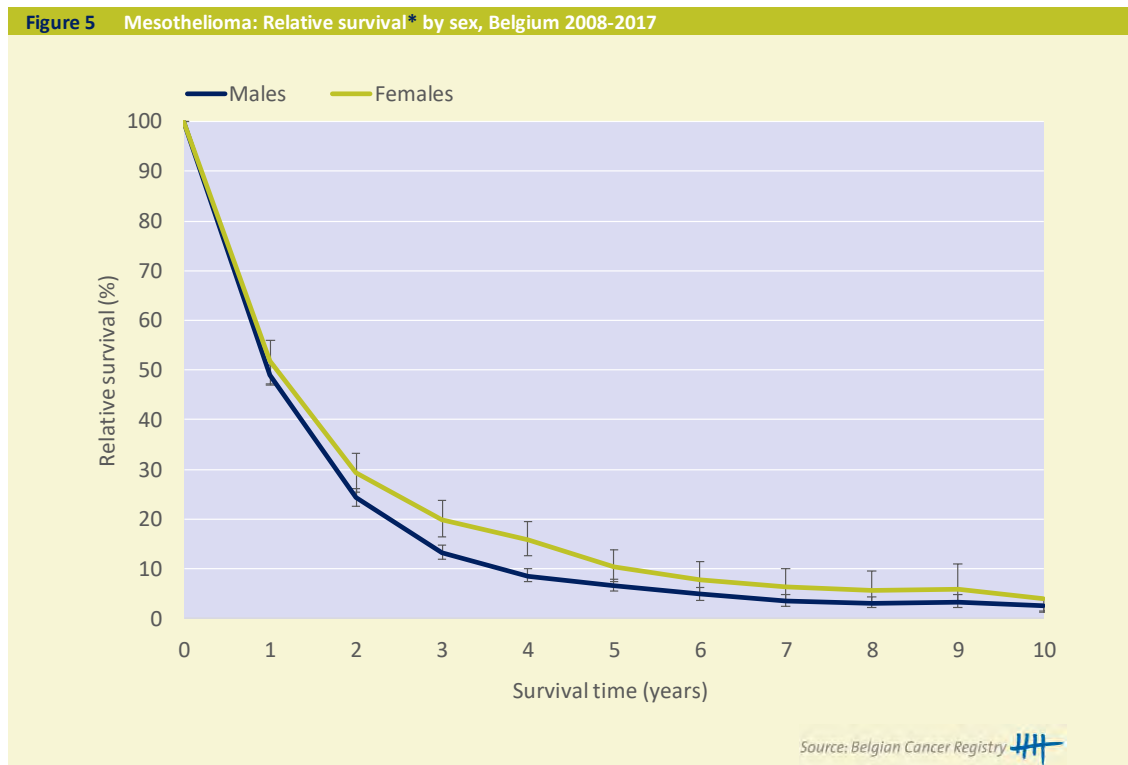
Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

Source: Belgian Cancer Registry

3.4.2.3 Survival

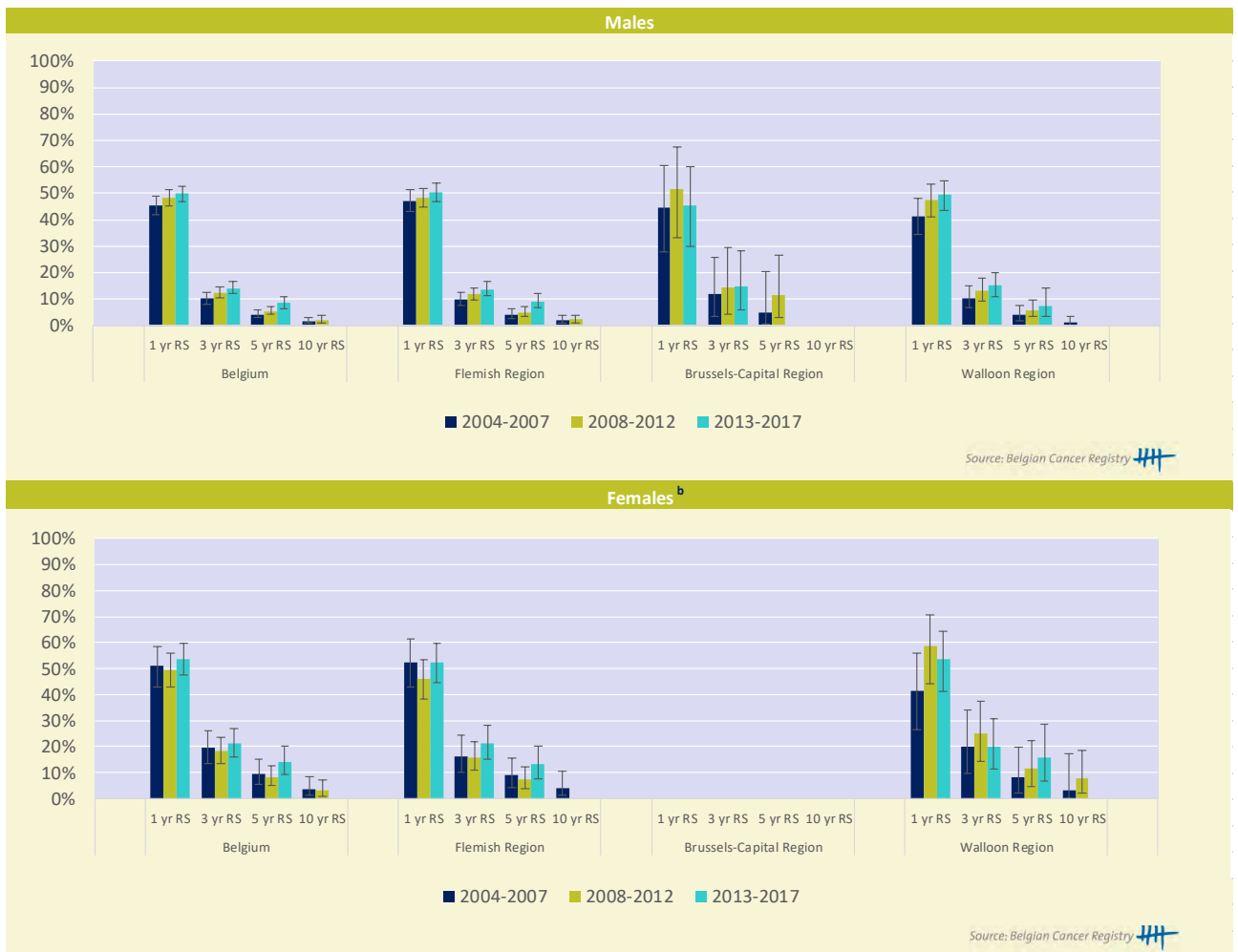
Figure 5 Mesothelioma: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.4.2.4 Survival trends

Figure 6 Mesothelioma: 1-, 3-, 5- and 10-year relative survival (RS)^a by sex and region



^a The relative survival values are represented with 95% Confidence Intervals

^b The survival results are not shown for the Brussels-Capital Region, since the numbers of patients at risk (N at risk) dropped to less than 30 cases.

3.5 MALIGNANT MELANOMA (ICD-10: C43)

3.5.1 Incidence

Table 1 Malignant melanoma: Overview of incidence, mortality, prevalence and survival by sex and region

Malignant melanoma	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	1,445	26.0	15.6	1,916	33.3	21.8
Flemish Region	873	27.1	15.5	1,216	36.9	23.7
Brussels-Capital Region	93	16.0	11.1	113	18.5	11.5
Walloon Region	479	27.1	17.3	587	31.7	22.0
Mortality, 2016						
Belgium	184	3.3	1.6	154	2.7	1.2
Flemish Region	117	3.7	1.7	101	3.1	1.3
Brussels-Capital Region	11	1.9	1.1	10	1.6	1.0
Walloon Region	56	3.2	1.6	43	2.3	1.0
Prevalence (5 years), 2013-2017						
Belgium	5,331	95.2	55.7	7,873	136.3	87.1
Flemish Region	3,258	100.5	55.9	4,937	149.1	92.5
Brussels-Capital Region	391	66.7	46.9	500	81.7	53.2
Walloon Region	1,683	95.1	59.0	2,436	131.4	88.9
5-year Relative survival, 2013-2017	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	6,057	91.9	[90.5;93.3]	8,460	95.4	[94.5;96.4]
Flemish Region	3,691	90.6	[88.8;92.4]	5,297	95.1	[93.9;96.3]
Brussels-Capital Region	453	92.5	[86.3;97.6]	553	94.8	[90.0;98.8]
Walloon Region	1,914	94.5	[91.9;96.9]	2,610	96.2	[94.4;97.8]
10-year Relative survival, 2008-2017	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	10,278	89.0	[87.0;91.0]	14,554	93.2	[91.9;94.4]
Flemish Region	6,074	86.3	[83.7;88.8]	8,849	91.9	[90.3;93.4]
Brussels-Capital Region	848	92.3	[84.8;99.2]	1,069	93.9	[88.1;99.2]
Walloon Region	3,360	92.9	[89.2;96.3]	4,638	95.4	[93.3;97.4]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry

Figure 1 Malignant melanoma: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017

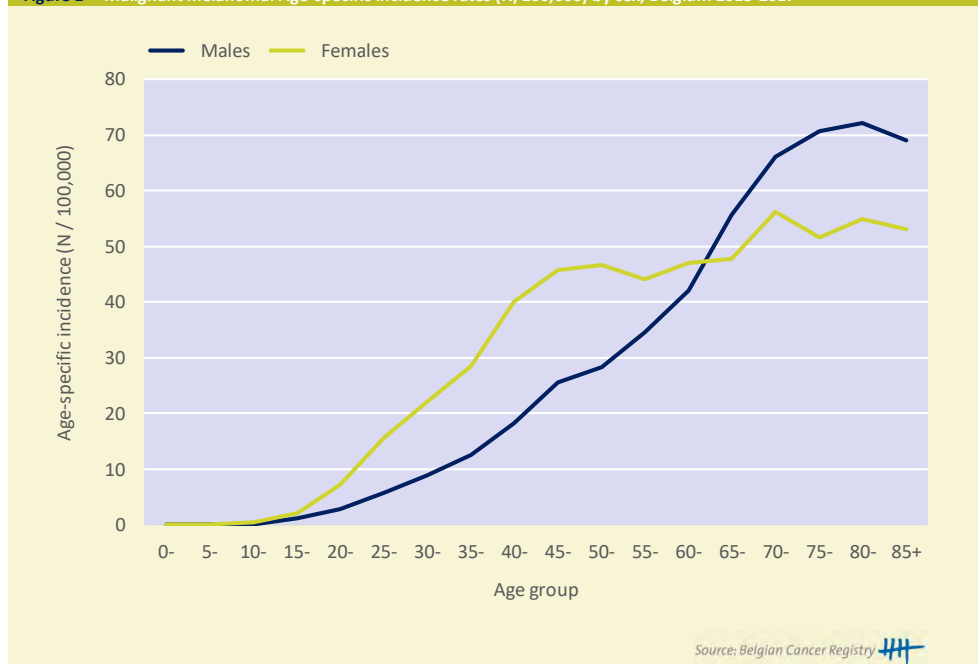
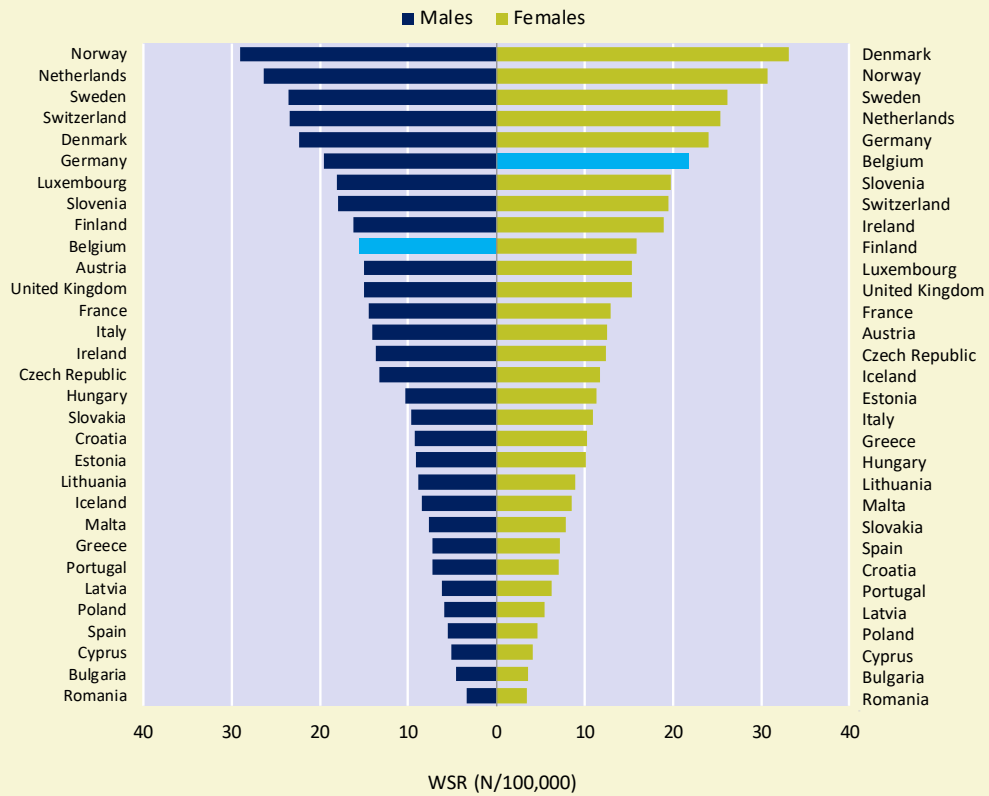


Figure 2 Malignant melanoma: Comparison of age-standardised incidence rates (WSR)
 (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Malignant melanoma: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

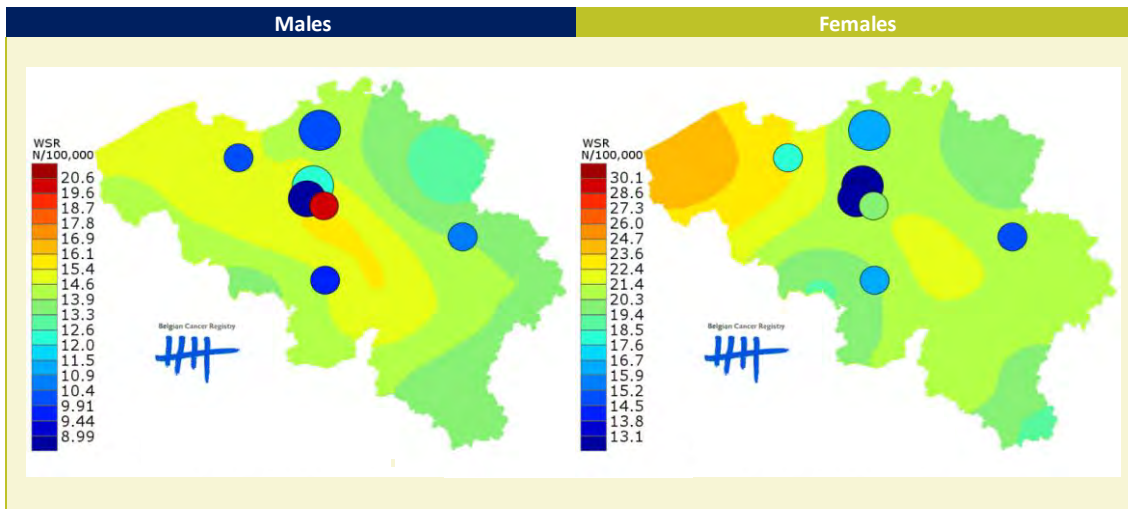
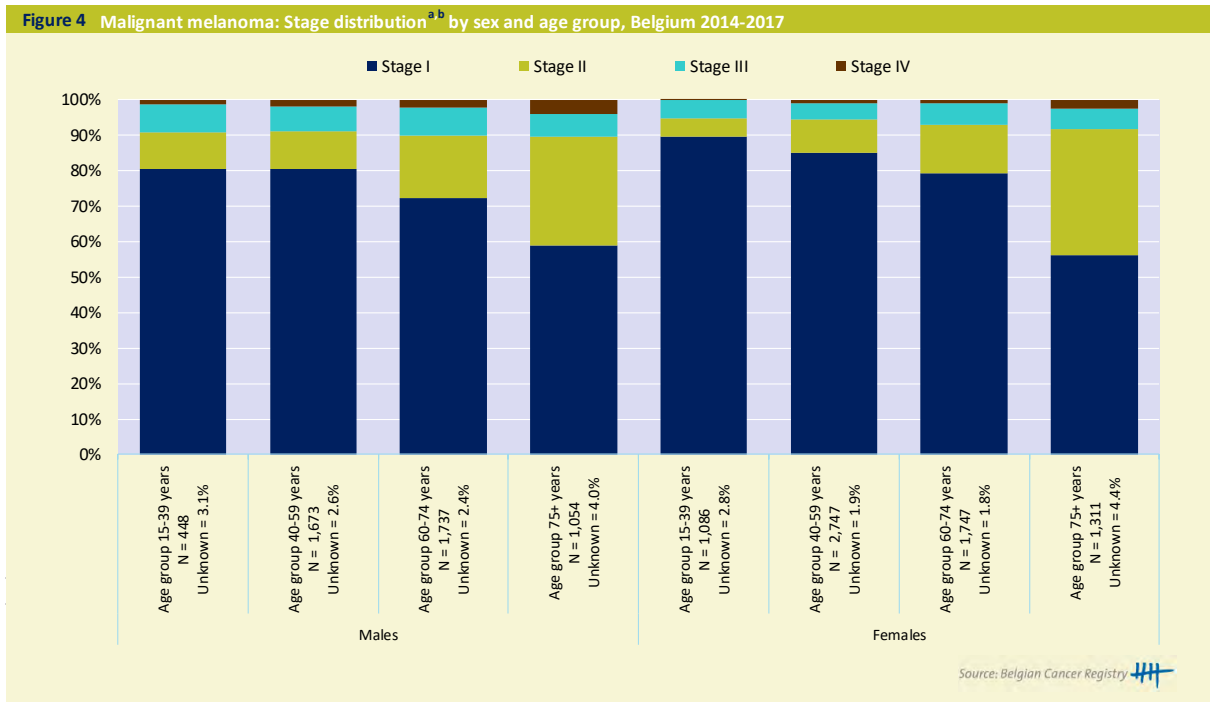


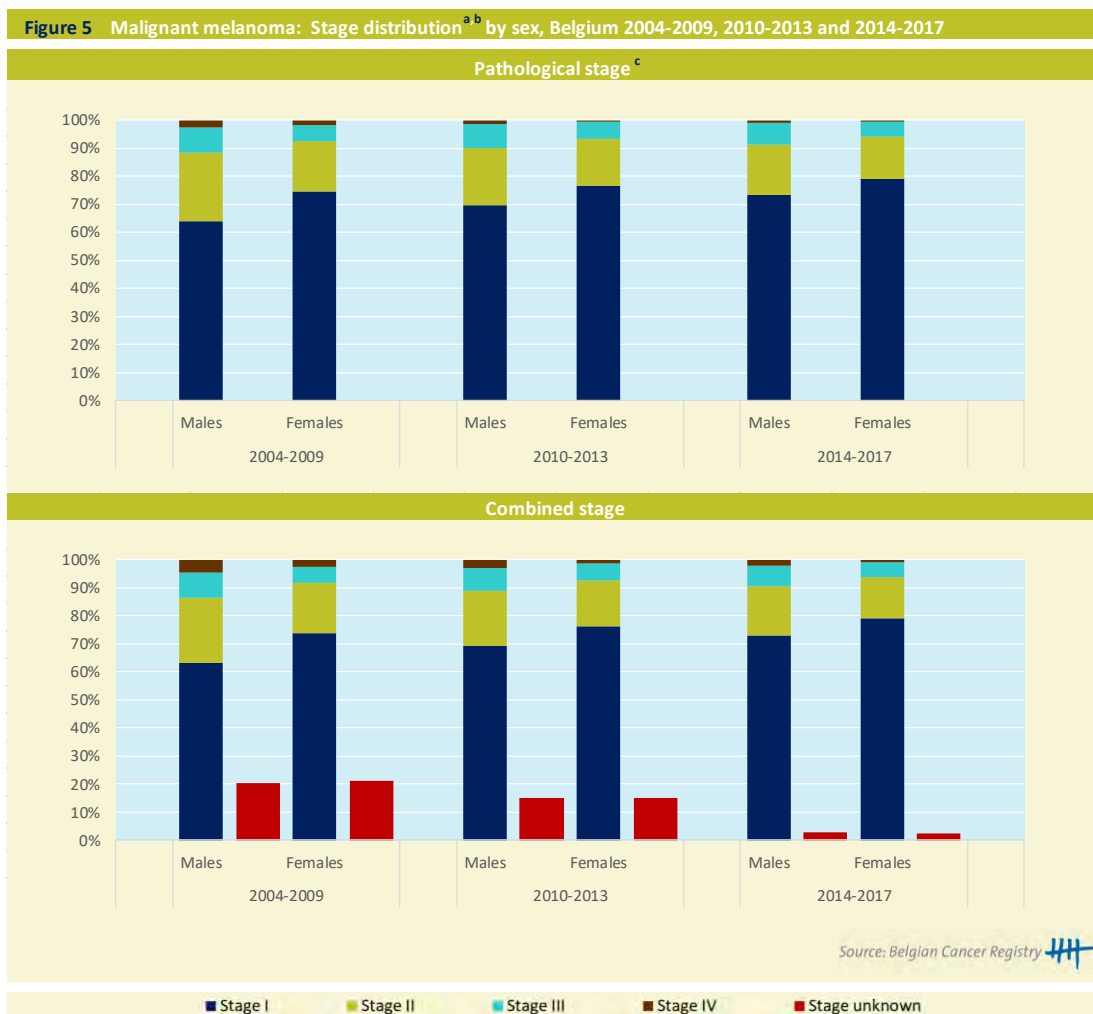
Figure 4 Malignant melanoma: Stage distribution^{a,b} by sex and age group, Belgium 2014-2017



^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Malignant melanoma: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

Table 2 Malignant melanoma: Pathological T-category by sex and age group, Belgium 2014-2017

Males										
Malignant melanoma	All ages		15-39 years		40-59 years		60-74 years		75+ years	
Tumour thickness (pT)	N	WSR	N	WSR	N	WSR	N	WSR	N	WSR
pT1 (0-1mm)	2,852	8.2	300	3.8	1,089	16.9	975	29.1	488	31.1
pT1a*	2,276	6.5	241	3.0	859	13.4	772	23.0	404	25.6
pT1b*	432	1.3	44	0.6	177	2.7	155	4.6	56	3.6
pT1, NOS*	144	0.4	15	0.2	53	0.8	48	1.4	28	1.8
pT2 (>1-2mm)	891	2.5	77	0.9	316	4.9	342	10.2	155	10.1
pT2a (no ulceration)	695	2.0	62	0.8	255	3.9	264	7.9	114	7.4
pT2b (with ulceration)	145	0.4	8	0.1	48	0.7	56	1.7	32	2.0
pT2, NOS (no info on ulceration)	51	0.1	7	0.1	13	0.2	22	0.6	9	0.6
pT3 (>2-4mm)	532	1.3	38	0.5	129	2.0	198	5.9	167	10.5
pT3a (no ulceration)	277	0.7	22	0.3	74	1.1	105	3.1	76	4.8
pT3b (with ulceration)	222	0.5	12	0.1	47	0.7	85	2.5	78	4.9
pT3, NOS (no info on ulceration)	33	0.1	4	0.0	8	0.1	8	0.2	13	0.8
pT4 (>4mm)	455	1.0	15	0.2	77	1.1	163	4.8	200	12.8
pT4a (no ulceration)	135	0.3	7	0.1	25	0.4	42	1.2	61	3.9
pT4b (with ulceration)	294	0.6	8	0.1	46	0.7	109	3.3	131	8.4
pT4, NOS (no info on ulceration)	26	0.1	-	-	6	0.1	12	0.3	8	0.5

Females										
Malignant melanoma	All ages		15-39 years		40-59 years		60-74 years		75+ years	
Tumour thickness (pT)	N	WSR	N	WSR	N	WSR	N	WSR	N	WSR
pT1 (0-1mm)	4,548	14.1	844	10.6	1,993	32.1	1,154	32.7	555	23.8
pT1a*	3,600	11.2	671	8.5	1,577	25.4	921	26.1	429	18.5
pT1b*	724	2.2	125	1.5	325	5.2	181	5.2	93	3.9
pT1, NOS*	224	0.7	48	0.6	91	1.5	52	1.4	33	1.5
pT2 (>1-2mm)	1,074	3.0	139	1.8	433	6.9	293	8.2	208	8.6
pT2a (no ulceration)	823	2.4	120	1.5	328	5.2	231	6.5	143	6.0
pT2b (with ulceration)	197	0.5	14	0.2	84	1.4	52	1.5	47	1.9
pT2, NOS (no info on ulceration)	54	0.1	5	0.1	21	0.3	10	0.2	18	0.7
pT3 (>2-4mm)	621	1.4	55	0.7	166	2.6	153	4.2	246	9.3
pT3a (no ulceration)	338	0.8	29	0.4	95	1.5	85	2.3	128	5.0
pT3b (with ulceration)	247	0.5	22	0.3	60	0.9	61	1.7	104	3.8
pT3, NOS (no info on ulceration)	36	0.1	4	0.1	11	0.2	7	0.2	14	0.5
pT4 (>4mm)	442	0.8	16	0.2	88	1.4	109	2.9	228	8.4
pT4a (no ulceration)	155	0.3	6	0.1	38	0.6	44	1.2	67	2.5
pT4b (with ulceration)	258	0.4	8	0.1	44	0.7	56	1.5	150	5.4
pT4, NOS (no info on ulceration)	29	0.1	2	0.0	6	0.1	9	0.2	11	0.4

Source: Belgian Cancer Registry * The definitions of pT were subject to important changes between the 7th and 8th edition of TNM UICC ^(6, 24).

3.5.2 Incidence trends

Figure 6 Malignant melanoma: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017



Figure 7 Malignant melanoma: Trends in age-standardised incidence (WSR) by localisation and sex, Belgium 2004-2017

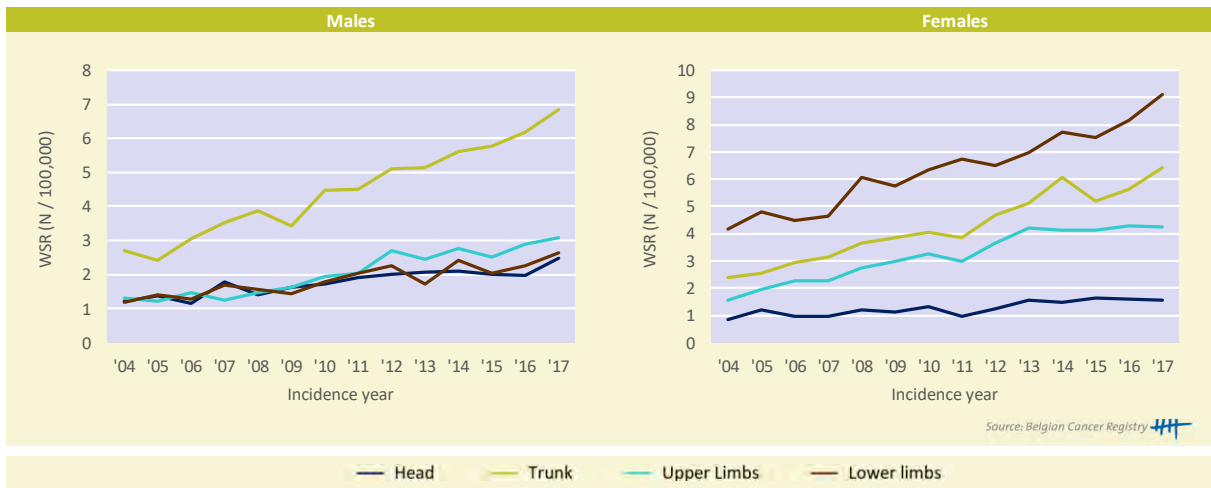


Figure 8 Malignant melanoma: Trends in age-standardised incidence (WSR) by stage and sex, Belgium 2004-2017

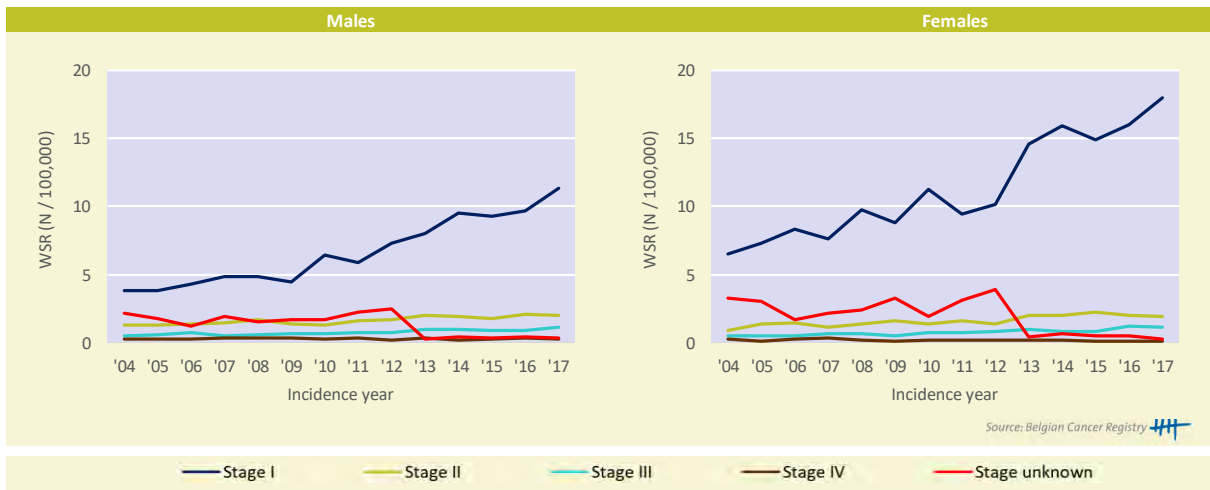


Table 3 Malignant melanoma: AAPC(%) by sex, region, stage and localisation in Belgium

Malignant melanoma	Males			Females		
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Incidence						
Belgium	5.3	[4.4; 6.2]	2004-2017	5.0	[4.4; 5.7]	2004-2017
Flemish Region	5.1	[4.1; 6.1]	2004-2017	5.7	[4.7; 6.8]	2004-2017
Brussels-Capital Region	1.7	[-1.1; 4.6]	2004-2009			
	7.2	[5.5; 9.0]	2009-2017			
	2.8	[1.6; 4.1]	2004-2017	1.5	[0.5; 2.5]	2004-2017
Walloon Region	6.7	[4.1; 9.4]	2004-2011	4.8	[1.7; 7.9]	2004-2009
	-1.5	[-4.4; 1.5]	2011-2017	-0.4	[-2.2; 1.3]	2009-2017
	6.1	[4.6; 7.5]	2004-2017	4.7	[3.4; 6.1]	2004-2017
Mortality						
Belgium	0.0	[-1.2; 1.2]	2004-2016	-0.2	[-2.1; 1.8]	2004-2016
Flemish Region	3.3	[-0.8; 7.4]	2004-2008			
	-1.6	[-3.4; 0.2]	2008-2016			
	0.0	[-1.7; 1.7]	2004-2016	0.1	[-2.2; 2.5]	2004-2016
Brussels-Capital Region	-2.6	[-5.3; 0.3]	2004-2016	-2.1	[-6.1; 2.1]	2004-2016
Walloon Region	-0.1	[-2.9; 2.8]	2004-2016	-0.4	[-3.2; 2.4]	2004-2016
Incidence by localisation						
Head	5.0	[3.5; 6.6]	2004-2017	4.5	[2.8; 6.3]	2004-2017
Trunk	7.8	[6.6; 8.9]	2004-2017	7.6	[6.5; 8.8]	2004-2017
Upper Limbs	6.5	[5.1; 7.9]	2004-2017	8.1	[7.0; 9.2]	2004-2017
	-0.3	[-6.1; 5.8]	2004-2007	13.2	[9.8; 16.6]	2004-2009
	13.8	[10.4; 17.4]	2007-2012	5.1	[3.2; 6.9]	2009-2017
Lower limbs	3.7	[0.4; 7.2]	2012-2017			
	5.5	[3.9; 7.2]	2004-2017	5.7	[4.8; 6.7]	2004-2017
Incidence by stage						
Stage I	9.2	[7.9; 10.5]	2004-2017	7.9	[6.3; 9.4]	2004-2017
Stage II	3.9	[2.6; 5.2]	2004-2017	5.1	[3.0; 7.3]	2004-2017
Stage III	5.6	[3.9; 7.4]	2004-2017	7.0	[5.1; 8.9]	2004-2017
Stage IV	-0.5	[-3.3; 2.5]	2004-2017	-3.9	[-7.4; -0.4]	2004-2017
Stage unknown	-14.5	[-20.3; -8.2]	2004-2017	-17.0	[-22.6; -11.1]	2004-2017
	-1.8	[-15.0; 13.5]	2004-2011	-0.8	[-13.9; 14.4]	2004-2011
	-27.2	[-38.7; -13.6]	2011-2017	-32.7	[-43.1; -20.3]	2011-2017

Source: Belgian Cancer Registry

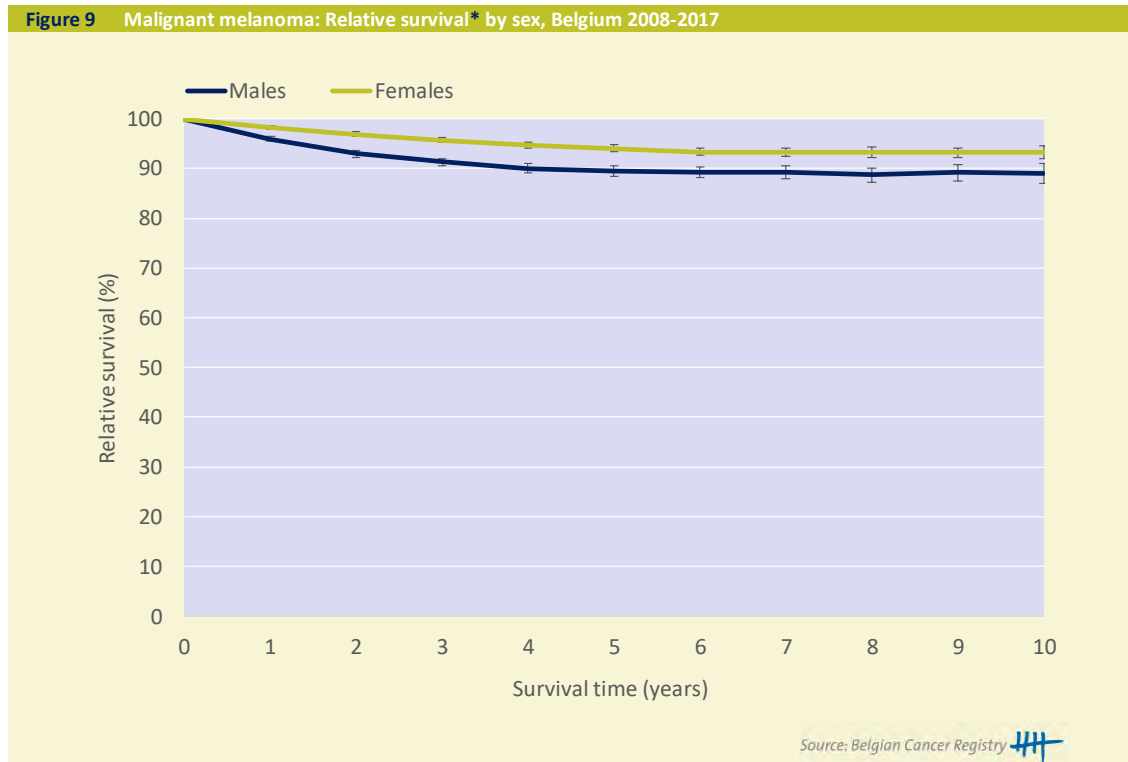
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.5.3 Survival

Figure 9 Malignant melanoma: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.5.4 Survival trends

Figure 10 Malignant melanoma: 1-, 3-, 5- and 10-year relative survival (RS) * by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.6 BREAST (ICD-10: C50)

3.6.1 Incidence

Table 1 Breast cancer: Overview of incidence, mortality, prevalence and survival by sex and region

Breast cancer	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	105	1.9	0.9	10,627	184.7	104.4
Flemish Region	71	2.2	1.0	6,275	190.5	104.6
Brussels-Capital Region	3	0.5	0.4	908	149.0	102.0
Walloon Region	31	1.8	1.0	3,444	186.1	105.2
Mortality, 2016						
Belgium	19	0.3	0.1	2,232	39.0	15.4
Flemish Region	15	0.5	0.2	1,289	39.3	15.2
Brussels-Capital Region	-	-	-	193	31.7	15.0
Walloon Region	4	0.2	0.1	750	40.6	16.1
Prevalence (5 years), 2013-2017						
Belgium	398	7.1	3.4	47,423	820.7	450.2
Flemish Region	263	8.1	3.6	27,879	841.8	448.7
Brussels-Capital Region	19	3.2	2.1	4,082	666.9	442.9
Walloon Region	116	6.6	3.2	15,462	833.9	456.7
5-year Relative survival, 2013-2017	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	477	83.3	[75.7;90.1]	52,807	91.0	[90.5;91.4]
Flemish Region	310	89.2	[80.7;96.3]	30,875	90.9	[90.3;91.5]
Brussels-Capital Region	29	49.6	[21.7;78.4]	4,620	91.3	[89.7;92.8]
Walloon Region	138	80.4	[64.5;93.6]	17,312	91.0	[90.2;91.8]
10-year Relative survival, 2008-2017	N at risk	%	95%CI	N at risk	%	95%CI
Belgium	894	72.3	[64.0;80.3]	102,752	85.2	[84.7;85.7]
Flemish Region	547	73.2	[62.1;83.7]	59,740	84.9	[84.2;85.6]
Brussels-Capital Region	66	58.3	[33.5;82.8]	9,107	84.3	[82.4;86.1]
Walloon Region	281	74.8	[60.5;88.6]	33,905	86.0	[85.1;86.9]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry 

Figure 1 Breast cancer in females: Age-specific incidence rates (N/100,000), Belgium 2013-2017

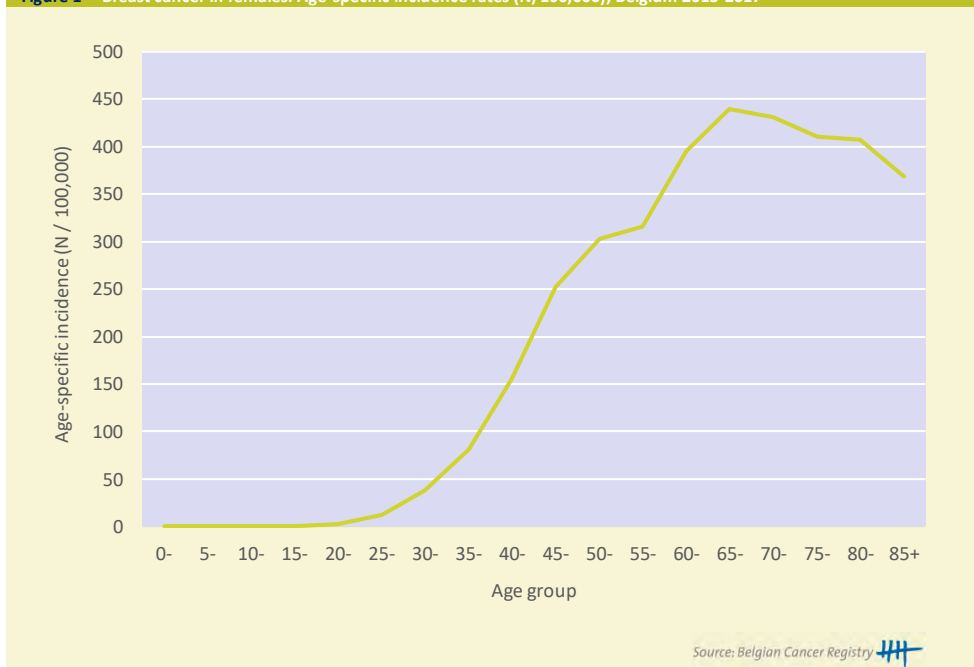
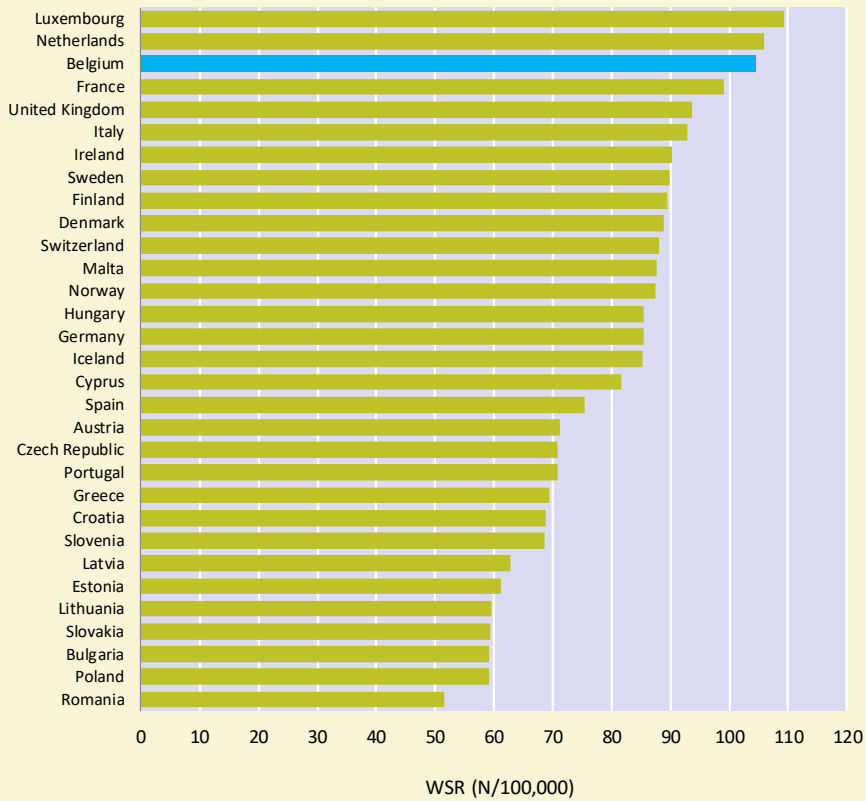


Figure 2 Breast cancer in females: Comparison of age-standardised incidence rates (WSR)
(Estimates of cancer incidence in 2018 by country and real data for Belgium in 2017)*



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Breast cancer in females: Age-standardised incidence (WSR), Belgium 2013-2017

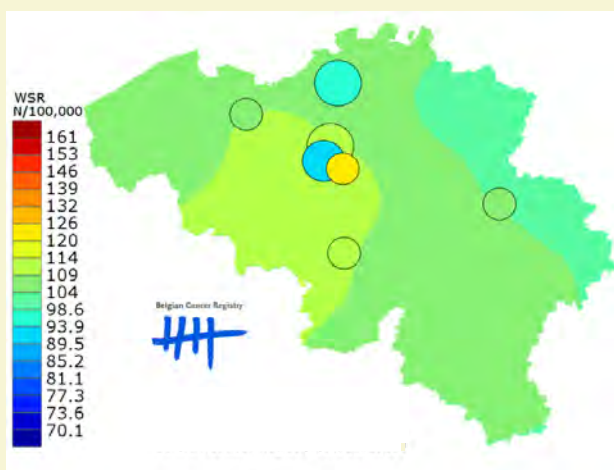
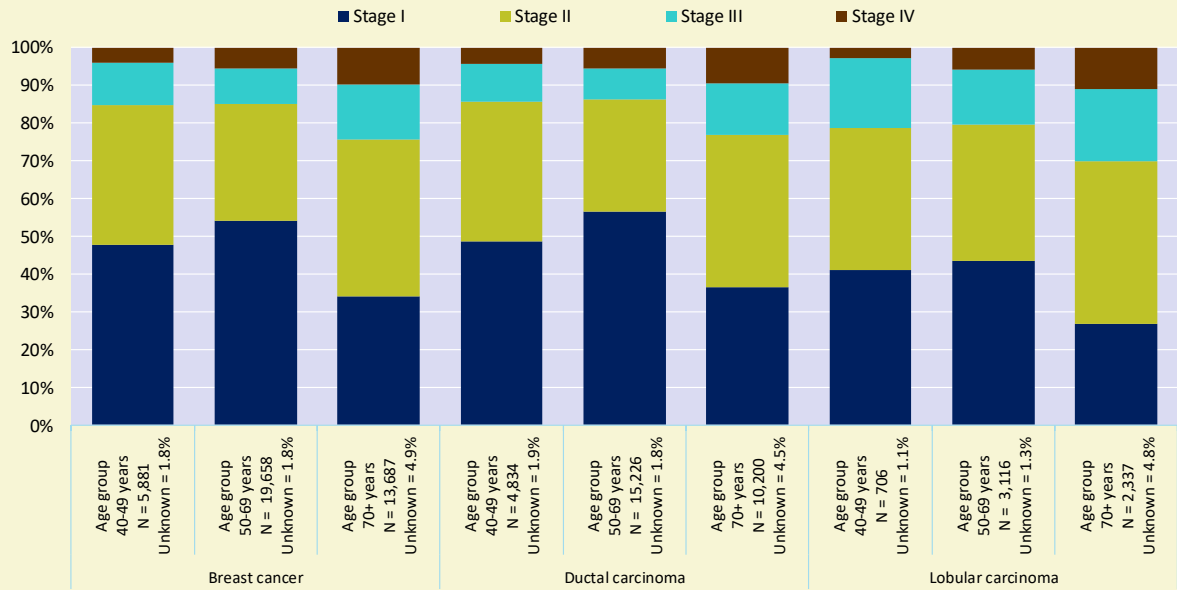


Figure 4 Breast cancer in females: Stage distribution^{a, b} by histology and age group, Belgium 2014-2017

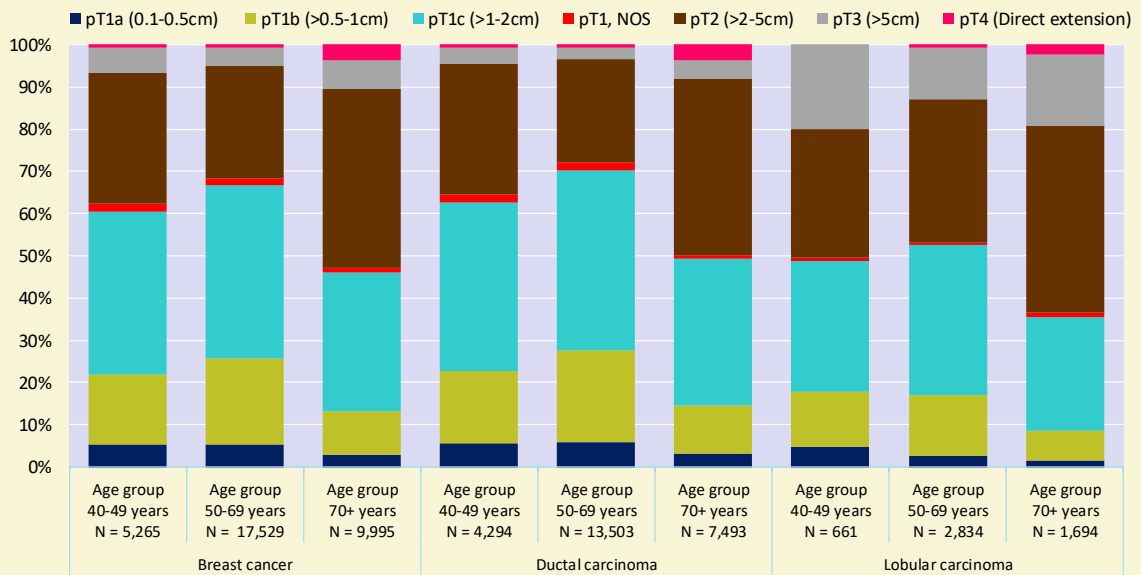


Source: Belgian Cancer Registry

^a Combined stage and only if TNM is applicable.

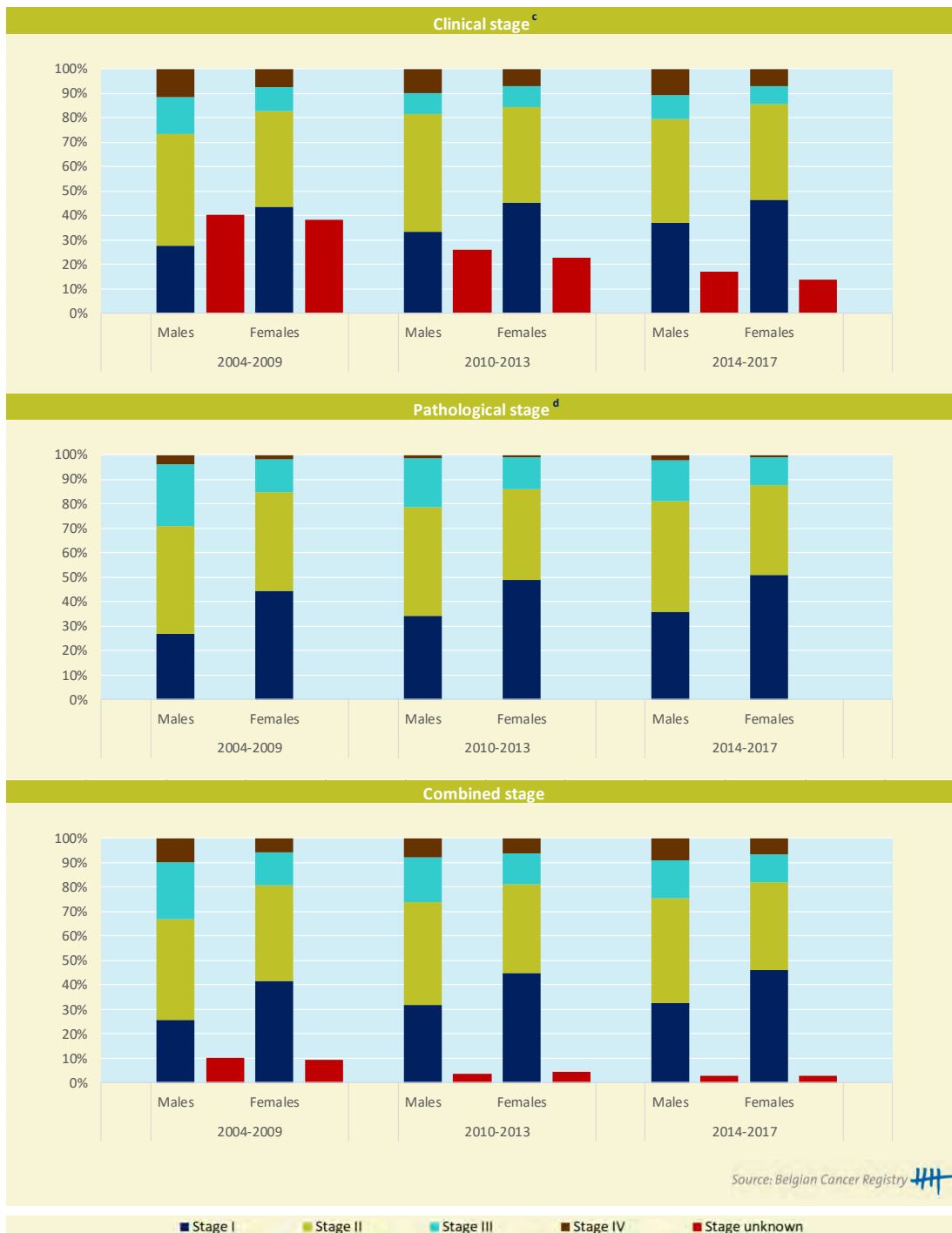
^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Breast cancer in females: Pathological T-category (pT) distribution by histology and age group, Belgium 2014-2017



Source: Belgian Cancer Registry

Figure 6 Breast cancer: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.6.2 Incidence trends

Figure 7 Breast cancer in females: Trends in age-standardised incidence and mortality (WSR) by region, 2004-2017



Figure 8 Breast cancer in females: Trends in age-standardised incidence (WSR) by age group and region, 2004-2017

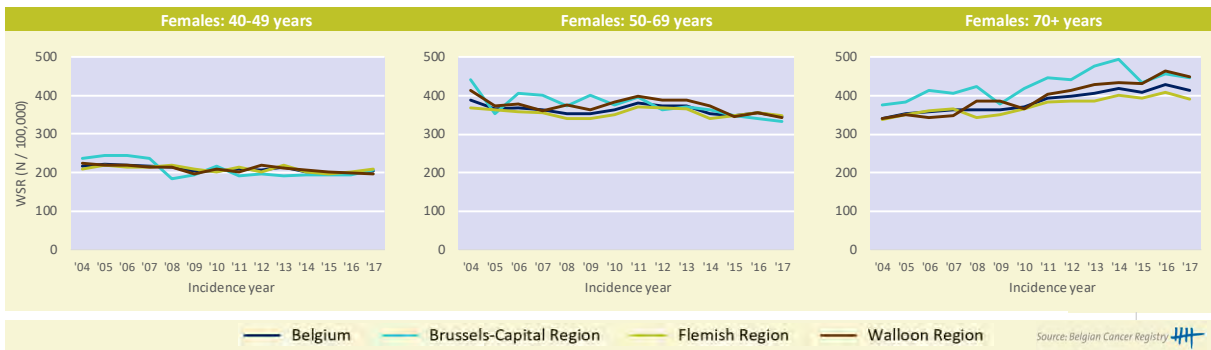


Figure 9 Breast cancer in females: Trends in age-standardised incidence (WSR) by stage and age group, Belgium 2004-2017

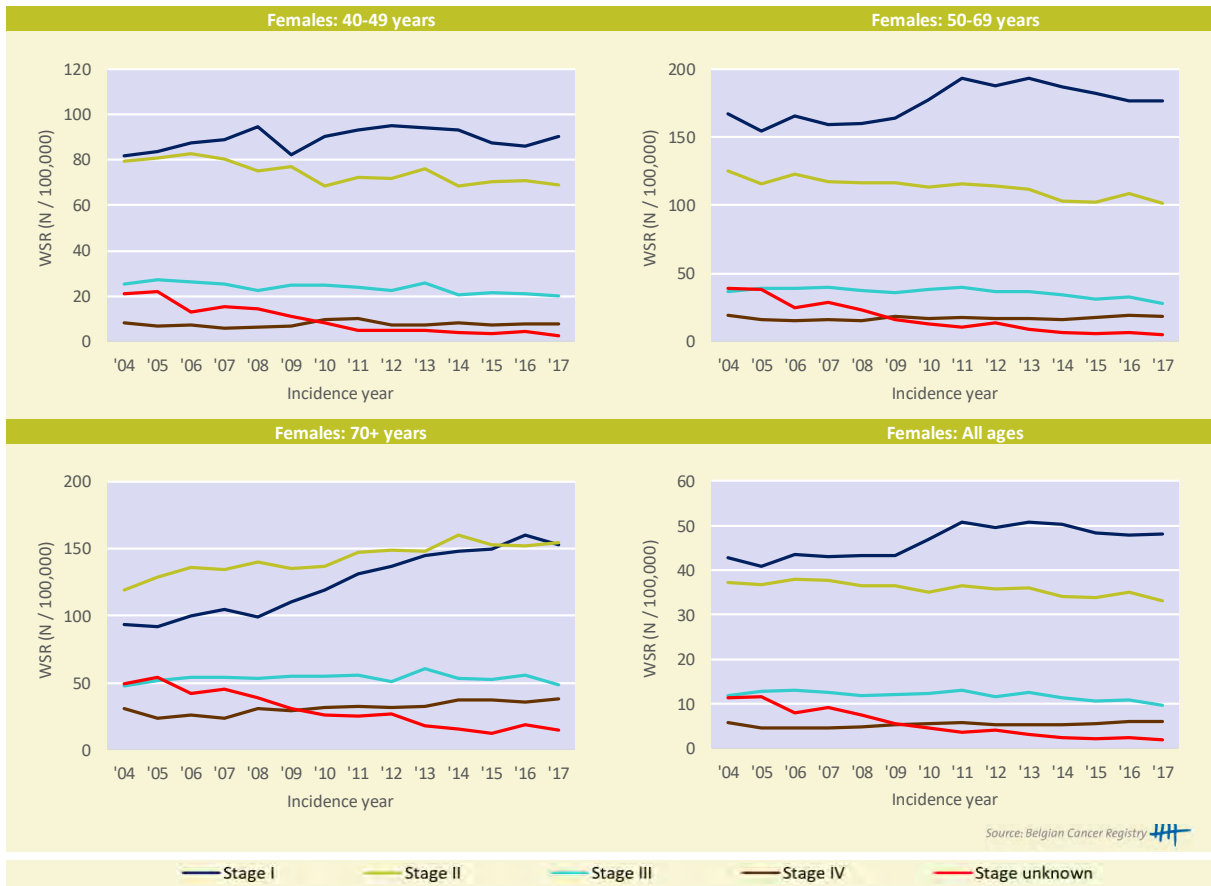


Figure 10 Breast cancer in females: Trends in age-standardised incidence (WSR) by age group and pT-category, Belgium 2004-2017

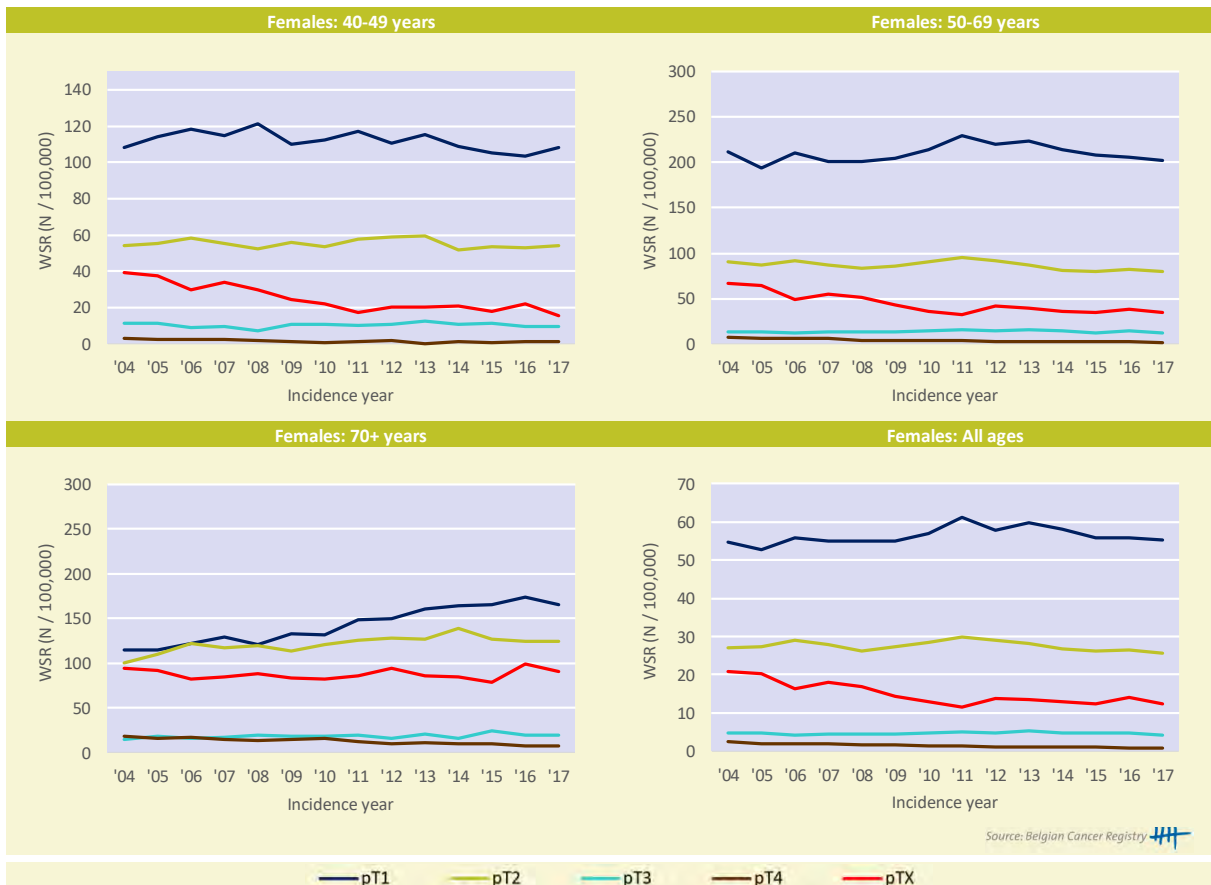


Table 2 Breast cancer in females: AAPC(%) by region, age group, stage and pT-category in Belgium			
Incidence	AAPC (%)	95%CI	Period
Belgium	-0.2	[-0.5; 0.1]	2004-2017
	0.1	[-0.4; 0.5]	2004-2013
	-0.8	[-1.9; 0.4]	2013-2017
Flemish Region	0.0	[-0.3; 0.3]	2004-2017
Brussels-Capital Region	-1.0	[-1.4; -0.5]	2004-2017
Walloon Region	-0.3	[-0.8; 0.1]	2004-2017
	0.1	[-0.4; 0.7]	2004-2014
	-1.8	[-3.9; 0.4]	2014-2017
Incidence by age group and region	AAPC (%)	95%CI	Period
40-49 years			
Belgium	-0.7	[-1.0; -0.4]	2004-2017
Flemish Region	-0.5	[-1.0; -0.0]	2004-2017
Brussels-Capital Region	-1.6	[-2.6; -0.7]	2004-2017
	-3.6	[-5.5; -1.7]	2004-2011
Walloon Region	0.7	[-1.6; 3.1]	2011-2017
	-0.8	[-1.3; -0.4]	2004-2017
50-69 years			
Belgium	-0.5	[-1.0; -0.1]	2004-2017
	-0.1	[-0.8; 0.5]	2004-2013
	-1.5	[-3.1; 0.1]	2013-2017
Flemish Region	-0.2	[-0.7; 0.3]	2004-2017
	-0.1	[-0.8; 0.6]	2004-2013
	-0.6	[-2.3; 1.2]	2013-2017
Brussels-Capital Region	-1.4	[-2.1; -0.6]	2004-2017
Walloon Region	-0.9	[-1.5; -0.3]	2004-2017
	0.0	[-0.9; 0.9]	2004-2013
	-2.7	[-4.9; -0.6]	2013-2017
70+ years			
Belgium	1.6	[1.3; 1.9]	2004-2017
	1.9	[1.5; 2.3]	2004-2014
	0.6	[-0.9; 2.2]	2014-2017
Flemish Region	1.3	[0.9; 1.7]	2004-2017
Brussels-Capital Region	1.5	[0.8; 2.3]	2004-2017
Walloon Region	2.5	[2.1; 2.9]	2004-2017
Mortality	AAPC (%)	95%CI	Period
Belgium	-2.5	[-2.8; -2.2]	2004-2016
	-1.6	[-2.2; -1.0]	2004-2011
	-3.9	[-4.7; -3.1]	2011-2016
Flemish Region	-2.8	[-3.1; -2.5]	2004-2016
	-1.5	[-2.2; -0.8]	2004-2010
	-4.1	[-4.8; -3.4]	2010-2016
Brussels-Capital Region	-2.0	[-3.3; -0.6]	2004-2016
	1.2	[-2.6; 5.2]	2004-2009
Walloon Region	-4.2	[-6.7; -1.6]	2009-2016
	-1.9	[-2.6; -1.2]	2004-2016

Incidence by pT-category	AAPC (%)	95%CI	Period
pT1 (0-2cm)	0.2	[-0.2; 0.6]	2004-2017
	1.2	[0.6; 1.7]	2004-2013
	-2.0	[-3.3; -0.6]	2013-2017
pT2 (>2-5cm)	-0.5	[-1.0; -0.0]	2004-2017
	0.7	[-0.1; 1.5]	2004-2012
	-2.4	[-3.7; -1.1]	2012-2017
pT3 (>5 cm)	0.2	[-0.7; 1.1]	2004-2017
	1.5	[0.2; 2.8]	2004-2013
	-2.8	[-5.8; 0.4]	2013-2017
pT4 (Direct extension)	-7.9	[-8.8; -6.9]	2004-2017
pTx (Unknown)	-3.5	[-4.5; -2.6]	2004-2017
	-7.1	[-8.9; -5.2]	2004-2011
	0.7	[-1.6; 3.2]	2011-2017
Incidence by age group and pT-category	AAPC (%)	95%CI	Period
40-49 years			
pT1 (0-2cm)	-0.5	[-1.0; 0.0]	2004-2017
	0.7	[-0.8; 2.3]	2004-2009
	-1.2	[-2.2; -0.3]	2009-2017
pT2 (>2-5cm)	-0.2	[-0.9; 0.5]	2004-2017
	pT3 (>5 cm)	-1.6	[-3.3; 0.1]
-6.7		[-11.8; -1.4]	2004-2008
6.9		[2.7; 11.2]	2008-2013
pT4 (Direct extension)	-6.4	[-11.5; -1.1]	2013-2017
	-7.3	[-12.0; -2.3]	2004-2017
	-15.3	[-21.6; -8.6]	2004-2013
pTx (Unknown)	13.8	[-5.8; 37.6]	2013-2017
	-6.0	[-7.4; -4.5]	2004-2017
	-9.6	[-12.4; -6.8]	2004-2011
	-1.6	[-5.2; 2.2]	2011-2017
50-69 years			
pT1 (0-2cm)	0.0	[-0.5; 0.6]	2004-2017
	1.2	[0.4; 1.9]	2004-2013
	-2.5	[-4.3; -0.6]	2013-2017
pT2 (>2-5cm)	-0.8	[-1.4; -0.3]	2004-2017
	0.5	[-0.7; 1.6]	2004-2011
	-2.3	[-3.6; -1.0]	2011-2017
pT3 (>5 cm)	-0.3	[-1.3; 0.8]	2004-2017
	2.1	[0.5; 3.7]	2004-2013
	-5.4	[-8.9; -1.7]	2013-2017
pT4 (Direct extension)	-9.2	[-10.8; -7.6]	2004-2017
pTx (Unknown)	-4.5	[-5.7; -3.2]	2004-2017
	-8.5	[-10.8; -6.0]	2004-2011
	0.4	[-2.7; 3.6]	2011-2017
70+ years			
pT1 (0-2cm)	3.0	[2.4; 3.6]	2004-2017
	2.5	[1.1; 4.0]	2004-2009
	5.1	[3.7; 6.6]	2009-2014
	0.4	[-2.2; 3.1]	2014-2017
pT2 (>2-5cm)	1.0	[0.3; 1.7]	2004-2017
	2.2	[1.4; 3.1]	2004-2014
	-2.9	[-6.0; 0.3]	2014-2017
pT3 (>5 cm)	1.8	[0.0; 3.5]	2004-2017
pT4 (Direct extension)	-6.2	[-7.4; -4.9]	2004-2017
pTx (Unknown)	0.0	[-0.9; 1.0]	2004-2017

Incidence by stage	AAPC (%)	95%CI	Period
Stage I	1.2	[0.7; 1.7]	2004-2017
	2.4	[1.7; 3.2]	2004-2013
	-1.4	[-3.2; 0.4]	2013-2017
Stage II	-0.8	[-1.1; -0.5]	2004-2017
Stage III	-1.8	[-2.5; -1.2]	2004-2017
	-0.3	[-1.2; 0.6]	2004-2013
	-5.3	[-7.4; -3.1]	2013-2017
Stage IV	1.8	[0.6; 3.0]	2004-2017
	1.2	[-0.3; 2.8]	2004-2014
	3.5	[-2.2; 9.7]	2014-2017
Stage Unknown	-13.8	[-15.4; -12.1]	2004-2017
Incidence by age group and stage	AAPC (%)	95%CI	Period
40-49 years			
Stage I	0.4	[-0.2; 1.0]	2004-2017
	1.6	[0.5; 2.6]	2004-2012
	-1.5	[-3.1; 0.3]	2012-2017
Stage II	-1.3	[-1.9; -0.7]	2004-2017
Stage III	-1.9	[-2.7; -1.0]	2004-2017
Stage IV	1.0	[-1.1; 3.1]	2004-2017
	3.0	[-1.3; 7.6]	2004-2011
	-1.3	[-6.3; 3.8]	2011-2017
Stage Unknown	-15.3	[-17.7; -12.9]	2004-2017
50-69 years			
Stage I	0.6	[0.0; 1.1]	2004-2017
	-0.6	[-2.3; 1.1]	2004-2008
	5.2	[3.6; 6.8]	2008-2012
Stage II	-2.1	[-3.4; -0.8]	2012-2017
	-1.3	[-1.8; -0.9]	2004-2017
	-2.1	[-2.7; -1.4]	2004-2017
Stage III	0.0	[-1.1; 1.1]	2004-2012
	-5.2	[-7.0; -3.5]	2012-2017
	0.5	[-0.8; 1.8]	2004-2017
Stage IV	-4.0	[-9.0; 1.3]	2004-2007
	1.4	[-0.7; 3.4]	2007-2014
	3.2	[-2.2; 8.9]	2014-2017
Stage Unknown	-15.1	[-16.8; -13.4]	2004-2017
70+ years			
Stage I	4.1	[3.5; 4.6]	2004-2017
	2.6	[0.8; 4.5]	2004-2008
	7.4	[6.0; 8.8]	2008-2013
	1.5	[-0.3; 3.3]	2013-2017
Stage II	1.8	[1.3; 2.3]	2004-2017
Stage III	0.2	[-0.6; 1.0]	2004-2017
	1.6	[-0.0; 3.3]	2004-2011
	-1.4	[-3.3; 0.5]	2011-2017
Stage IV	3.1	[1.9; 4.4]	2004-2017
Stage Unknown	-10.4	[-12.4; -8.4]	2004-2017

Source: Belgian Cancer Registry 

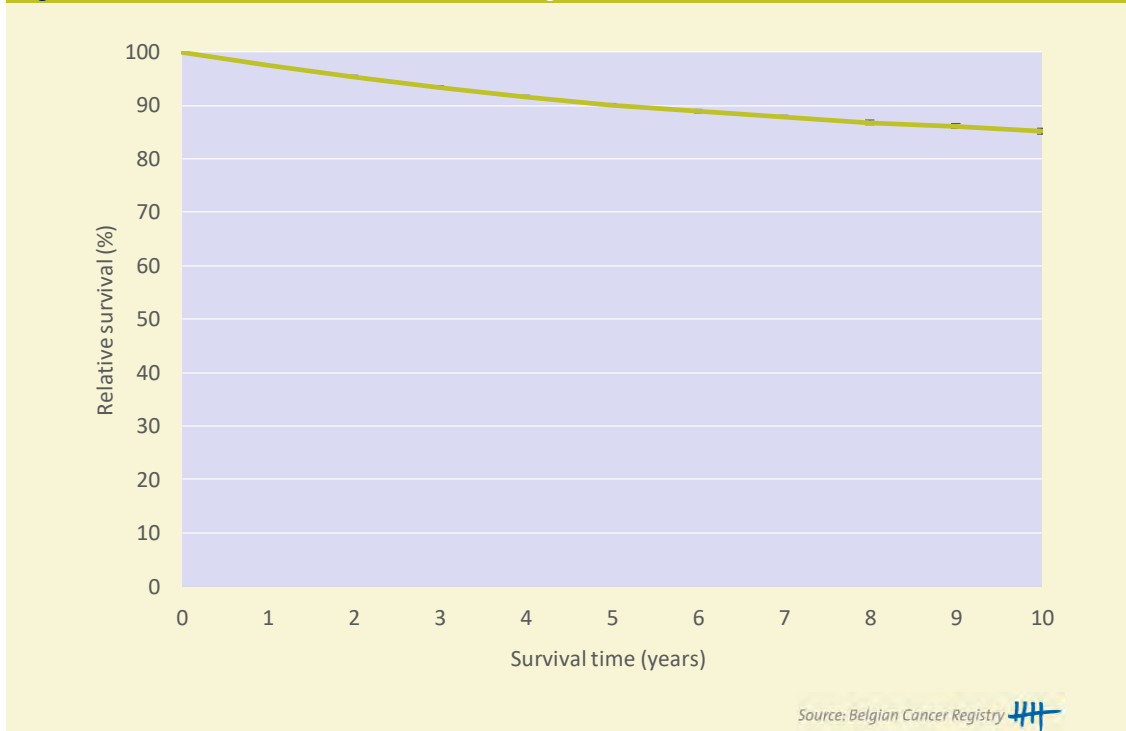
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint.

This column represents the corresponding time interval. AAPC's are always calculated over the entire study-period.

3.6.3 Survival

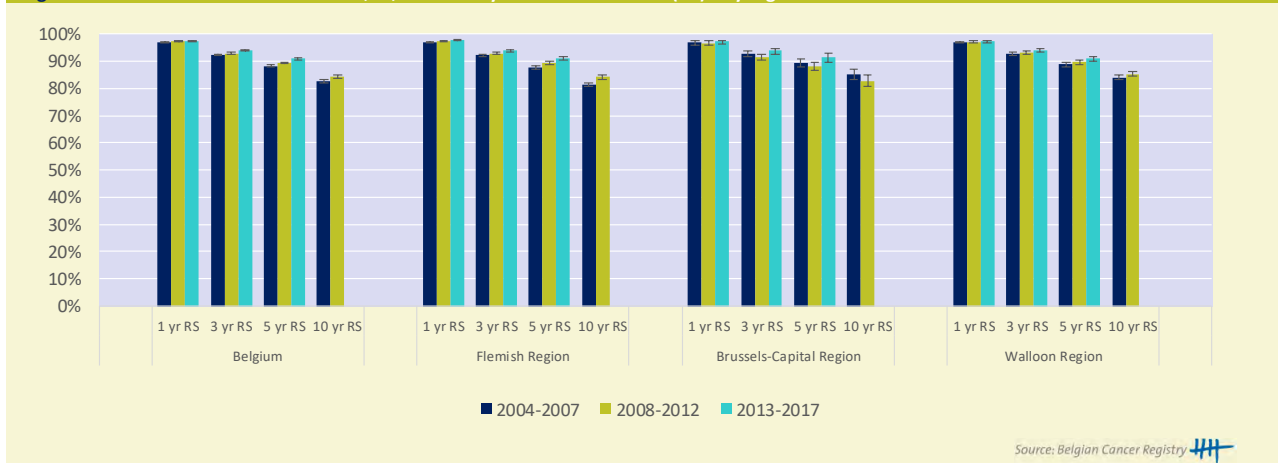
Figure 11 Breast cancer in females: Relative survival*, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.6.4 Survival trends

Figure 12 Breast cancer in females: 1-, 3-, 5- and 10-year relative survival (RS)* by region



* The relative survival values are represented with 95% Confidence Intervals

3.7 FEMALE GENITAL ORGANS

3.7.1 CERVIX (ICD-10: C53)

3.7.1.1 Incidence

Table 1 Cervical cancer: Overview of incidence, mortality, prevalence and survival by region

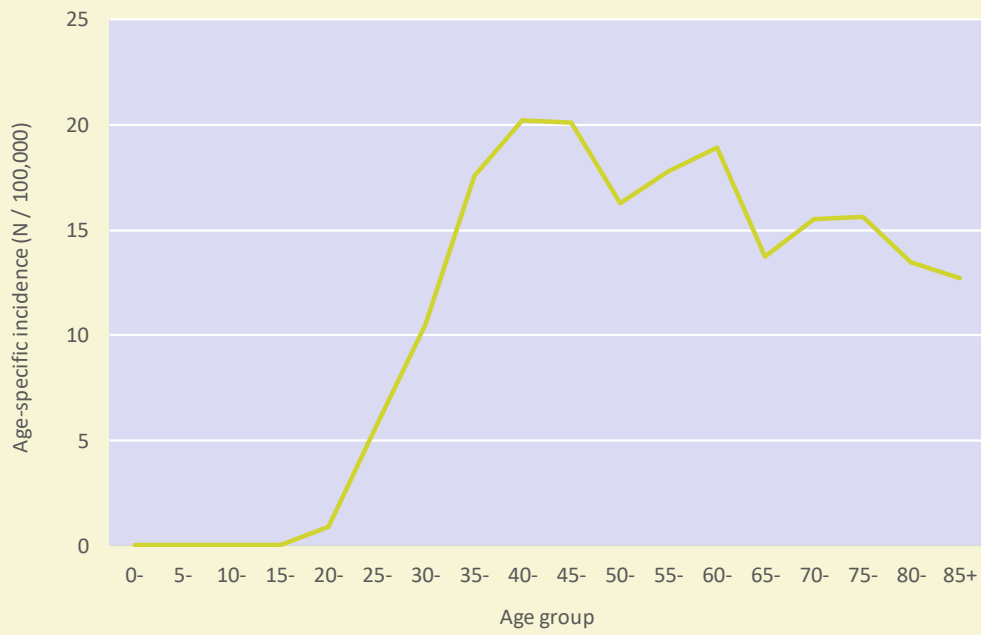
Cervical cancer	Females		
	N	CR	WSR
Incidence, 2017			
Belgium	622	10.8	7.5
Flemish Region	355	10.8	7.4
Brussels-Capital Region	54	8.9	6.3
Walloon Region	213	11.5	8.1
Mortality, 2016			
Belgium	147	2.6	1.4
Flemish Region	86	2.6	1.2
Brussels-Capital Region	14	2.3	1.6
Walloon Region	47	2.5	1.5
Prevalence (5 years), 2013-2017			
Belgium	2,487	43.0	30.9
Flemish Region	1,375	41.5	29.6
Brussels-Capital Region	236	38.6	29.2
Walloon Region	876	47.2	34.3
5-year Relative survival, 2013-2017	N at risk	%	95%CI
Belgium	3,186	70.4	[68.4;72.3]
Flemish Region	1,726	72.0	[69.3;74.5]
Brussels-Capital Region	303	68.1	[60.9;74.4]
Walloon Region	1,157	68.6	[65.2;71.8]
10-year Relative survival, 2008-2017	N at risk	%	95%CI
Belgium	6,298	64.1	[62.3;65.8]
Flemish Region	3,454	65.1	[62.8;67.4]
Brussels-Capital Region	621	62.6	[56.8;68.0]
Walloon Region	2,223	62.9	[59.8;65.9]

CR: crude (all ages) rate (N/100,000 person years)

Source: Belgian Cancer Registry 

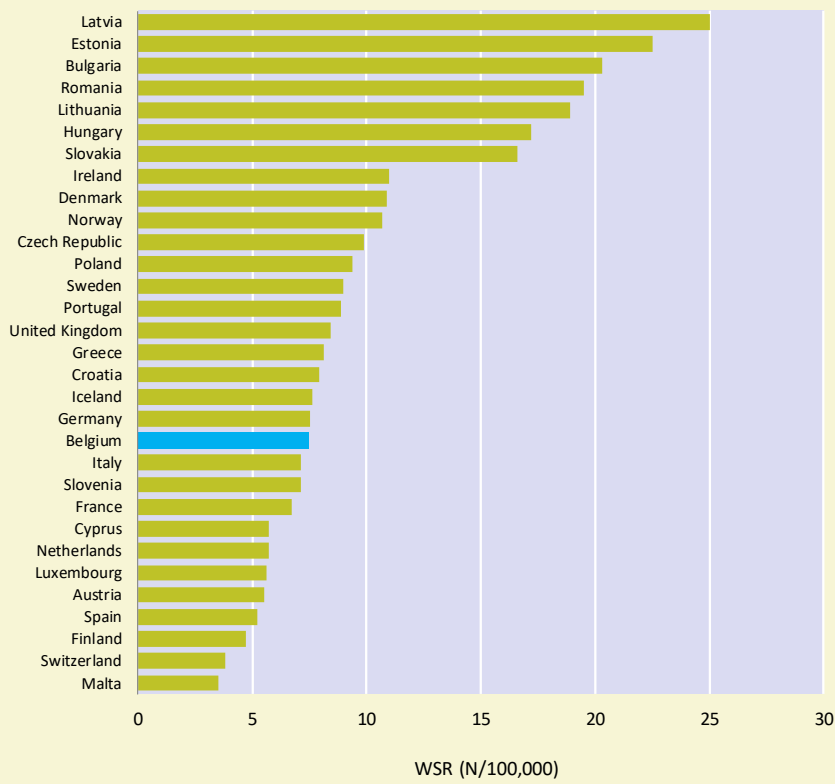
WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Figure 1 Cervical cancer: Age-specific incidence rates (N/100,000), Belgium 2013-2017



Source: Belgian Cancer Registry

Figure 2 Cervical cancer: Comparison of age-standardised incidence rates (WSR) (Estimates of cancer incidence in 2018 by country * and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System

From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019

© European Union, 2019

Figure 3 Cervical cancer: Age-standardised incidence (WSR), Belgium 2013-2017

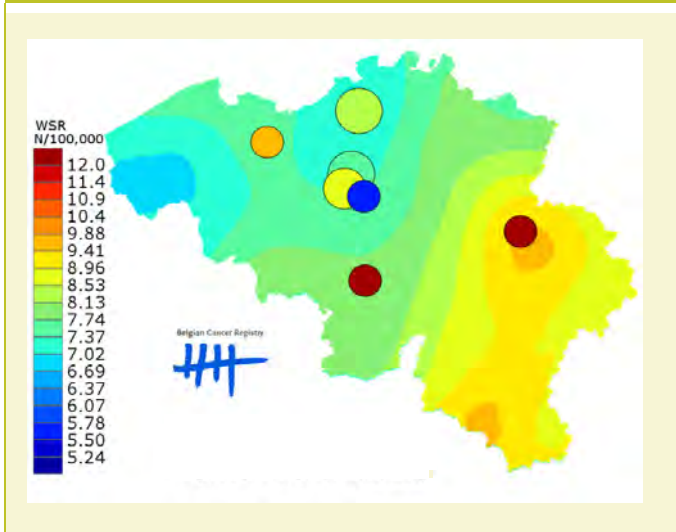
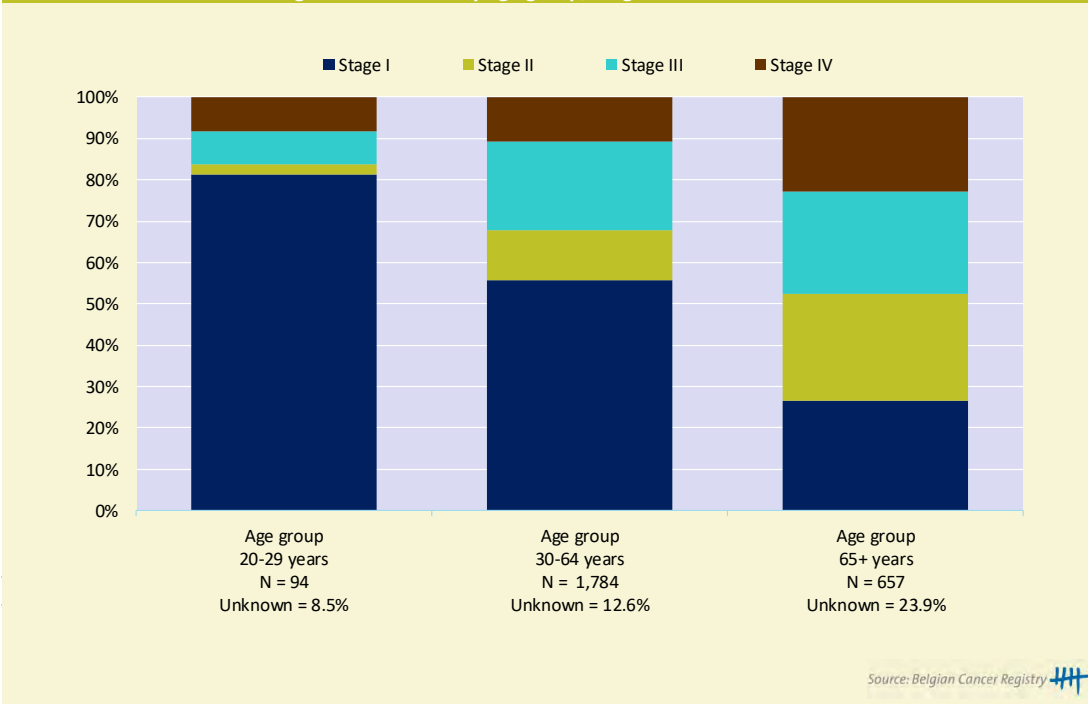


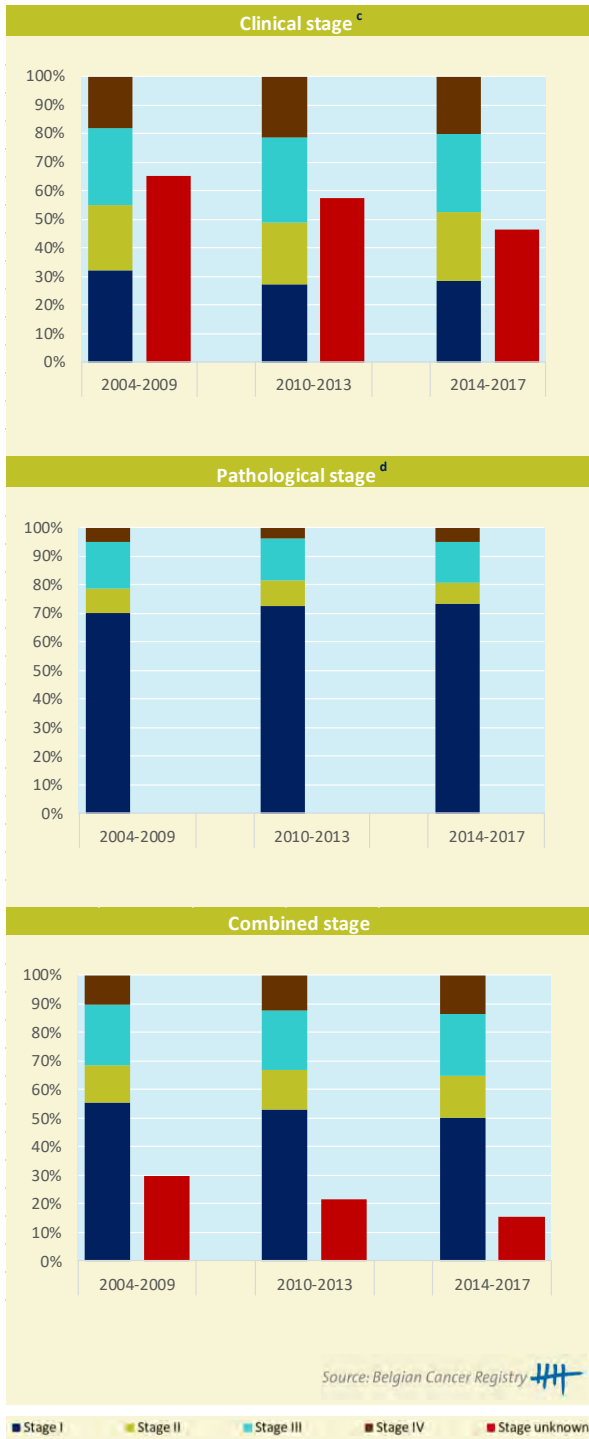
Figure 4 Cervical cancer: Stage distribution^{a,b} by age group, Belgium 2014-2017



^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Cervical cancer: Stage distribution^{a,b}, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.7.1.2 Incidence trends

Figure 6 Cervical cancer: Trends in age-standardised incidence and mortality (WSR) by region, 2004-2017



Figure 7 Cervical cancer: Trends in age-standardised incidence (WSR) by age group and region, 2004-2017

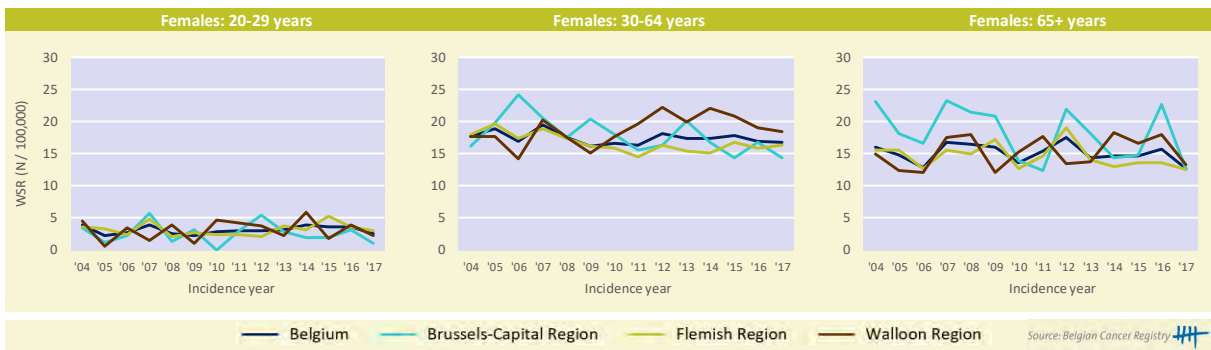


Figure 8 Cervical cancer: Trends in age-standardised incidence (WSR) by stage, Belgium 2004-2017

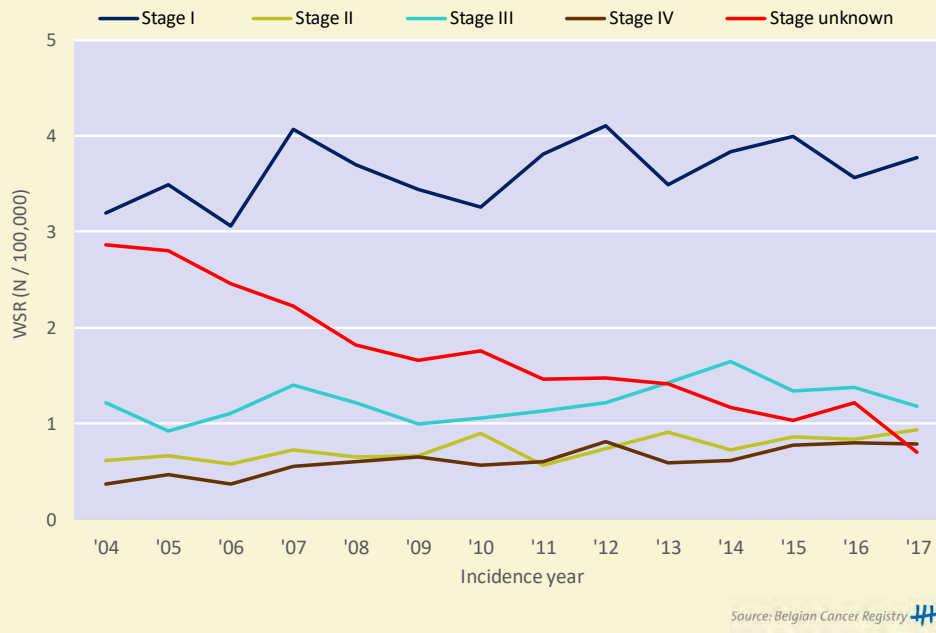


Figure 9 Cervical cancer: Trends in age-standardised incidence (WSR) for invasive and in situ carcinomas, age group 30-64 years, Belgium 2004-2017

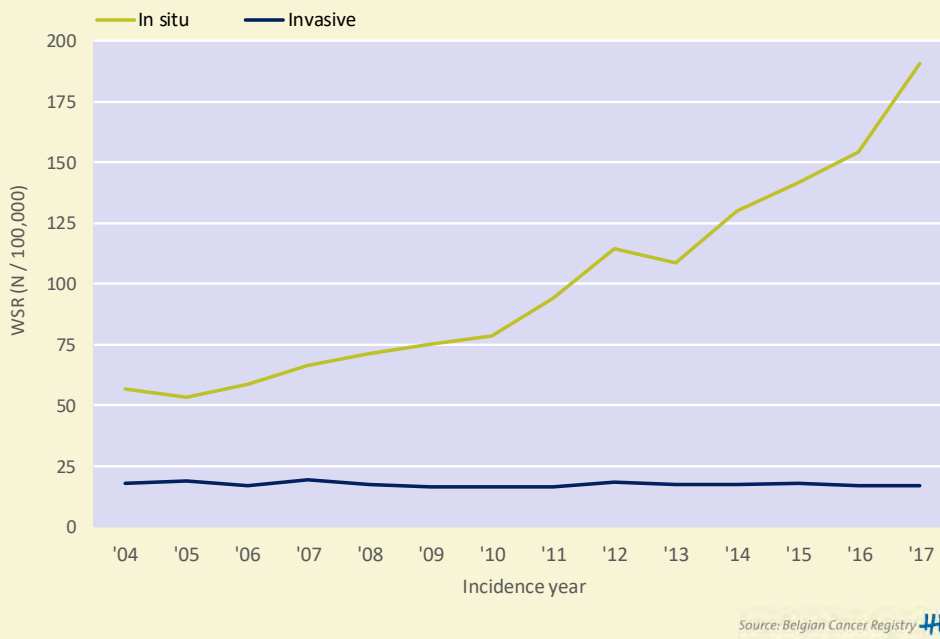
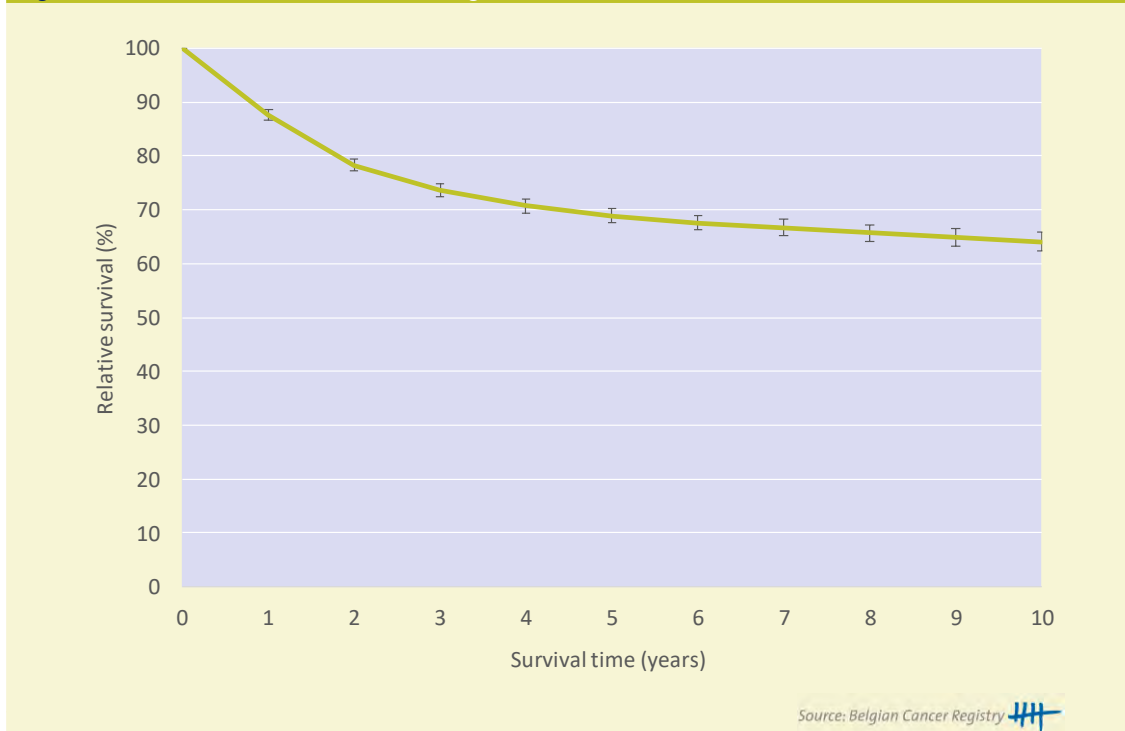


Table 2 Cervical cancer: AAPC(%) by region, age group and stage in Belgium			
Cervical cancer	Females		
Incidence	AAPC (%)	95%CI	Period
Belgium	-0.4	[-1.1; 0.4]	2004-2017
Flemish Region	-1.1	[-1.9; -0.3]	2004-2017
	-2.7	[-4.3; -1.0]	2004-2011
	0.8	[-1.2; 2.8]	2011-2017
Brussels-Capital Region	-2.2	[-3.9; -0.4]	2004-2017
Walloon Region	1.6	[-0.1; 3.3]	2004-2017
Mortality	AAPC (%)	95%CI	Period
Belgium	-1.9	[-3.4; -0.3]	2004-2016
Flemish Region	-3.9	[-5.4; -2.3]	2004-2016
	-1.0	[-3.4; 1.5]	2004-2012
	-9.5	[-14.2; -4.4]	2012-2016
Brussels-Capital Region	-3.5	[-8.9; 2.3]	2004-2016
Walloon Region	1.9	[0.0; 3.9]	2004-2016
Incidence by age group and region	AAPC (%)	95%CI	Period
20-29 years			
Belgium	1.0	[-2.0; 4.1]	2004-2017
Flemish Region	0.8	[-3.0; 4.7]	2004-2017
	-6.7	[-15.0; 2.4]	2004-2010
	7.7	[-0.4; 16.5]	2010-2017
Brussels-Capital Region	-	-	-
Walloon Region	4.2	[-5.8; 15.2]	2004-2017
30-64 years			
Belgium	-0.4	[-1.2; 0.3]	2004-2017
Flemish Region	-1.3	[-2.0; -0.6]	2004-2017
	-3.2	[-4.5; -1.7]	2004-2011
	0.9	[-0.8; 2.7]	2011-2017
Brussels-Capital Region	-2.1	[-3.8; -0.3]	2004-2017
Walloon Region	1.6	[-0.0; 3.3]	2004-2017
65+ years			
Belgium	-0.5	[-1.9; 0.9]	2004-2017
Flemish Region	-1.1	[-2.8; 0.7]	2004-2017
Brussels-Capital Region	-2.3	[-5.4; 0.8]	2004-2017
Walloon Region	1.1	[-1.2; 3.4]	2004-2017
Incidence by stage	AAPC (%)	95%CI	Period
Stage I	1.1	[-0.1; 2.3]	2004-2017
Stage II	2.9	[1.1; 4.8]	2004-2017
Stage III	1.9	[-0.2; 3.9]	2004-2017
Stage IV	5.4	[3.3; 7.6]	2004-2017
Stage Unknown	-8.7	[-10.2; -7.3]	2004-2017
Incidence (age group 30-64 years)	AAPC (%)	95%CI	Period
"Cervical carcinoma in situ"	10.0	[9.1; 10.9]	2004-2017
Invasive cervical cancer	-0.4	[-1.1; 0.4]	2004-2017

Source: Belgian Cancer Registry *AAPC: average annual percentage change**Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint.**This column represents the corresponding time interval. AAPC's are always calculated over the entire study-period.*

3.7.1.3 Survival

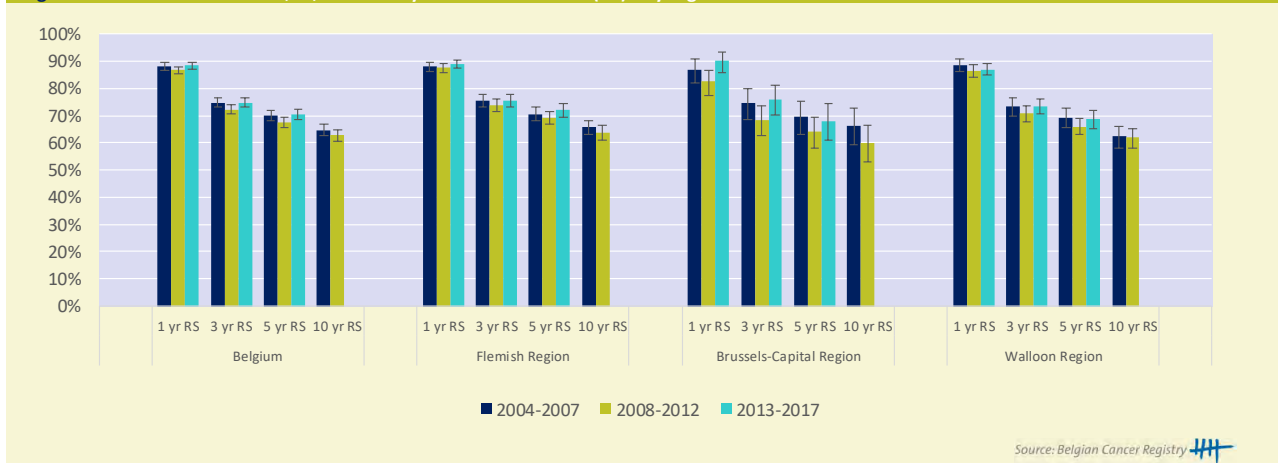
Figure 10 Cervical cancer: Relative survival*, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.7.1.4 Survival trends

Figure 11 Cervical cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by region



* The relative survival values are represented with 95% Confidence Intervals

3.7.2 CORPUS UTERI (ICD-10: C54)

3.7.2.1 Incidence

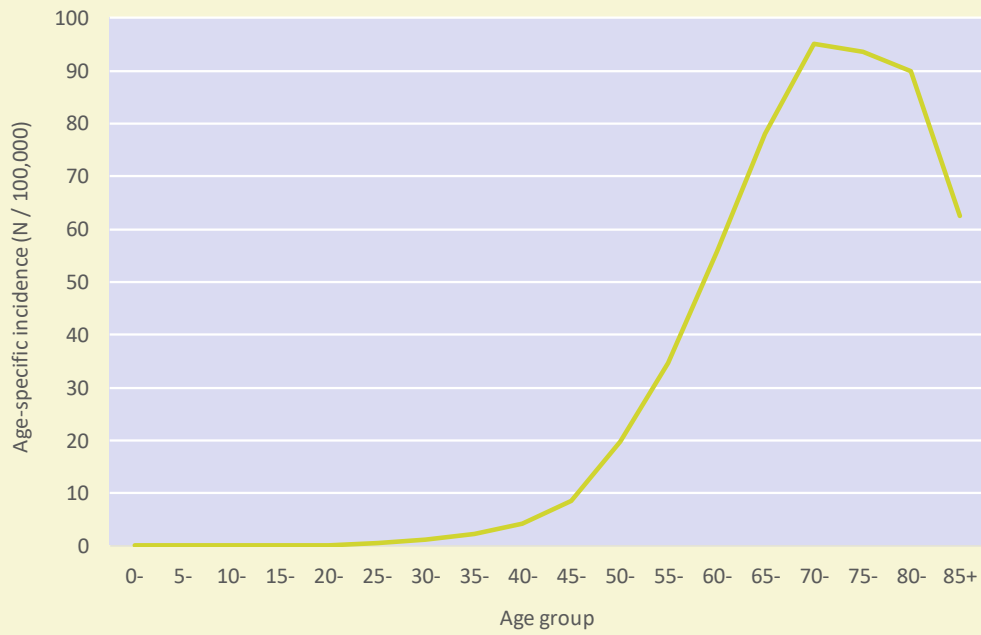
Table 1 Corpus uteri cancer: Overview of incidence, mortality, prevalence and survival by region				
Corpus uteri cancer		Females		
Incidence, 2017		N	CR	WSR
Belgium		1,394	24.2	10.8
Flemish Region		833	25.3	10.8
Brussels-Capital Region		110	18.1	11.1
Walloon Region		451	24.4	10.7
Mortality, 2016		N	CR	WSR
Belgium		230	4.0	1.4
Flemish Region		149	4.5	1.4
Brussels-Capital Region		21	3.5	1.6
Walloon Region		60	3.3	1.2
Prevalence (5 years), 2013-2017		N	CR	WSR
Belgium		5,731	99.2	43.2
Flemish Region		3,505	105.8	43.7
Brussels-Capital Region		430	70.2	41.1
Walloon Region		1,796	96.9	42.5
5-year Relative survival, 2013-2017		N at risk	%	95%CI
Belgium		7,094	81.4	[80.0;82.9]
Flemish Region		4,294	82.4	[80.6;84.2]
Brussels-Capital Region		557	78.7	[73.0;83.9]
Walloon Region		2,243	80.2	[77.4;82.7]
10-year Relative survival, 2008-2017		N at risk	%	95%CI
Belgium		14,300	78.0	[76.5;79.6]
Flemish Region		8,693	77.2	[75.3;79.1]
Brussels-Capital Region		1,085	78.7	[72.3;84.8]
Walloon Region		4,522	79.7	[76.8;82.5]

CR: crude (all ages) rate (N/100,000 person years)

Source: Belgian Cancer Registry 

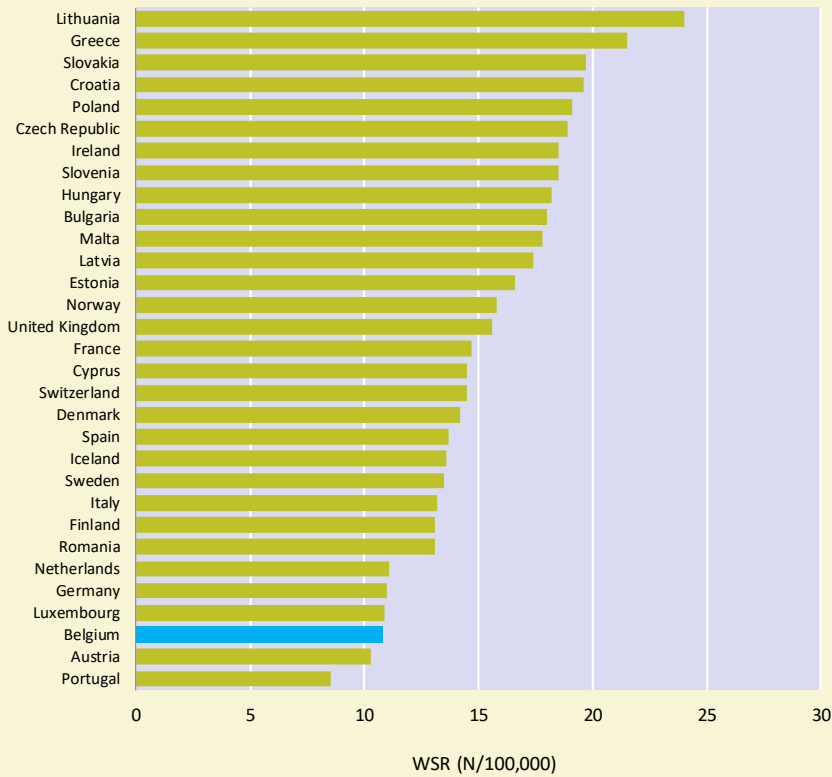
WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Figure 1 Corpus uteri cancer: Age-specific incidence rates (N/100,000), Belgium 2013-2017



Source: Belgian Cancer Registry

Figure 2 Corpus uteri cancer: Comparison of age-standardised incidence rates (WSR) (Estimates of cancer incidence in 2018 by country * and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Corpus uteri cancer: Age-standardised incidence (WSR), Belgium 2013-2017

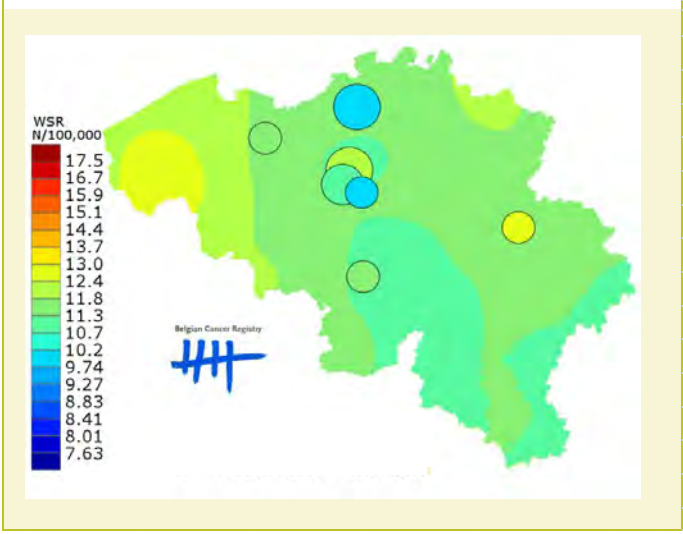
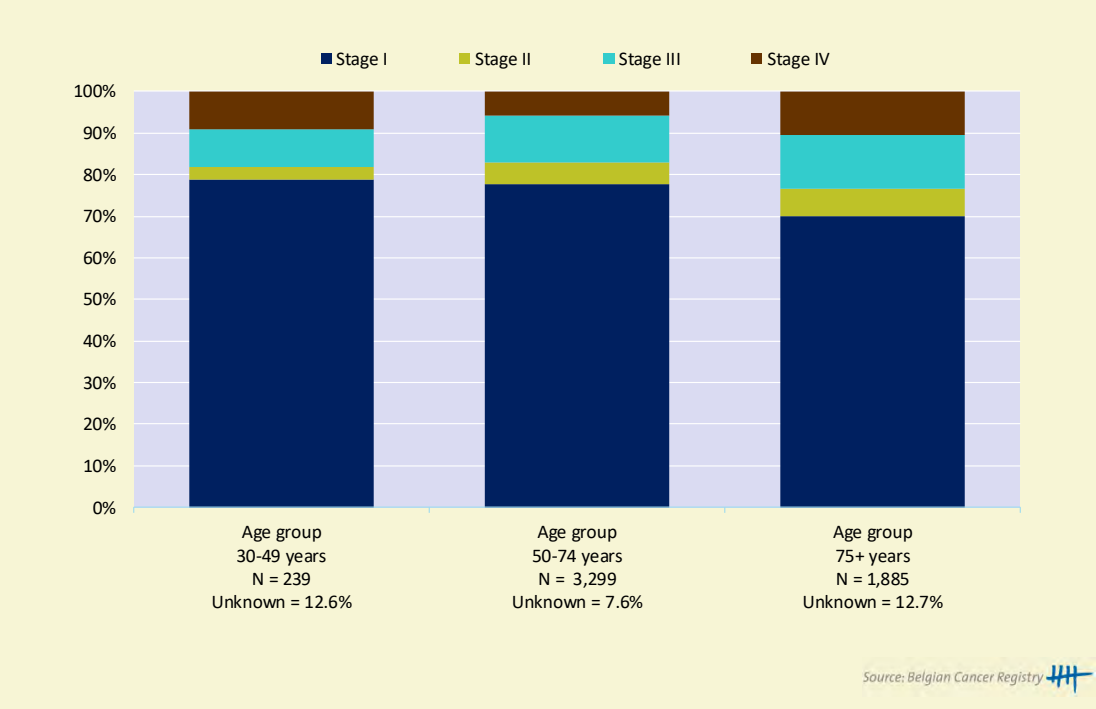


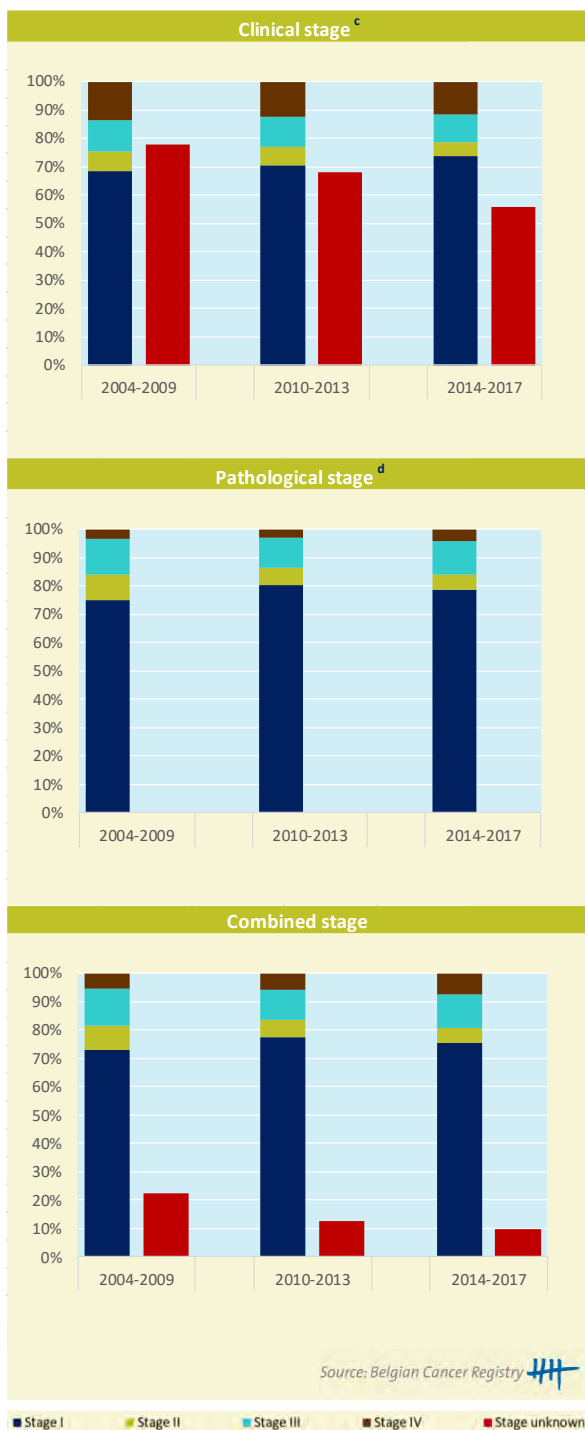
Figure 4 Corpus uteri cancer: Stage distribution^{a,b} by age group, Belgium 2014-2017



^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Corpus uteri cancer: Stage distribution ^{a,b}, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.7.2.2 Incidence trends

Figure 6 Corpus uteri cancer: Trends in age-standardised incidence and mortality (WSR) by region, 2004-2017

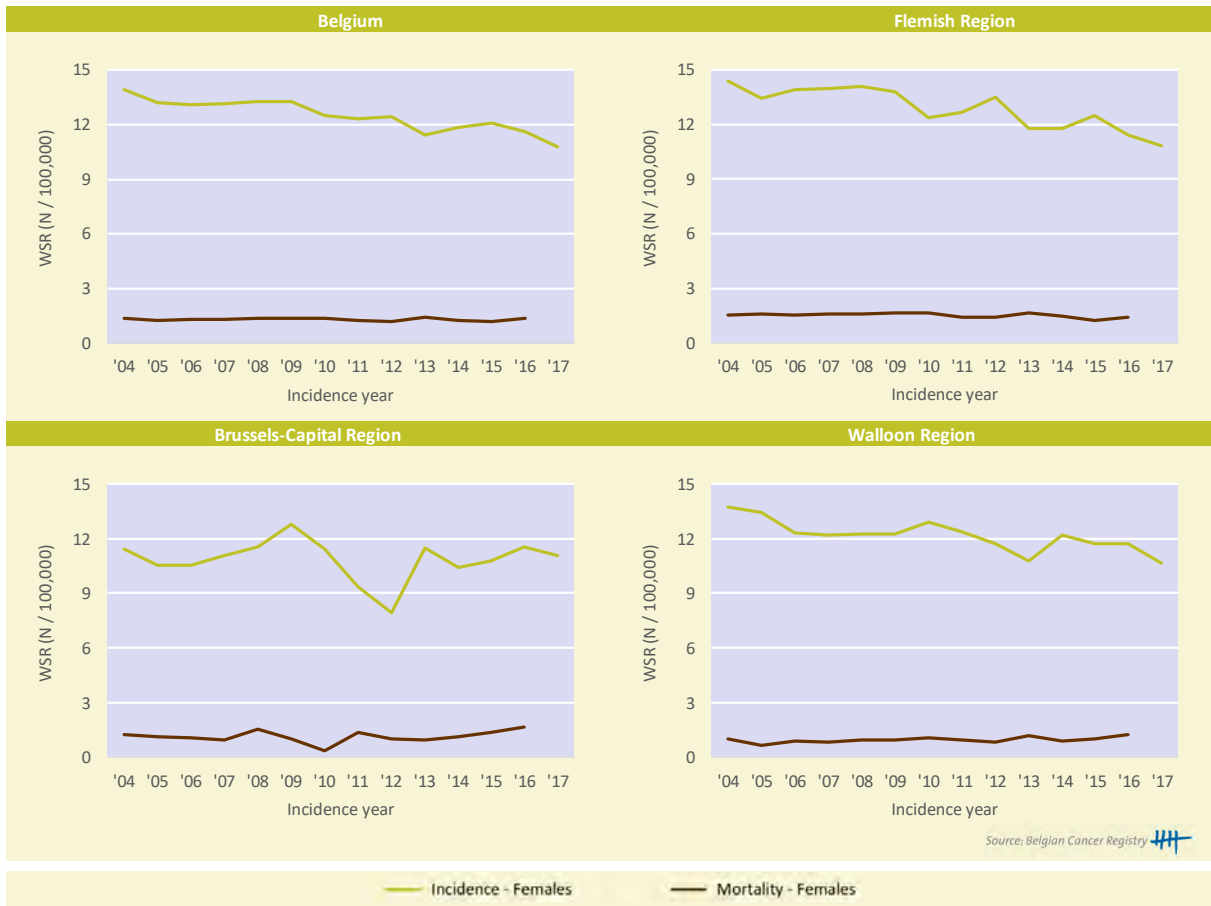


Figure 7 Corpus uteri cancer: Trends in age-standardised incidence (WSR) by histology, Belgium 2004-2017

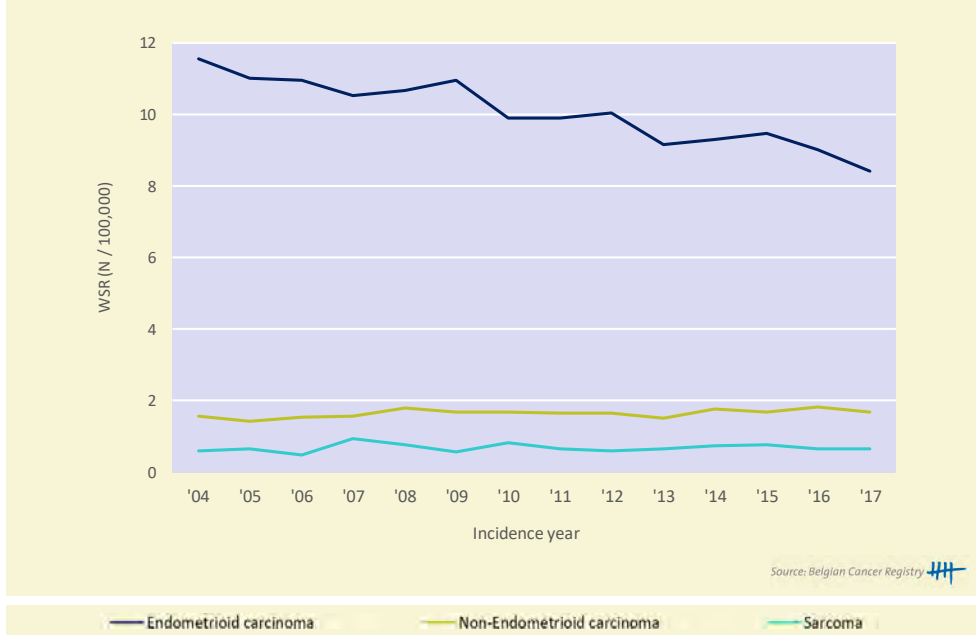


Table 2 Corpus uteri cancer: AAPC(%) by region, age group and histology in Belgium

Corpus uteri cancer		Females		
	AAPC (%)	95%CI	Period	
Incidence				
Belgium	-1.6	[-2.0; -1.2]	2004-2017	
Flemish Region	-1.9	[-2.5; -1.2]	2004-2017	
Brussels-Capital Region	-0.3	[-1.9; 1.4]	2004-2017	
Walloon Region	-1.3	[-2.0; -0.7]	2004-2017	
Mortality				
Belgium	-0.2	[-1.2; 0.7]	2004-2016	
Flemish Region	-1.3	[-2.4; -0.2]	2004-2016	
Brussels-Capital Region	1.7	[-4.1; 7.8]	2004-2016	
	-5.7	[-15.3; 5.1]	2004-2011	
	12.9	[-3.5; 32.1]	2011-2016	
Walloon Region	2.3	[0.0; 4.6]	2004-2016	
Incidence by histology				
Carcinoma Endometrioid	-2.1	[-2.5; -1.7]	2004-2017	
Carcinoma Non-Endometrioid	0.9	[0.1; 1.7]	2004-2017	
Sarcoma	0.6	[-1.9; 3.1]	2004-2017	

Source: Belgian Cancer Registry 

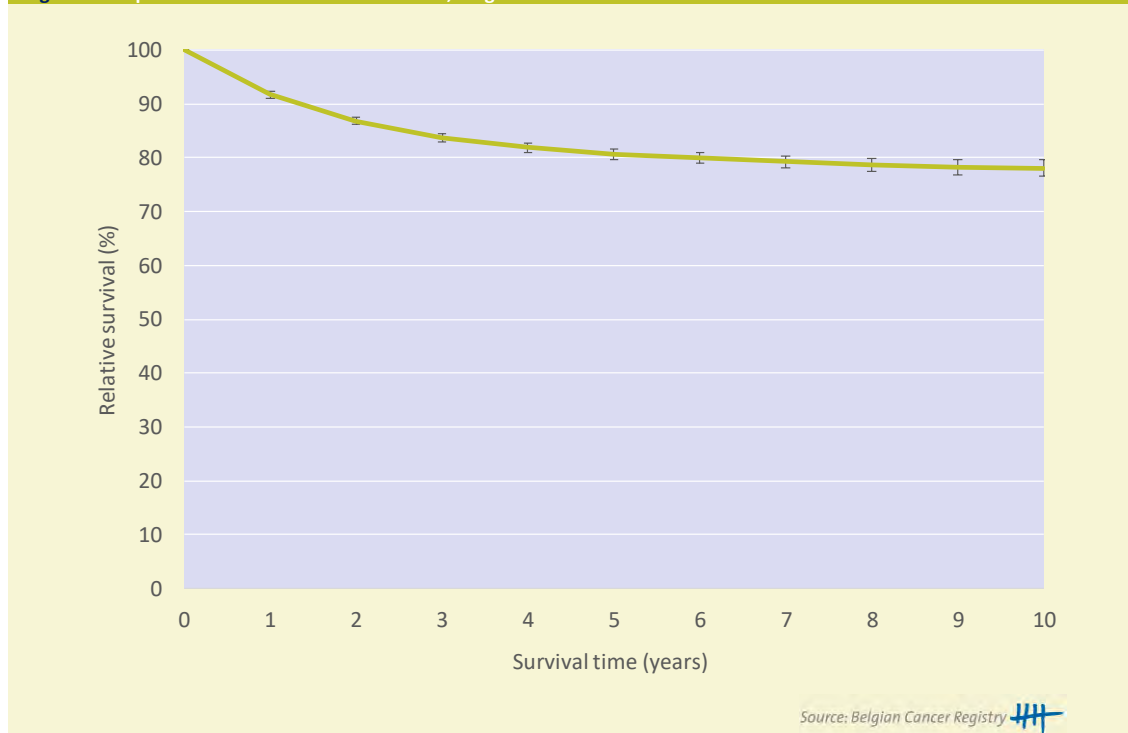
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint.

This column represents the corresponding time interval. AAPC's are always calculated over the entire study-period.

3.7.2.3 Survival

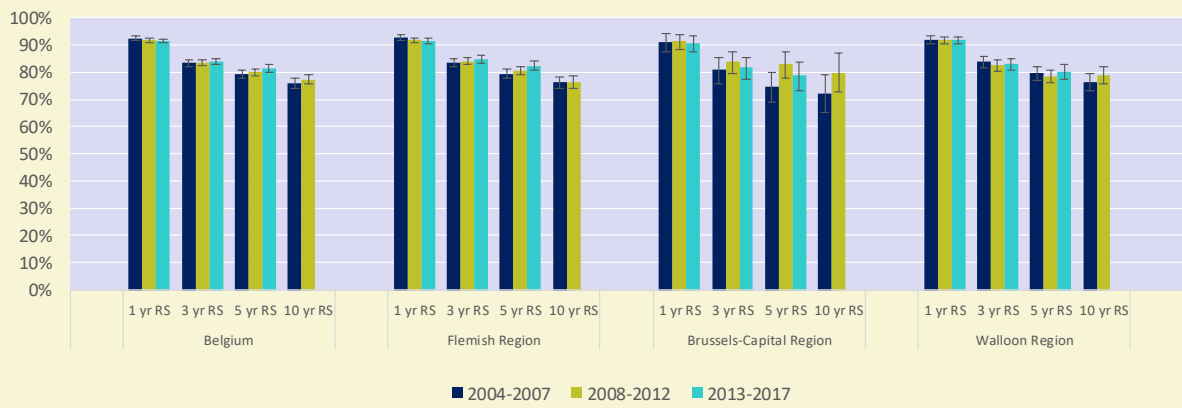
Figure 8 Corpus uteri cancer: Relative survival*, Belgium 2008-2017




* The relative survival values are represented with 95% Confidence Intervals

3.7.2.4 Survival trends

Figure 9 Corpus uteri cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by region



Source: Belgian Cancer Registry 

* The relative survival values are represented with 95% Confidence Intervals

3.7.3 OVARY (ICD-10: C56)

3.7.3.1 Incidence

Table 1 Ovarian cancer: Overview of incidence, mortality, prevalence and survival by region

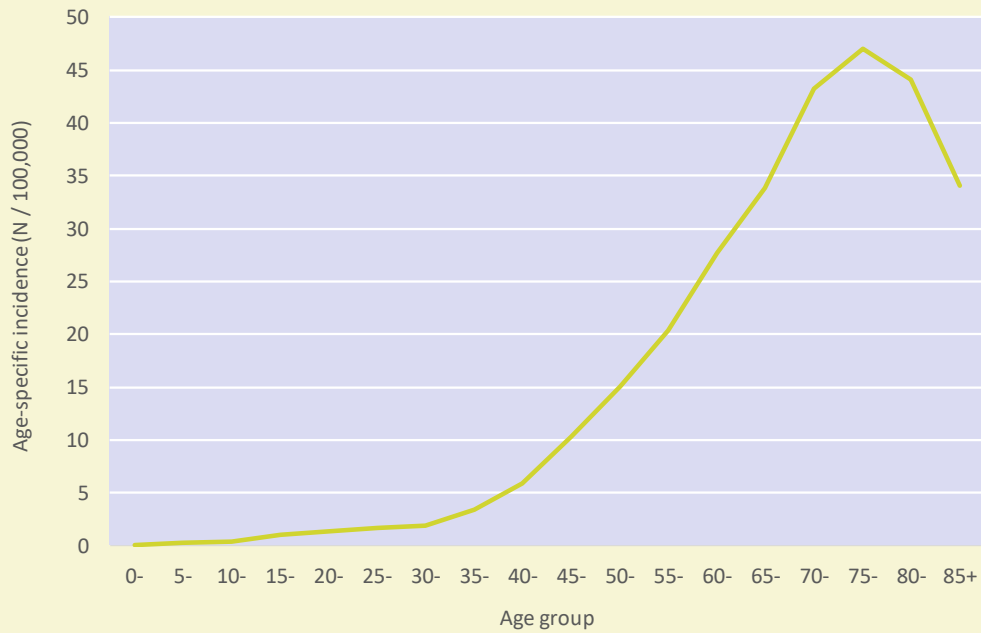
Ovarian cancer	Females		
Incidence, 2017	N	CR	WSR
Belgium	784	13.6	6.9
Flemish Region	480	14.6	6.8
Brussels-Capital Region	61	10.0	6.6
Walloon Region	243	13.1	7.0
Mortality, 2016	N	CR	WSR
Belgium	565	9.9	3.8
Flemish Region	360	11.0	3.9
Brussels-Capital Region	41	6.7	3.5
Walloon Region	164	8.9	3.6
Prevalence (5 years), 2013-2017	N	CR	WSR
Belgium	2,373	41.1	22.3
Flemish Region	1,438	43.4	22.4
Brussels-Capital Region	198	32.3	21.0
Walloon Region	737	39.7	22.6
5-year Relative survival, 2013-2017	N at risk	%	95%CI
Belgium	3,918	45.0	[42.9;47.1]
Flemish Region	2,345	45.6	[42.9;48.3]
Brussels-Capital Region	308	51.2	[43.0;59.1]
Walloon Region	1,265	42.5	[38.8;46.1]
10-year Relative survival, 2008-2017	N at risk	%	95%CI
Belgium	8,019	33.9	[32.2;35.5]
Flemish Region	4,826	35.6	[33.6;37.7]
Brussels-Capital Region	655	35.7	[29.4;42.3]
Walloon Region	2,538	30.0	[27.2;32.9]

CR: crude (all ages) rate (N/100,000 person years)

Source: Belgian Cancer Registry 

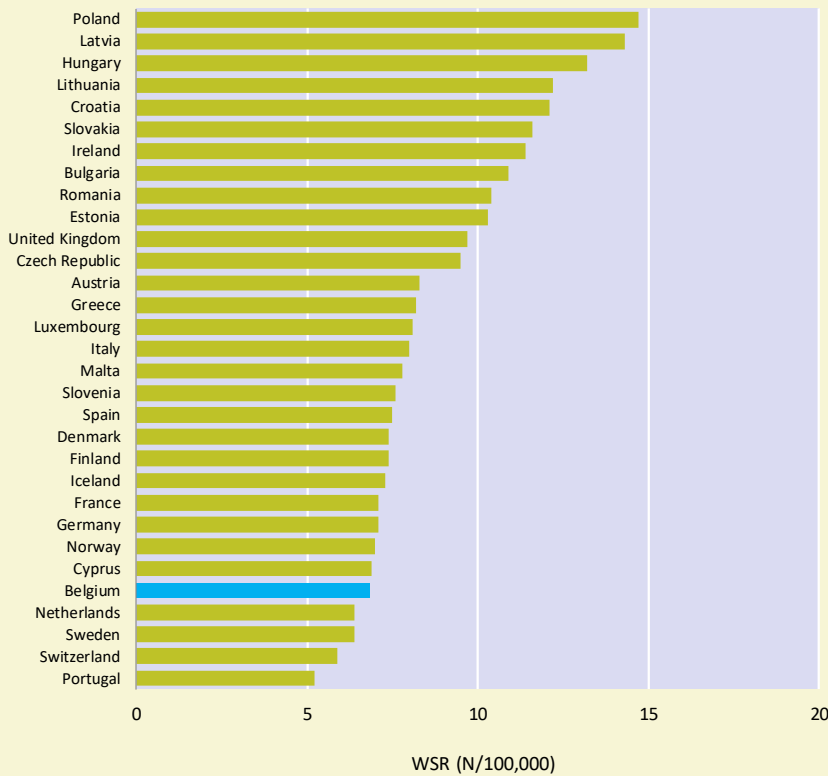
WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Figure 1 Ovarian cancer: Age-specific incidence rates (N/100,000), Belgium 2013-2017



Source: Belgian Cancer Registry

Figure 2 Ovarian cancer: Comparison of age-standardised incidence rates (WSR) (Estimates of cancer incidence in 2018 by country * and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Ovarian cancer: Age-standardised incidence (WSR), Belgium 2013-2017

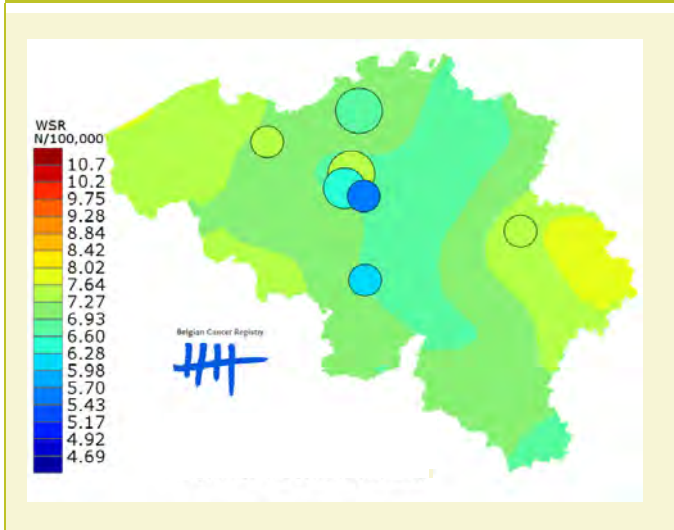
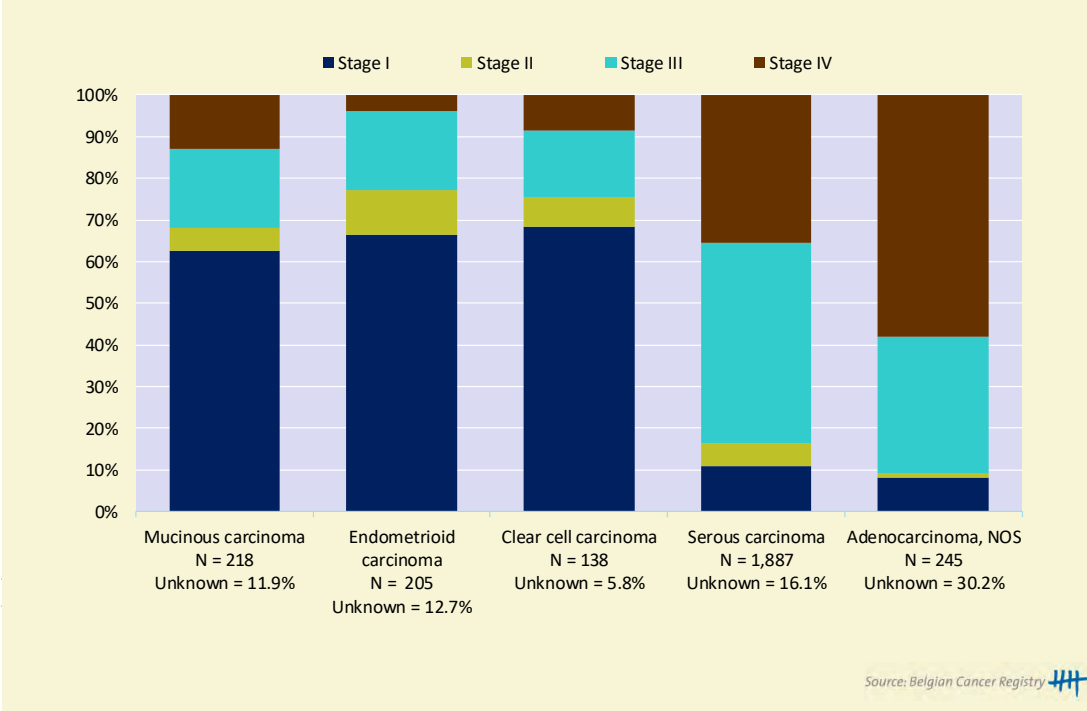


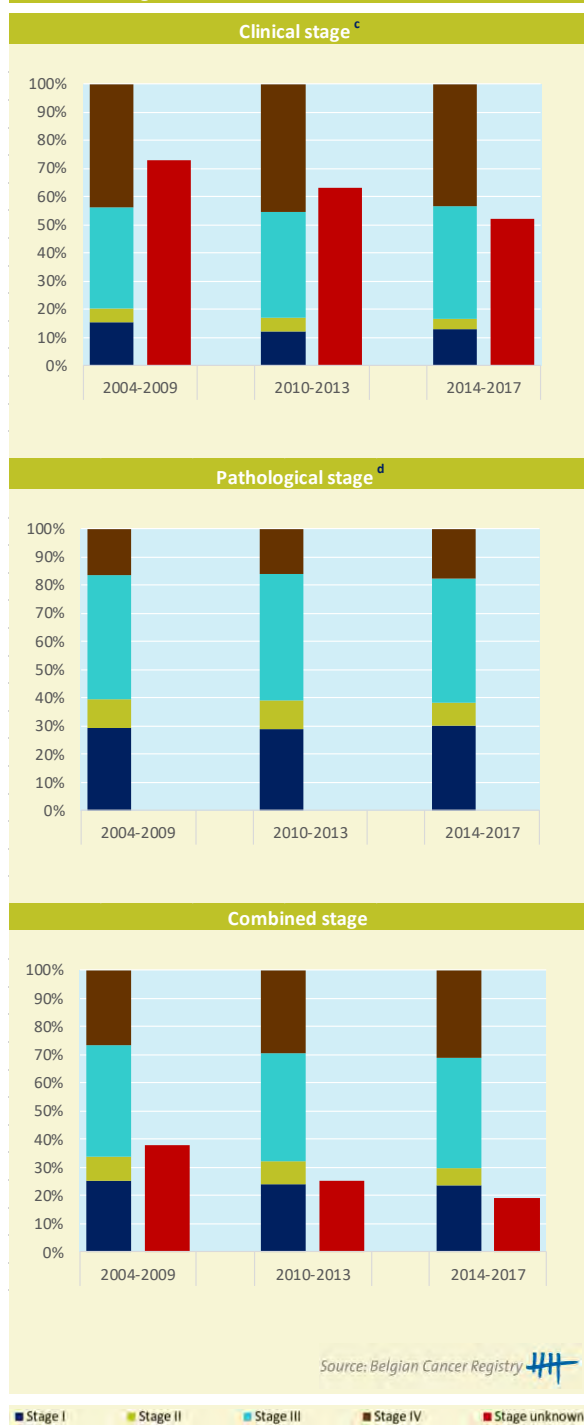
Figure 4 Ovarian cancer: Stage distribution^{a,b} by histology, Belgium 2014-2017



^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Ovarian cancer: Stage distribution^{a,b}, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.7.3.2 Incidence trends

Figure 6 Ovarian cancer: Trends in age-standardised incidence and mortality (WSR) by region, 2004-2017



Figure 7 Ovarian cancer: Trends in age-standardised incidence (WSR) by histology, Belgium 2004-2017

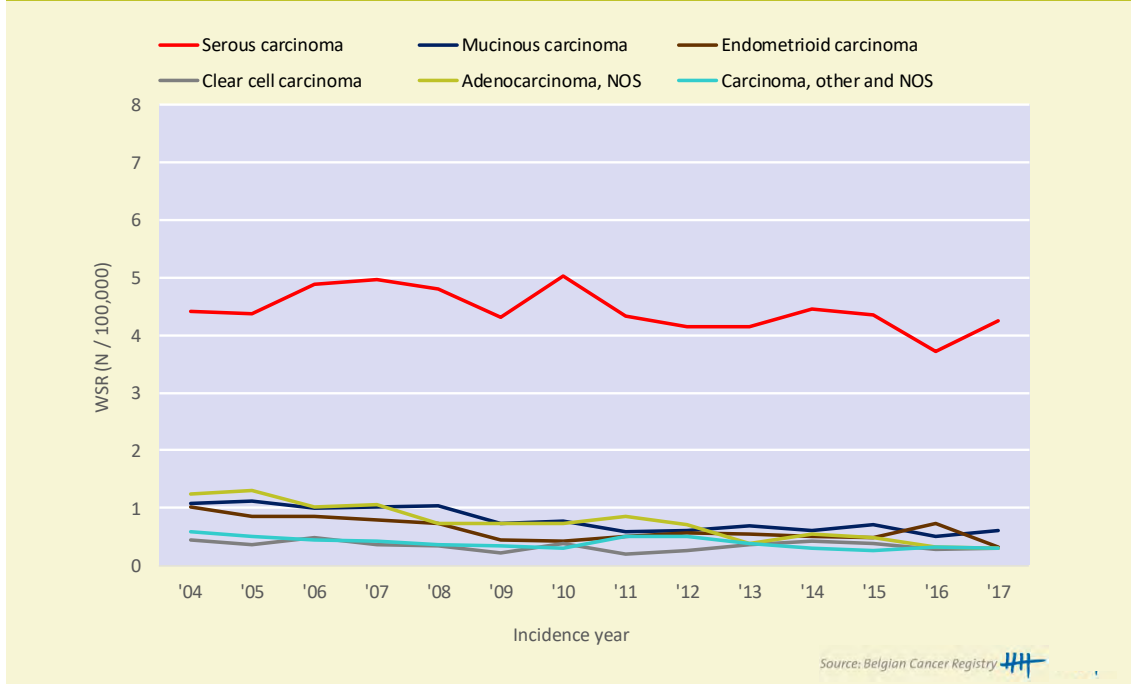


Table 2 Ovarian cancer: AAPC(%) by region, age group and histology in Belgium			
Ovarian cancer	Females		
Incidence	AAPC (%)	95%CI	Period
Belgium	-2.8	[-3.4; -2.2]	2004-2017
Flemish Region	-3.3	[-3.8; -2.7]	2004-2017
Brussels-Capital Region	-2.8	[-4.8; -0.7]	2004-2017
Walloon Region	-2.1	[-3.0; -1.2]	2004-2017
Mortality	AAPC (%)	95%CI	Period
Belgium	-2.3	[-3.0; -1.6]	2004-2016
	1.5	[-1.8; 4.9]	2004-2007
	-3.5	[-4.5; -2.6]	2007-2016
Flemish Region	-2.5	[-3.2; -1.7]	2004-2016
	1.8	[-1.7; 5.3]	2004-2007
	-3.8	[-4.8; -2.9]	2007-2016
Brussels-Capital Region	-1.4	[-4.1; 1.5]	2004-2016
Walloon Region	-2.6	[-4.0; -1.1]	2004-2016
Incidence by histology	AAPC (%)	95%CI	Period
Serous carcinoma	-1.1	[-2.1; -0.1]	2004-2017
Mucinous carcinoma	-5.4	[-7.0; -3.9]	2004-2017
	-8.1	[-11.2; -5.0]	2004-2011
	-2.2	[-6.1; 1.8]	2011-2017
Endometrioid carcinoma	-5.6	[-8.3; -2.8]	2004-2017
	-11.5	[-17.5; -5.0]	2004-2010
	-0.2	[-6.0; 5.9]	2010-2017
Clear cell carcinoma	-1.8	[-5.0; 1.5]	2004-2017
	-7.2	[-13.3; -0.7]	2004-2011
	4.9	[-3.2; 13.7]	2011-2017
Adenocarcinoma, NOS	-10.2	[-12.4; -7.9]	2004-2017
Carcinoma, other and NOS	-4.8	[-7.7; -1.8]	2004-2017
	-10.3	[-22.8; 4.1]	2004-2007
	-3.1	[-6.8; 0.7]	2007-2017

Source: Belgian Cancer Registry 

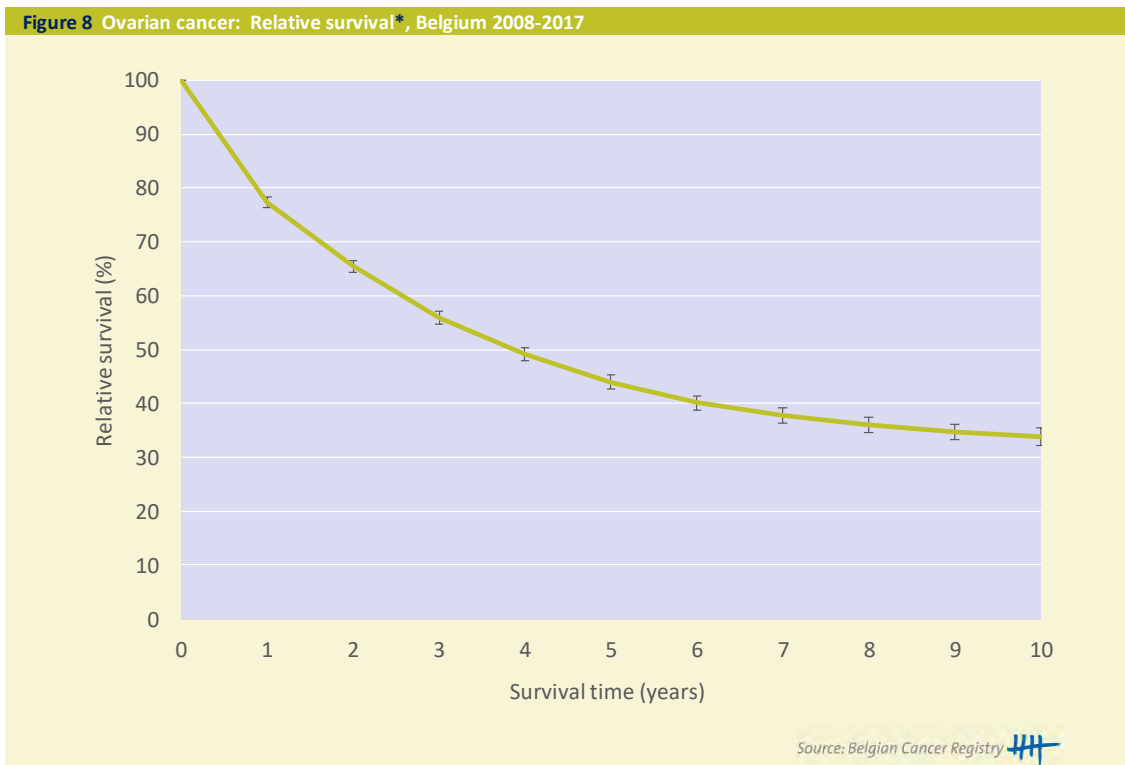
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint.

This column represents the corresponding time interval. AAPC's are always calculated over the entire study-period.

3.7.3.3 Survival

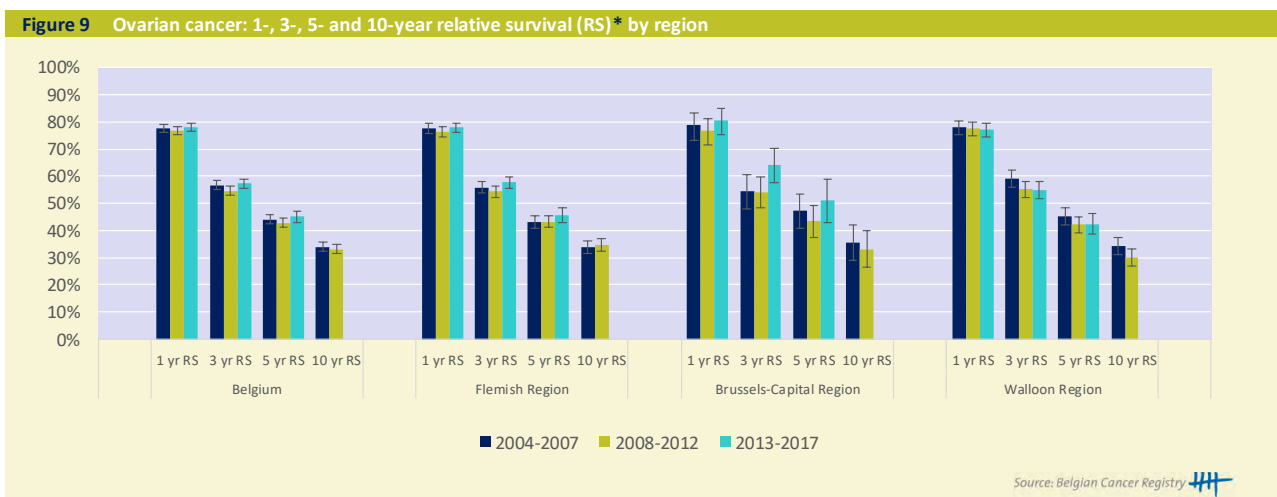
Figure 8 Ovarian cancer: Relative survival*, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.7.3.4 Survival trends

Figure 9 Ovarian cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by region



* The relative survival values are represented with 95% Confidence Intervals

3.8 MALE GENITAL ORGANS

3.8.1 PROSTATE (ICD-10: C61)

3.8.1.1 Incidence

Table 1 Prostate cancer: Overview of incidence, mortality, prevalence and survival by region

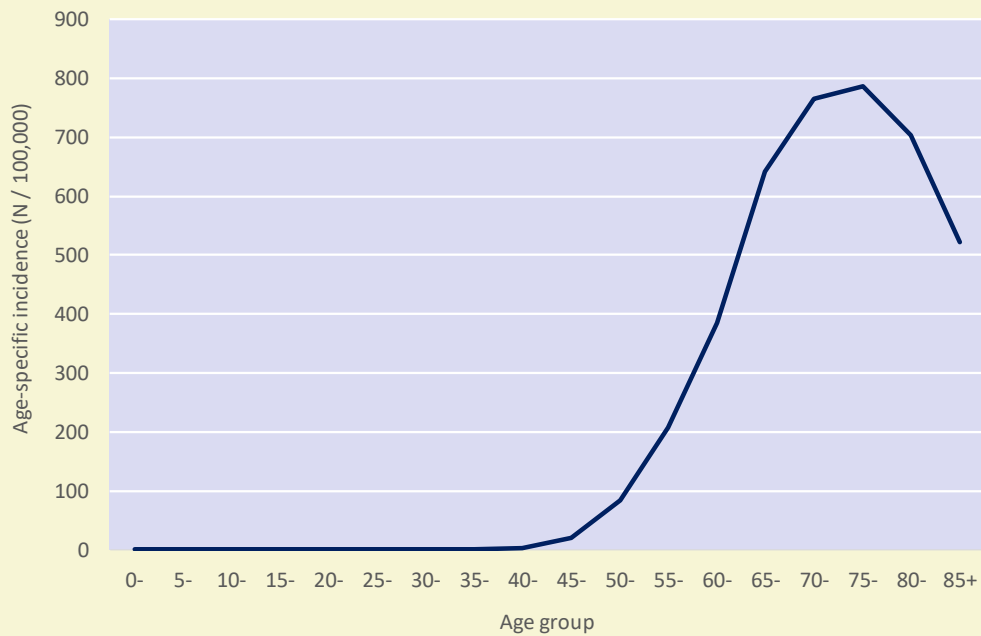
Prostate cancer	Males		
Incidence, 2017	N	CR	WSR
Belgium	9,555	171.6	83.5
Flemish Region	6,224	193.2	88.0
Brussels-Capital Region	564	96.8	65.9
Walloon Region	2,767	156.8	78.9
Mortality, 2016	N	CR	WSR
Belgium	1,529	27.6	9.6
Flemish Region	925	28.9	9.3
Brussels-Capital Region	127	21.9	10.3
Walloon Region	477	27.2	10.3
Prevalence (5 years), 2013-2017	N	CR	WSR
Belgium	37,897	677.0	311.5
Flemish Region	24,787	764.8	328.5
Brussels-Capital Region	2,321	395.7	264.6
Walloon Region	10,789	609.5	289.5
5-year Relative survival, 2013-2017	N at risk	%	95%CI
Belgium	42,720	95.4	[94.7;96.0]
Flemish Region	27,619	95.9	[95.2;96.6]
Brussels-Capital Region	2,727	93.3	[90.7;95.7]
Walloon Region	12,374	94.6	[93.3;95.8]
10-year Relative survival, 2008-2017	N at risk	%	95%CI
Belgium	86,249	94.2	[93.4;95.0]
Flemish Region	56,244	94.1	[93.1;95.0]
Brussels-Capital Region	5,549	94.3	[91.0;97.5]
Walloon Region	24,456	94.7	[93.1;96.2]

Source: Belgian Cancer Registry 

CR: crude (all ages) rate (N/100,000 person years)

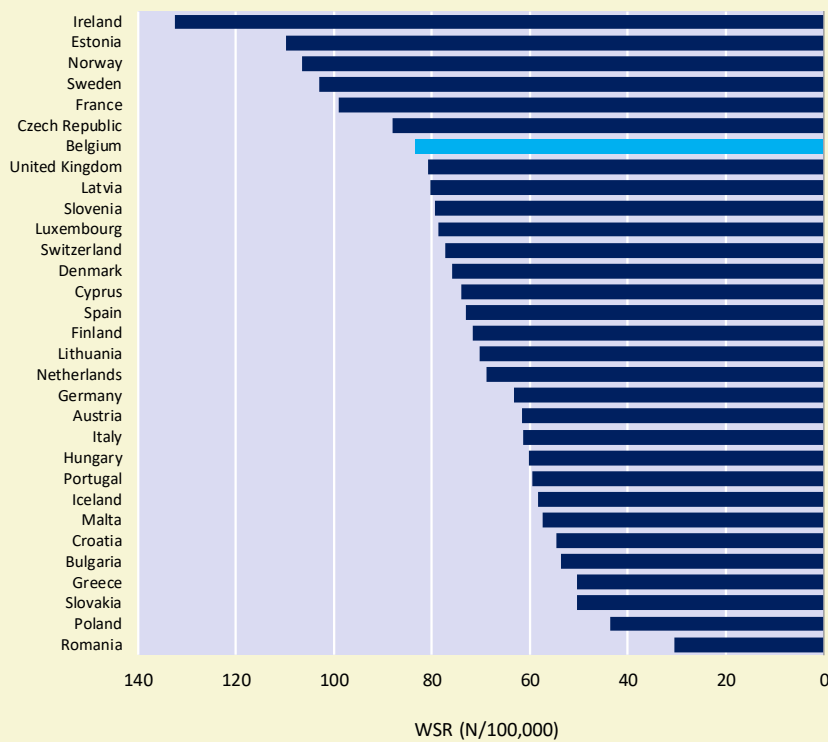
WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Figure 1 Prostate cancer: Age-specific incidence rates (N/100,000), Belgium 2013-2017



Source: Belgian Cancer Registry

Figure 2 Prostate cancer: Comparison of age-standardised incidence rates (WSR) (Estimates of cancer incidence in 2018 by country * and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System

From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019

© European Union, 2019

Figure 3 Prostate cancer: Age-standardised incidence (WSR), Belgium 2013-2017

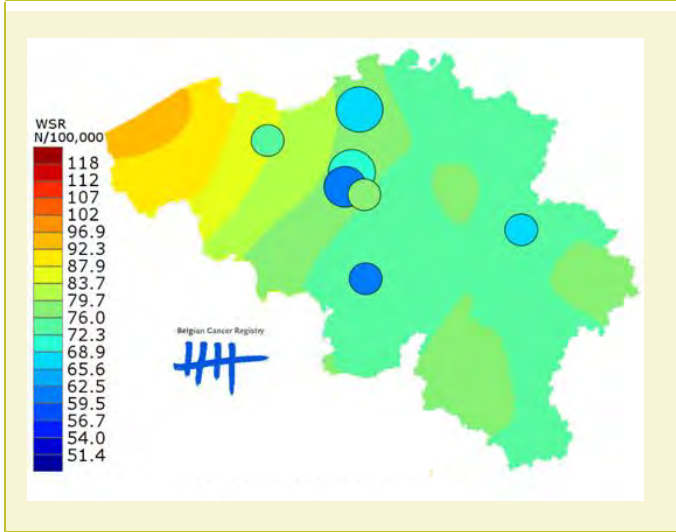
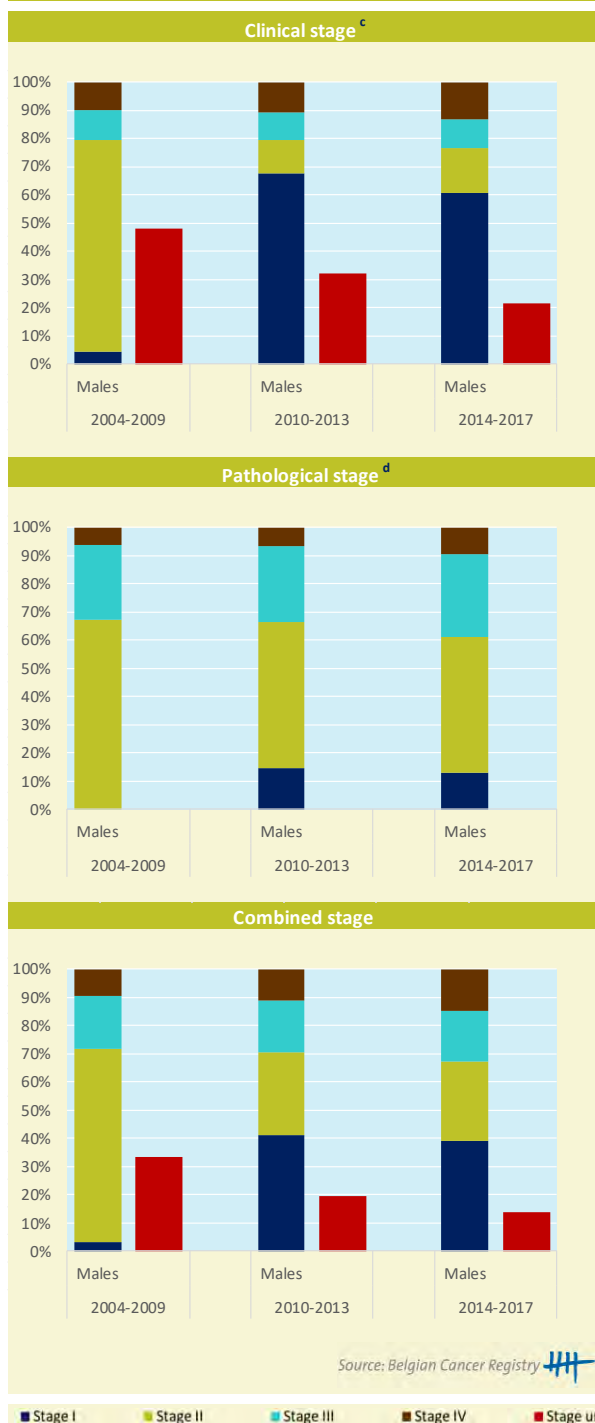


Figure 4 Prostate cancer: Stage distribution^{a, b}, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.8.1.2 Incidence trends

Figure 5 Prostate cancer: Trends in age-standardised incidence and mortality (WSR) by region, 2004-2017

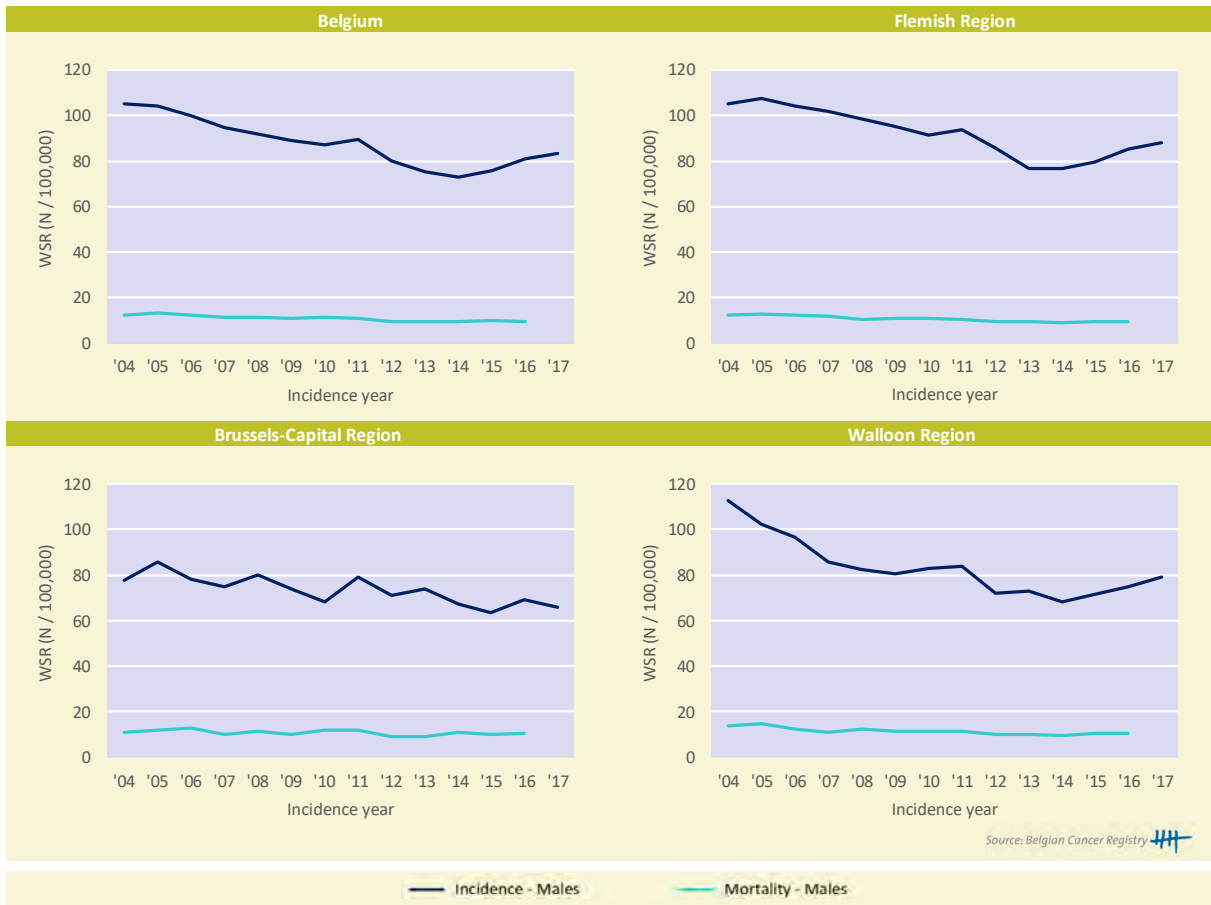


Figure 6 Prostate cancer: Trends in age-standardised incidence (WSR) by stage, Belgium 2004-2017

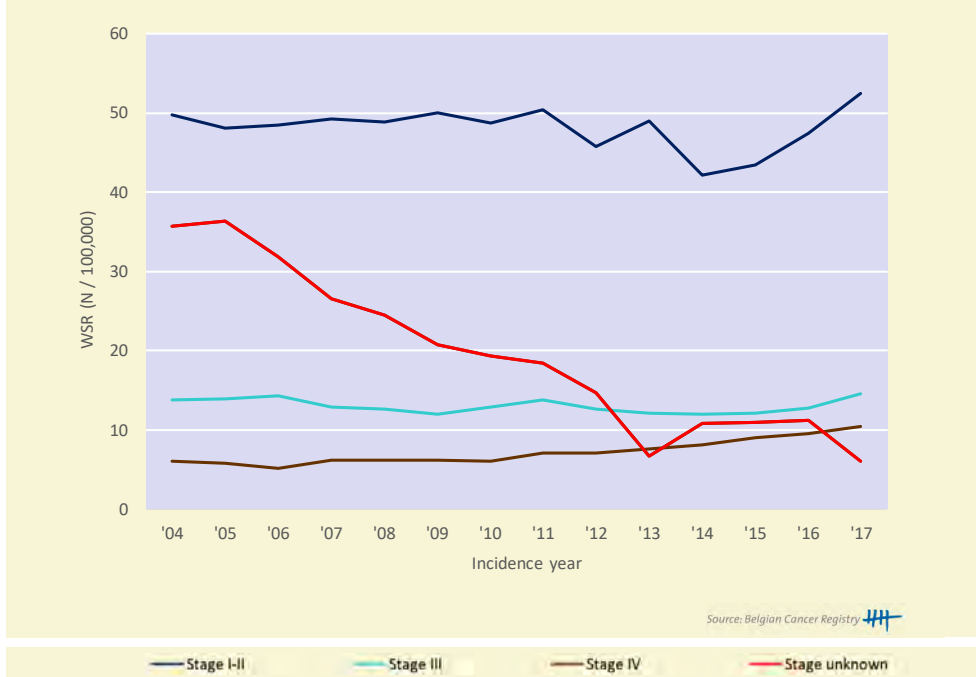


Table 2 Prostate cancer: AAPC(%) by region and stage in Belgium			
Prostate cancer		Males	
Incidence	AAPC (%)	95%CI	Period
Belgium	-1.9	[-2.4; -1.5]	2004-2017
	-3.6	[-4.1; -3.0]	2004-2014
Flemish Region	3.8	[1.6; 5.9]	2014-2017
	-1.5	[-2.0; -1.0]	2004-2017
	-2.0	[-3.2; -0.7]	2004-2009
	-4.8	[-5.9; -3.6]	2009-2014
	5.1	[2.6; 7.6]	2014-2017
Brussels-Capital Region	-1.6	[-2.4; -0.9]	2004-2017
Walloon Region	-2.8	[-3.5; -2.1]	2004-2017
	-8.0	[-10.7; -5.2]	2004-2007
	-3.2	[-4.2; -2.1]	2007-2014
	3.7	[0.6; 6.9]	2014-2017
Mortality	AAPC (%)	95%CI	Period
Belgium	-2.6	[-3.3; -2.0]	2004-2016
Flemish Region	-2.7	[-3.4; -2.1]	2004-2016
Brussels-Capital Region	-1.3	[-2.8; 0.3]	2004-2016
Walloon Region	-2.7	[-3.8; -1.7]	2004-2016
Incidence by stage	AAPC (%)	95%CI	Period
Stage I-II	0.0	[-0.9; 0.8]	2004-2017
	-1.1	[-2.1; -0.1]	2004-2014
	3.5	[-0.5; 7.6]	2014-2017
Stage III	-0.2	[-1.1; 0.8]	2004-2017
	-2.3	[-5.2; 0.7]	2004-2008
	-1.1	[-2.9; 0.7]	2008-2014
Stage IV	4.7	[0.4; 9.3]	2014-2017
	4.6	[3.9; 5.4]	2004-2017
	1.4	[-0.3; 3.1]	2004-2010
Stage Unknown	7.5	[6.0; 9.1]	2010-2017
	-12.3	[-14.9; -9.5]	2004-2017

Source: Belgian Cancer Registry 

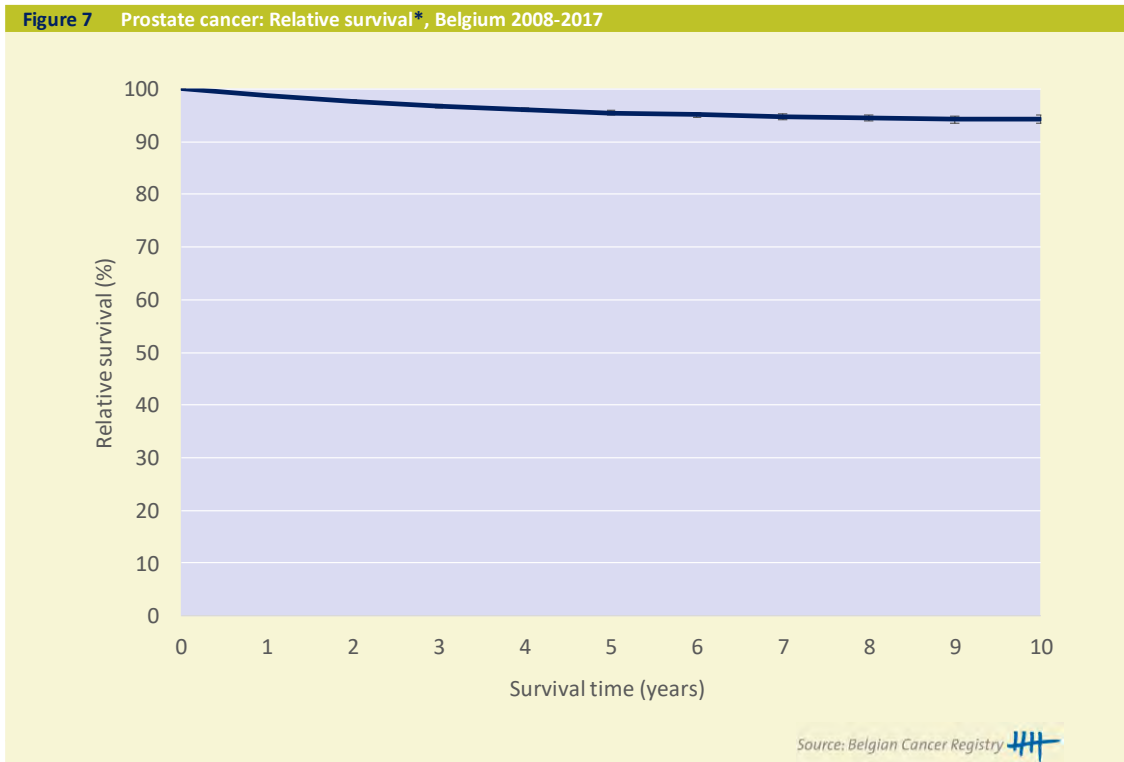
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint.

This column represents the corresponding time interval. AAPC's are always calculated over the entire study-period.

3.8.1.3 Survival

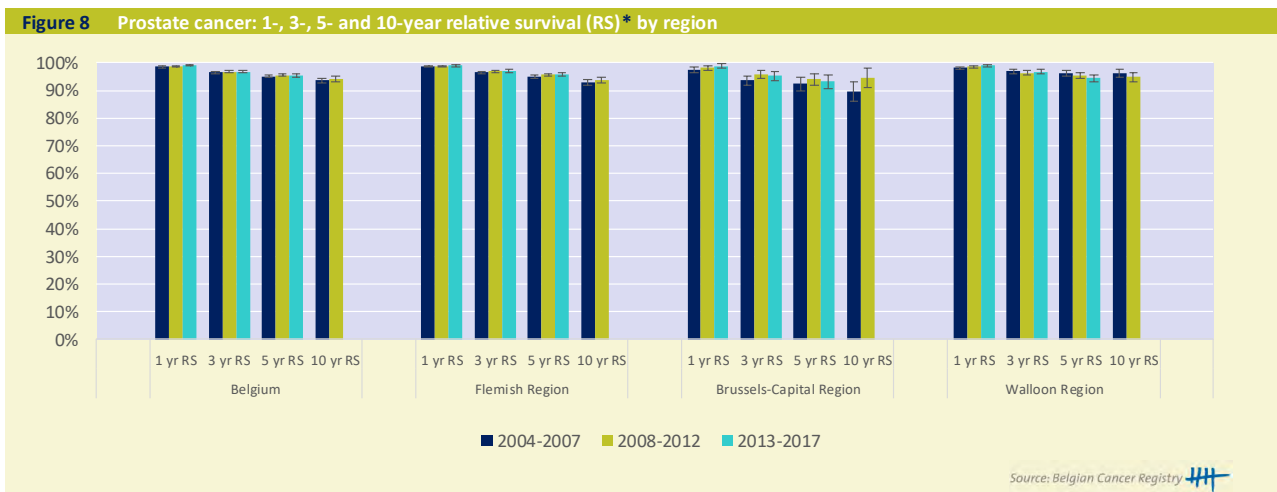
Figure 7 Prostate cancer: Relative survival*, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.8.1.4 Survival trends

Figure 8 Prostate cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by region



* The relative survival values are represented with 95% Confidence Intervals

3.8.2 TESTIS (ICD-10: C62)

3.8.2.1 Incidence

Table 1 Testicular cancer: Overview of incidence, mortality, prevalence and survival by region

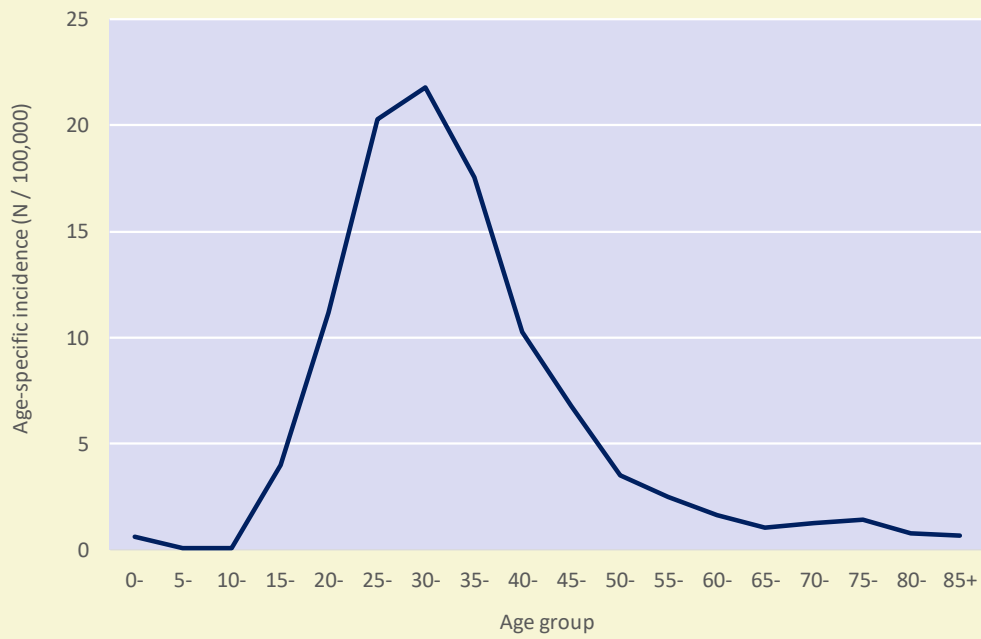
Testicular cancer	Males		
Incidence, 2017	N	CR	WSR
Belgium	387	7.0	7.0
Flemish Region	247	7.7	8.1
Brussels-Capital Region	30	5.2	4.4
Walloon Region	110	6.2	6.0
Mortality, 2016	N	CR	WSR
Belgium	10	0.2	0.2
Flemish Region	4	0.1	0.1
Brussels-Capital Region	1	0.2	0.1
Walloon Region	5	0.3	0.2
Prevalence (5 years), 2013-2017	N	CR	WSR
Belgium	1,785	31.9	30.4
Flemish Region	1,066	32.9	32.9
Brussels-Capital Region	127	21.6	18.0
Walloon Region	592	33.4	31.1
5-year Relative survival, 2013-2017	N at risk	%	95%CI
Belgium	1,828	98.1	[97.0;98.9]
Flemish Region	1,081	99.2	[98.0;100.0]
Brussels-Capital Region	131	95.3	[89.3;98.3]
Walloon Region	616	96.7	[94.3;98.5]
10-year Relative survival, 2008-2017	N at risk	%	95%CI
Belgium	3,426	96.9	[95.5;98.0]
Flemish Region	1,955	98.1	[96.5;99.2]
Brussels-Capital Region	270	94.6	[87.6;98.6]
Walloon Region	1,201	95.5	[92.9;97.6]

Source: Belgian Cancer Registry 

CR: crude (all ages) rate (N/100,000 person years)

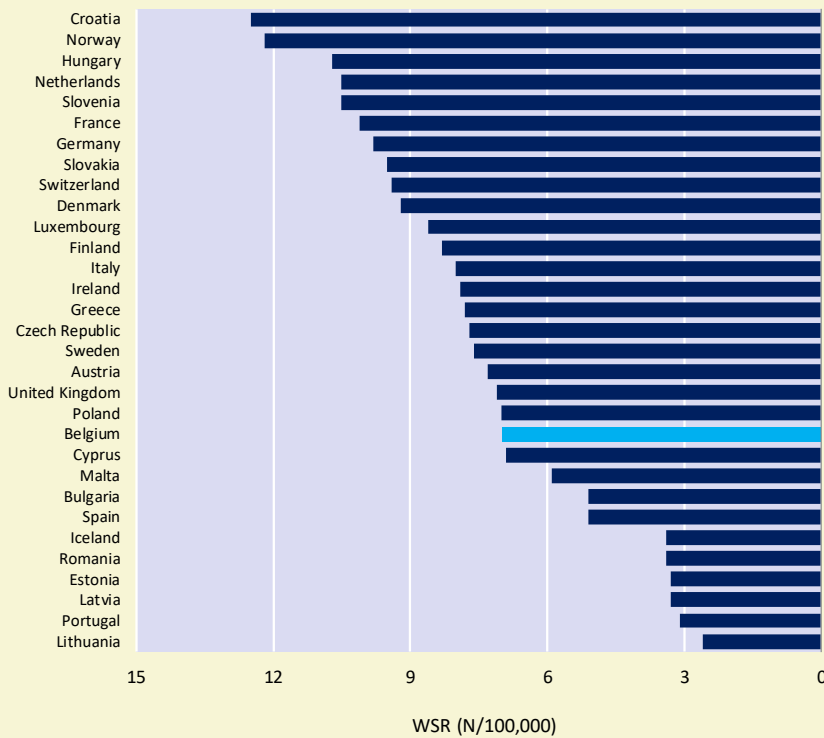
WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Figure 1 Testicular cancer: Age-specific incidence rates (N/100,000), Belgium 2013-2017



Source: Belgian Cancer Registry

Figure 2 Testicular cancer: Comparison of age-standardised incidence rates (WSR) (Estimates of cancer incidence in 2018 by country * and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Testicular cancer: Age-standardised incidence (WSR), Belgium 2013-2017

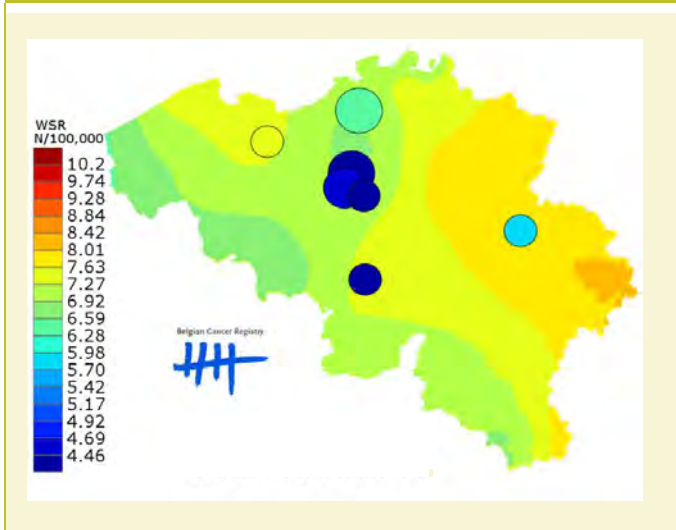
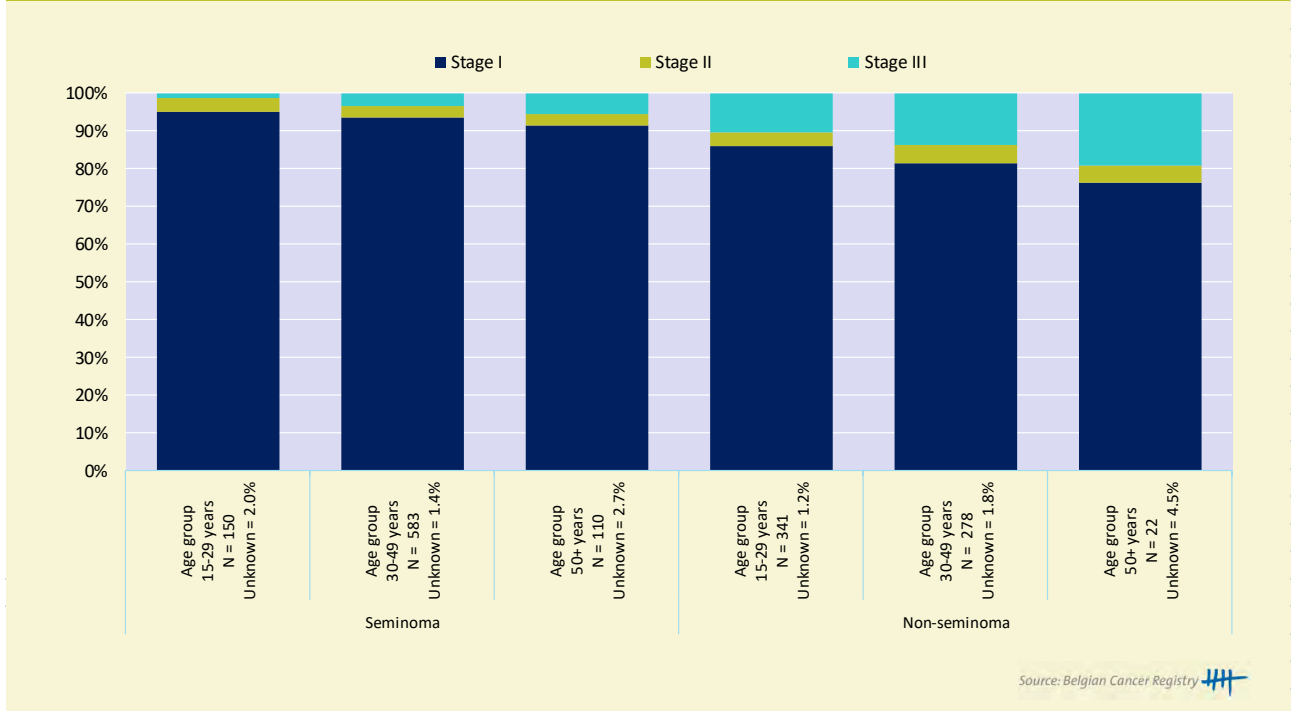


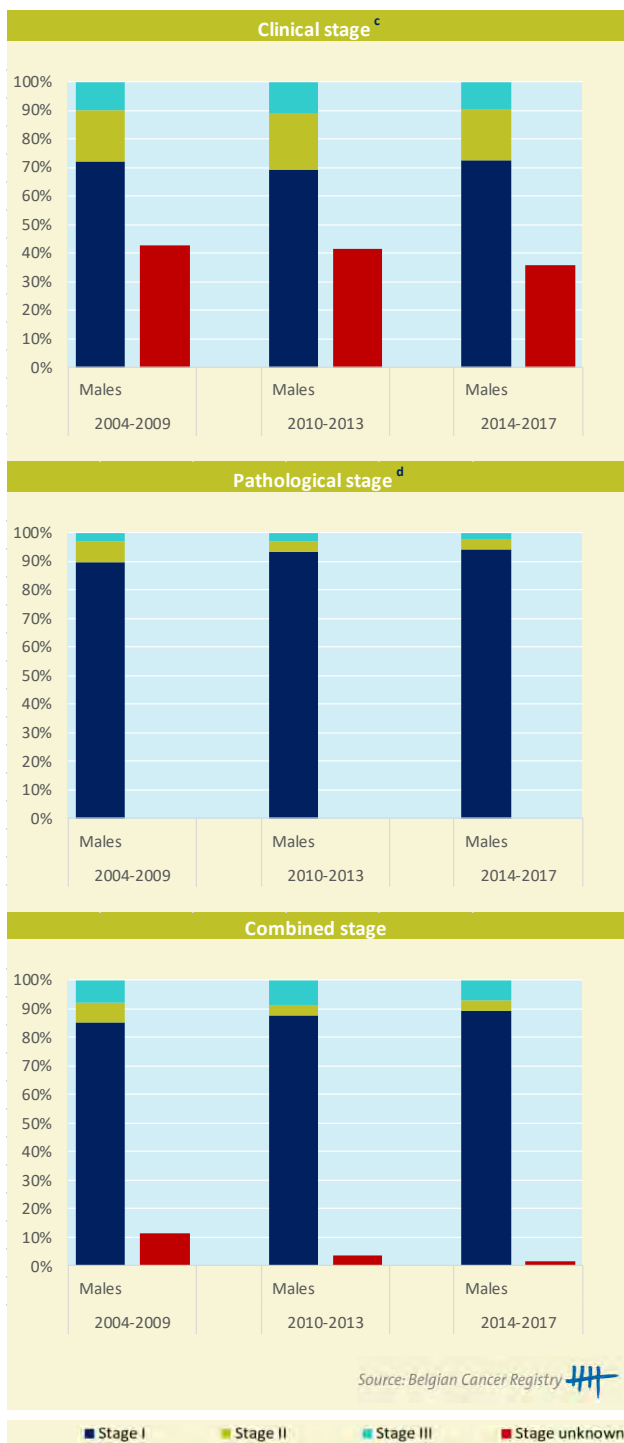
Figure 4 Testicular cancer: Stage distribution^{a,b} by age group and histology, Belgium 2014-2017



^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Testicular cancer: Stage distribution ^{a b}, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.8.2.2 Incidence trends

Figure 6 Testicular cancer: Trends in age-standardised incidence and mortality (WSR) by region, 2004-2017

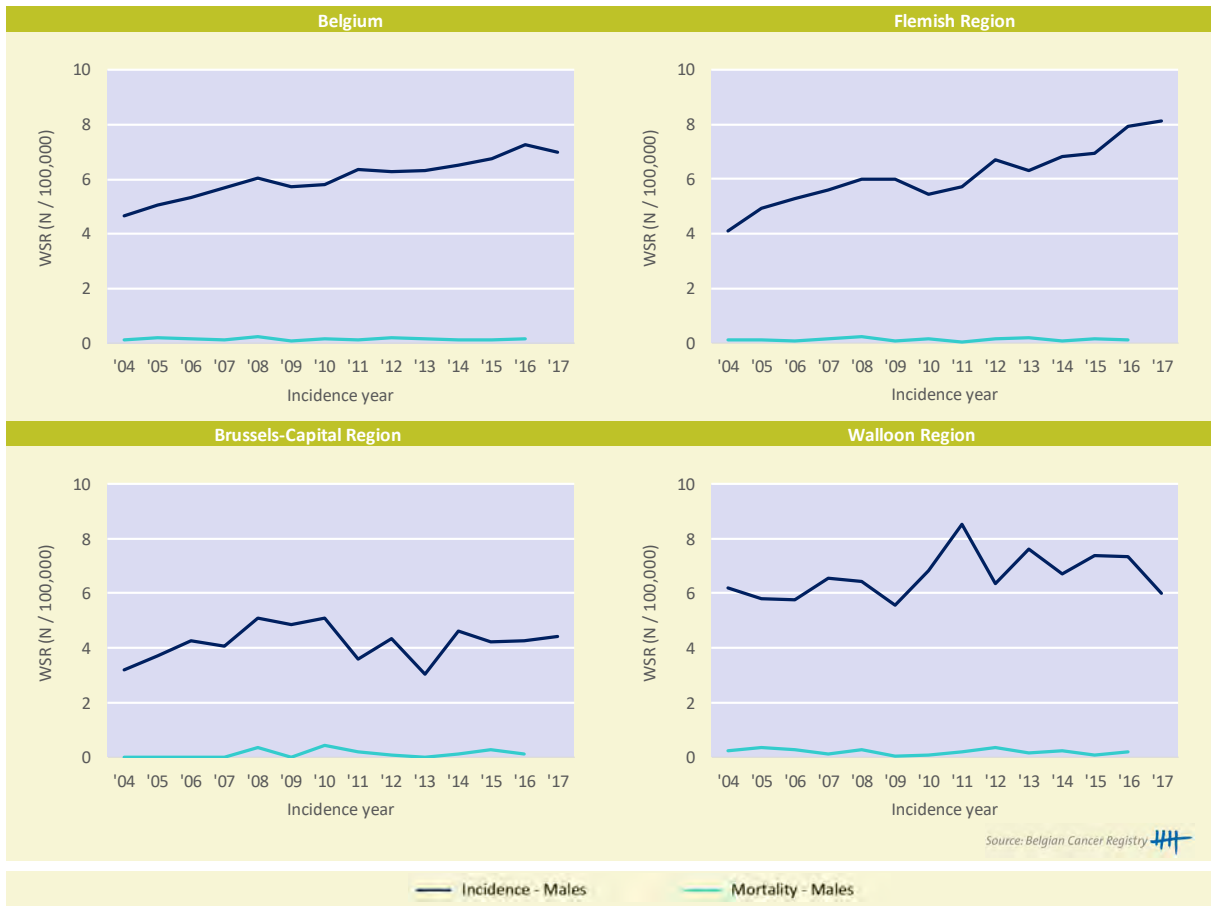


Figure 7 Testicular cancer: Trends in age-standardised incidence by stage, 2004-2017

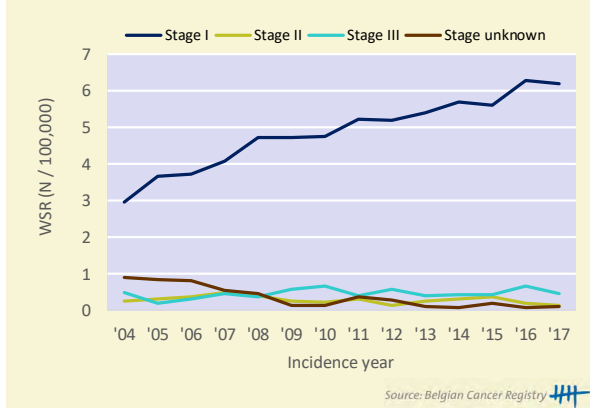


Figure 8 Testicular cancer: Trends in age-standardised incidence by histology, 2004-2017

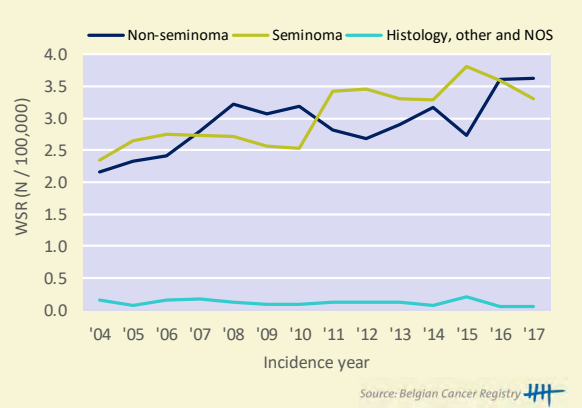


Table 2 Testicular cancer: AAPC(%) by region, stage and histology in Belgium

Testicular cancer	Males		
	AAPC (%)	95%CI	Period
Incidence			
Belgium	2.9	[2.3, 3.5]	2004-2017
Flemish Region	5.2	[4.0, 6.4]	2004-2017
	9.7	[4.8, 14.8]	2004-2007
	2.2	[0.4, 3.9]	2007-2014
	8.0	[3.2, 13.0]	2014-2017
Brussels-Capital Region	1.1	[-1.1, 3.3]	2004-2017
	6.0	[-0.7, 13.1]	2004-2009
	-1.9	[-5.6, 2.0]	2009-2017
Walloon Region	1.3	[-0.3, 3.0]	2004-2017
Mortality			
Belgium	-0.5	[-5.5, 4.8]	2004-2016
Flemish Region	-0.2	[-8.0, 8.3]	2004-2016
Brussels-Capital Region	-	-	-
Walloon Region	-4.0	[-13.6, 6.6]	2004-2016
Incidence by stage			
Stage I	5.6	[5.0, 6.1]	2004-2017
	10.5	[8.4, 12.7]	2004-2008
	3.5	[2.7, 4.3]	2008-2017
Stage II	-4.4	[-9.3, 0.7]	2004-2017
Stage III	3.3	[-1.0, 7.8]	2004-2017
Stage Unknown	-17.1	[-22.8, -11.0]	2004-2017
Incidence by histology			
Non-seminoma	4.2	[2.9, 5.5]	2004-2017
	11.2	[6.6, 16.0]	2004-2008
	-3.7	[-7.3, -0.1]	2008-2012
	5.4	[2.0, 8.8]	2012-2017
Seminoma	3.2	[1.9, 4.5]	2004-2017
Other and unspecified histology	-4.5	[-9.9, 1.3]	2004-2017

Source: Belgian Cancer Registry 

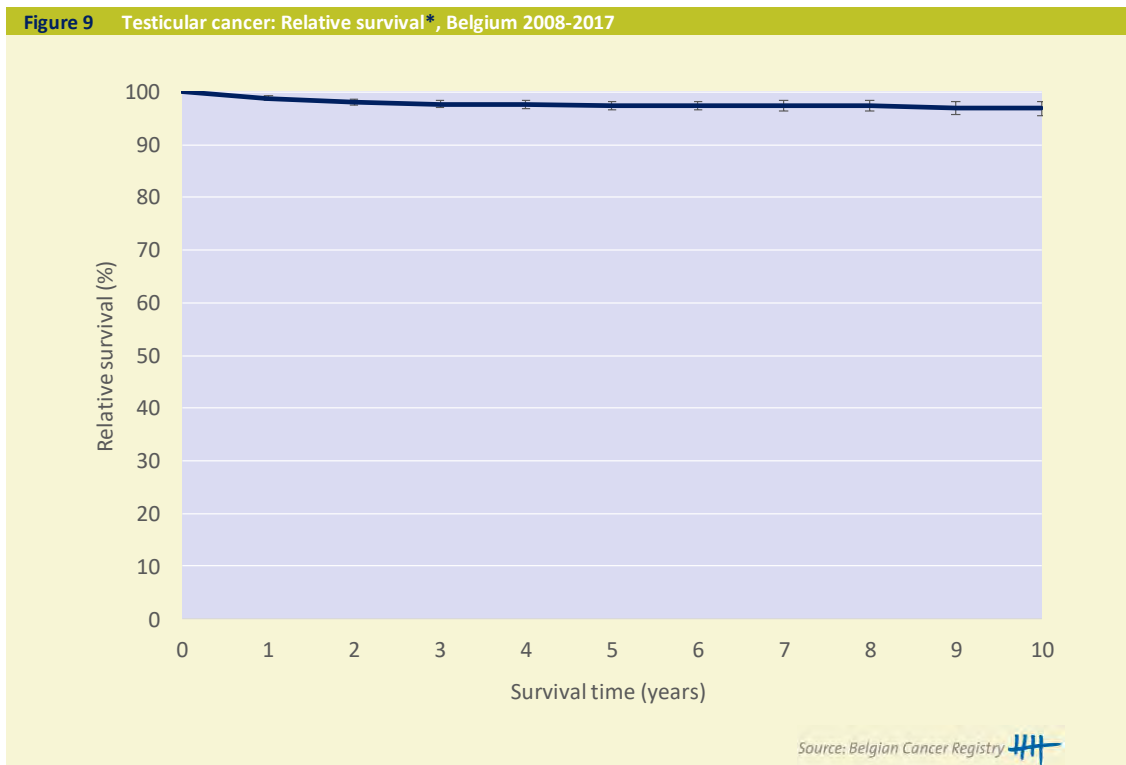
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint.

This column represents the corresponding time interval. AAPC's are always calculated over the entire study-period.

3.8.2.3 Survival

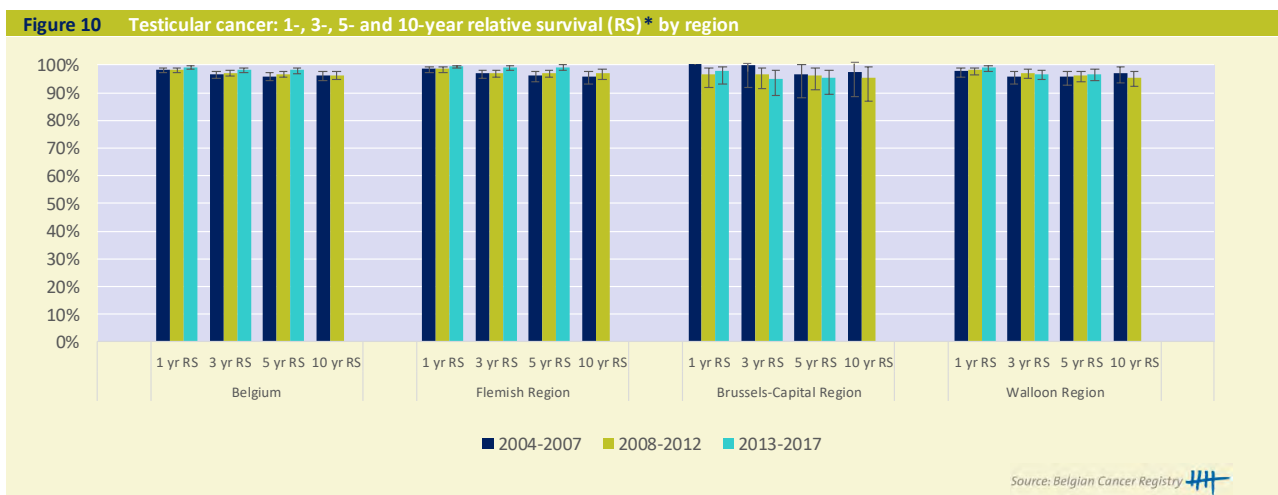
Figure 9 Testicular cancer: Relative survival*, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.8.2.4 Survival trends

Figure 10 Testicular cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by region



* The relative survival values are represented with 95% Confidence Intervals

3.9 URINARY TRACT

3.9.1 KIDNEY (ICD-10: C64)

3.9.1.1 Incidence

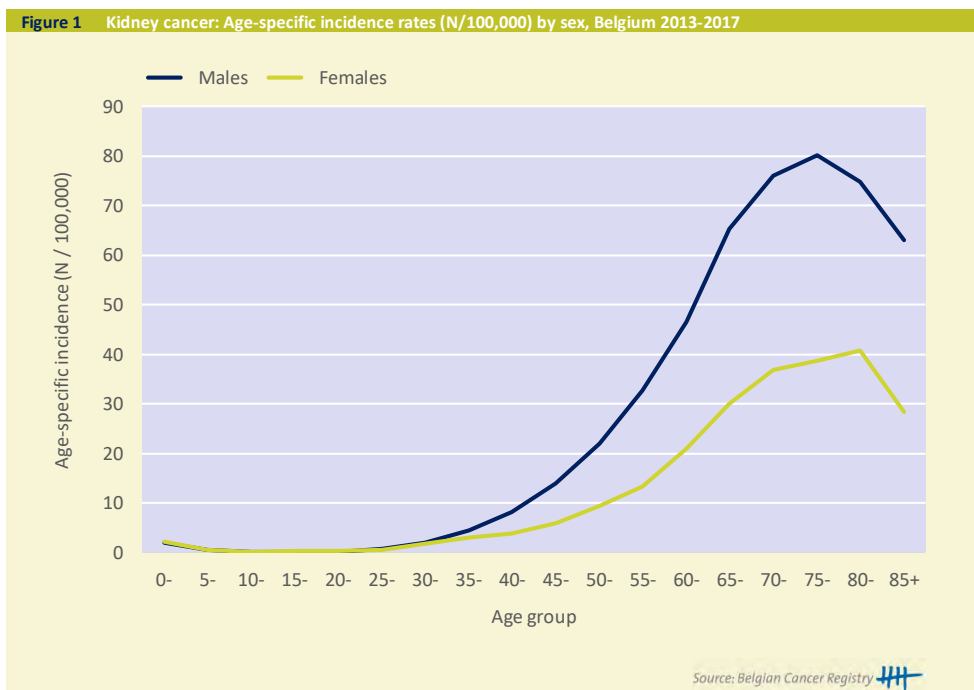
Table 1 Kidney cancer: Overview of incidence, mortality, prevalence and survival by sex and region								
Kidney cancer	Males			Females				
	N	CR	WSR	N	CR	WSR		
Incidence, 2017								
Belgium	1,122	20.2	10.8	647	11.2	5.6		
Flemish Region	732	22.7	11.1	413	12.5	5.8		
Brussels-Capital Region	63	10.8	8.1	30	4.9	3.1		
Walloon Region	327	18.5	10.8	204	11.0	5.8		
Mortality, 2016								
Belgium	359	6.5	2.9	234	4.1	1.3		
Flemish Region	231	7.2	3.1	142	4.3	1.3		
Brussels-Capital Region	28	4.8	2.7	18	3.0	1.3		
Walloon Region	100	5.7	2.6	74	4.0	1.4		
Prevalence (5 years), 2013-2017								
Belgium	4,191	74.9	40.1	2,415	41.8	20.2		
Flemish Region	2,680	82.7	41.1	1,530	46.2	20.9		
Brussels-Capital Region	272	46.4	33.9	158	25.8	15.6		
Walloon Region	1,239	70.0	39.8	727	39.2	20.3		
5-year Relative survival, 2013-2017								
	N at risk	%	95%CI	N at risk	%	95%CI		
Belgium	5,400	77.1	[75.3;78.8]	3,026	77.0	[74.6;79.2]		
Flemish Region	3,460	76.5	[74.2;78.6]	1,937	75.5	[72.5;78.4]		
Brussels-Capital Region	355	80.7	[73.9;86.7]	197	76.4	[66.7;84.7]		
Walloon Region	1,585	77.5	[74.2;80.7]	892	80.4	[76.2;84.2]		
10-year Relative survival, 2008-2017								
	N at risk	%	95%CI	N at risk	%	95%CI		
Belgium	10,173	69.9	[67.9;71.9]	5,818	70.7	[68.1;73.3]		
Flemish Region	6,498	68.6	[66.0;71.1]	3,735	68.6	[65.3;71.8]		
Brussels-Capital Region	699	71.5	[63.8;78.8]	380	79.2	[68.3;89.2]		
Walloon Region	2,976	72.4	[68.7;76.1]	1,703	73.4	[68.5;78.2]		

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

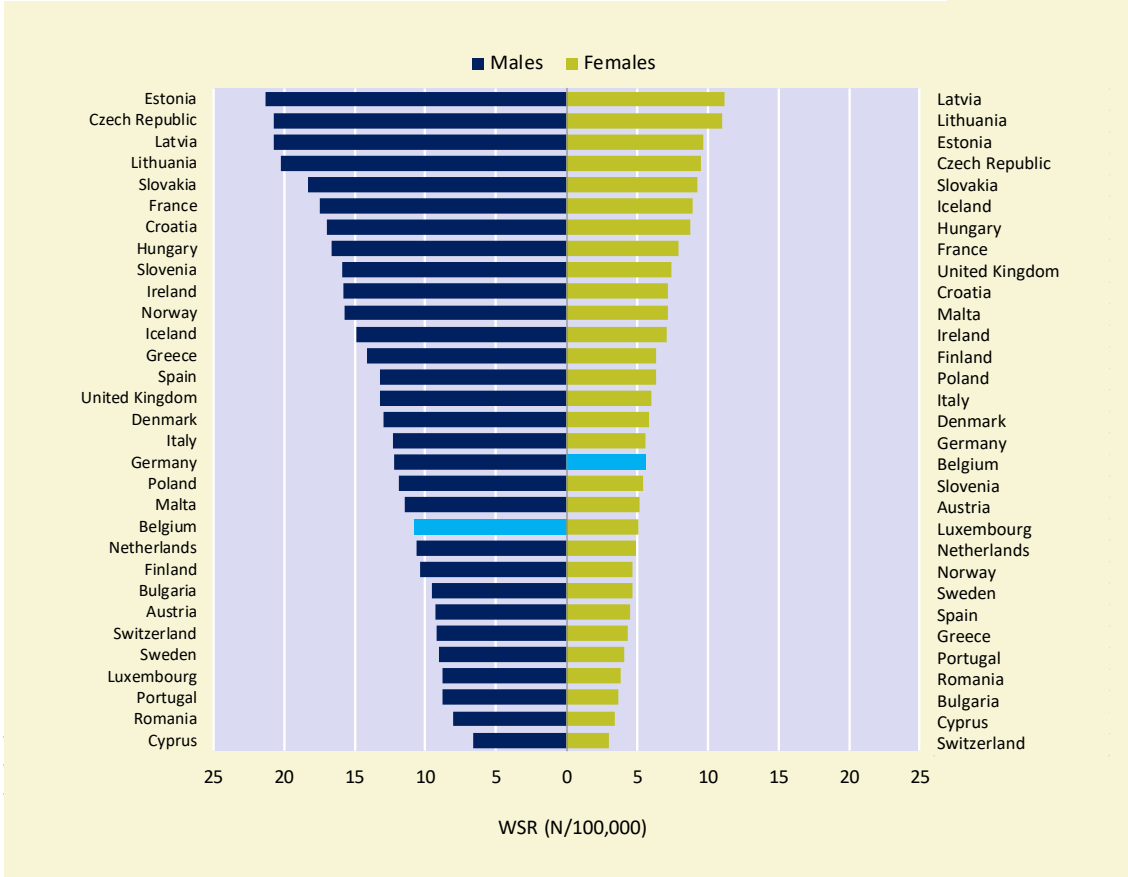
Source: Belgian Cancer Registry

Figure 1 Kidney cancer: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017



Source: Belgian Cancer Registry

Figure 2 Kidney cancer: Comparison of age-standardised incidence rates (WSR) (Estimates of cancer incidence in 2018 by country * and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Kidney cancer: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

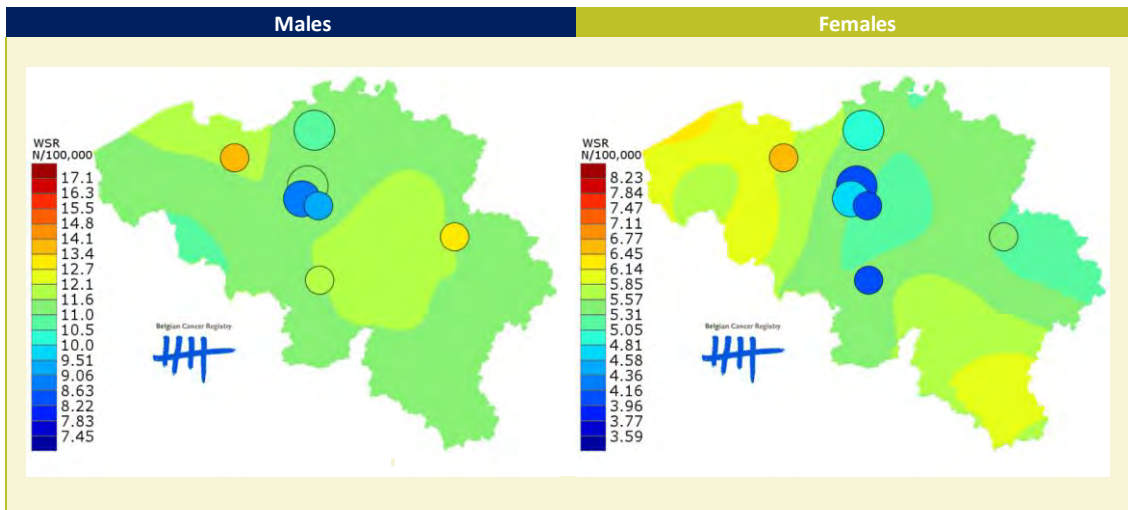
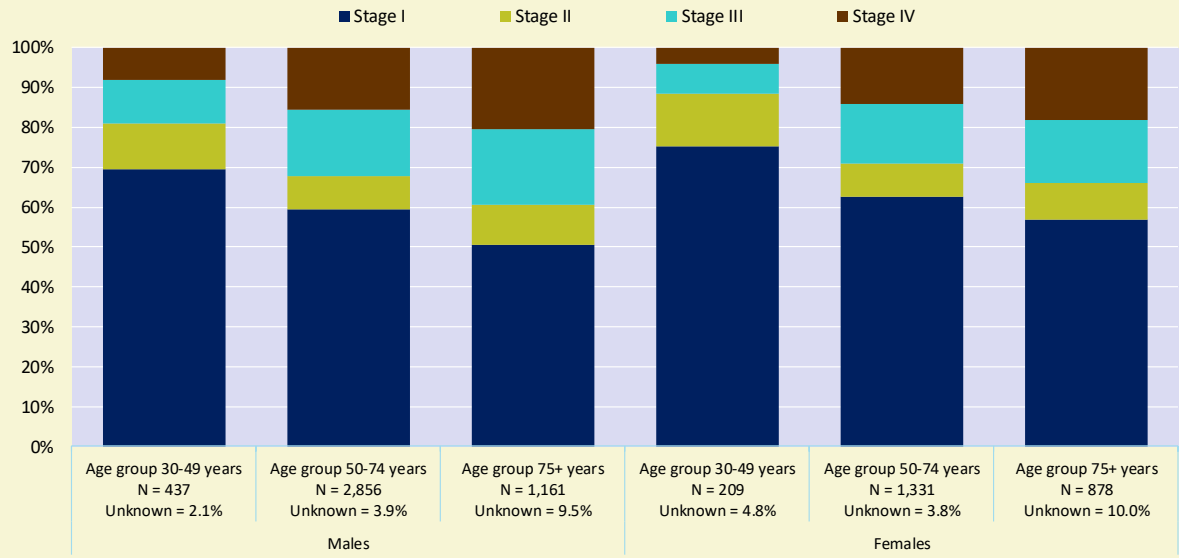


Figure 4 Kidney cancer: Stage distribution^{a,b} by sex and age group, Belgium 2014-2017

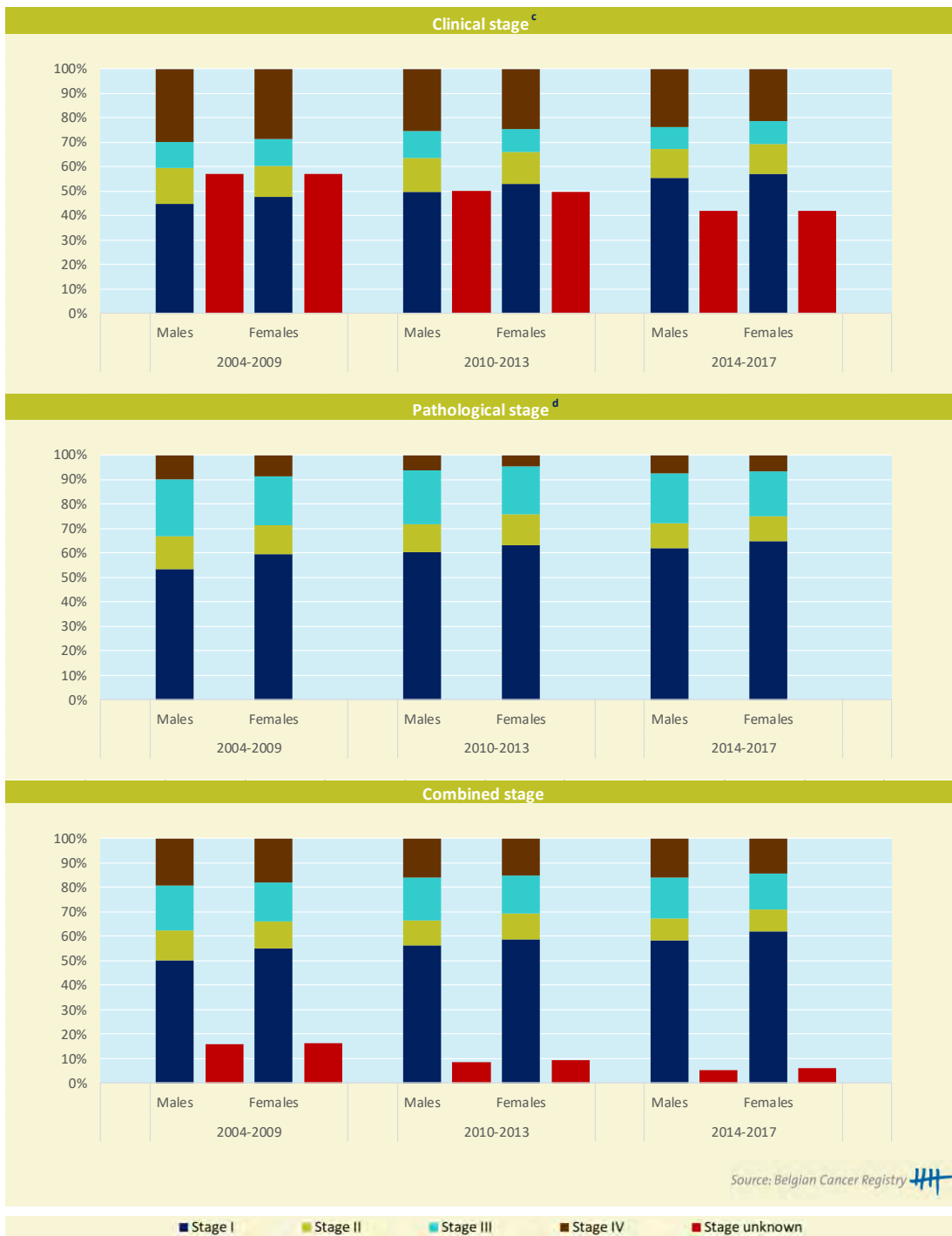


Source: Belgian Cancer Registry

^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Kidney cancer: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.9.1.2 Incidence trends

Figure 6 Kidney cancer: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

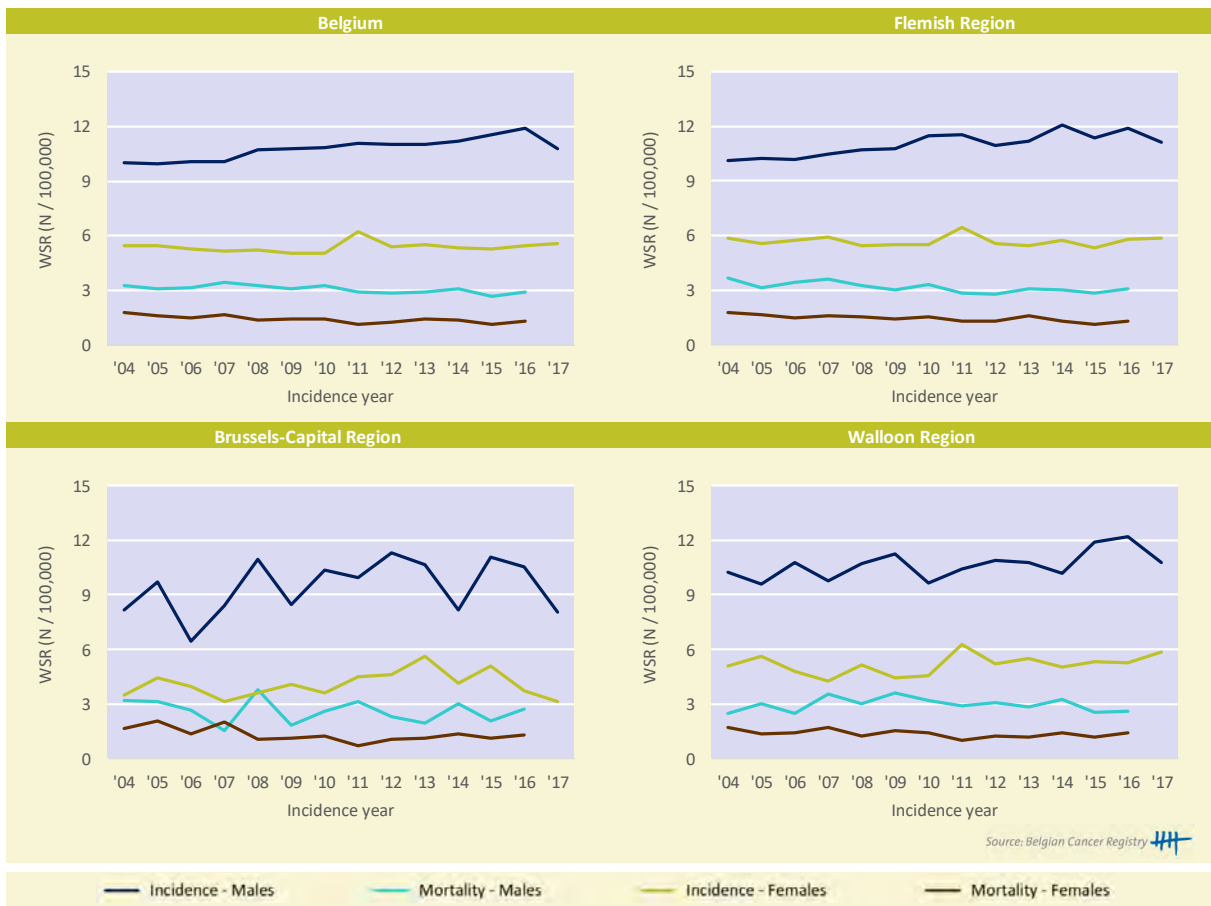


Figure 7 Kidney cancer: Trends in age-standardised incidence (WSR) by stage and sex, Belgium 2004-2017

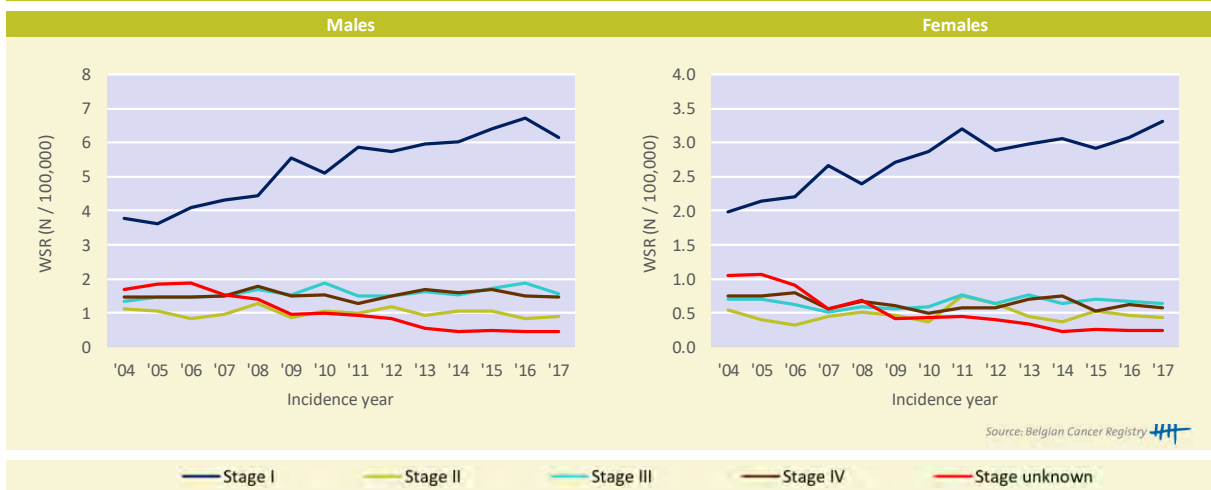


Table 2 Kidney cancer: AAPC(%) by sex, region and stage in Belgium						
Kidney cancer	Males			Females		
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Incidence						
Belgium	1.1	[0.7; 1.5]	2004-2017	0.3	[-0.5; 1.0]	2004-2017
	1.7	[0.9; 2.5]	2004-2011			
	0.4	[-0.5; 1.4]	2011-2017			
Flemish Region	1.1	[0.7; 1.6]	2004-2017	-0.1	[-0.8; 0.7]	2004-2017
	1.9	[1.0; 2.8]	2004-2011			
	0.2	[-0.9; 1.3]	2011-2017			
Brussels-Capital Region	1.3	[-1.0; 3.7]	2004-2017	0.8	[-2.2; 3.8]	2004-2017
				0.6	[-12.6; 15.8]	2004-2007
				0.8	[-2.8; 4.6]	2007-2017
Walloon Region	1.0	[0.1; 1.9]	2004-2017	0.9	[-0.5; 2.4]	2004-2017
Mortality						
Belgium	-1.2	[-2.0; -0.5]	2004-2016	-2.5	[-3.8; -1.1]	2004-2016
Flemish Region	-1.6	[-2.7; -0.5]	2004-2016	-2.6	[-3.9; -1.3]	2004-2016
Brussels-Capital Region	-1.2	[-5.4; 3.2]	2004-2016	-4.5	[-8.9; 0.1]	2004-2016
				-12.6	[-29.1; 7.7]	2004-2007
				-1.6	[-7.5; 4.6]	2007-2016
Walloon Region	0.1	[-1.5; 1.8]	2004-2016	-2.0	[-4.1; 0.2]	2004-2016
	5.7	[1.2; 10.4]	2004-2009			
	-3.6	[-6.5; -0.7]	2009-2016			
Incidence by stage						
Stage I	4.7	[3.9; 5.5]	2004-2017	3.4	[2.6; 4.2]	2004-2017
	7.0	[5.3; 8.7]	2004-2011	5.9	[4.3; 7.5]	2004-2011
	2.1	[0.1; 4.0]	2011-2017	0.6	[-1.2; 2.4]	2011-2017
Stage II	-0.8	[-2.6; 1.1]	2004-2017	0.5	[-2.8; 3.8]	2004-2017
Stage III	1.3	[0.1; 2.5]	2004-2017	-0.2	[-1.8; 1.4]	2004-2017
				-7.4	[-14.3; 0.0]	2004-2007
				2.1	[0.0; 4.1]	2007-2017
Stage IV	0.3	[-0.9; 1.6]	2004-2017	-1.5	[-3.5; 0.5]	2004-2017
Stage Unknown	-11.5	[-13.4; -9.5]	2004-2017	-11.7	[-13.8; -9.6]	2004-2017
	-6.8	[-16.1; 3.6]	2004-2007			
	-12.8	[-15.2; -10.4]	2007-2017			

Source: Belgian Cancer Registry 

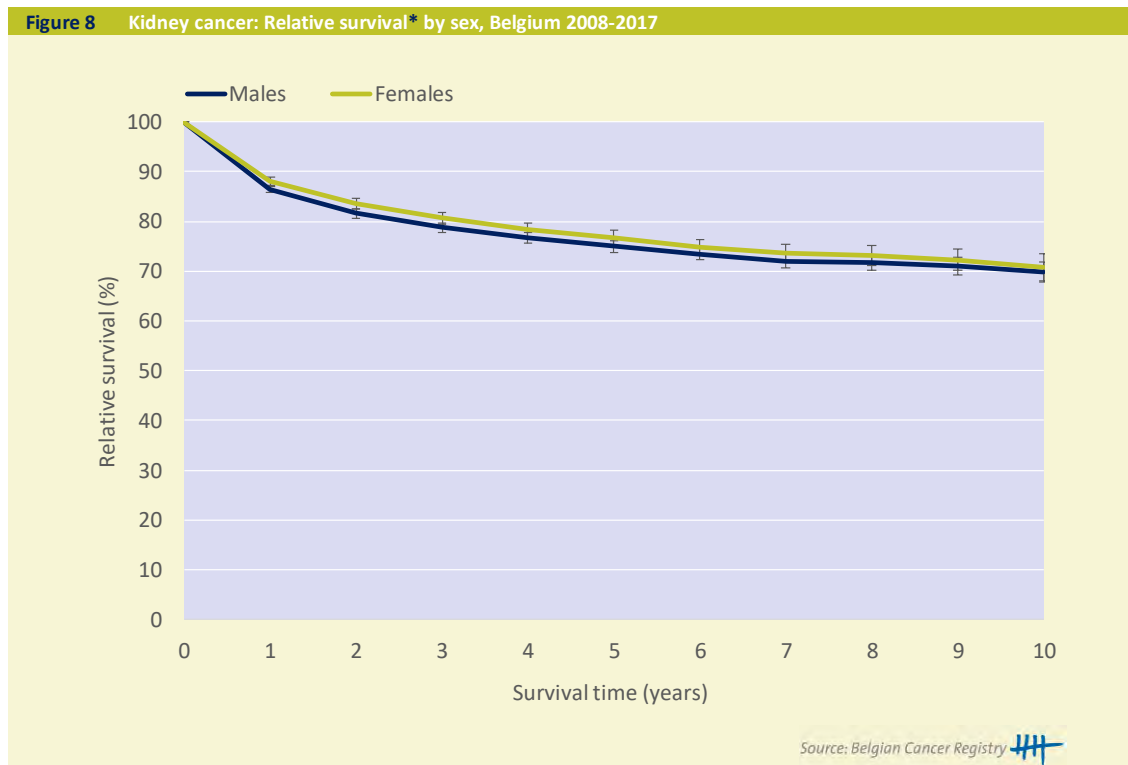
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.9.1.3 Survival

Figure 8 Kidney cancer: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.9.1.4 Survival trends

Figure 9 Kidney cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.9.2 BLADDER (ICD-10: C67)

3.9.2.1 Incidence

Table 1 Bladder cancer: Overview of incidence, mortality, prevalence and survival by sex and region

Bladder cancer	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	1,864	33.5	14.4	462	8.0	2.8
Flemish Region	1,123	34.9	13.4	279	8.5	2.9
Brussels-Capital Region	138	23.7	14.1	31	5.1	2.2
Walloon Region	603	34.2	16.1	152	8.2	3.0
Mortality, 2016						
Belgium	627	11.3	4.3	233	4.1	1.2
Flemish Region	386	12.1	4.1	137	4.2	1.2
Brussels-Capital Region	52	9.0	4.5	20	3.3	1.2
Walloon Region	189	10.8	4.5	76	4.1	1.2
Prevalence (5 years), 2013-2017						
Belgium	5,745	102.6	44.0	1,329	23.0	8.4
Flemish Region	3,439	106.1	40.9	799	24.1	8.1
Brussels-Capital Region	404	68.9	43.7	98	16.0	7.2
Walloon Region	1,902	107.4	49.8	432	23.3	9.2
5-year Relative survival, 2013-2017						
Belgium	N at risk: 9,326	%: 57.0	95%CI: [55.5;58.6]	N at risk: 2,448	%: 47.8	95%CI: [45.0;50.6]
Flemish Region	5,458	58.2	[56.1;60.3]	1,437	48.7	[45.0;52.4]
Brussels-Capital Region	714	50.7	[45.3;56.2]	196	46.1	[37.1;55.0]
Walloon Region	3,154	56.4	[53.7;59.1]	815	46.4	[41.5;51.4]
10-year Relative survival, 2008-2017						
Belgium	N at risk: 18,159	%: 49.6	95%CI: [47.9;51.3]	N at risk: 4,815	%: 44.8	95%CI: [42.0;47.6]
Flemish Region	10,873	50.7	[48.5;52.9]	2,851	45.3	[41.7;48.9]
Brussels-Capital Region	1,373	43.1	[37.6;48.9]	386	45.2	[35.8;55.2]
Walloon Region	5,913	49.1	[46.1;52.2]	1,578	43.8	[38.8;48.9]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry 

Figure 1 Bladder cancer: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017

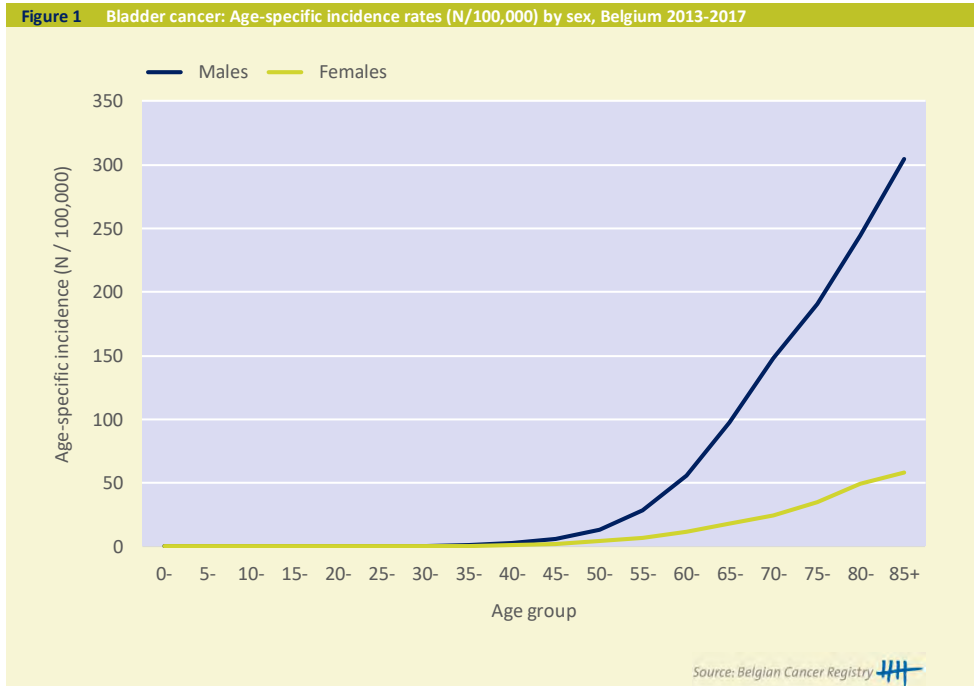


Figure 2 Bladder cancer: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

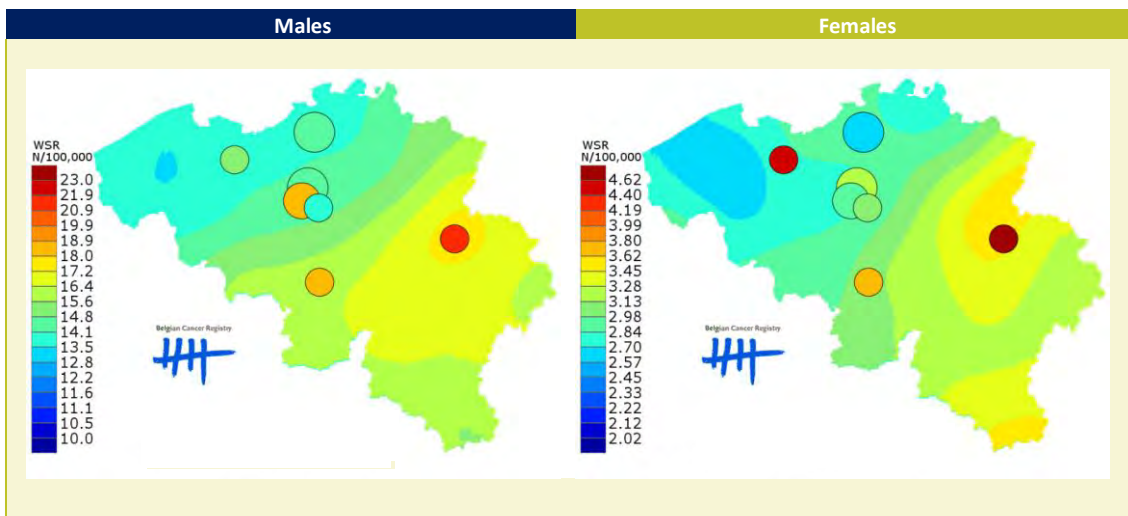
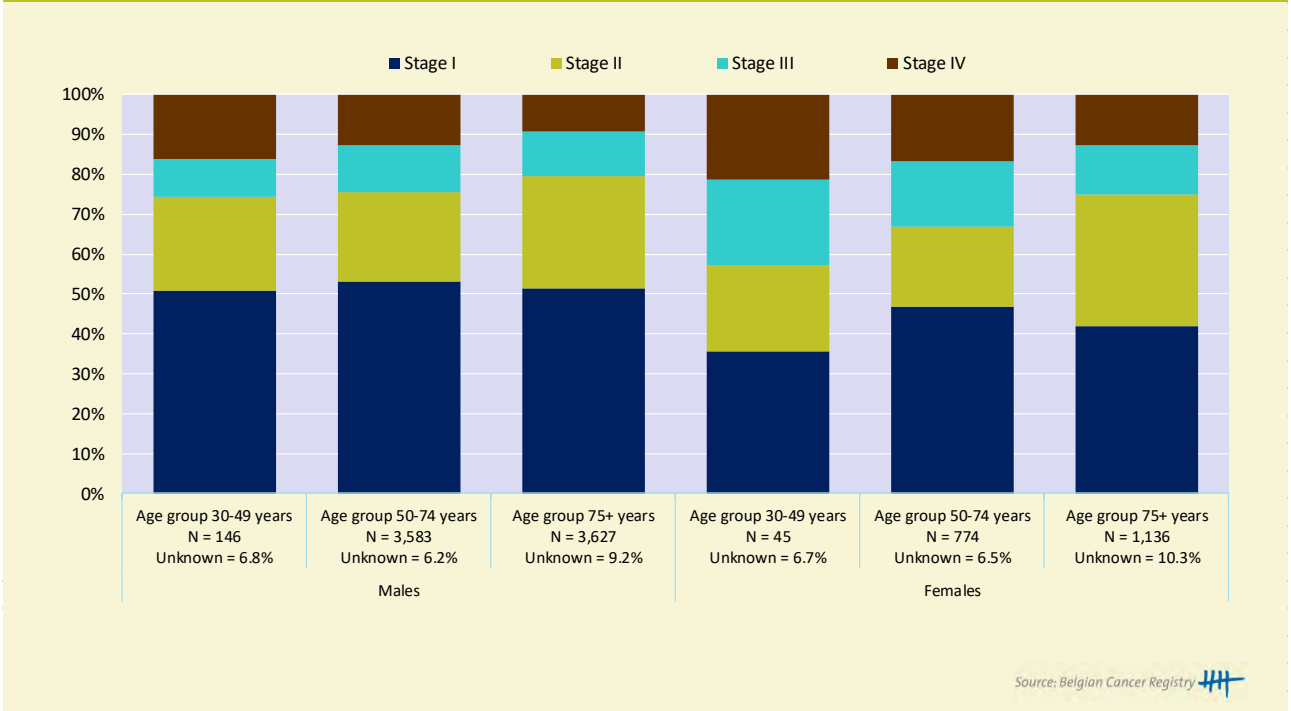


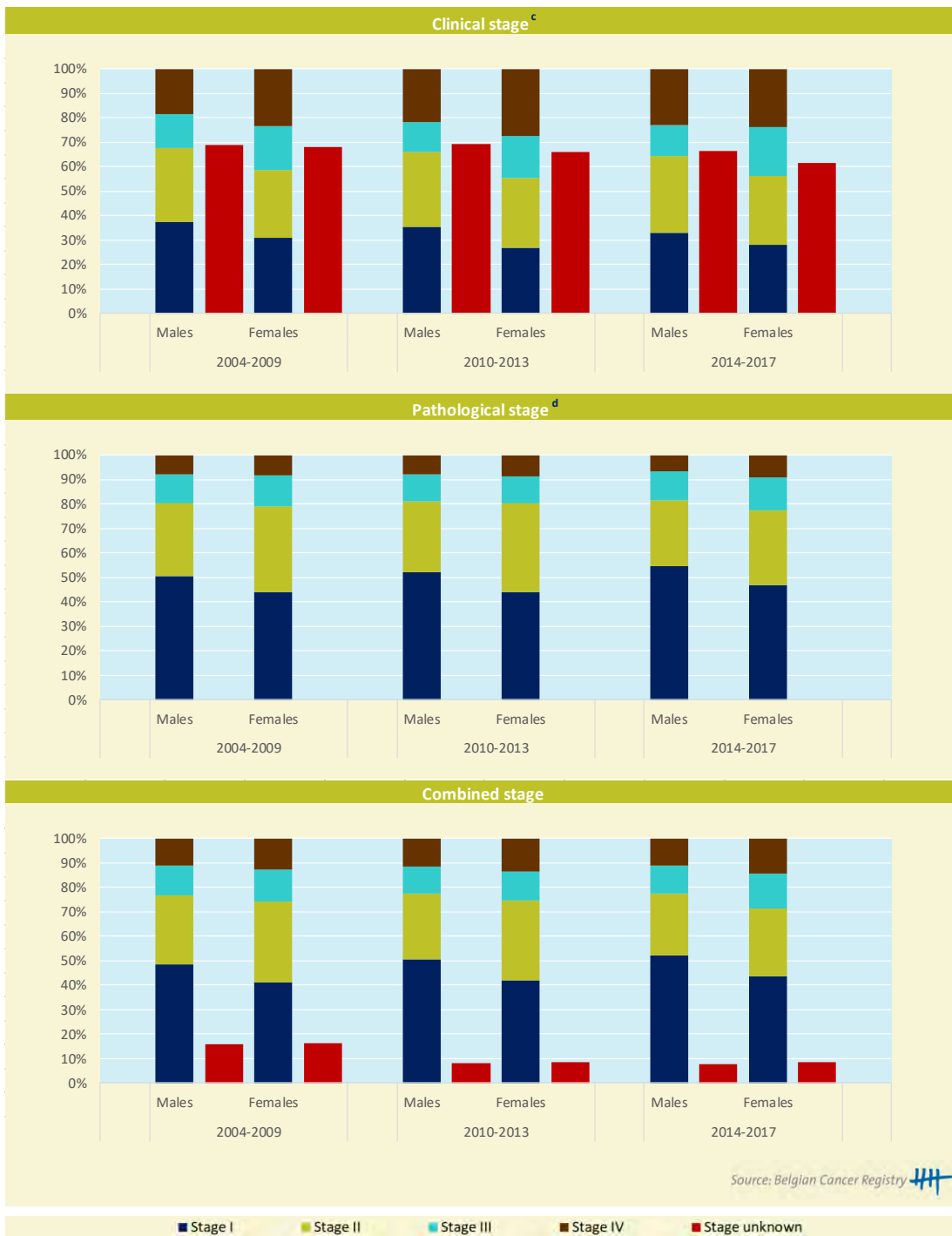
Figure 3 Bladder cancer: Stage distribution ^{a,b} by sex and age group, Belgium 2014-2017



^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 4 Bladder cancer: Stage distribution^{a b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.9.2.2 Incidence trends

Figure 5 Bladder cancer: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

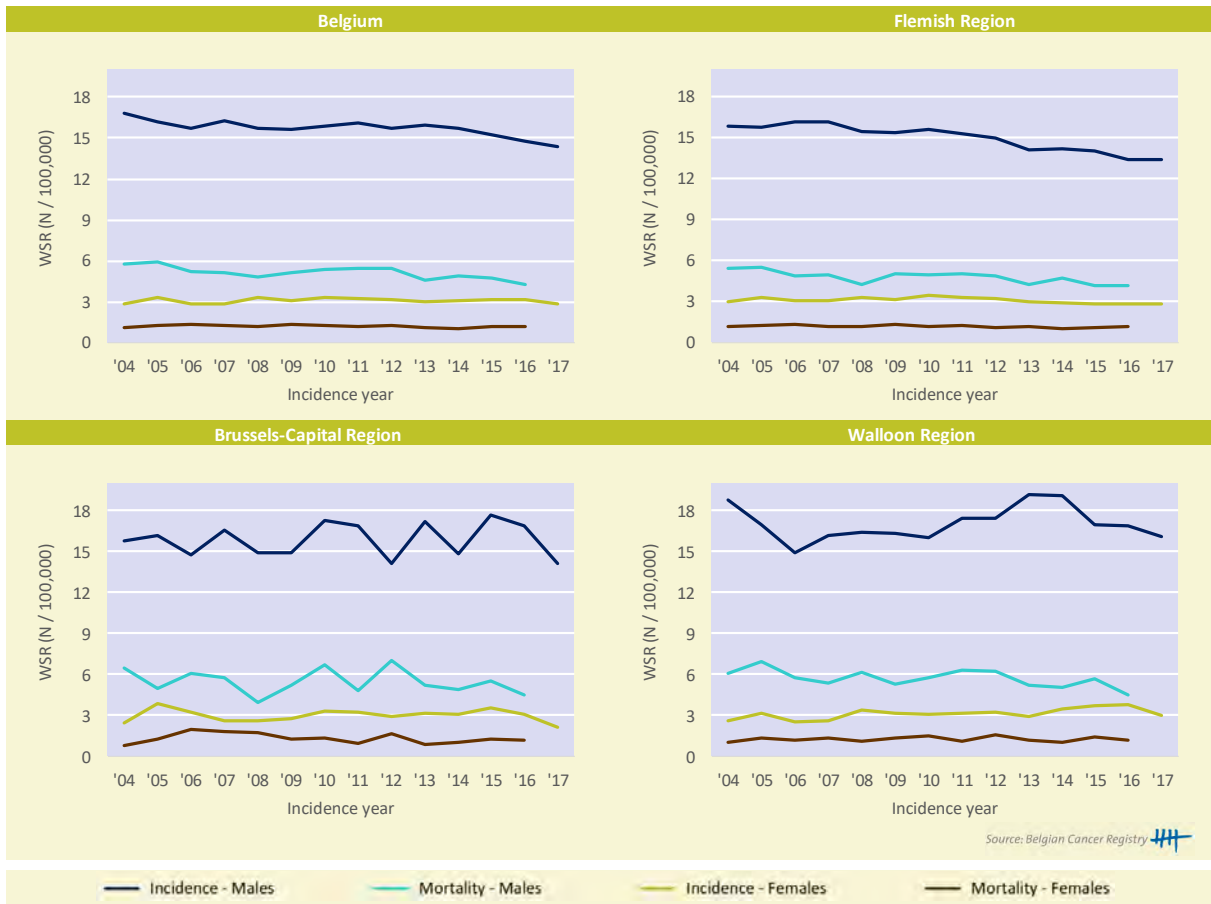
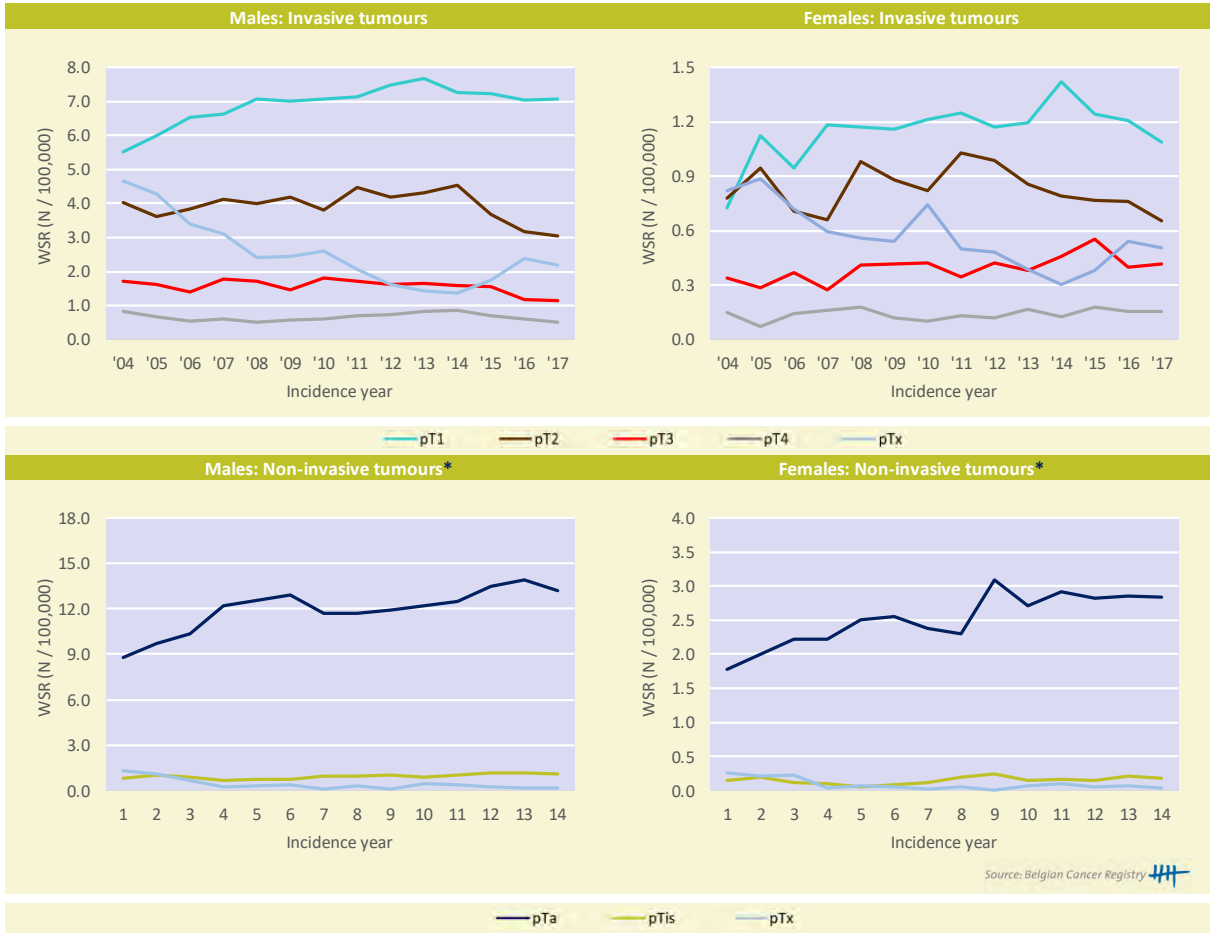


Figure 6 Bladder cancer: Trends in age-standardised incidence (WSR) for invasive and non-invasive bladder tumours by pT-category and sex, Belgium 2004-2017



* Only cases with ICD-O-3 behaviour code 2 are considered as non-invasive tumours.

Table 2 Bladder cancer: AAPC(%) by sex, region and pT-category in Belgium						
Bladder cancer	Males			Females		
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Incidence						
Belgium	-0.9	[-1.2; -0.7]	2004-2017	0.2	[-0.6; 1.0]	2004-2017
	-0.3	[-0.7; 0.0]	2004-2014	1.9	[-0.0; 3.8]	2004-2010
	-2.9	[-4.2; -1.7]	2014-2017	-1.2	[-2.8; 0.3]	2010-2017
Flemish Region	-1.4	[-1.7; -1.2]	2004-2017	-0.7	[-1.3; -0.2]	2004-2017
	-0.5	[-1.1; 0.1]	2004-2010	1.5	[0.2; 2.9]	2004-2010
	-2.2	[-2.7; -1.7]	2010-2017	-2.7	[-3.8; -1.6]	2010-2017
Brussels-Capital Region	0.1	[-1.1; 1.3]	2004-2017	-0.2	[-2.5; 2.2]	2004-2017
Walloon Region	-1.0	[-1.9; -0.1]	2004-2017	1.9	[0.4; 3.4]	2004-2017
	-5.3	[-8.6; -1.8]	2004-2007			
	2.9	[1.6; 4.3]	2007-2014			
	-5.5	[-8.9; -2.1]	2014-2017			
Mortality						
Belgium	-1.9	[-2.9; -0.9]	2004-2016	-0.5	[-1.6; 0.7]	2004-2016
	-0.9	[-2.5; 0.7]	2004-2012	2.0	[-1.2; 5.2]	2004-2009
	-3.8	[-7.1; -0.4]	2012-2016	-2.2	[-4.3; -0.1]	2009-2016
Flemish Region	-1.8	[-2.9; -0.7]	2004-2016	-1.2	[-2.3; -0.1]	2004-2016
Brussels-Capital Region	-1.0	[-3.7; 1.7]	2004-2016	0.5	[-3.8; 5.1]	2004-2016
				22.8	[1.1; 49.3]	2004-2007
				-6.0	[-11.2; -0.4]	2007-2016
Walloon Region	-1.7	[-3.3; -0.2]	2004-2016	0.6	[-1.6; 3.0]	2004-2016
Incidence by pT-category						
Non-invasive bladder tumour*						
pTa (Non-invasive papillary carcinoma)	2.8	[1.8; 3.7]	2004-2017	3.7	[2.6; 4.8]	2004-2017
	6.0	[3.2; 8.9]	2004-2009	7.7	[3.6; 12.0]	2004-2008
	0.8	[-0.8; 2.4]	2009-2017	2.0	[0.4; 3.6]	2008-2017
pTis (Carcinoma in situ: "Flat tumour")	1.8	[-0.0; 3.7]	2004-2017	2.7	[-3.4; 9.1]	2004-2017
				2.5	[-7.8; 13.8]	2004-2012
				3.0	[-13.8; 23.0]	2012-2017
pTx	-12.5	[-18.4; -6.1]	2004-2017	-10.6	[-18.5; -1.8]	2004-2017
(Primary tumour cannot be assessed)	-26.1	[-37.6; -12.5]	2004-2010	-25.3	[-38.2; -9.6]	2004-2011
	1.2	[-12.3; 16.7]	2010-2017	10.3	[-12.0; 38.3]	2011-2017
Invasive bladder tumour						
pT1	1.6	[1.3; 2.0]	2004-2017	3.7	[2.6; 4.8]	2004-2017
(Tumour invades subepithelial connective tissue)	5.5	[4.2; 6.9]	2004-2008	14.3	[6.0; 23.2]	2004-2007
	1.3	[0.4; 2.2]	2008-2013	0.1	[-1.8; 2.1]	2007-2017
	-1.7	[-2.9; -0.5]	2013-2017			
pT2	-2.0	[-2.8; -1.2]	2004-2017	-1.0	[-2.7; 0.7]	2004-2017
(Tumour invades muscle)	1.4	[0.3; 2.4]	2004-2014	2.7	[-0.3; 5.9]	2004-2012
	-12.6	[-16.0; -9.1]	2014-2017	-6.7	[-11.4; -1.8]	2012-2017
pT3	-2.8	[-4.2; -1.5]	2004-2017	2.7	[0.6; 4.9]	2004-2017
(Tumour invades perivesical tissue)	0.2	[-1.5; 1.9]	2004-2014			
	-12.3	[-17.9; -6.3]	2014-2017			
pT4	-3.2	[-4.3; -2.0]	2004-2017	2.1	[-1.4; 5.7]	2004-2017
(Tumour directly invades surrounding tissue)	-8.9	[-12.2; -5.4]	2004-2008			
	9.2	[6.8; 11.7]	2008-2014			
	-17.5	[-21.7; -13.1]	2014-2017			
pTx	-8.2	[-11.5; -4.8]	2004-2017	-3.6	[-6.0; -1.2]	2004-2017
(Primary tumour cannot be assessed)	-20.1	[-32.8; -4.9]	2004-2007	-8.2	[-10.9; -5.3]	2004-2014
	-4.3	[-8.5; 0.1]	2007-2017	13.0	[0.4; 27.3]	2014-2017

Source: Belgian Cancer Registry 

AAPC: average annual percentage change

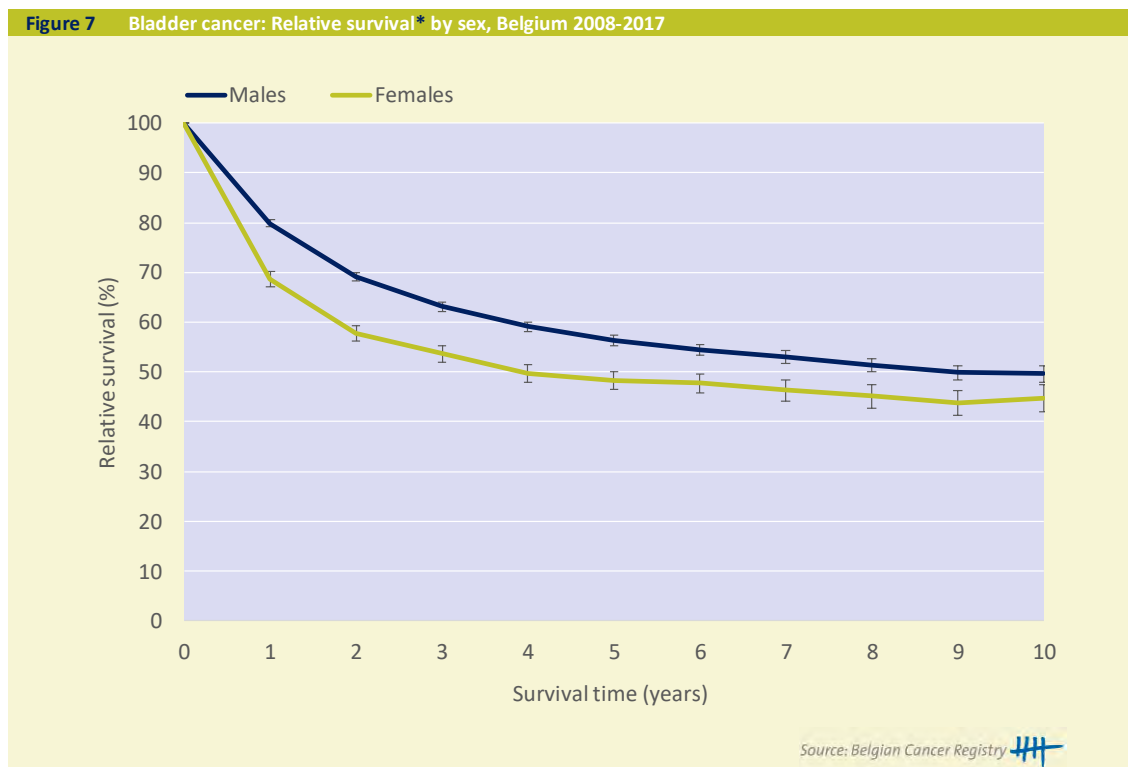
Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

* Only cases with ICD-O-3 behaviour code 2 are considered as non-invasive tumours.

3.9.2.3 Survival

Figure 7 Bladder cancer: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.9.2.4 Survival trends

Figure 8 Bladder cancer: 1-, 3-, 5- and 10-year relative survival (RS)* by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.10 CENTRAL NERVOUS SYSTEM (ICD-10: C71-C72)

3.10.1 Incidence

Table 1 Tumours of the central nervous system: Overview of incidence, mortality, prevalence and survival by sex and region

Tumours of the central nervous system	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	512	9.2	6.5	339	5.9	3.9
Flemish Region	311	9.7	6.7	207	6.3	4.0
Brussels-Capital Region	45	7.7	6.6	30	4.9	3.7
Walloon Region	156	8.8	6.2	102	5.5	3.8
Mortality, 2016						
Belgium	379	6.8	4.2	275	4.8	2.6
Flemish Region	225	7.0	4.2	161	4.9	2.7
Brussels-Capital Region	25	4.3	3.1	21	3.5	2.3
Walloon Region	129	7.3	4.6	93	5.0	2.4
Prevalence (5 years), 2013-2017						
Belgium	1,014	18.1	15.4	722	12.5	10.7
Flemish Region	609	18.8	15.5	440	13.3	11.2
Brussels-Capital Region	91	15.5	13.6	71	11.6	10.3
Walloon Region	314	17.7	15.8	211	11.4	10.1
5-year Relative survival, 2013-2017						
Belgium	N at risk: 2,408	%: 21.6	95%CI: [19.6;23.6]	N at risk: 1,609	%: 25.5	95%CI: [23.1;28.0]
Flemish Region	1,463	21.5	[19.0;24.1]	987	26.0	[22.9;29.2]
Brussels-Capital Region	190	28.0	[20.7;35.9]	139	33.6	[24.8;42.7]
Walloon Region	755	20.1	[16.8;23.7]	483	22.3	[18.0;26.9]
10-year Relative survival, 2008-2017						
Belgium	N at risk: 4,531	%: 16.8	95%CI: [15.4;18.3]	N at risk: 3,183	%: 17.1	95%CI: [15.4;19.0]
Flemish Region	2,785	16.4	[14.6;18.3]	1,945	16.2	[13.9;18.6]
Brussels-Capital Region	375	22.0	[16.5;28.1]	273	23.4	[16.5;31.0]
Walloon Region	1,371	16.4	[13.8;19.2]	965	17.1	[14.2;20.3]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry 

Figure 1 Tumours of the central nervous system: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017

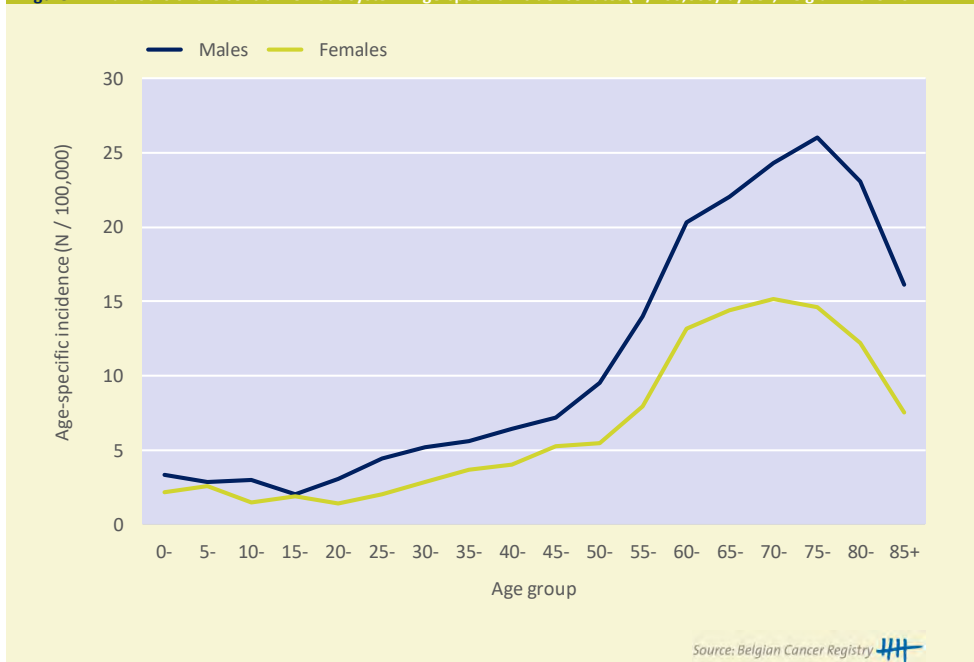
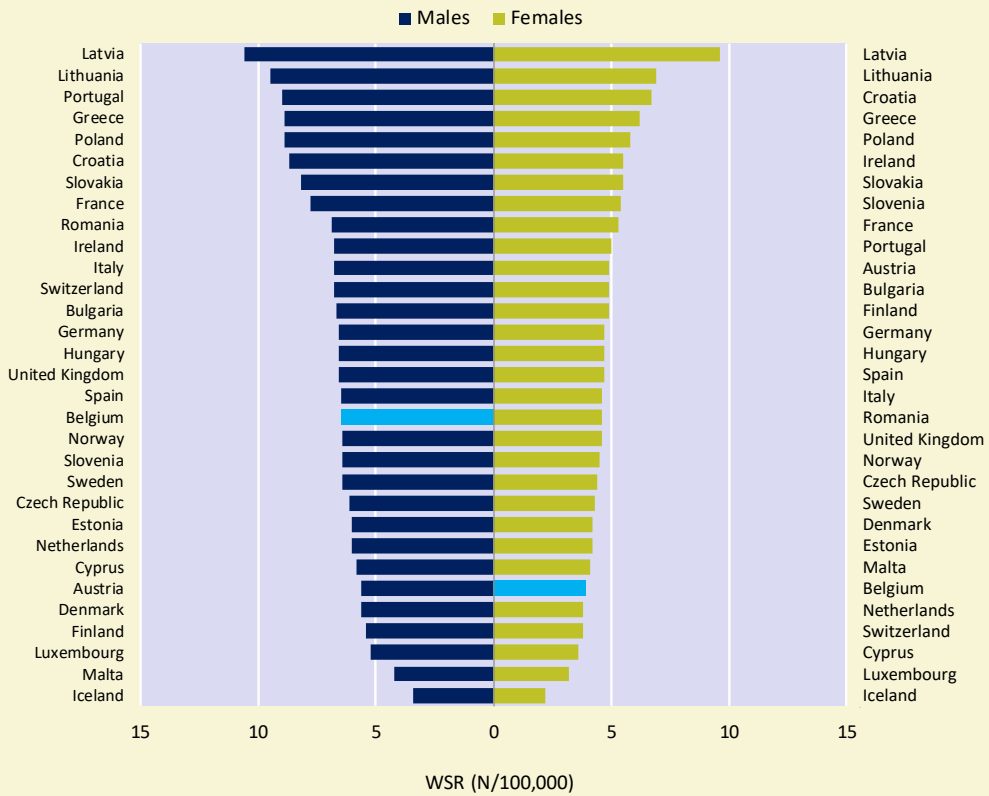
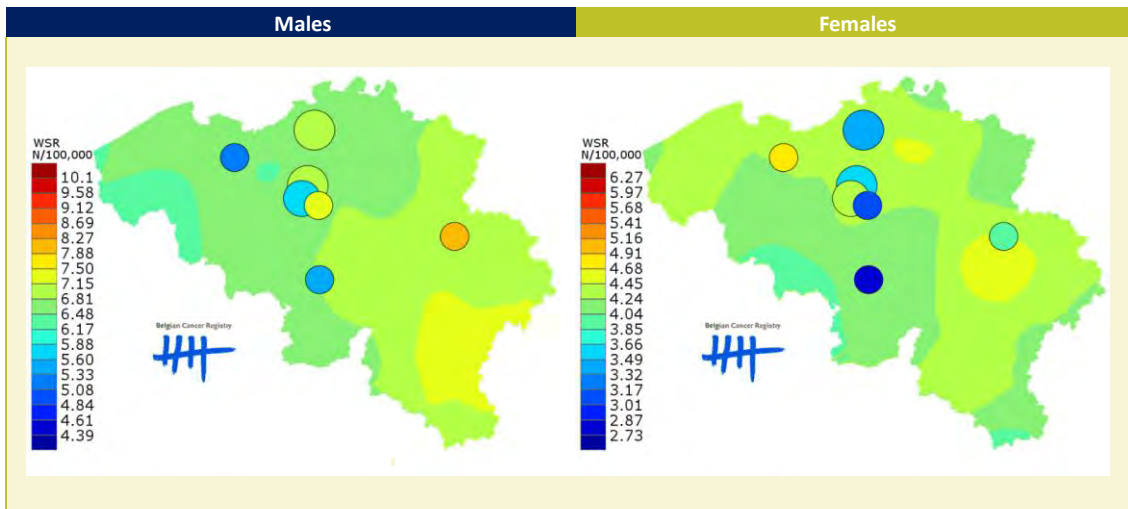


Figure 2 Tumours of the central nervous system: Comparison of age-standardised incidence rates (WSR) (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Tumours of the central nervous system: Age-standardised incidence (WSR) by sex, Belgium 2013-2017



3.10.2 Incidence trends

Figure 4 Tumours of the central nervous system: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

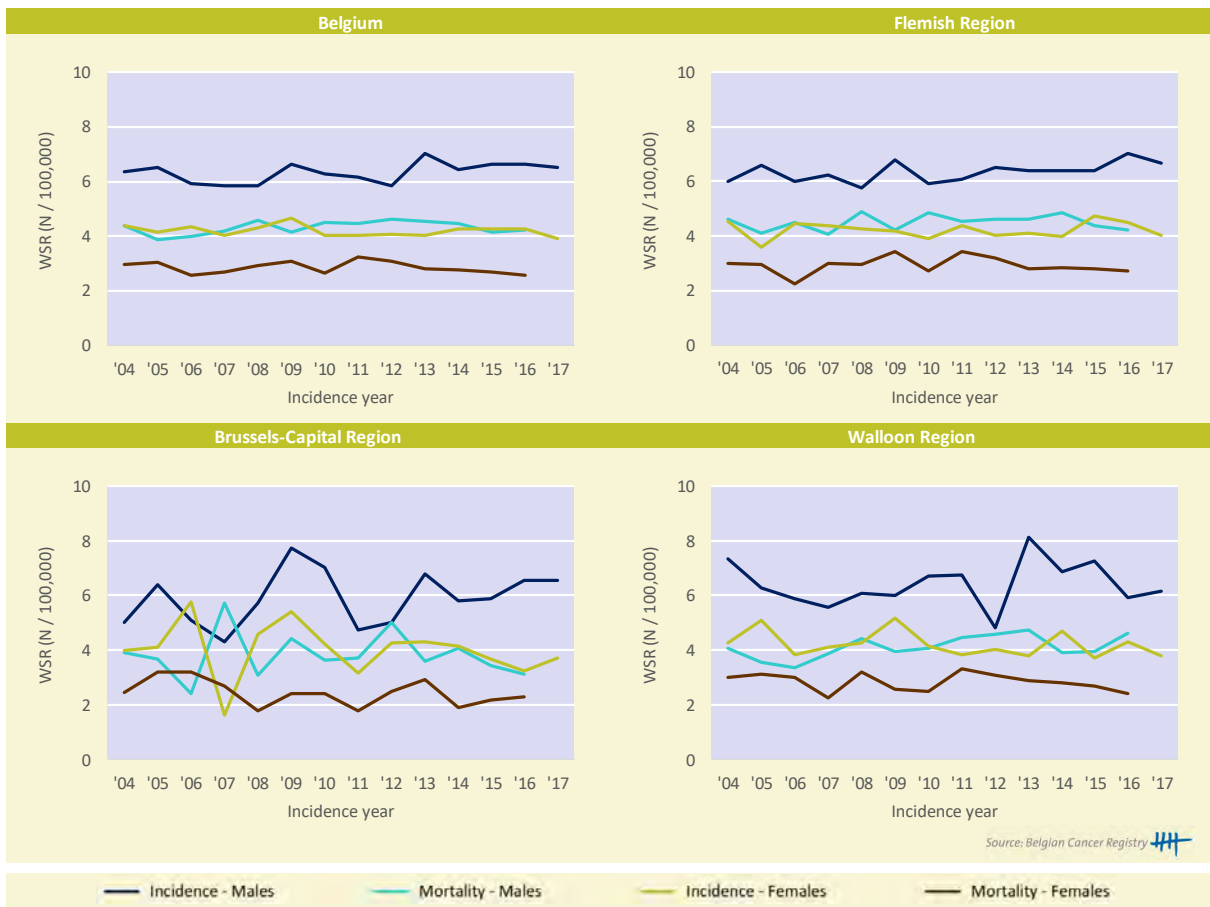


Figure 5 Tumours of the central nervous system: Trends in age-standardised incidence (WSR) by histology and sex, Belgium 2004-2017

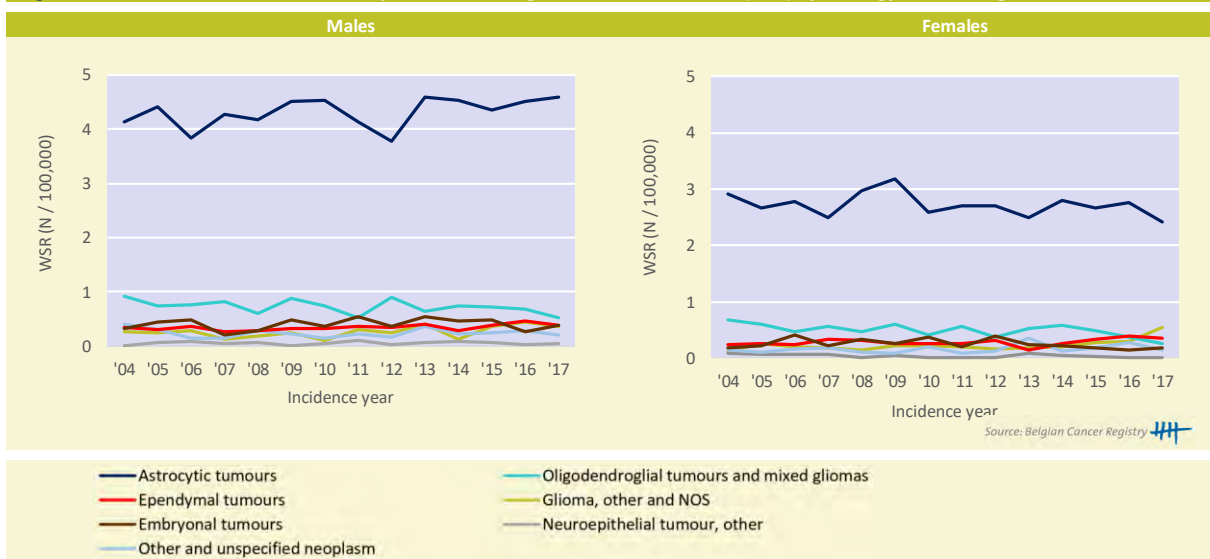


Table 2 Tumours of the central nervous system: AAPC(%) by sex, region and histology in Belgium						
Tumours of the central nervous system	Males			Females		
	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period
Incidence						
Belgium	0.6	[-0.2; 1.4]	2004-2017	-0.4	[-1.0; 0.3]	2004-2017
Flemish Region	0.7	[-0.0; 1.4]	2004-2017	0.1	[-1.0; 1.2]	2004-2017
Brussels-Capital Region	1.4	[-1.0; 3.8]	2004-2017	-0.5	[-4.8; 4.0]	2004-2017
Walloon Region	0.3	[-1.7; 2.3]	2004-2017	-0.9	[-2.4; 0.6]	2004-2017
Mortality						
Belgium	0.2	[-0.6; 1.0]	2004-2016	-0.5	[-1.7; 0.7]	2004-2016
	1.3	[0.3; 2.4]	2004-2013			
	-3.3	[-6.7; 0.2]	2013-2016			
Flemish Region	0.2	[-0.8; 1.3]	2004-2016	0.0	[-1.8; 1.8]	2004-2016
Brussels-Capital Region	-0.1	[-3.8; 3.7]	2004-2016	-2.1	[-5.0; 1.0]	2004-2016
Walloon Region	1.5	[0.0; 3.0]	2004-2016	-0.8	[-2.7; 1.2]	2004-2016
Incidence by histology						
Astrocytic tumours	0.7	[-0.2; 1.5]	2004-2017	-0.6	[-1.7; 0.4]	2004-2017
Oligodendroglial tumours and mixed gliomas	-2.1	[-4.3; 0.2]	2004-2017	-3.8	[-6.6; -0.8]	2004-2017
Ependymal tumours	2.1	[0.1; 4.2]	2004-2017	1.6	[-1.8; 5.2]	2004-2017
Glioma, other and NOS	3.8	[-2.2; 10.2]	2004-2017	7.9	[4.5; 11.4]	2004-2017
	-6.4	[-19.0; 8.2]	2004-2010	0.7	[-3.3; 4.7]	2004-2014
	13.5	[0.5; 28.2]	2010-2017	35.7	[16.5; 58.2]	2014-2017
Embryonal tumours	1.1	[-3.3; 5.7]	2004-2017	-1.2	[-5.1; 2.9]	2004-2017
				14.7	[-1.0; 32.8]	2004-2008
				-7.5	[-12.8; -1.9]	2008-2017
Neuroepithelial tumour, other	-	-	-	-	-	-
Other and unspecified neoplasm	0.0	[-5.0; 5.3]	2004-2017	3.5	[-2.4; 9.7]	2004-2017

Source: Belgian Cancer Registry 

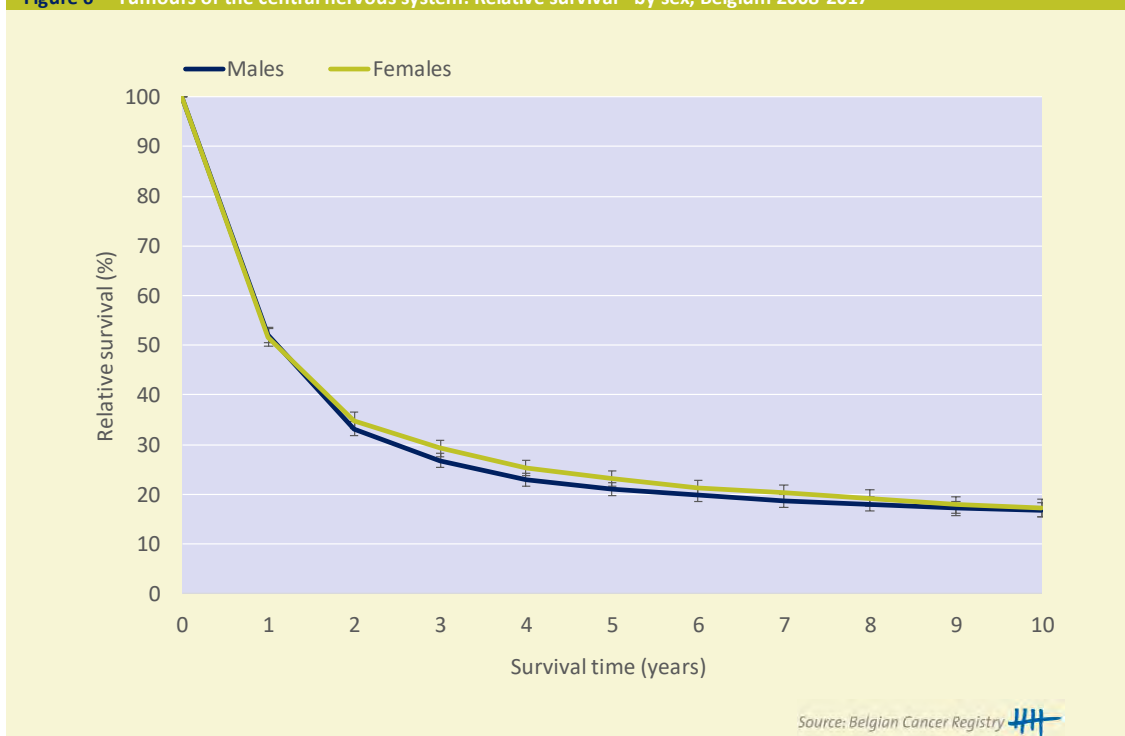
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.10.3 Survival

Figure 6 Tumours of the central nervous system: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.10.4 Survival trends

Figure 7 Tumours of the central nervous system: 1-, 3-, 5- and 10-year relative survival (RS) * by sex and region



* The relative survival values are represented with 95% Confidence Intervals

3.11 THYROID (ICD-10: C73)

3.11.1 Incidence

Table 1 Thyroid cancer: Overview of incidence, mortality, prevalence and survival by sex and region

Thyroid cancer	Males			Females		
	N	CR	WSR	N	CR	WSR
Incidence, 2017						
Belgium	287	5.2	3.5	751	13.1	9.9
Flemish Region	149	4.6	3.1	342	10.4	7.8
Brussels-Capital Region	36	6.2	4.8	109	17.9	14.2
Walloon Region	102	5.8	4.0	300	16.2	12.2
Mortality, 2016						
Belgium	30	0.5	0.2	37	0.6	0.2
Flemish Region	20	0.6	0.3	24	0.7	0.2
Brussels-Capital Region	3	0.5	0.2	2	0.3	0.2
Walloon Region	7	0.4	0.2	11	0.6	0.2
Prevalence (5 years), 2013-2017						
Belgium	1,201	21.5	14.5	3,516	60.8	44.9
Flemish Region	542	16.7	11.0	1,639	49.5	36.5
Brussels-Capital Region	160	27.3	21.4	521	85.1	65.5
Walloon Region	499	28.2	19.2	1,356	73.1	54.2
5-year Relative survival, 2013-2017						
Belgium	N at risk 1,335	% 92.3	95%CI [89.6;94.6]	N at risk 3,718	% 96.5	95%CI [95.4;97.5]
Flemish Region	619	86.9	[82.4;90.8]	1,754	94.4	[92.7;96.0]
Brussels-Capital Region	174	95.8	[88.2;100.5]	558	98.7	[95.8;100.7]
Walloon Region	542	97.0	[93.3;99.8]	1,406	98.2	[96.4;99.5]
10-year Relative survival, 2008-2017						
Belgium	N at risk 2,476	% 88.1	95%CI [84.8;91.1]	N at risk 6,896	% 96.5	95%CI [95.2;97.7]
Flemish Region	1,150	84.2	[79.5;88.5]	3,152	93.2	[91.1;95.1]
Brussels-Capital Region	320	89.1	[77.0;98.2]	1,036	101.1	[98.0;103.4]
Walloon Region	1,006	92.3	[87.3;96.7]	2,708	98.7	[96.7;100.5]

CR: crude (all ages) rate (N/100,000 person years)

WSR: age-standardised rate using the World Standard Population (N/100,000 person years)

Source: Belgian Cancer Registry 

Figure 1 Thyroid cancer: Age-specific incidence rates (N/100,000) by sex, Belgium 2013-2017

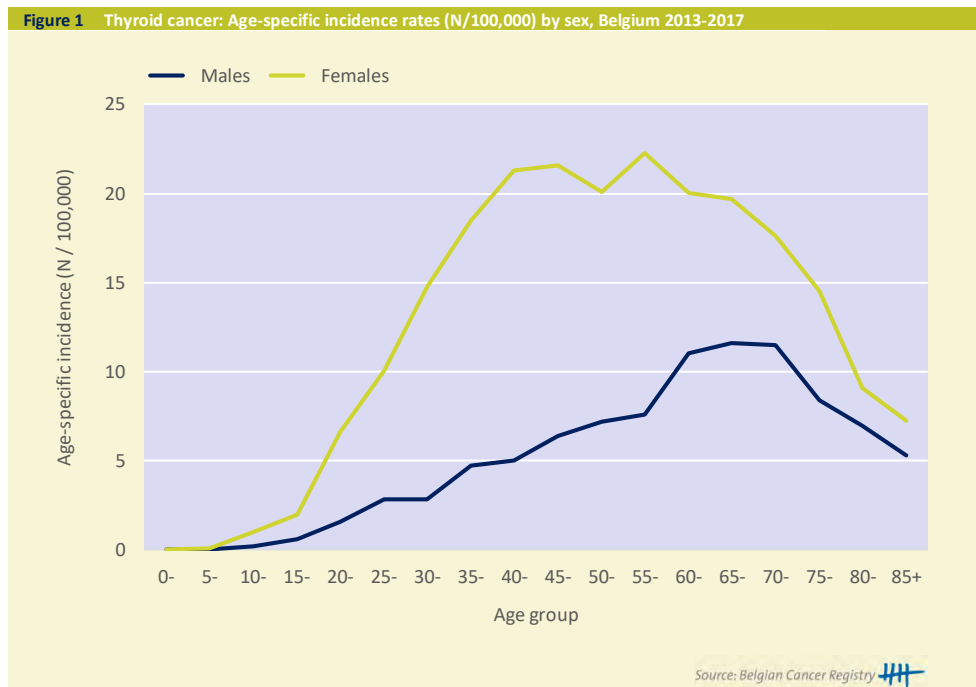
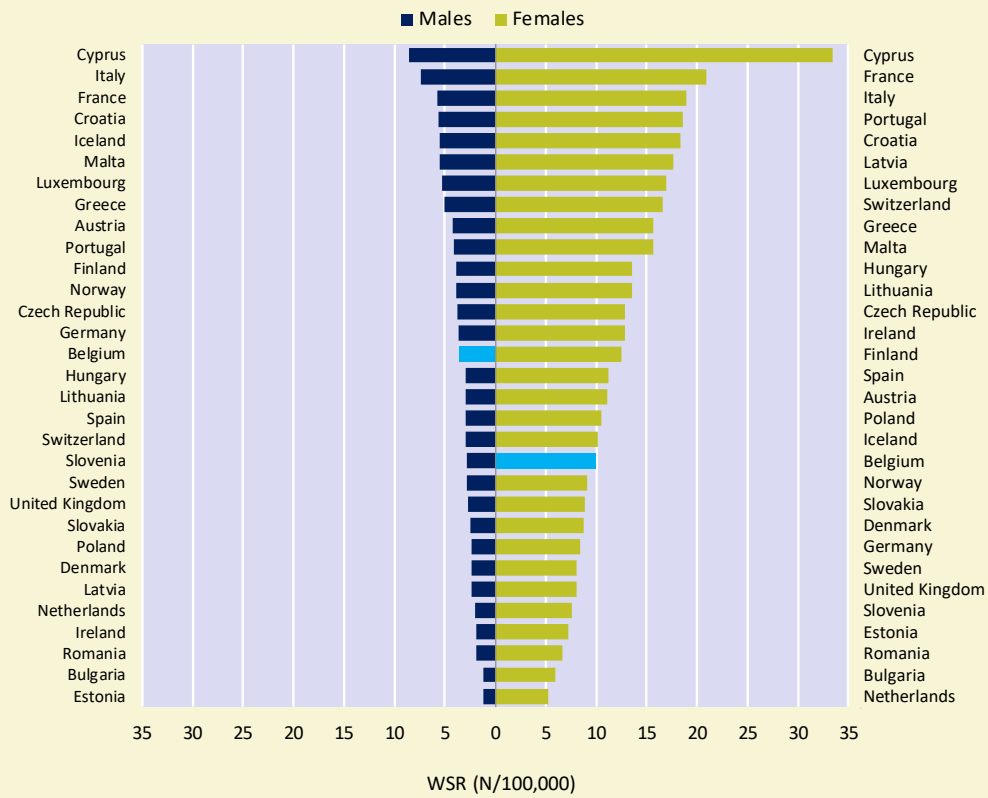


Figure 2 Thyroid cancer: Comparison of age-standardised incidence rates (WSR)
 (Estimates of cancer incidence in 2018 by country* and real data for Belgium in 2017)



*Source: ECIS - European Cancer Information System
 From <https://ecis.jrc.ec.europa.eu>, accessed on 28/10/2019
 © European Union, 2019

Figure 3 Thyroid cancer: Age-standardised incidence (WSR) by sex, Belgium 2013-2017

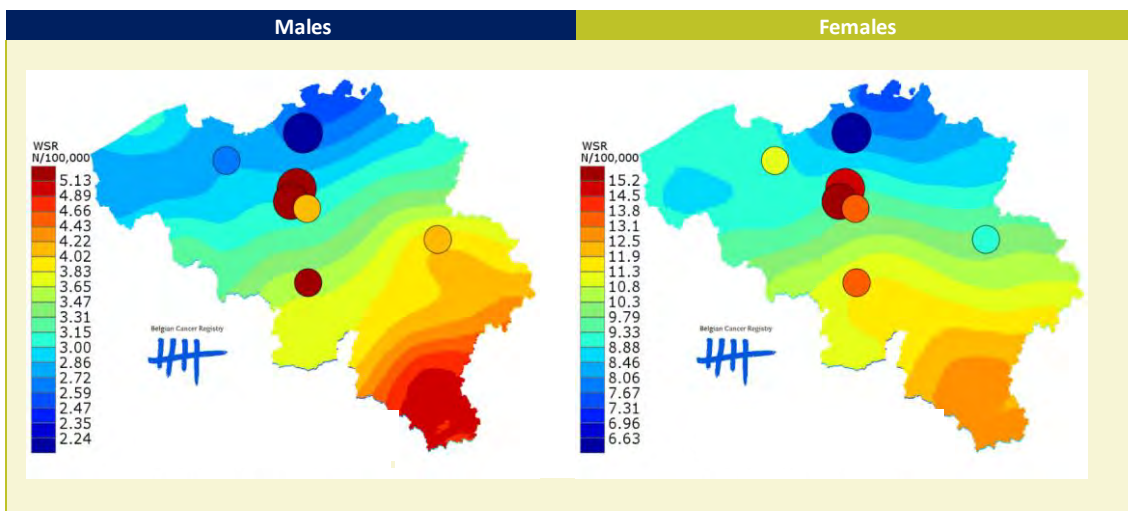
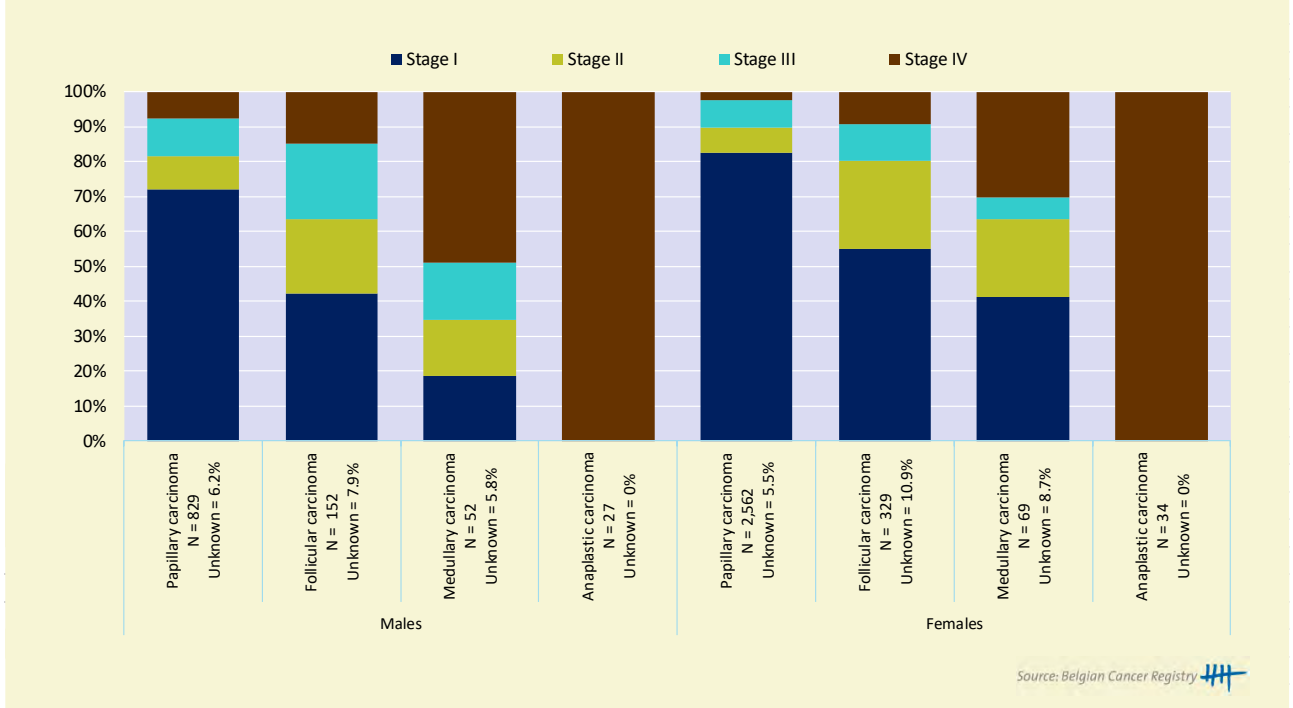


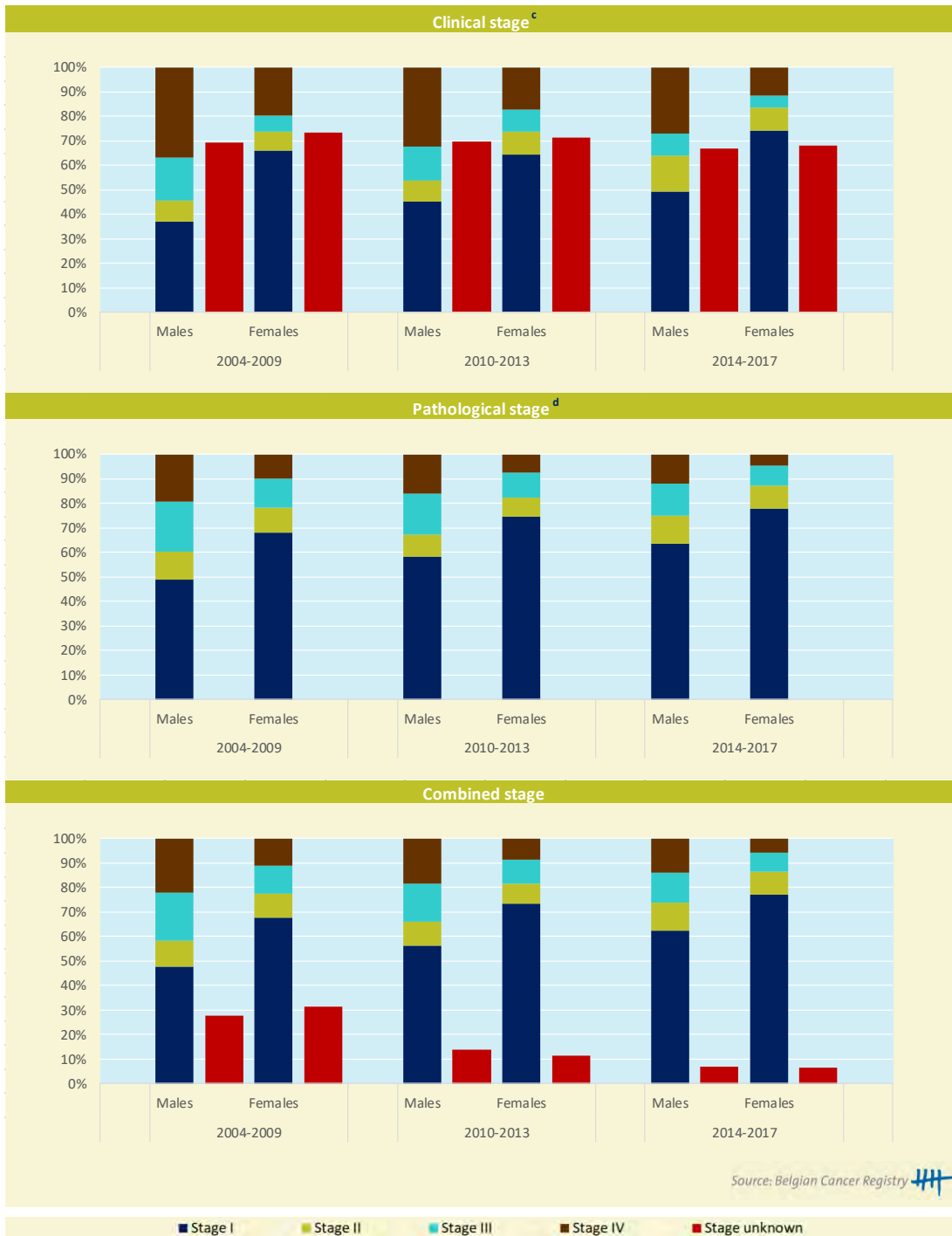
Figure 4 Thyroid cancer: Stage distribution ^{a,b} by sex and histology, Belgium 2014-2017



^a Combined stage and only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

Figure 5 Thyroid cancer: Stage distribution^{a,b} by sex, Belgium 2004-2009, 2010-2013 and 2014-2017



^a Only if TNM is applicable.

^b The proportion of unknown stage is defined as the number of diagnoses with stage X divided by the total number of diagnoses (Stage I, II, III, IV and X).

^c The proportion of diagnoses with unknown clinical stage is a measure for data completeness.

^d The proportion of diagnoses with unknown pathological stage is not shown (see methodology).

3.11.2 Incidence trends

Figure 6 Thyroid cancer: Trends in age-standardised incidence and mortality (WSR) by sex and region, 2004-2017

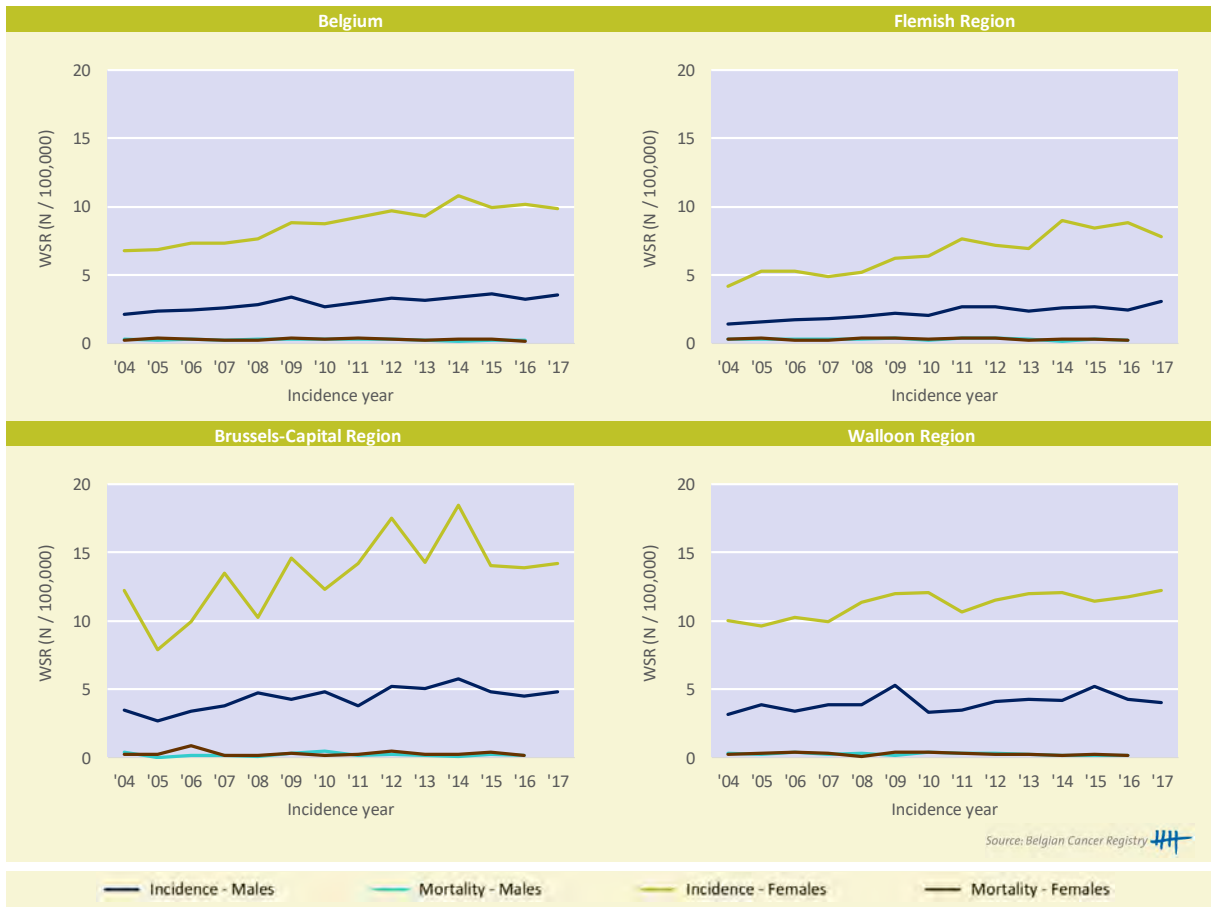


Figure 7 Thyroid cancer: Trends in age-standardised incidence (WSR) by histology and sex, Belgium 2004-2017

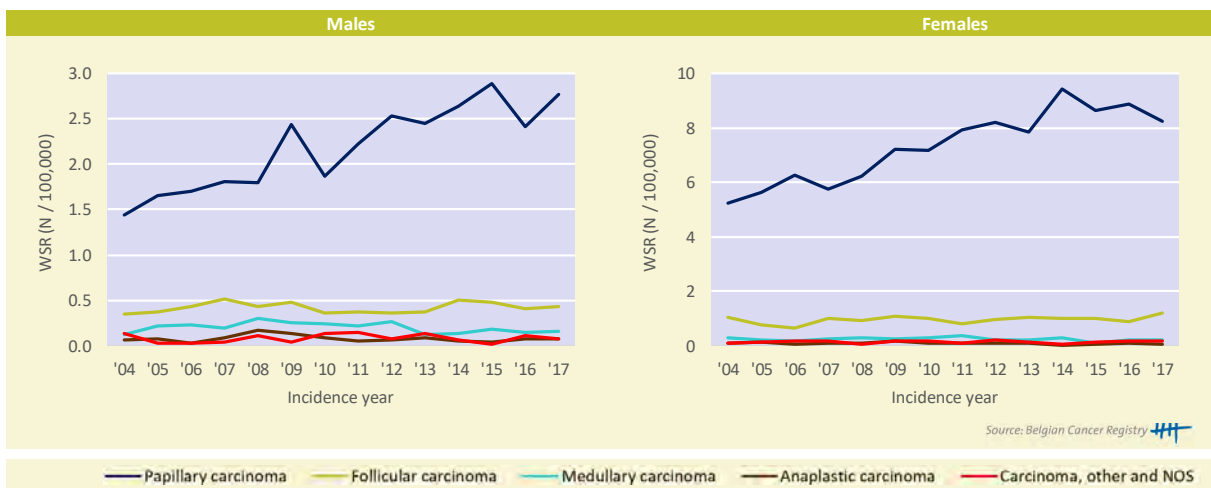


Table 2 Thyroid cancer: AAPC(%) by sex, region and histology in Belgium							
Thyroid cancer	Males			Females			
Incidence	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period	
Belgium	3.7	[2.8; 4.7]	2004-2017	3.4	[2.8; 4.0]	2004-2017	
	6.9	[4.1; 9.8]	2004-2009	4.9	[3.8; 6.1]	2004-2012	
	1.8	[0.2; 3.4]	2009-2017	1.0	[-0.9; 2.8]	2012-2017	
Flemish Region	5.0	[3.9; 6.1]	2004-2017	5.5	[4.1; 6.9]	2004-2017	
	7.6	[5.4; 10.0]	2004-2011				
Brussels-Capital Region	2.0	[-0.5; 4.7]	2011-2017				
	4.1	[2.1; 6.1]	2004-2017	3.5	[1.0; 6.2]	2004-2017	
	9.0	[2.9; 15.4]	2004-2009				
Walloon Region	1.2	[-2.2; 4.6]	2009-2017				
	1.9	[-0.1; 3.9]	2004-2017	1.6	[0.9; 2.3]	2004-2017	
				3.1	[1.4; 4.9]	2004-2010	
			0.3	[-1.1; 1.8]	2010-2017		
Mortality	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period	
Belgium	-2.9	[-6.2; 0.4]	2004-2016	-2.5	[-5.2; 0.3]	2004-2016	
	2.7	[-3.6; 9.4]	2004-2011	2.1	[-3.2; 7.6]	2004-2011	
	-10.3	[-18.2; -1.7]	2011-2016	-8.6	[-15.4; -1.3]	2011-2016	
Flemish Region	-2.2	[-7.1; 2.8]	2004-2016	-1.2	[-5.2; 3.0]	2004-2016	
Brussels-Capital Region	-	-	-	-0.4	[-9.1; 9.1]	2004-2016	
Walloon Region	-3.9	[-8.2; 0.6]	2004-2016	-3.9	[-10.4; 3.1]	2004-2016	
Incidence by histology	AAPC (%)	95%CI	Period	AAPC (%)	95%CI	Period	
Papillary carcinoma	4.9	[3.5; 6.3]	2004-2017	3.9	[3.0; 4.8]	2004-2017	
				5.6	[4.3; 7.0]	2004-2013	
				0.1	[-3.1; 3.3]	2013-2017	
Follicular carcinoma	0.7	[-1.3; 2.9]	2004-2017	1.6	[-0.5; 3.8]	2004-2017	
	-0.3	[-3.8; 3.4]	2004-2012				
Medullary carcinoma	2.4	[-3.6; 8.8]	2012-2017				
	-0.7	[-3.9; 2.5]	2004-2017	-2.9	[-7.5; 1.9]	2004-2017	
	16.3	[3.3; 31.0]	2004-2008				
Anaplastic carcinoma	-7.5	[-11.8; -2.9]	2008-2017				
	-1.1	[-7.3; 5.4]	2004-2017	-6.5	[-11.8; -0.9]	2004-2017	
Carcinoma, other and NOS	1.7	[-8.1; 12.7]	2004-2017	1.0	[-5.1; 7.5]	2004-2017	

Source: Belgian Cancer Registry 

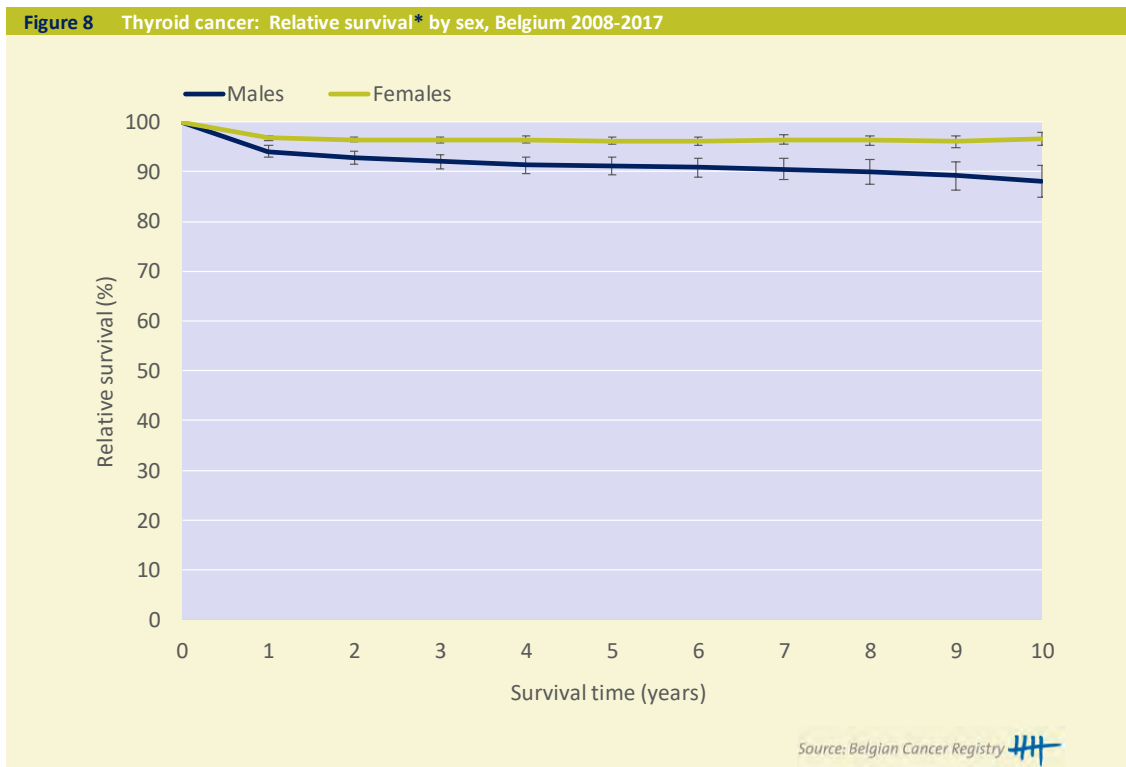
AAPC: average annual percentage change

Period: When a joinpoint occurred, APC's are calculated for the period before and after the joinpoint. This column represents the corresponding time interval.

AAPC's are always calculated over the entire study-period.

3.11.3 Survival

Figure 8 Thyroid cancer: Relative survival* by sex, Belgium 2008-2017



* The relative survival values are represented with 95% Confidence Intervals

3.11.4 Survival trends

Figure 9 Thyroid cancer: 1-, 3-, 5- and 10-year relative survival (RS) * by sex and region



* The relative survival values are represented with 95% Confidence Intervals

4 REFERENCE LIST

1. Agentschap Zorg & Gezondheid (www.zorg-en-gezondheid.be)
2. Observatorium voor Gezondheid en Welzijn van Brussel-Hoofdstad / l'Observatoire de la Santé et du Social de Bruxelles-Capitale (<http://www.ccc-ggc.brussels>)
3. Agence wallonne de la santé, de la protection sociale, du handicap et des familles (AViQ) (<https://www.aviq.be>)
4. Directorate-general Statistics Belgium (<http://www.statbel.fgov.be/>)
5. ECIS - European Cancer Information System (<https://ecis.jrc.ec.europa.eu/>)
6. Sobin LH, Gospodarowicz MK, Wittekind C, editors. TNM classification of malignant tumours. International Union Against Cancer 8th Edition. John Wiley & Sons; 2017.
7. Cancer Burden in Belgium, 2004-2013. Brussels: Belgian Cancer Registry, 2015.
8. Vrijens F, Verleye L, De Gendt C, Schillemans V, Robays J, et al. Quality indicators for the management of lung cancer. KCE Reports 266 (2016).
9. Leroy R, De Gendt C, Stordeur S, Silversmit G, Verleye L, et al. Quality indicators for the management of head and neck cancer squamous cell carcinoma. KCE Reports 266 (2016).
10. Programme Pay for Performance (P4P) 2018 (<https://www.health.belgium.be/fr/programme-pay-performance-p4p-pourles-hopitaux-generaux>)
11. Het InterMutualistisch Agentschap (IMA) – L'Agence InterMutualiste (AIM) (<http://www.ima-aim.be>)
12. Cancer Prevalence in Belgium, 2010. Brussels: Belgian Cancer Registry, 2014.
13. Henau K, Van Eycken E, Silversmit G, Pukkala E. Regional variation in incidence for smoking and alcohol related cancers in Belgium. *Cancer Epidemiology* 2015; 39(1): 55-65.
14. Cancer Incidence in Belgium, 2008. Brussels: Belgian Cancer Registry, 2011.
15. Clegg LX, Hankey BF, Tiwari R, Feuer EJ, Edwards BK. Estimating average annual per cent change in trend analysis. *Statistics in Medicine* 2009; 28(29): 3670-82.
16. Karim-Kos HE, de Vries E, Soerjomataram I, Lemmens V, Siesling S, Coebergh JW. Recent trends of cancer in Europe: a combined approach of incidence, survival and mortality for 17 cancer sites since the 1990s. *European Journal of Cancer*. 2008 Jul;44(10):1345-89.
17. Ederer F, Axtell LM, Cutler SJ. The relative survival rate: A statistical methodology. *National Cancer Institute Monograph* 1962; 6:101-121.
18. Cancer Survival in Belgium. Brussels: Belgian Cancer Registry, 2012.
19. Cleveland WS. Robust locally weighted regression and smoothing scatterplots. *J. Amer. Statist. Assn.* 1979; 74: 829-833.
20. Cleveland WS, Devlin SJ. Locally weighted regression: an approach to regression analysis by local fitting. *J. Amer. Statist. Assn.* 1988; 83: 596-610.
21. Cleveland WS, Grosse E. Computational Methods for Local Regression. *Statistics and Computing* 1991; 1: 47-62.
22. Cleveland WS, Grosse EH, Shyu MJ. Local regression models. In: Chambers JM, Hastie TJ. (Editors). *Statistical Models in S*. New York: Chapman and Hall, 1992. 309-376.
23. Cancer in children and adolescents in Belgium, 2004-2016. Brussels: Belgian Cancer Registry, 2019.
24. Sobin LH, Gospodarowicz MK, Wittekind C, editors. TNM classification of malignant tumours. International Union Against Cancer 7th Edition. John Wiley & Sons; 2009.

Belgian Cancer Registry



www.kankerregister.org
www.registreducancer.org

Koningsstraat 215 / Rue Royale 215
1210 Brussel / Bruxelles
T +32 2 250 10 10
F +32 2 250 10 11