

Belgian Cancer Registry



Cancer Fact Sheet **Kidney Cancer**

ICD10 : C64

Belgium 2019

1. Cancer Incidence

1.1. Number of new diagnoses and incidence rates

Table 1: Kidney Cancer: Average age at diagnosis, number of new cancer diagnoses (N), crude rate (CR), age-standardised incidence rates (ESR and WSR) and cumulative risk by sex and region, 2019

| Males | Age (years) | N | CR | ESR | WSR | CRi |
|-------------------------|-------------|--------------|-------------|-------------|-------------|-------------|
| Belgium | 66.6 | 1,288 | 22.9 | 17.1 | 12.0 | 1.42 |
| Brussels-Capital Region | 63.4 | 90 | 15.2 | 15.5 | 10.9 | 1.24 |
| Flemish Region | 67.4 | 806 | 24.7 | 17.2 | 12.1 | 1.43 |
| Walloon Region | 65.6 | 392 | 22.1 | 17.1 | 12.1 | 1.45 |

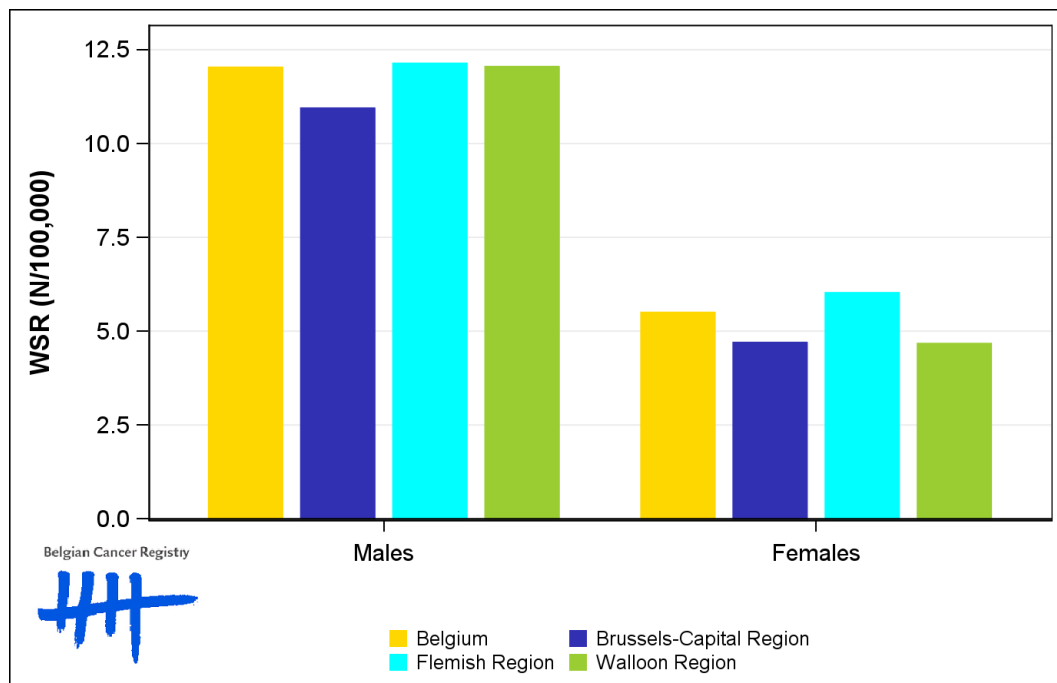
| Females | Age (years) | N | CR | ESR | WSR | CRi |
|-------------------------|-------------|------------|-------------|------------|------------|-------------|
| Belgium | 68.7 | 681 | 11.7 | 7.7 | 5.5 | 0.62 |
| Brussels-Capital Region | 62.7 | 41 | 6.7 | 6.1 | 4.7 | 0.52 |
| Flemish Region | 69.5 | 459 | 13.8 | 8.5 | 6.0 | 0.68 |
| Walloon Region | 68.0 | 181 | 9.7 | 6.5 | 4.7 | 0.53 |

CR=Crude (all ages) Rate (N/100,000 person-years)
 ESR (1976)=Age-Standardised Rate, using the European Standard Population (N/100,000 person-years)
 WSR=Age-Standardised Rate, using the World Standard Population (N/100,000 person-years)
 CRi=Cumulative Risk for 0-74 years (%)

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Figure 1: Kidney Cancer: Age-standardised incidence rates by sex and region, 2019



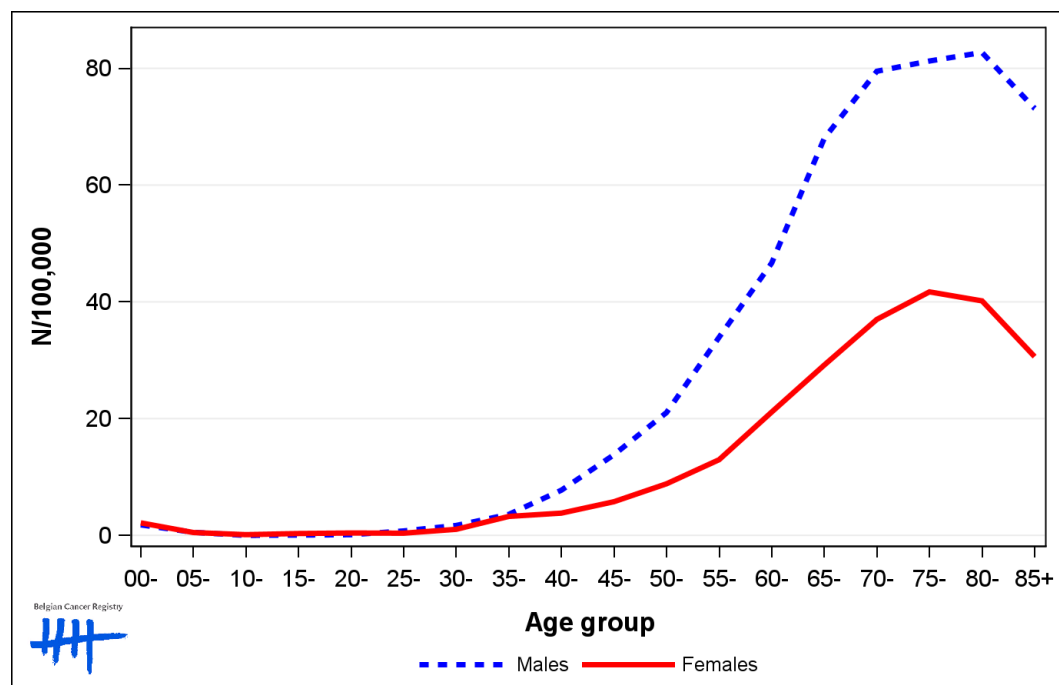
1.2. Age-specific incidence rates

Table 2: Kidney Cancer: Age-specific incidence rates, crude rate (CR) and age-standardised incidence rates (ESR and WSR) by sex, Belgium 2019

| | 00- | 05- | 10- | 15- | 20- | 25- | 30- | 35- | 40- | 45- | 50- | 55- | 60- | 65- | 70- | 75- | 80- | 85+ | CR | ESR | WSR |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| Males | 2.9 | 0.3 | 0.0 | 0.3 | 0.0 | 1.6 | 1.1 | 3.2 | 8.7 | 15.5 | 19.2 | 37.4 | 42.9 | 75.7 | 77.6 | 86.5 | 96.8 | 89.2 | 22.9 | 17.1 | 12.0 |
| Females | 2.0 | 0.6 | 0.3 | 0.7 | 0.9 | 0.0 | 0.5 | 2.7 | 2.5 | 5.5 | 9.6 | 12.1 | 22.2 | 30.6 | 34.8 | 51.0 | 39.8 | 38.2 | 11.7 | 7.7 | 5.5 |

CR=Crude (all ages) Rate (N/100,000 person-years)
 ESR (1976)=Age-Standardised Rate, using the European Standard Population (N/100,000 person-years)
 WSR=Age-Standardised Rate, using the World Standard Population (N/100,000 person-years)

Figure 2: Kidney Cancer: Age-specific incidence rates by sex, 2015-2019



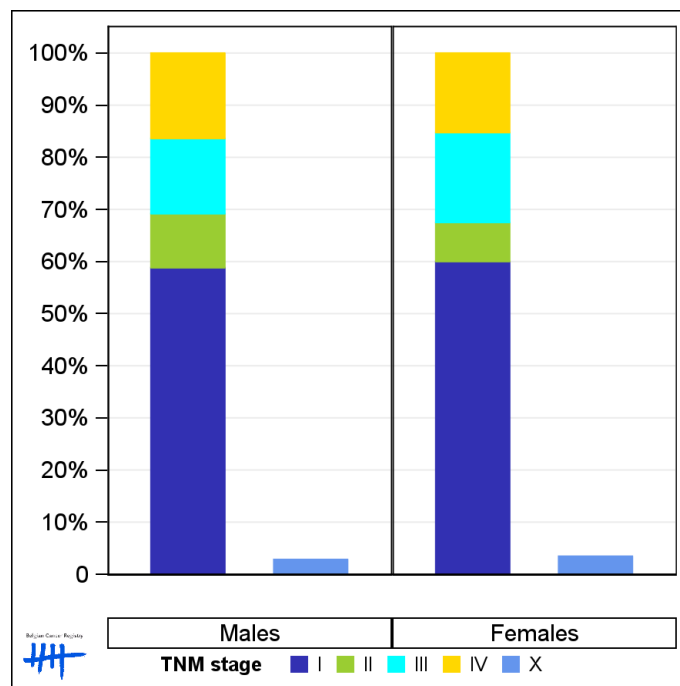
1.3. Combined stage

Table 3: Kidney Cancer: Distribution of combined stage by sex, Belgium 2019

| | Stage I | Stage II | Stage III | Stage IV | Stage X | Stage NA | Total |
|----------------|---------|----------|-----------|----------|---------|----------|-------|
| Males | | | | | | | |
| N | 726 | 128 | 178 | 202 | 36 | 18 | 1,288 |
| % | 56.4 | 9.9 | 13.8 | 15.7 | 2.8 | 1.4 | 100 |
| Females | | | | | | | |
| N | 386 | 48 | 111 | 98 | 23 | 15 | 681 |
| % | 56.7 | 7.0 | 16.3 | 14.4 | 3.4 | 2.2 | 100 |

Staging according to the TNM 8th edition (Ref: Brierley JD, Gospodarowicz MK, Wittekind Ch. TNM classification of malignant tumours, UICC 8th edition)
 Combined TNM stage : compilation of pathological (pTNM) and clinical (cTNM) stage. pTNM prevails over cTNM, except when cTNM stage is IV
 Stage X: diagnoses with an unknown stage
 Stage NA: diagnoses with a histological diagnosis where no stage can be evaluated (Not Applicable)

Figure 3: Kidney Cancer: Bar chart of known combined stage by sex, Belgium 2019



1.4. Trends in incidence

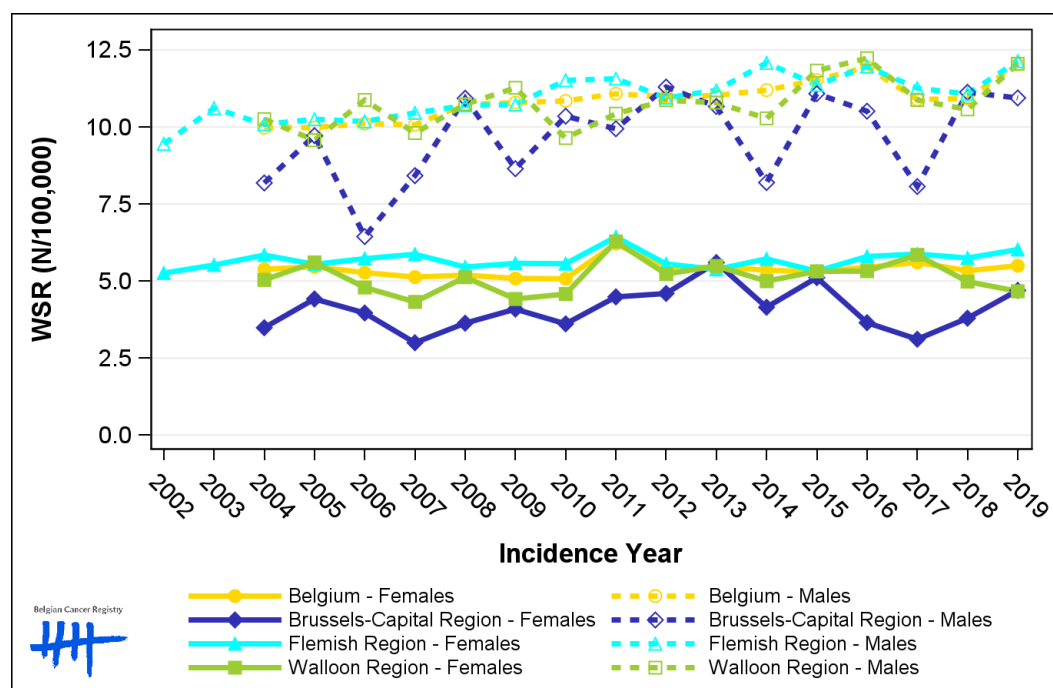
Table 4: Kidney Cancer: Age-standardised incidence rates (WSR) and average annual percentage change (AAPC) by incidence year, sex and region

| Males | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | AAPC | 95% CI |
|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-------------------|
| Belgium | 10.0 | 10.1 | 10.1 | 10.7 | 10.8 | 10.8 | 11.1 | 11.0 | 11.0 | 11.2 | 11.5 | 11.9 | 10.9 | 10.9 | 12.0 | 1.0 | [0.6; 1.4] |
| Brussels-Capital Region | 9.7 | 6.4 | 8.4 | 10.9 | 8.6 | 10.3 | 9.9 | 11.3 | 10.7 | 8.2 | 11.1 | 10.5 | 8.1 | 11.1 | 10.9 | 1.5 | [-0.5; 3.5] |
| Flemish Region | 10.3 | 10.2 | 10.5 | 10.7 | 10.7 | 11.5 | 11.6 | 10.9 | 11.2 | 12.1 | 11.4 | 12.0 | 11.3 | 11.1 | 12.1 | 1.0 | [0.5; 1.4] |
| Walloon Region | 9.6 | 10.9 | 9.8 | 10.7 | 11.3 | 9.6 | 10.4 | 10.9 | 10.8 | 10.3 | 11.8 | 12.2 | 10.9 | 10.6 | 12.1 | 1.0 | [0.2; 1.8] |

| Females | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | AAPC | 95% CI |
|-------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------|
| Belgium | 5.5 | 5.3 | 5.1 | 5.2 | 5.1 | 5.1 | 6.2 | 5.4 | 5.5 | 5.4 | 5.3 | 5.4 | 5.6 | 5.3 | 5.5 | 0.3 | [-0.3; 0.9] |
| Brussels-Capital Region | 4.4 | 4.0 | 3.0 | 3.6 | 4.1 | 3.6 | 4.5 | 4.6 | 5.6 | 4.2 | 5.1 | 3.7 | 3.1 | 3.8 | 4.7 | 0.6 | [-1.7; 2.9] |
| Flemish Region | 5.5 | 5.7 | 5.9 | 5.5 | 5.6 | 5.6 | 6.4 | 5.6 | 5.4 | 5.7 | 5.3 | 5.8 | 5.9 | 5.7 | 6.0 | 0.2 | [-0.4; 0.8] |
| Walloon Region | 5.6 | 4.8 | 4.3 | 5.1 | 4.4 | 4.6 | 6.3 | 5.2 | 5.5 | 5.0 | 5.3 | 5.3 | 5.9 | 5.0 | 4.7 | 0.4 | [-0.9; 1.8] |

WSR=Age-Standardised Rate, using the World Standard Population (N/100,000 person-years)
 AAPC = Average Annual Percentage Change over the 2005-2019 period

Figure 4: Kidney Cancer: Age-standardised incidence rates (WSR) by incidence year, sex and region



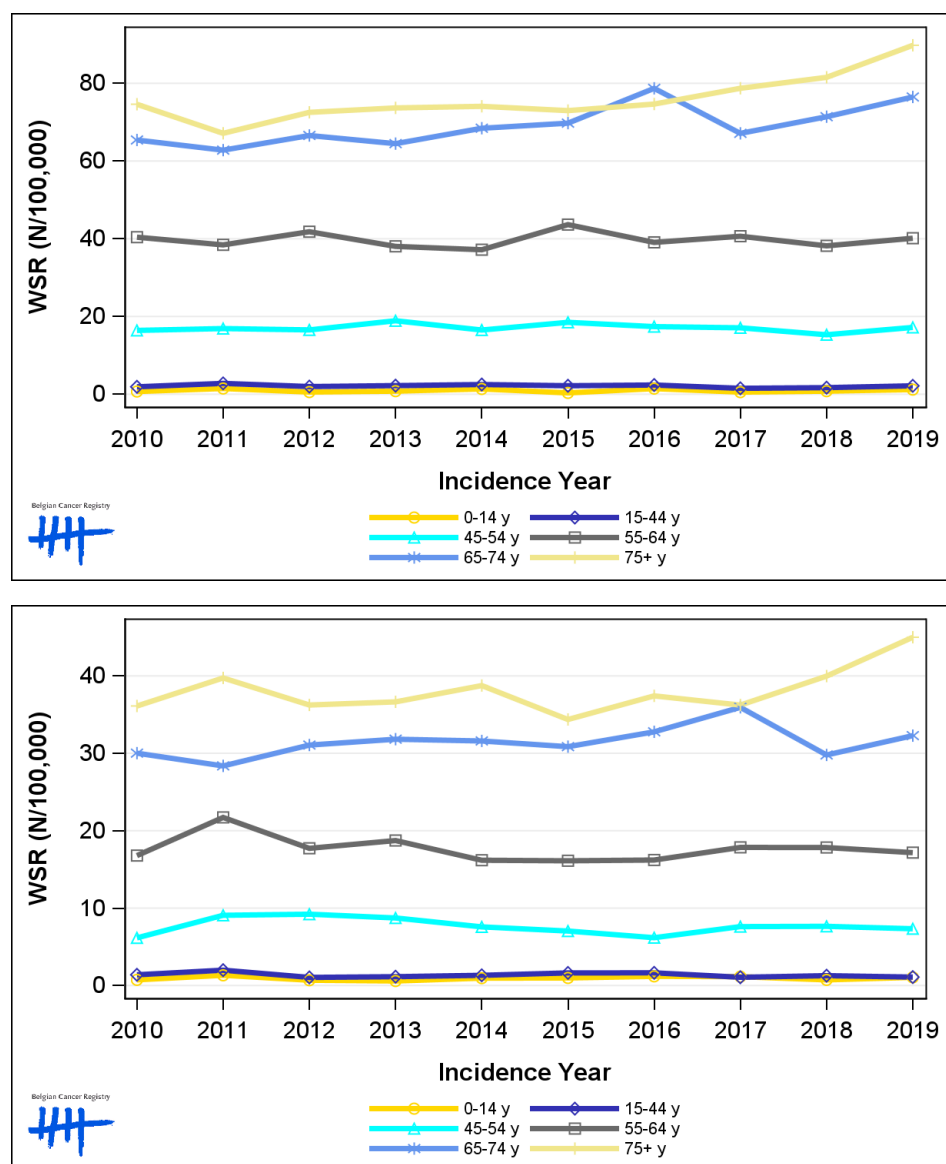
1.5. Incidence by broad age groups

Table 5: Kidney Cancer: Number of new diagnoses and age-standardised incidence rates (WSR) by broad age groups and incidence year by sex, Belgium

| | N | | | | | | | | | | WSR | | | | | | | | | |
|----------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| Males | | | | | | | | | | | | | | | | | | | | |
| All ages | 994 | 995 | 1,046 | 1,056 | 1,076 | 1,142 | 1,188 | 1,136 | 1,164 | 1,288 | 10.8 | 11.1 | 11.0 | 11.0 | 11.2 | 11.5 | 11.9 | 10.9 | 10.9 | 12.0 |
| 0-14 y | 6 | 13 | 5 | 7 | 12 | 3 | 13 | 5 | 7 | 10 | 0.7 | 1.5 | 0.6 | 0.8 | 1.4 | 0.4 | 1.5 | 0.6 | 0.8 | 1.2 |
| 15-44 y | 52 | 75 | 53 | 59 | 66 | 58 | 63 | 40 | 44 | 55 | 1.9 | 2.8 | 2.0 | 2.2 | 2.5 | 2.2 | 2.4 | 1.5 | 1.7 | 2.2 |
| 45-54 y | 133 | 138 | 138 | 158 | 137 | 154 | 145 | 141 | 128 | 139 | 16.4 | 16.9 | 16.6 | 18.9 | 16.5 | 18.5 | 17.4 | 17.1 | 15.3 | 17.2 |
| 55-64 y | 261 | 254 | 280 | 257 | 254 | 301 | 275 | 291 | 277 | 298 | 40.4 | 38.4 | 41.8 | 38.0 | 37.2 | 43.6 | 39.1 | 40.7 | 38.2 | 40.1 |
| 65-74 y | 277 | 274 | 301 | 297 | 325 | 340 | 395 | 352 | 384 | 420 | 65.4 | 62.8 | 66.6 | 64.5 | 68.4 | 69.7 | 78.7 | 67.1 | 71.4 | 76.5 |
| 75+ y | 265 | 241 | 269 | 278 | 282 | 286 | 297 | 307 | 324 | 366 | 74.6 | 67.1 | 72.5 | 73.7 | 74.1 | 73.0 | 74.7 | 78.7 | 81.5 | 89.8 |
| Females | | | | | | | | | | | | | | | | | | | | |
| All ages | 557 | 659 | 602 | 618 | 613 | 588 | 638 | 651 | 640 | 681 | 5.1 | 6.2 | 5.4 | 5.5 | 5.4 | 5.3 | 5.4 | 5.6 | 5.3 | 5.5 |
| 0-14 y | 6 | 11 | 6 | 5 | 8 | 8 | 10 | 10 | 6 | 9 | 0.7 | 1.3 | 0.7 | 0.6 | 1.0 | 1.0 | 1.2 | 1.2 | 0.7 | 1.1 |
| 15-44 y | 35 | 49 | 26 | 29 | 34 | 41 | 41 | 27 | 33 | 26 | 1.4 | 2.0 | 1.1 | 1.2 | 1.3 | 1.6 | 1.6 | 1.1 | 1.3 | 1.1 |
| 45-54 y | 50 | 73 | 75 | 71 | 62 | 58 | 51 | 62 | 60 | 59 | 6.2 | 9.1 | 9.2 | 8.7 | 7.6 | 7.0 | 6.2 | 7.6 | 7.7 | 7.3 |
| 55-64 y | 111 | 147 | 122 | 129 | 113 | 114 | 116 | 129 | 132 | 128 | 16.8 | 21.7 | 17.7 | 18.7 | 16.2 | 16.1 | 16.2 | 17.9 | 17.8 | 17.2 |
| 65-74 y | 151 | 143 | 157 | 165 | 167 | 166 | 182 | 207 | 178 | 195 | 30.0 | 28.4 | 31.1 | 31.8 | 31.6 | 30.9 | 32.8 | 35.9 | 29.8 | 32.3 |
| 75+ y | 204 | 236 | 216 | 219 | 229 | 201 | 238 | 216 | 231 | 264 | 36.1 | 39.7 | 36.2 | 36.6 | 38.8 | 34.4 | 37.4 | 36.2 | 40.0 | 45.0 |

N=Number of invasive tumours
WSR=Age-Standardised Rate, using the World Standard Population (N/100,000 person-years)

Figure 5: Kidney Cancer: Age-standardised incidence rates (WSR) versus incidence year by broad age groups for males (top) and females (bottom), Belgium



2. Relative survival

Table 6: Kidney Cancer: 5-year relative survival proportion by sex, age group and region, Belgium 2015-2019

| | 5-year relative survival 2015-2019 (%) | | | | | |
|-------------------------|--|----------|--------------|-----------|----------|--------------|
| | Males | | | Females | | |
| | N at risk | estimate | 95% CI | N at risk | estimate | 95% CI |
| Overall | 5,743 | 77.8 | [76.0, 79.6] | 3,111 | 80.8 | [78.4, 83.0] |
| Age group | | | | | | |
| 15-44 years | 248 | 92.6 | [87.7, 95.8] | 166 | 96.6 | [92.0, 98.7] |
| 45-64 years | 2,097 | 82.6 | [80.3, 84.7] | 893 | 84.3 | [81.1, 87.1] |
| 65+ years | 3,401 | 73.2 | [70.4, 76.0] | 2,053 | 77.7 | [74.4, 80.9] |
| Region | | | | | | |
| Brussels-Capital Region | 391 | 79.4 | [72.3, 85.7] | 183 | 84.9 | [75.2, 92.8] |
| Flemish Region | 3,642 | 77.0 | [74.8, 79.2] | 2,039 | 80.8 | [77.9, 83.5] |
| Walloon Region | 1,710 | 79.2 | [75.7, 82.4] | 889 | 79.9 | [75.6, 84.0] |

Figure 6: Kidney Cancer: relative survival proportion by sex, Belgium 2015-2019

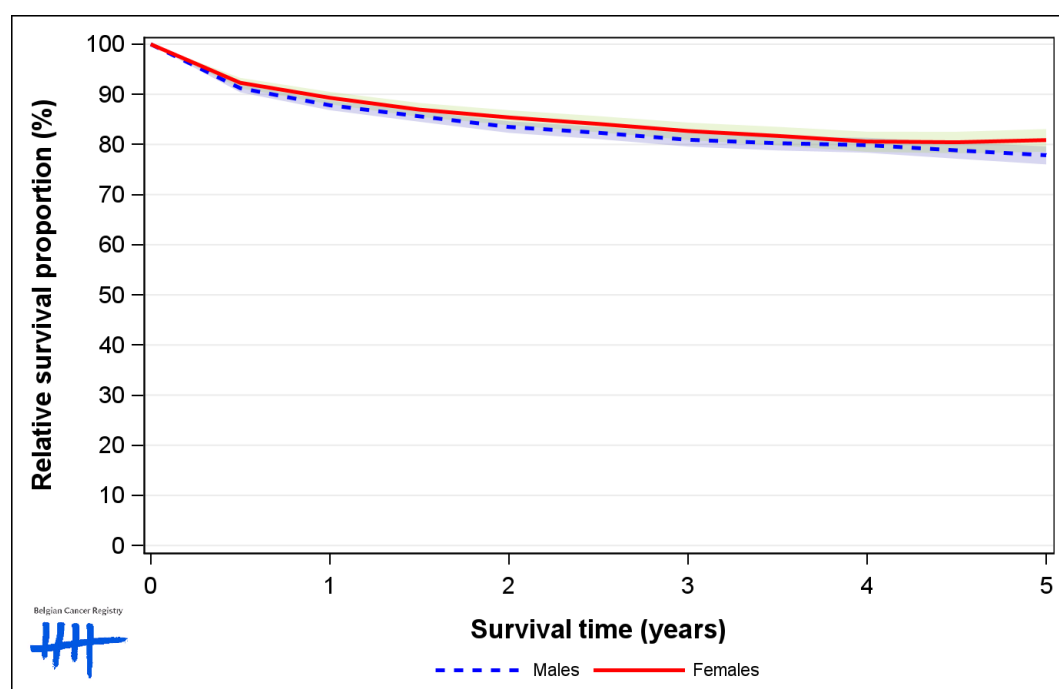


Figure 7: Kidney Cancer: relative survival proportion by age group in males, Belgium 2015-2019

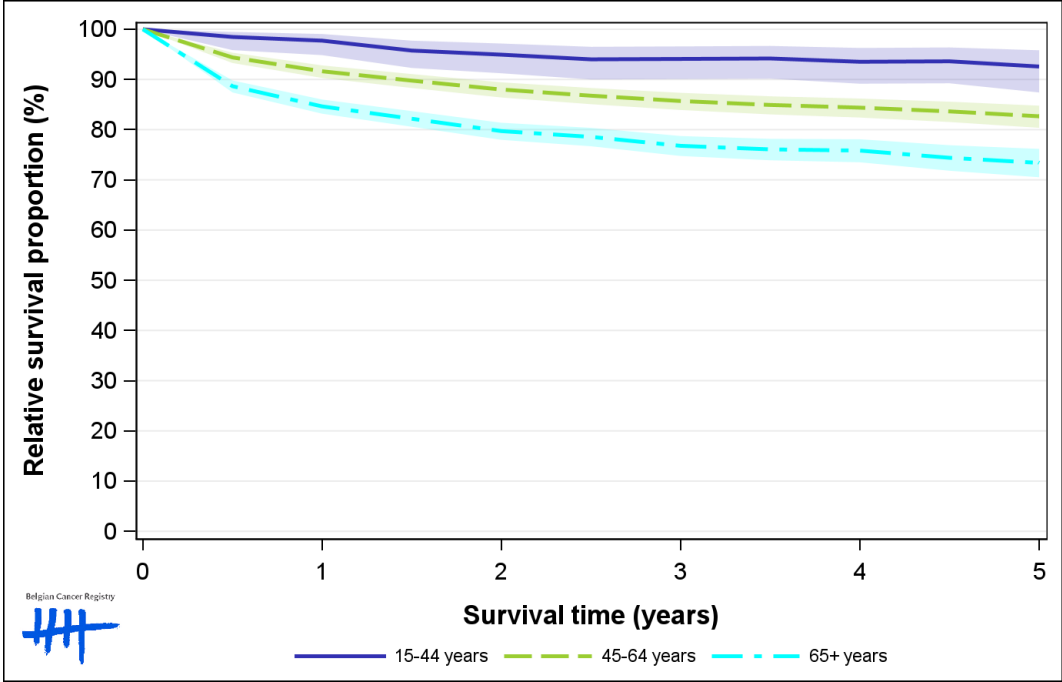


Figure 8: Kidney Cancer: relative survival proportion by age group in females, Belgium 2015-2019

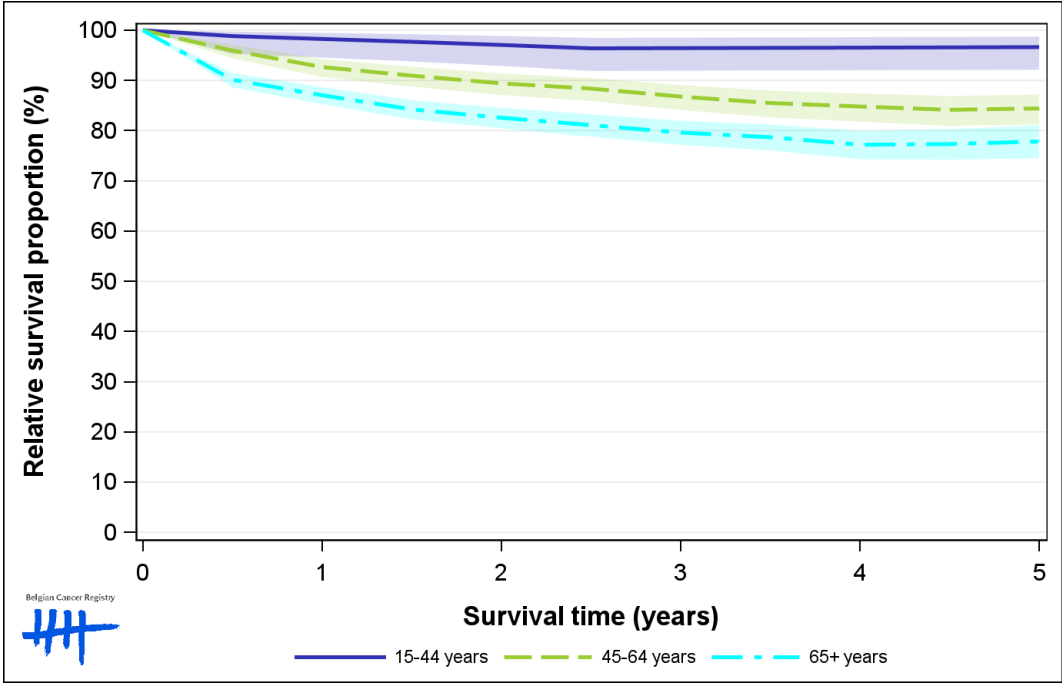


Figure 9: Kidney Cancer: relative survival proportion by region in males, Belgium 2015-2019

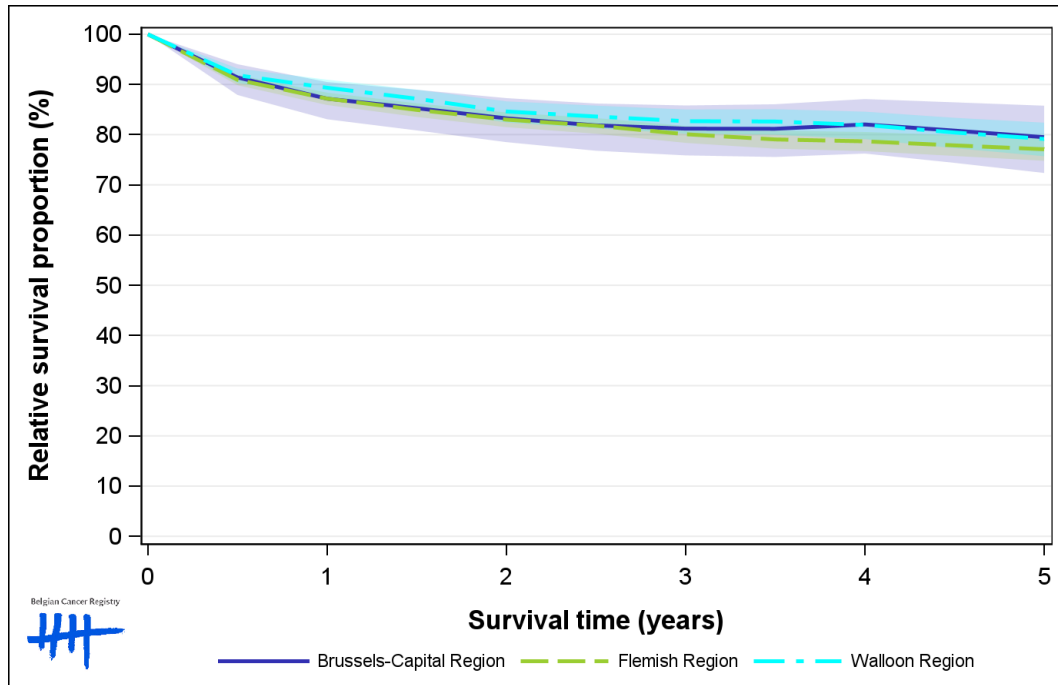


Figure 10: Kidney Cancer: relative survival proportion by region in females, Belgium 2015-2019

