

Belgian Cancer Registry



Cancer Fact Sheet **Liver Cancer**

ICD10 : C22

Belgium 2021

1. Cancer Incidence

1.1. Number of new diagnoses and incidence rates

Table 1: Liver 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, 2021

| Males | Age (years) | N | CR | ESR | WSR | CRi |
|-------------------------|-------------|------------|-------------|------------|------------|-------------|
| Belgium | 69.7 | 790 | 13.9 | 9.6 | 6.6 | 0.86 |
| Brussels-Capital Region | 65.5 | 64 | 10.7 | 11.0 | 7.7 | 1.01 |
| Flemish Region | 70.9 | 391 | 11.9 | 7.5 | 5.0 | 0.65 |
| Walloon Region | 68.9 | 335 | 18.8 | 13.4 | 9.2 | 1.22 |

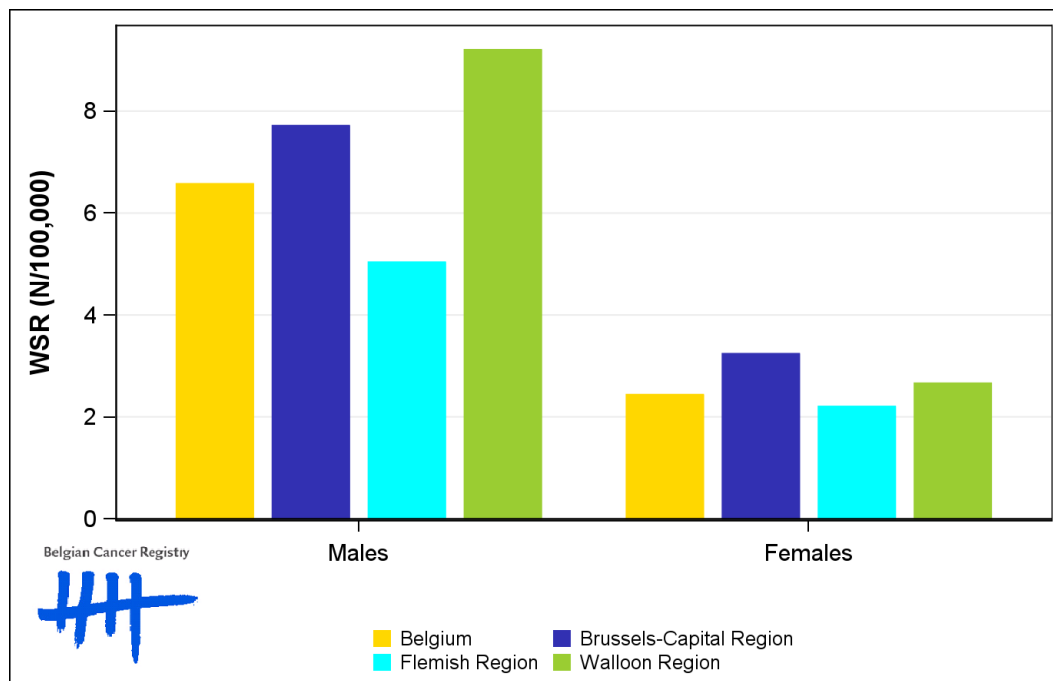
| Females | Age (years) | N | CR | ESR | WSR | CRi |
|-------------------------|-------------|------------|------------|------------|------------|-------------|
| Belgium | 69.5 | 318 | 5.4 | 3.5 | 2.4 | 0.28 |
| Brussels-Capital Region | 69.5 | 37 | 6.0 | 4.9 | 3.2 | 0.34 |
| Flemish Region | 70.0 | 173 | 5.1 | 3.0 | 2.2 | 0.25 |
| Walloon Region | 68.6 | 108 | 5.8 | 3.9 | 2.7 | 0.32 |

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: Liver cancer: Age-standardised incidence rates by sex and region, 2021



1.2. Age-specific incidence rates

Table 2: Liver cancer: Age-specific incidence rates, crude rate (CR) and age-standardised incidence rates (ESR and WSR) by sex, Belgium 2021

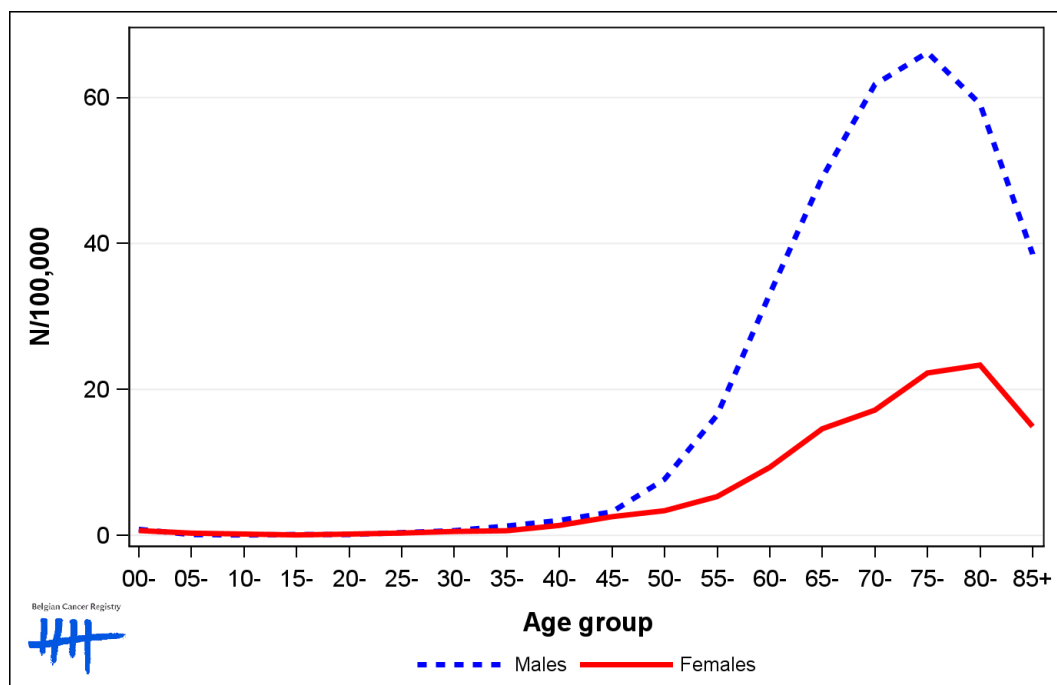
| | 00- | 05- | 10- | 15- | 20- | 25- | 30- | 35- | 40- | 45- | 50- | 55- | 60- | 65- | 70- | 75- | 80- | 85+ | CR | ESR | WSR |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|-----|-----|
| Males | 0.7 | 0.3 | 0.0 | 0.6 | 0.0 | 0.5 | 0.8 | 0.8 | 1.3 | 2.4 | 5.5 | 11.4 | 29.5 | 52.5 | 66.8 | 72.9 | 64.3 | 35.1 | 13.9 | 9.6 | 6.6 |
| Females | 0.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.3 | 0.8 | 1.1 | 1.1 | 2.1 | 3.1 | 4.2 | 11.0 | 15.9 | 15.9 | 25.8 | 19.5 | 15.9 | 5.4 | 3.5 | 2.4 |

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: Liver cancer: Age-specific incidence rates by sex, 2017-2021



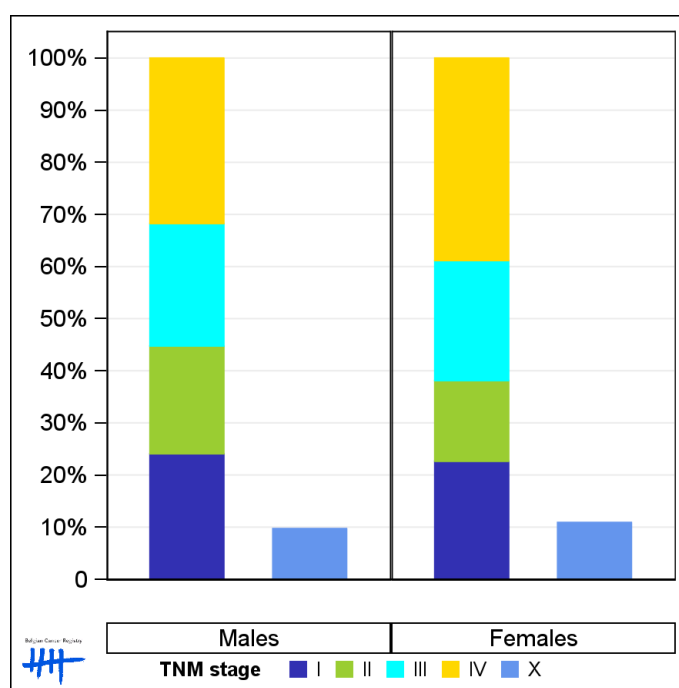
1.3. Combined stage

Table 3: Liver cancer: Distribution of combined stage by sex, Belgium 2021

| | Stage I | Stage II | Stage III | Stage IV | Stage X | Stage NA | Total |
|----------------|---------|----------|-----------|----------|---------|----------|-------|
| Males | | | | | | | |
| N | 170 | 146 | 166 | 224 | 76 | 8 | 790 |
| % | 21.5 | 18.5 | 21.0 | 28.4 | 9.6 | 1.0 | 100 |
| Females | | | | | | | |
| N | 63 | 43 | 64 | 108 | 34 | 6 | 318 |
| % | 19.8 | 13.5 | 20.1 | 34.0 | 10.7 | 1.9 | 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: Liver cancer: Bar chart of known combined stage by sex, Belgium 2021



1.4. Trends in incidence

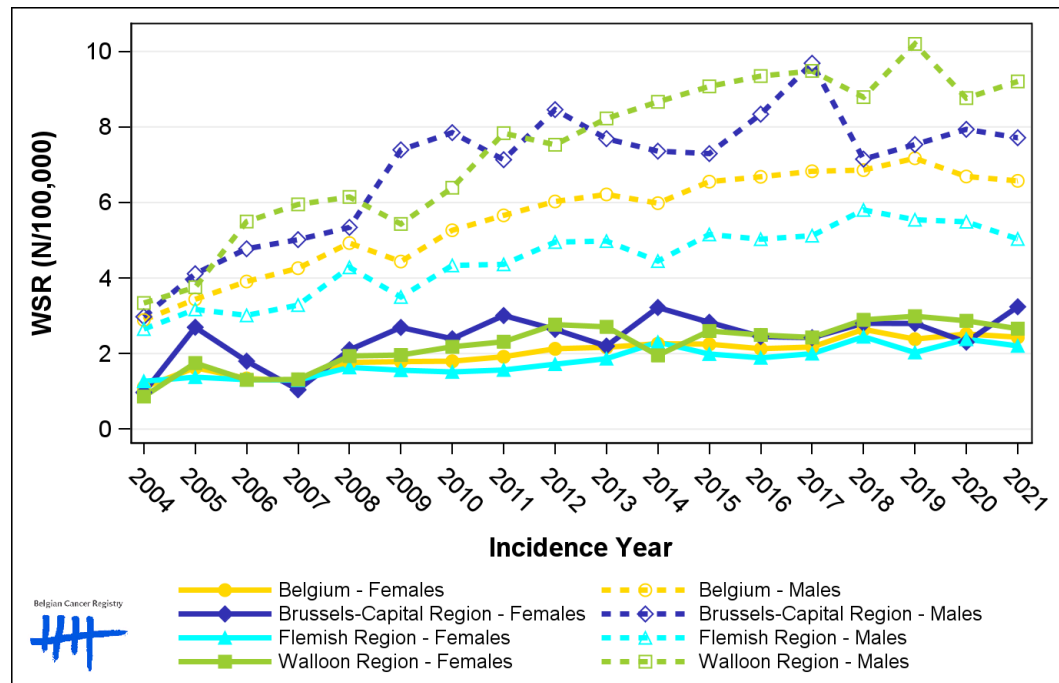
Table 4: Liver cancer: Age-standardised incidence rates (WSR) and average annual percentage change (AAPC) by incidence year, sex and region

| Males | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | AAPC | 95% CI |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------------|
| Belgium | 4.3 | 4.9 | 4.4 | 5.3 | 5.7 | 6.0 | 6.2 | 6.0 | 6.6 | 6.7 | 6.8 | 6.9 | 7.2 | 6.7 | 6.6 | 3.2 | [2.5; 3.8] |
| Brussels-Capital Region | 5.0 | 5.3 | 7.4 | 7.9 | 7.1 | 8.5 | 7.7 | 7.4 | 7.3 | 8.3 | 9.7 | 7.1 | 7.5 | 7.9 | 7.7 | 1.8 | [0.1; 3.4] |
| Flemish Region | 3.3 | 4.3 | 3.5 | 4.3 | 4.4 | 5.0 | 5.0 | 4.5 | 5.2 | 5.0 | 5.1 | 5.8 | 5.5 | 5.5 | 5.0 | 3.0 | [1.9; 4.1] |
| Walloon Region | 5.9 | 6.1 | 5.4 | 6.4 | 7.8 | 7.5 | 8.2 | 8.7 | 9.1 | 9.3 | 9.5 | 8.8 | 10.2 | 8.8 | 9.2 | 3.7 | [2.8; 4.6] |

| Females | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | AAPC | 95% CI |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------------|
| Belgium | 1.3 | 1.8 | 1.8 | 1.8 | 1.9 | 2.1 | 2.2 | 2.3 | 2.3 | 2.1 | 2.2 | 2.6 | 2.4 | 2.5 | 2.4 | 4.0 | [3.0; 5.0] |
| Brussels-Capital Region | 1.0 | 2.1 | 2.7 | 2.4 | 3.0 | 2.6 | 2.2 | 3.2 | 2.8 | 2.5 | 2.4 | 2.8 | 2.8 | 2.3 | 3.2 | 3.2 | [0.2; 6.2] |
| Flemish Region | 1.3 | 1.6 | 1.6 | 1.5 | 1.6 | 1.7 | 1.9 | 2.3 | 2.0 | 1.9 | 2.0 | 2.4 | 2.0 | 2.4 | 2.2 | 3.7 | [2.5; 4.9] |
| Walloon Region | 1.3 | 1.9 | 2.0 | 2.2 | 2.3 | 2.8 | 2.7 | 2.0 | 2.6 | 2.5 | 2.4 | 2.9 | 3.0 | 2.9 | 2.7 | 4.3 | [2.7; 5.9] |

WSR=Age-Standardised Rate, using the World Standard Population (N/100,000 person-years)
 AAPC = Average Annual Percentage Change over the 2007-2021 period

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



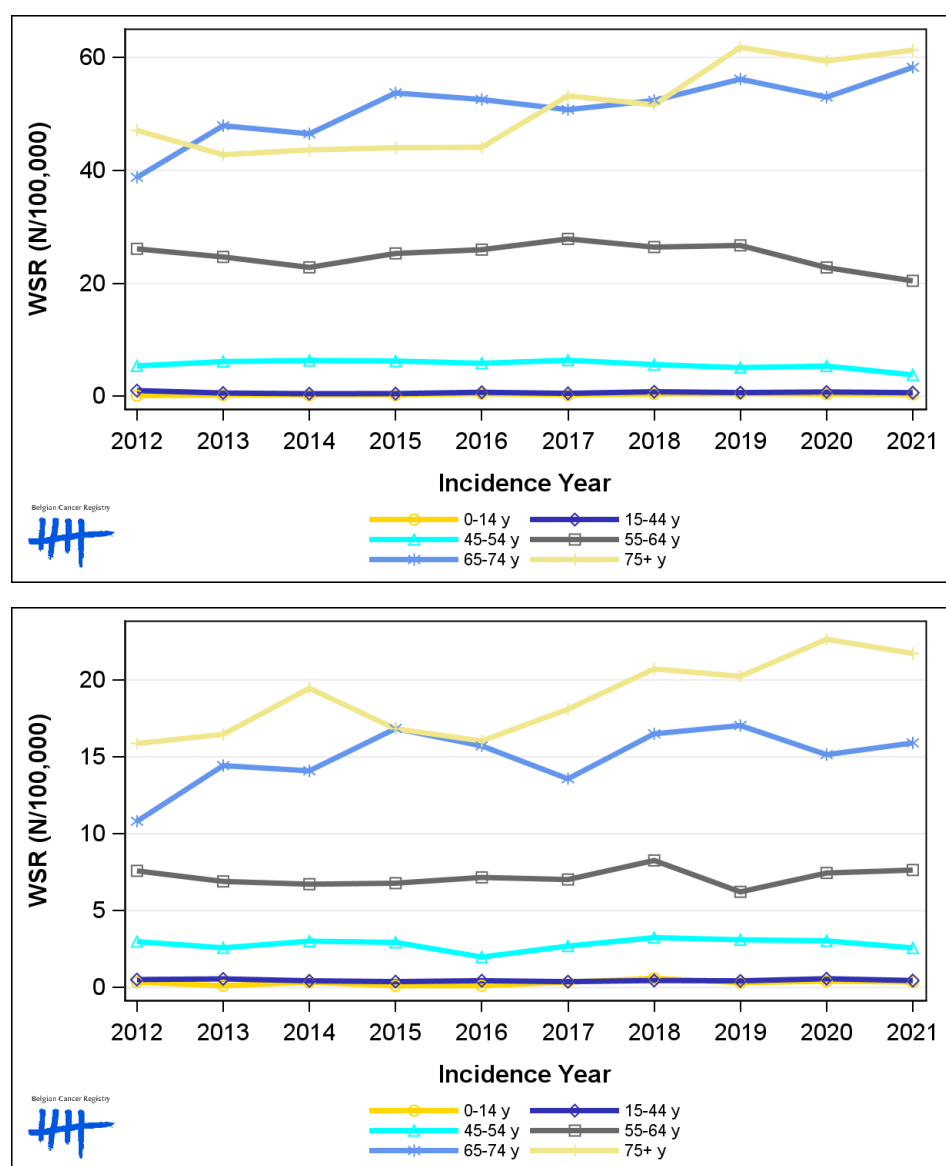
1.5. Incidence by broad age groups

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

| | N | | | | | | | | | | WSR | | | | | | | | | |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Males | | | | | | | | | | | | | | | | | | | | |
| All ages | 597 | 619 | 611 | 671 | 693 | 739 | 751 | 817 | 774 | 790 | 6.0 | 6.2 | 6.0 | 6.6 | 6.7 | 6.8 | 6.9 | 7.2 | 6.7 | 6.6 |
| 0-14 y | 1 | 2 | 2 | 2 | 4 | 2 | 4 | 4 | 3 | 3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.5 | 0.2 | 0.4 | 0.5 | 0.4 | 0.4 |
| 15-44 y | 26 | 14 | 12 | 12 | 19 | 13 | 21 | 17 | 19 | 15 | 1.0 | 0.6 | 0.5 | 0.5 | 0.7 | 0.5 | 0.8 | 0.7 | 0.8 | 0.6 |
| 45-54 y | 45 | 52 | 53 | 51 | 50 | 55 | 47 | 41 | 45 | 31 | 5.4 | 6.1 | 6.3 | 6.2 | 5.8 | 6.4 | 5.6 | 5.1 | 5.4 | 3.8 |
| 55-64 y | 175 | 166 | 154 | 173 | 180 | 197 | 190 | 195 | 170 | 153 | 26.1 | 24.7 | 22.8 | 25.3 | 26.0 | 27.9 | 26.4 | 26.7 | 22.8 | 20.4 |
| 65-74 y | 173 | 222 | 220 | 262 | 264 | 266 | 284 | 313 | 298 | 338 | 38.8 | 47.9 | 46.5 | 53.7 | 52.5 | 50.7 | 52.4 | 56.2 | 53.0 | 58.2 |
| 75+ y | 177 | 163 | 170 | 171 | 176 | 206 | 205 | 247 | 239 | 250 | 47.1 | 42.8 | 43.6 | 44.0 | 44.1 | 53.2 | 51.6 | 61.8 | 59.4 | 61.3 |
| Females | | | | | | | | | | | | | | | | | | | | |
| All ages | 243 | 252 | 274 | 276 | 267 | 273 | 327 | 304 | 329 | 318 | 2.1 | 2.2 | 2.3 | 2.3 | 2.1 | 2.2 | 2.6 | 2.4 | 2.5 | 2.4 |
| 0-14 y | 3 | 1 | 3 | 1 | 1 | 3 | 5 | 3 | 4 | 3 | 0.4 | 0.1 | 0.3 | 0.1 | 0.1 | 0.4 | 0.6 | 0.3 | 0.4 | 0.4 |
| 15-44 y | 12 | 14 | 11 | 10 | 11 | 9 | 12 | 11 | 13 | 12 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.6 | 0.5 |
| 45-54 y | 24 | 21 | 25 | 25 | 16 | 22 | 26 | 24 | 24 | 20 | 3.0 | 2.6 | 3.0 | 2.9 | 2.0 | 2.7 | 3.3 | 3.1 | 3.0 | 2.6 |
| 55-64 y | 52 | 48 | 46 | 47 | 51 | 51 | 61 | 46 | 57 | 58 | 7.6 | 6.9 | 6.7 | 6.8 | 7.2 | 7.0 | 8.3 | 6.2 | 7.5 | 7.6 |
| 65-74 y | 55 | 75 | 75 | 91 | 87 | 78 | 99 | 103 | 93 | 99 | 10.8 | 14.4 | 14.1 | 16.8 | 15.7 | 13.6 | 16.5 | 17.0 | 15.1 | 15.9 |
| 75+ y | 97 | 93 | 114 | 102 | 101 | 110 | 124 | 117 | 138 | 126 | 15.9 | 16.5 | 19.5 | 16.8 | 16.0 | 18.1 | 20.7 | 20.2 | 22.6 | 21.7 |

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

Figure 5: Liver 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: Liver cancer: 5-year relative survival proportion by sex, age group and region, Belgium 2017-2021

| | 5-year relative survival 2017-2021 (%) | | | | | |
|-------------------------|--|----------|--------------|-----------|----------|--------------|
| | Males | | | Females | | |
| | N at risk | estimate | 95% CI | N at risk | estimate | 95% CI |
| Overall | 3,831 | 21.8 | [20.1, 23.6] | 1,522 | 22.2 | [19.4, 25.2] |
| Age group | | | | | | |
| 15-59 years | 621 | 31.8 | [27.5, 36.3] | 277 | 27.3 | [20.2, 34.8] |
| 60-74 years | 2,067 | 24.0 | [21.6, 26.5] | 636 | 22.8 | [18.7, 27.1] |
| 75+ years | 1,143 | 10.8 | [8.0, 14.1] | 609 | 19.3 | [15.0, 24.1] |
| Region | | | | | | |
| Brussels-Capital Region | 326 | 20.1 | [14.4, 26.5] | 147 | 22.2 | [14.0, 31.8] |
| Flemish Region | 1,905 | 21.5 | [19.1, 24.1] | 837 | 19.8 | [16.3, 23.5] |
| Walloon Region | 1,600 | 22.8 | [20.0, 25.6] | 538 | 26.5 | [21.3, 31.9] |

Figure 6: Liver cancer: relative survival proportion by sex, Belgium 2017-2021

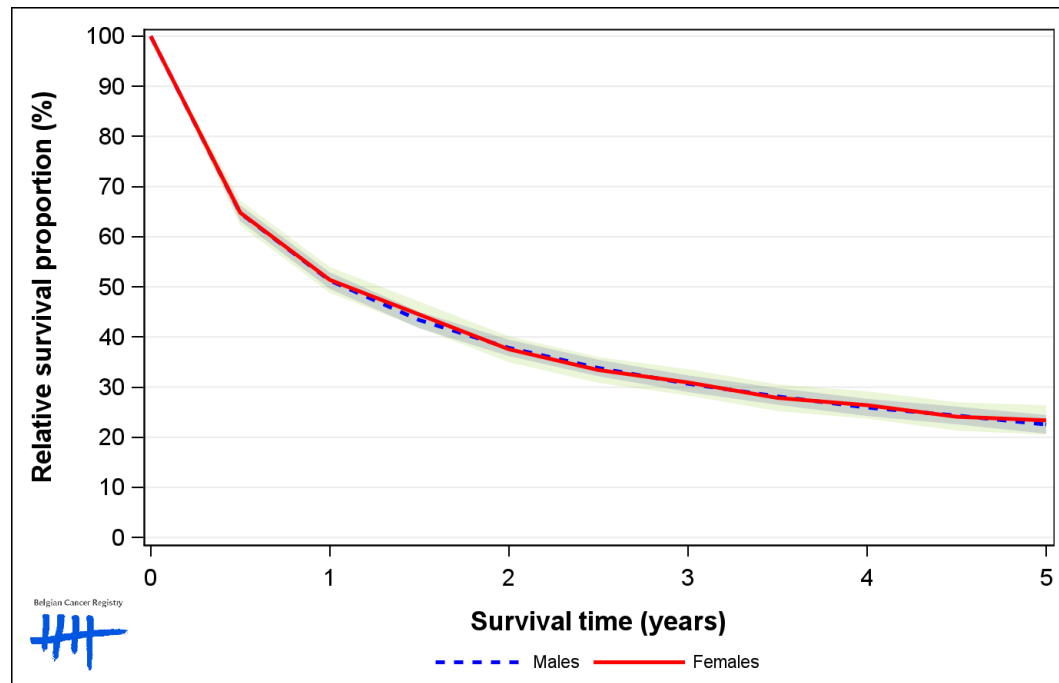


Figure 7: Liver cancer: relative survival proportion by age group in males, Belgium 2017-2021

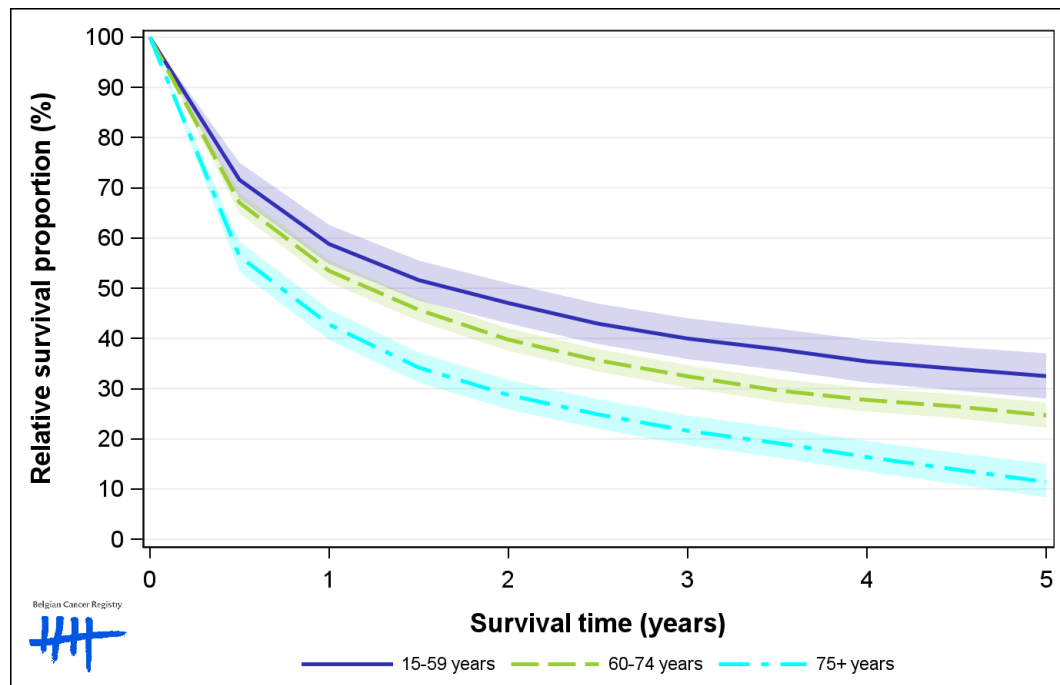


Figure 8: Liver cancer: relative survival proportion by age group in females, Belgium 2017-2021

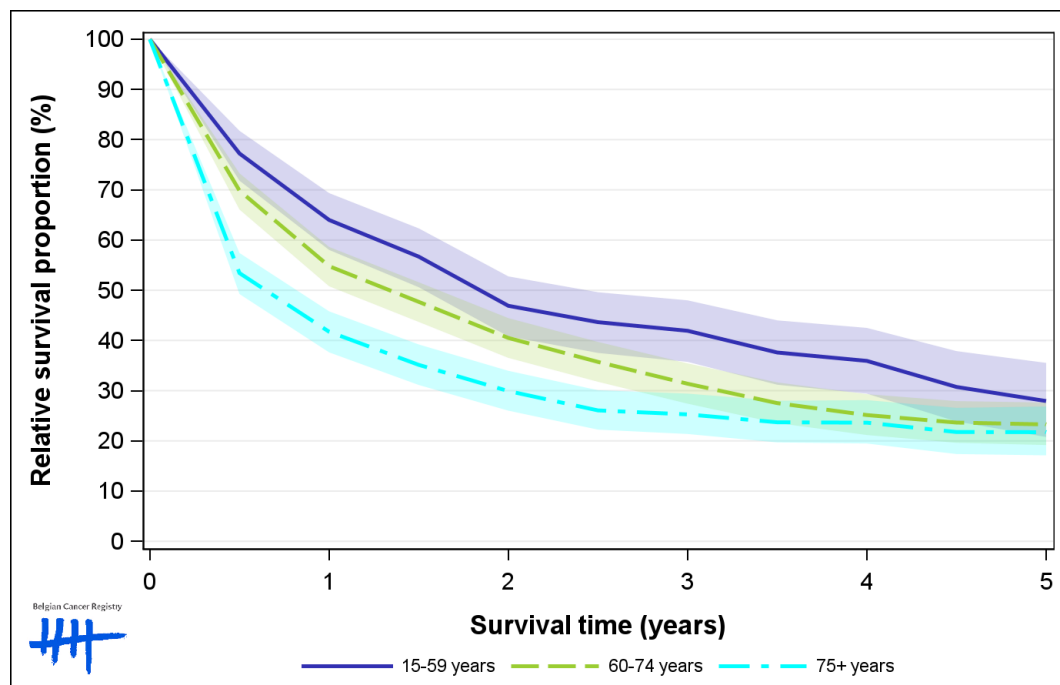


Figure 9: Liver cancer: relative survival proportion by region in males, Belgium 2017-2021

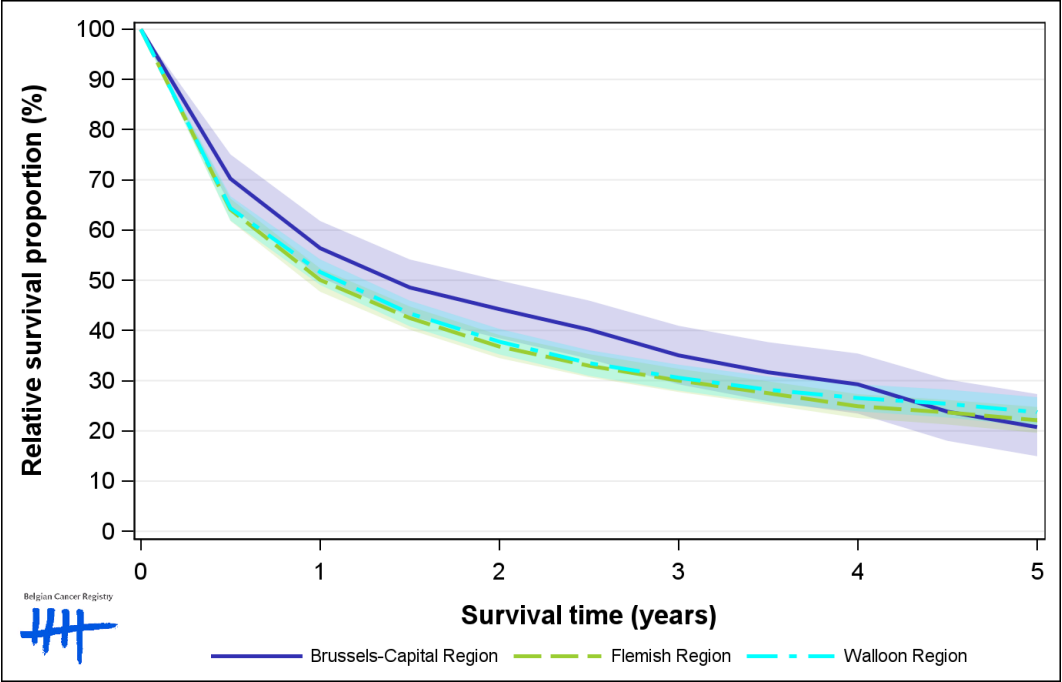


Figure 10: Liver cancer: relative survival proportion by region in females, Belgium 2017-2021

