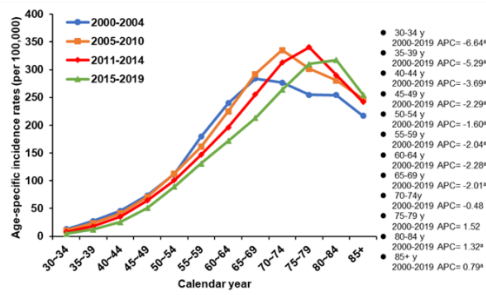
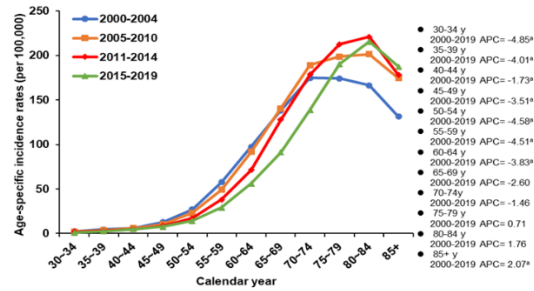


(A) Male

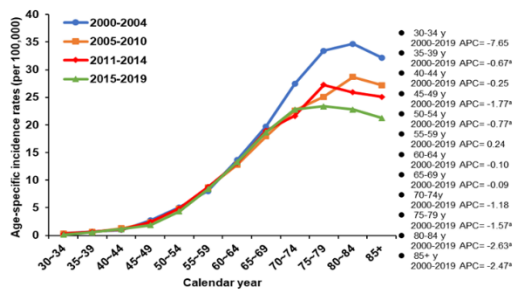


(B) Female

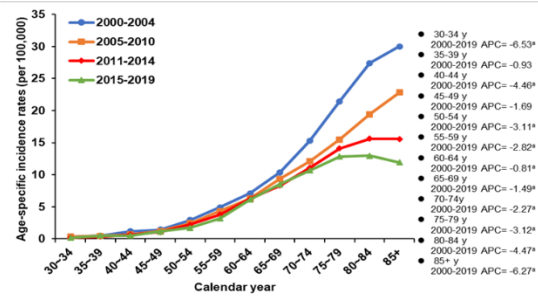


Supplementary figure 1 Joinpoint analysis of age-specific incidence rates of hepatocellular carcinoma for male and female in Taiwan from 2000-2019. A: Male; B; Female. Incidence rates significantly decreased among both sexes in later period for all age groups between 30-69. However, the age-specific incidence rates in older age groups 75-79, 80-84, and 85-89 significantly increased in later period. APC: Annual Percentage Change. ^a $P < 0.05$.

(A) Male

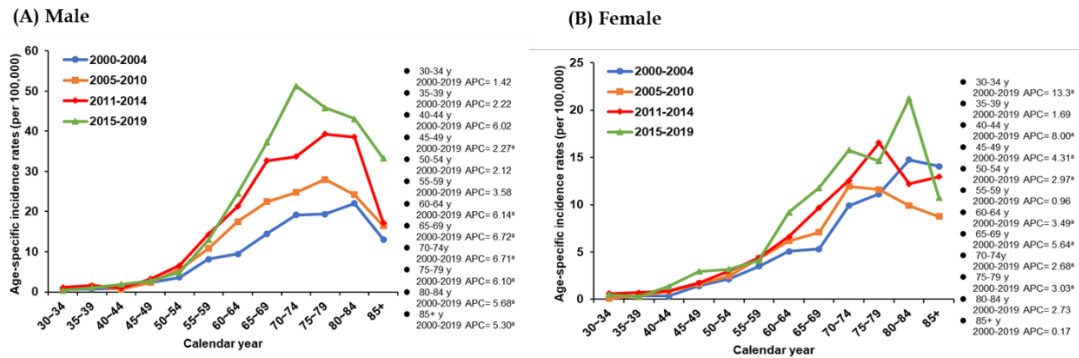


(B) Female

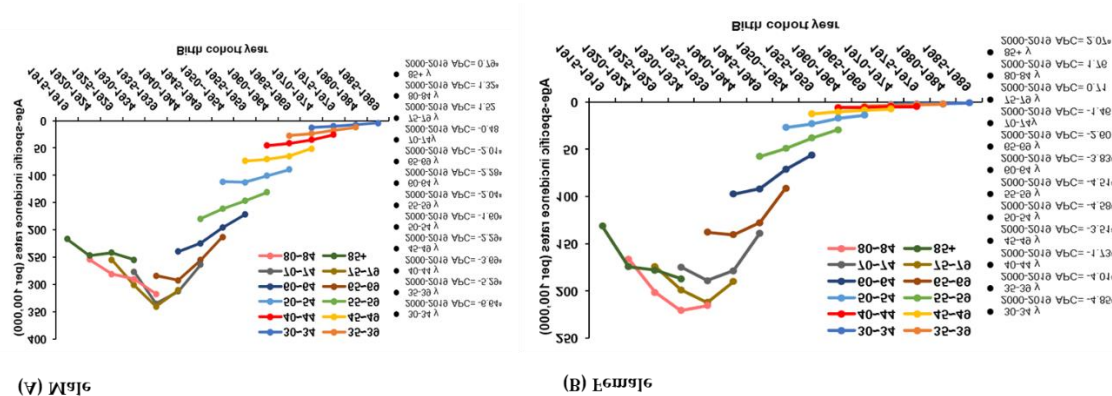


Supplementary figure 2 Joinpoint analysis of age-specific incidence rates of hepatocellular carcinoma for male and female in Poland from 2000-2019. A: Male; B: Female. Nearly all age groups in both sexes showed decreasing trends in age-specific incidence rates in later period. APC: Annual Percentage Change.

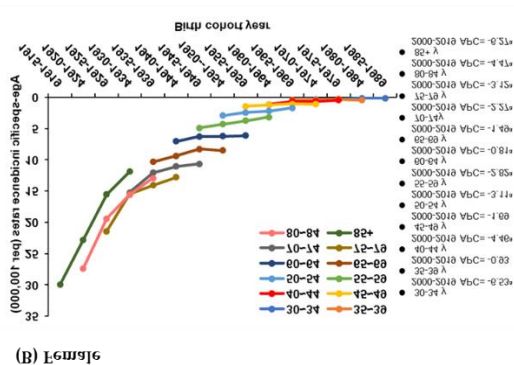
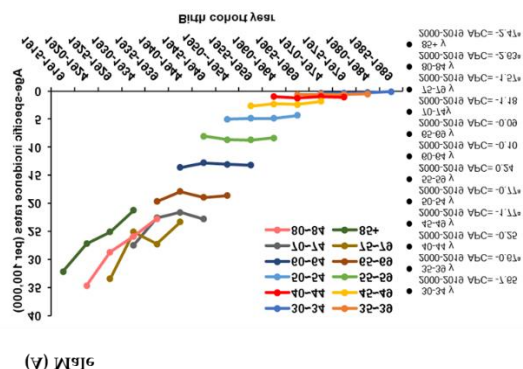
^a $P < 0.05$.



Supplementary figure 3 Joinpoint analysis of age-specific incidence rates of hepatocellular carcinoma for male and female in Flanders from 2000-2019. A: Male; B: Female. age-specific incidence rate for males in age groups 45-49, 60-64, 65-69, 70-74, 75-79, 80-84 and 85-89 significantly increased in later period. Among females, age groups 30-34, 40-44, 45-49, 50-54, 60-64, 65-69, 70-74, 75-79 and 80-84 significantly increased in later period. APC: Annual Percentage Change. ^a $P < 0.05$.



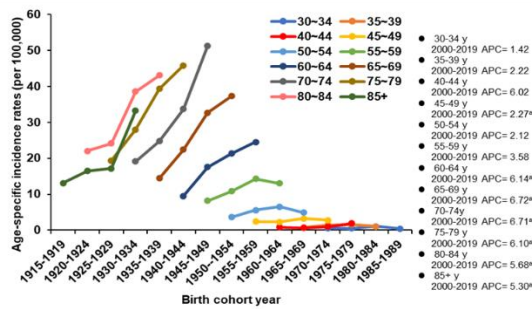
Supplementary figure 4 Joinpoint analysis of age-specific incidence rates of hepatocellular carcinoma for male and female in Taiwan by birth cohort for the period from 2000-2019. A: Male; B: Female. Incidence rates significantly decreased among both sexes for all age groups between 30-69. The decreasing trend was greater in the 30-34 age group than the 40-69 age groups for both sexes. For the 30-34 age group representing 1970-1989 birth cohorts, the incidence rate for males decreased from 12.92 to 4.44 with an APC of -6.64 (95% CI: -9.78 to -3.73). Corresponding incidence rates for females decreased from 2.53 to 1.03, with an APC of -4.85 (95% CI: -9.03 to -1.38). APC: Annual Percentage Change. ^a $P < 0.05$.



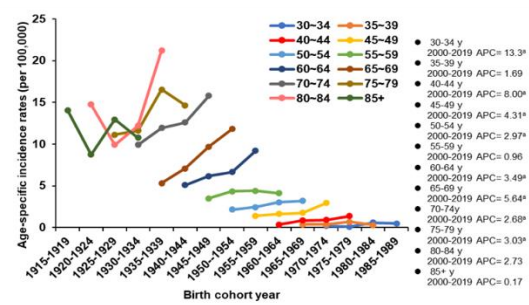
Supplementary figure 5 Joinpoint analysis of age-specific incidence rates of hepatocellular carcinoma for male and female in Poland by birth cohort for the period from 2000-2019. A: Male; B: Female. Nearly all age groups in both sexes showed decreasing trends in age-specific incidence rates with more recent birth cohorts. The decreasing trend was larger in the 30-34 age group than other age groups. For the 30-34 age group representing 1970-1989 birth cohorts, the incidence rate for males decreased from 0.38 to 0.11 with an APC of -7.65 (95% CI: -15.70 to 0.33); and for females, decreased from 0.36 to 0.17 with an APC of -6.53 (95% CI: -9.50 to -4.20). APC: Annual Percentage Change.

^a $P < 0.05$.

(A) Male



(B) Female



Supplementary figure 6 Joinpoint analysis of age-specific incidence rates of hepatocellular carcinoma for male and female in Flanders by birth cohort for the period from 2000-2019. A: Male; B: Female. Nearly all age in both sexes showed increasing trends in age-specific incidence rates in later period. APC: Annual Percentage Change. ^a $P < 0.05$.