

2021 HEPATOCELLULAR CARCINOMA FACTSHEET IN KOREA



Korean Association
for the Study of the Liver



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This factsheet was made by mutual cooperation and research between National Health Insurance Service (NHIS) and Korean Association for the Study of the Liver (KASL) based on MOU.

Data source and HCC definition

Subjects Patients who were newly diagnosed with hepatocellular carcinoma (HCC) between 2008 and 2018 from KNHIS database

HCC definition C220 (ICD code) and V193 (rare incurable disease code)

Publisher

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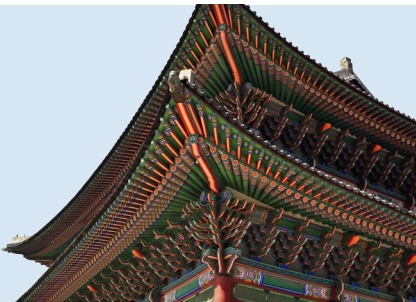
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Greetings

Hepatocellular carcinoma (HCC) is the sixth most common cancer in Korea. As the incidence remains high, and as the prognosis is poor, accurate data on current HCC status are essential when establishing healthcare policy and prioritizing limited resources. Thus, we are very pleased to present a factsheet entitled “2021 hepatocellular carcinoma in Korea”. This includes information on HCC incidence, etiology, comorbidities, and treatment over a recent 10-year interval (2008-2018). The factsheet was prepared by the Korean Association for the Study of the Liver (KASL) and the National Health Insurance Service (NHIS) based on MOU (grant no. NHIS-2021-1-096). The factsheet accurately presents the current status of HCC in Korea. We are grateful to the NHIS and the research committee of the KASL.

April 2021

President of the Korean Association for Study of the Liver **Han Chu Lee**
Chairman of the Korean Association for Study of the Liver **Dong Joon Kim**

Incidence of HCC

01

- Incidence of HCC (2018)
- Number of new HCC cases (2018)
- Crude incidence rate of HCC by age (2018)
- Crude incidence rate of HCC by region (2018)
- Crude incidence rate of HCC by income level (2018)
- Changes of crude incidence rate of HCC in recent 10 years (2008-2018)
- Changes of HCC cases in recent 10 years (2008-2018)
- Changes of crude incidence rate of HCC by age in recent 10 years (2008-2018)
- Crude incidence rate of HCC by region (2008 vs. 2018)
- Crude incidence rate of HCC by income level in recent 10 years (2008-2018)

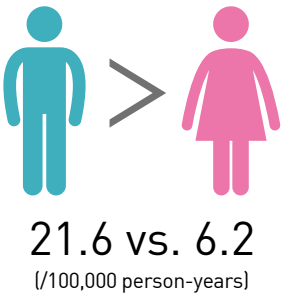


Data source Data from 2008-2018, Korean National Health Insurance Service (KNHIS)

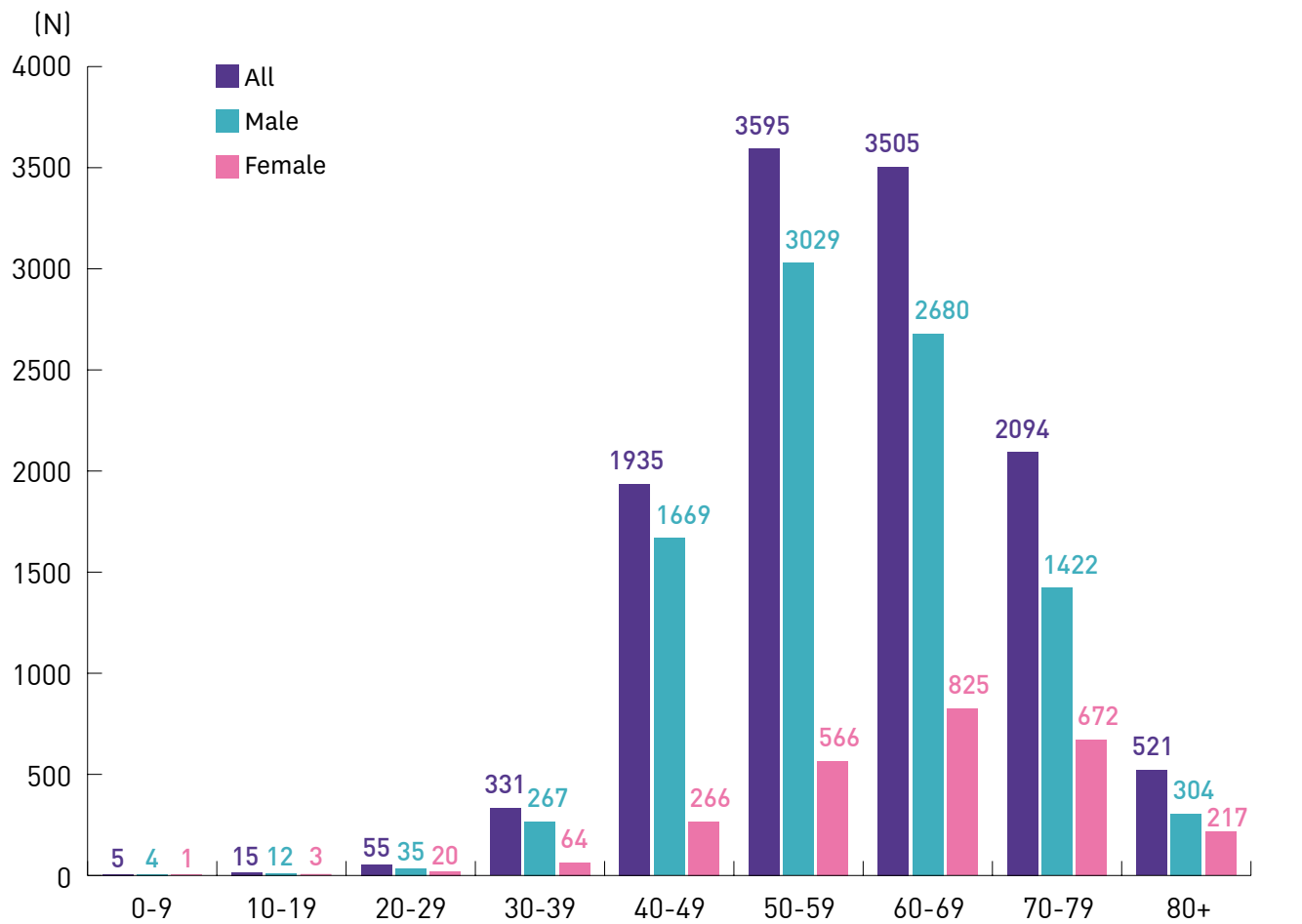
Incidence of HCC (2018)

Incidence of HCC: Patients newly diagnosed with HCC from Korean National Health Insurance Service (KNHIS) database
Definition of HCC: International Classification of Diseases (ICD) code of C220 and rare incurable disease code of V193 (severe cancer)

*Standard population: population covered by health insurance in 2005



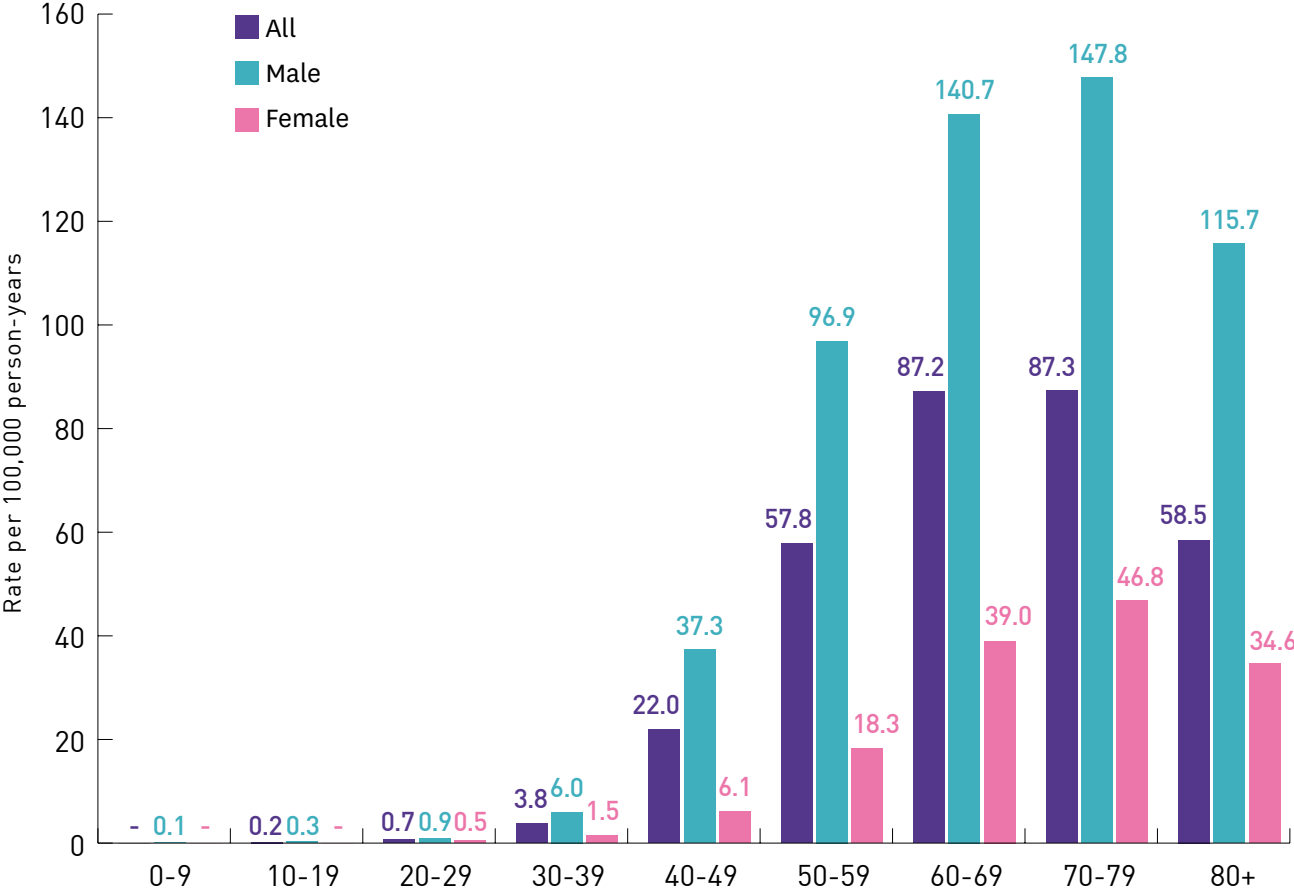
Number of new HCC cases (2018)



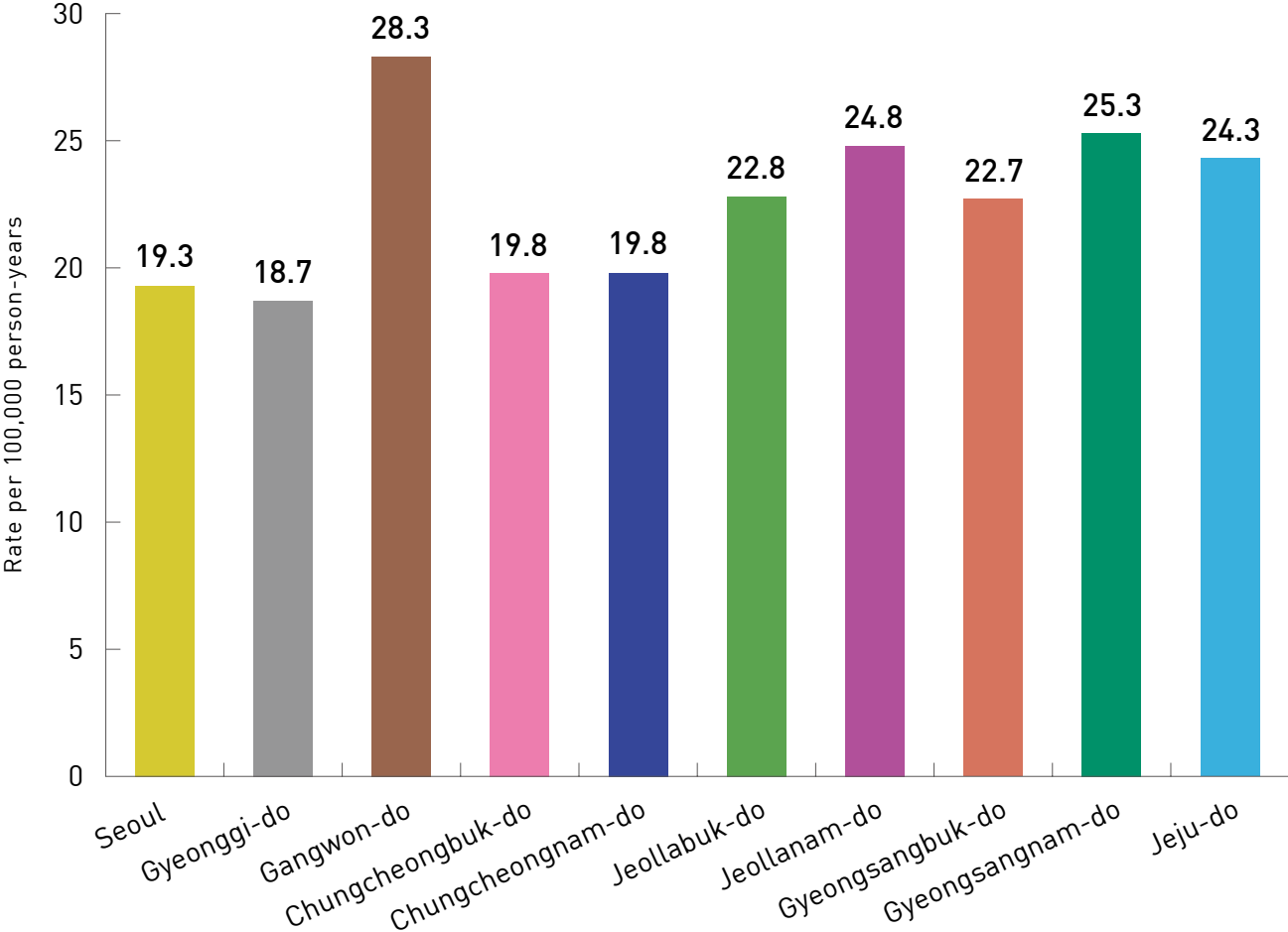
Crude incidence rate of HCC by age (2018)

The highest crude incidence rate

60-79 years

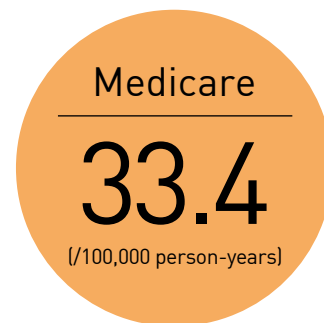
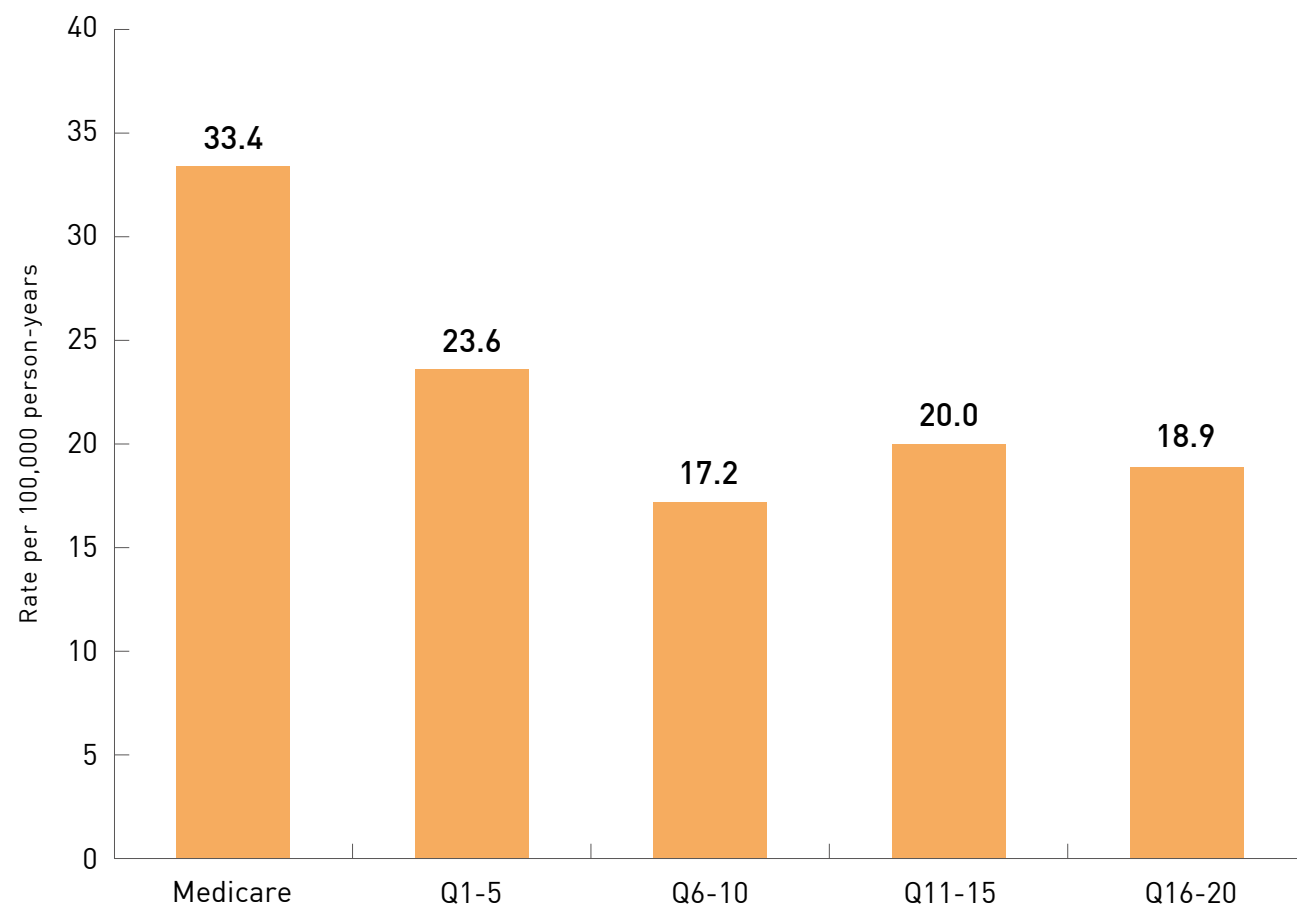


Crude incidence rate of HCC by region (2018)

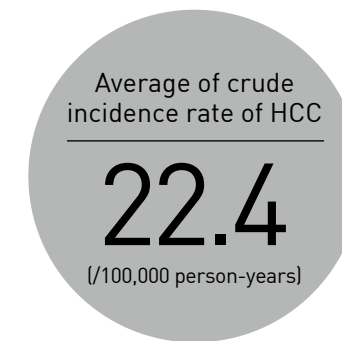
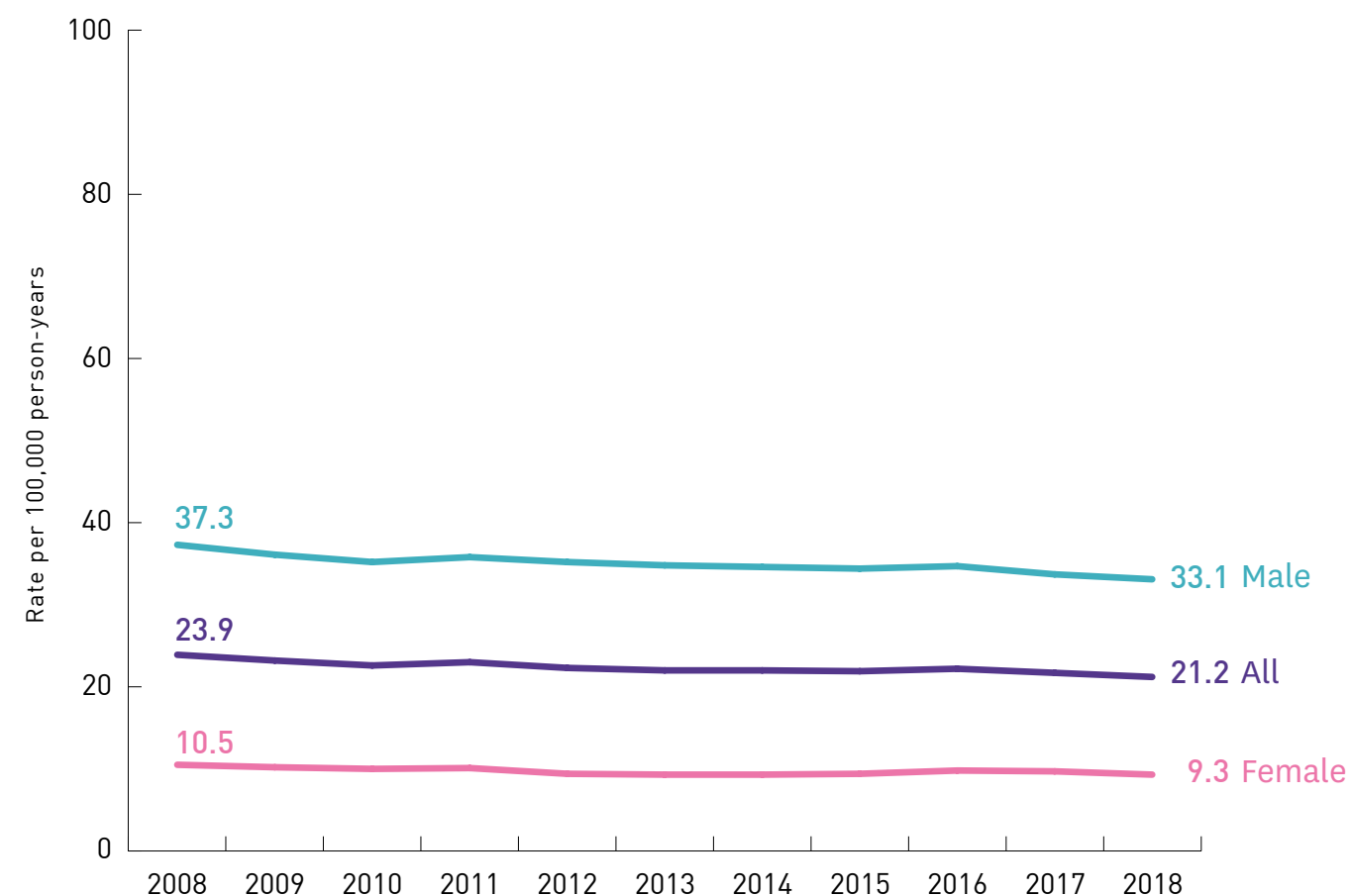


Crude incidence rate of HCC by income level (2018)

- Medicare: exemption from paying insurance
- The health insurance group with 20 categories were re-grouped into 4 categories (Q1-5, Q6-10, Q11-15, Q16-20).
- Q16-20: highest income group
- Q1-5: lowest income group

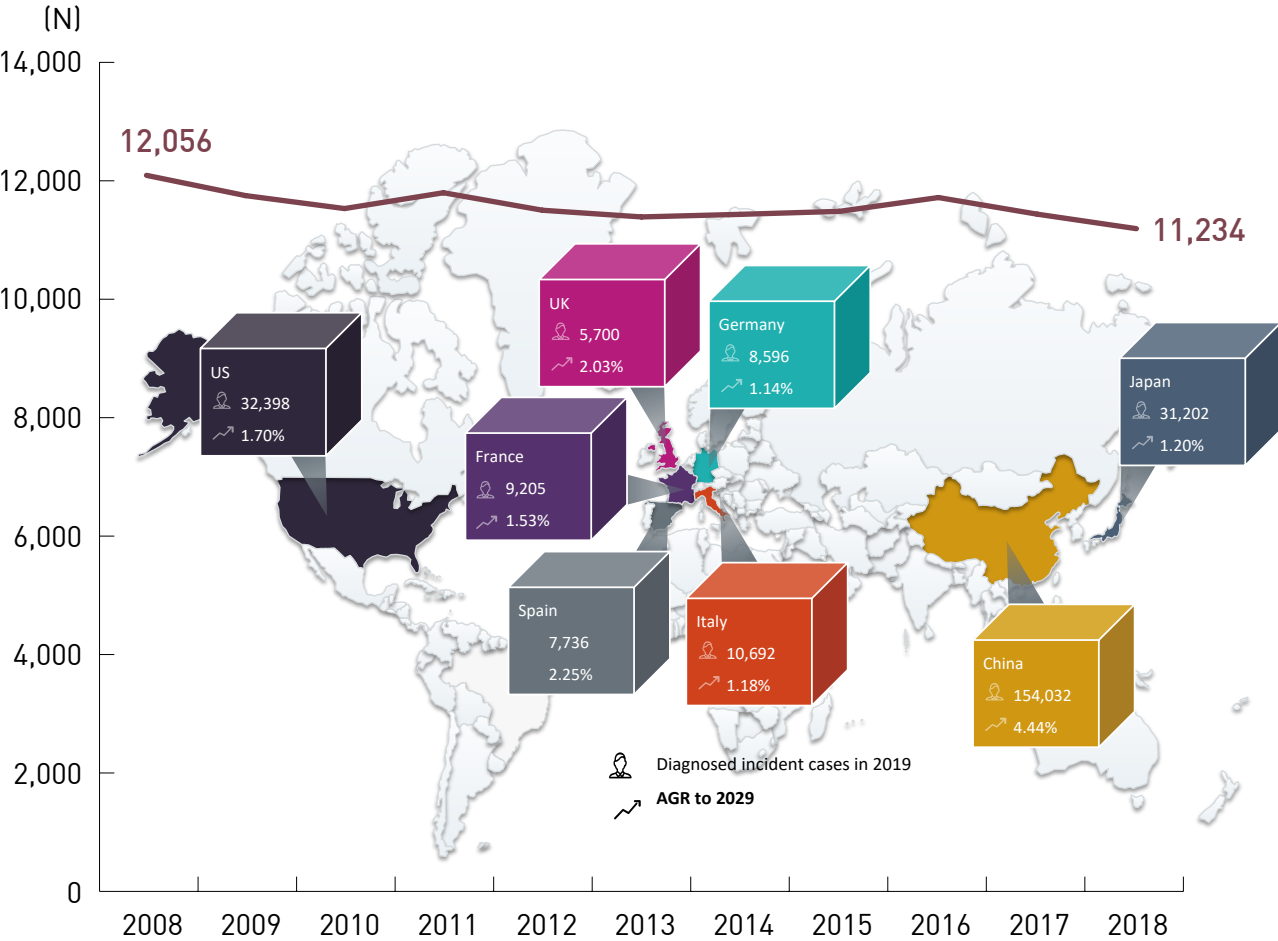


Changes of crude incidence rate of HCC in recent 10 years (2008-2018)



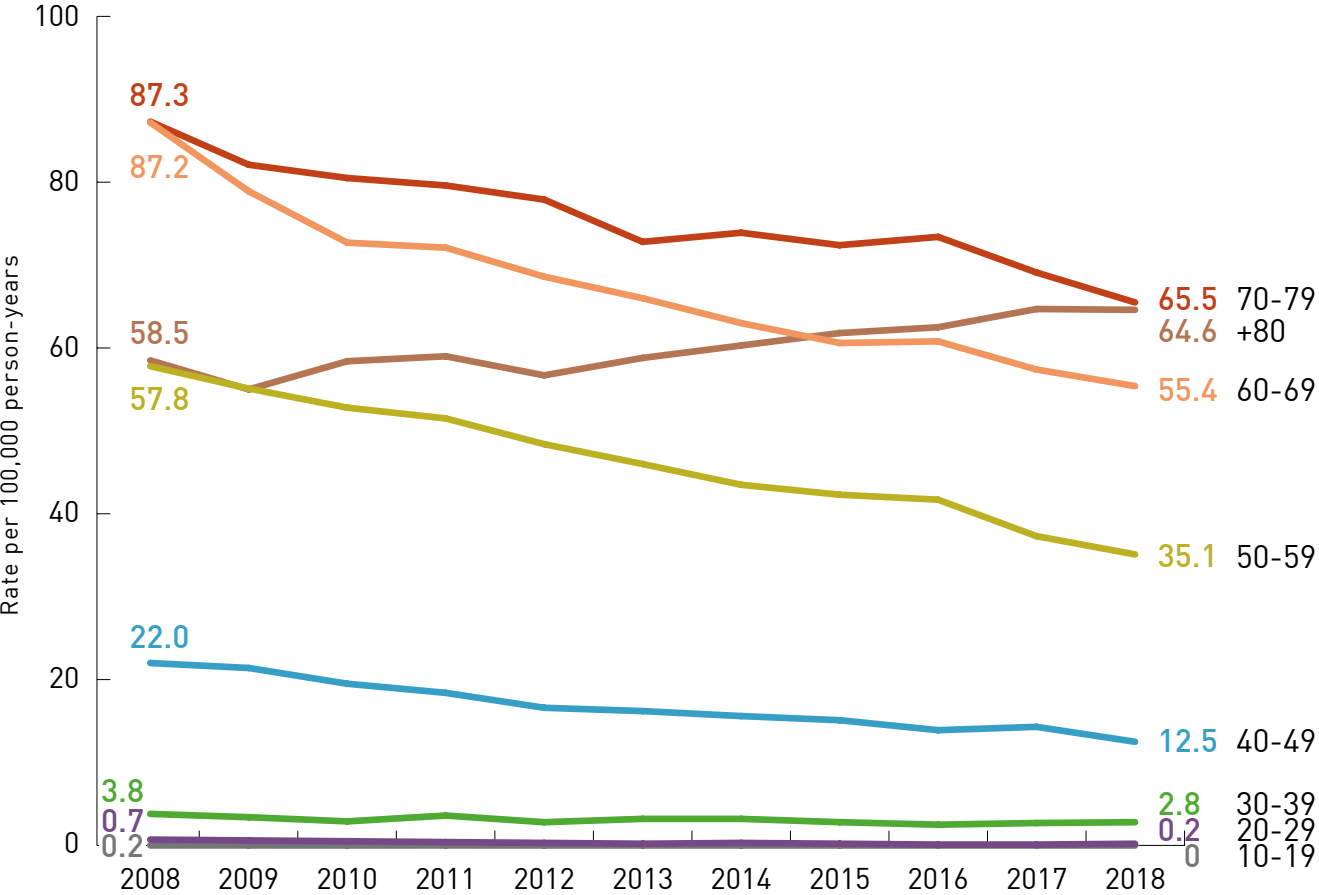
Changes of HCC cases in recent 10 years (2008-2018)

Number of new HCC cases did not decrease

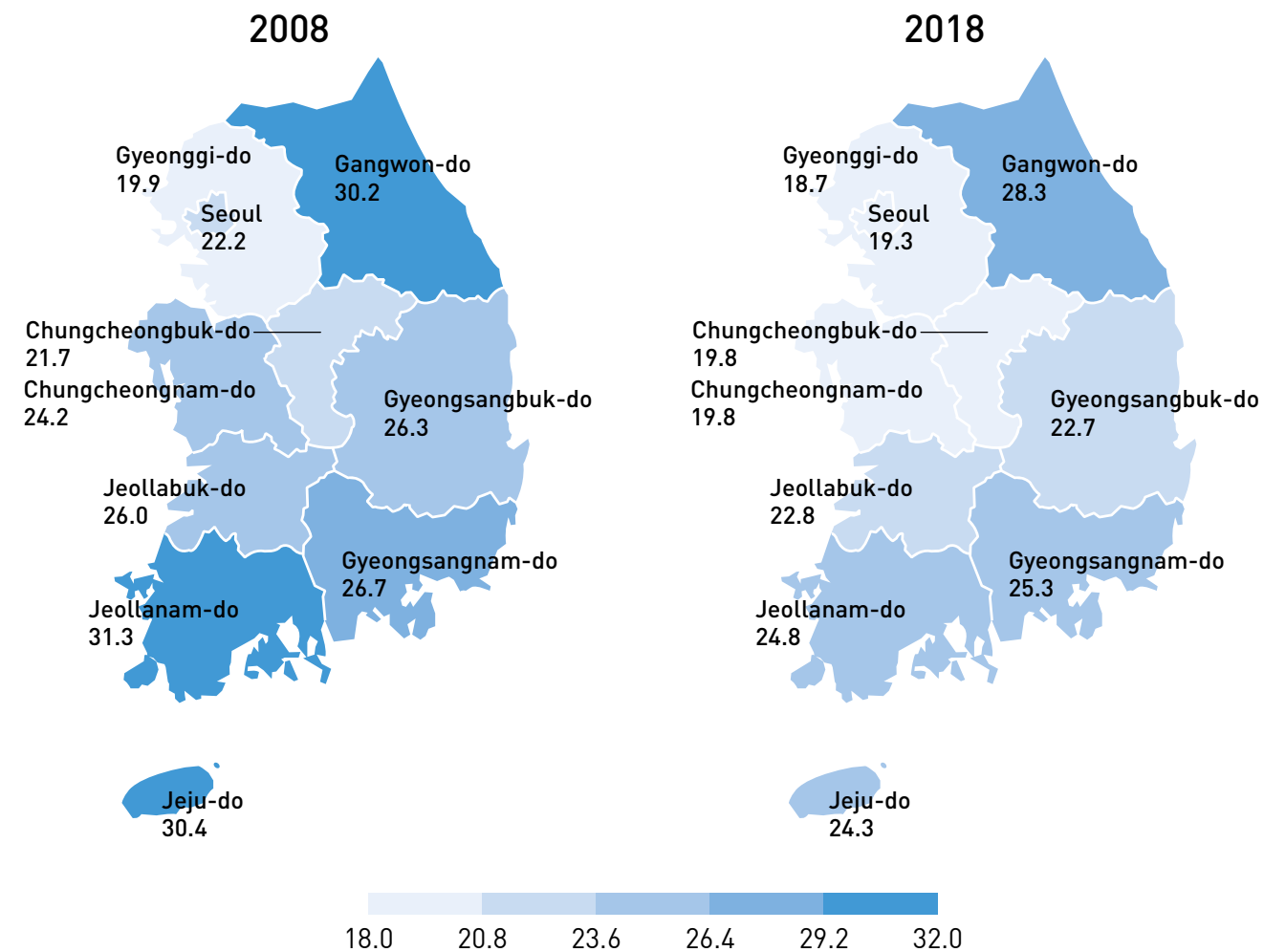


Changes of crude incidence rate of HCC by age in recent 10 years (2008-2018)

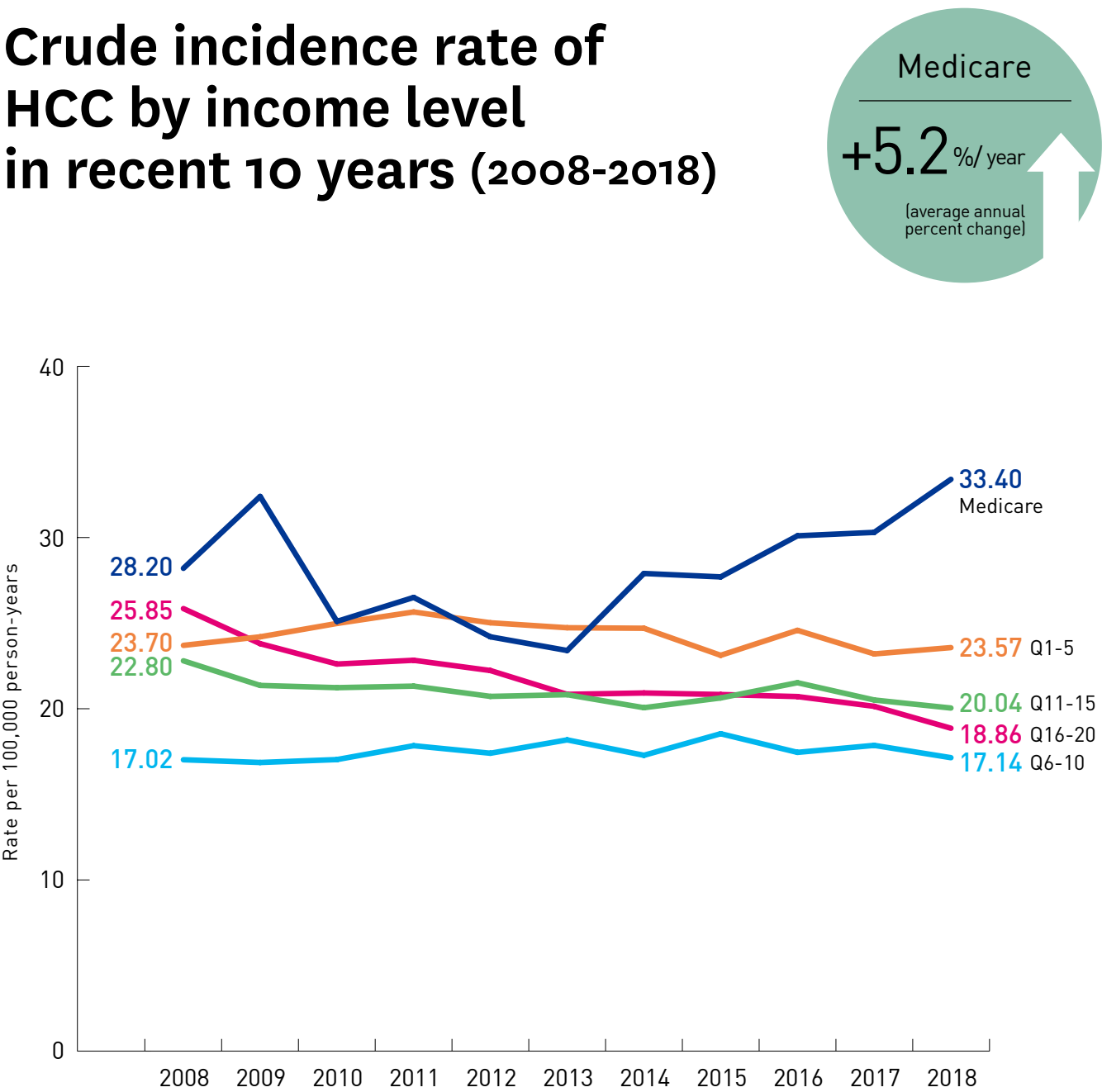
>80 years
+6.1%/year
(average annual percent change)



Crude incidence rate of HCC by region (2008 vs. 2018)



Crude incidence rate of HCC by income level in recent 10 years (2008-2018)



Etiology and co-morbidities of HCC

02

Etiology of HCC (2008-2018)

Etiology of HCC (2008 vs. 2018)

Liver cirrhosis in HCC (2008-2018)

Chronic kidney disease in HCC (2008-2018)

Type 2 diabetes mellitus in HCC (2008-2018)

Hypertension in HCC (2008-2018)

Other malignancies in HCC (2008-2018)

Cardiovascular disease in HCC (2008-2018)

Cerebrovascular disease in HCC (2008-2018)

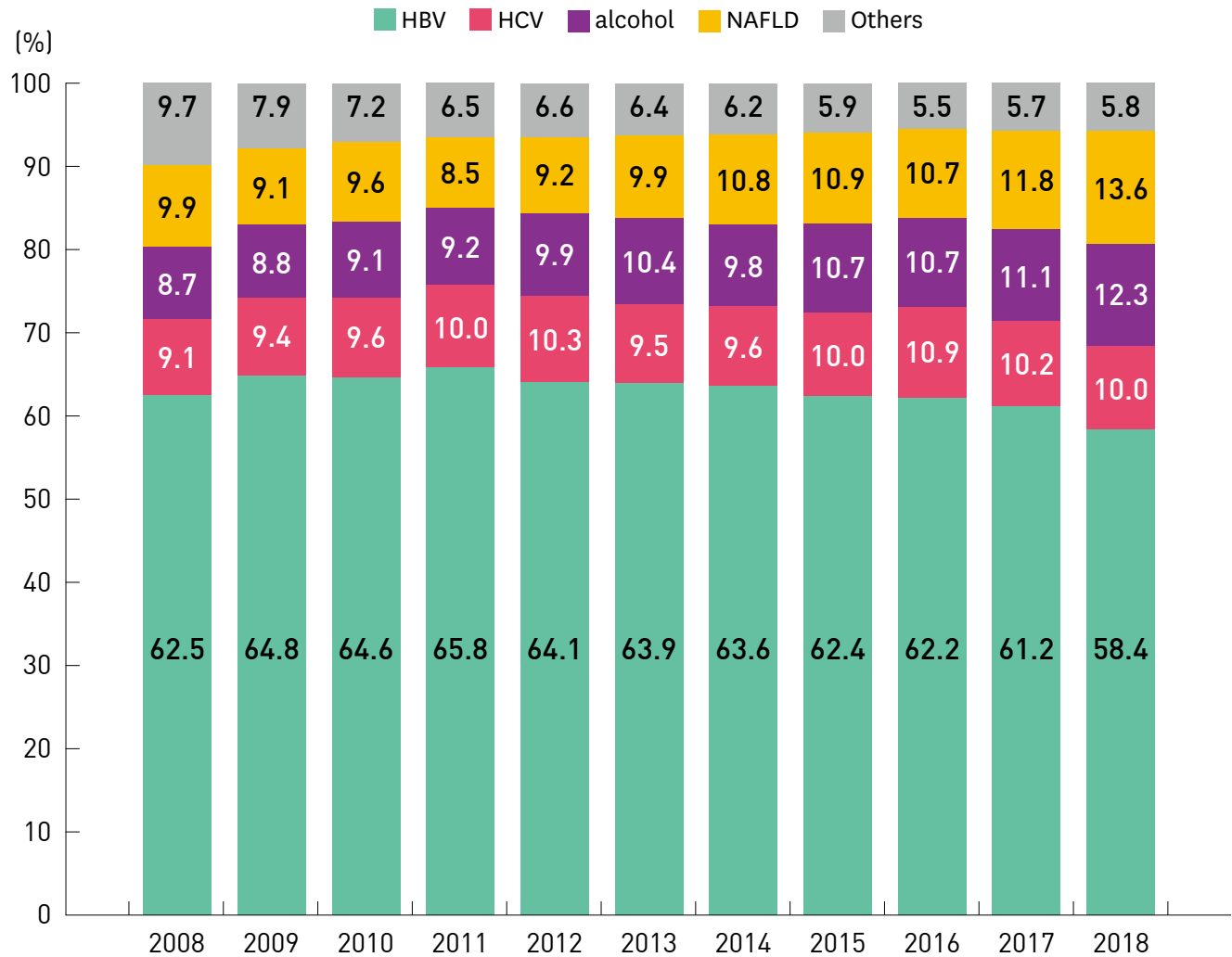
Data source

Data from 2008-2018

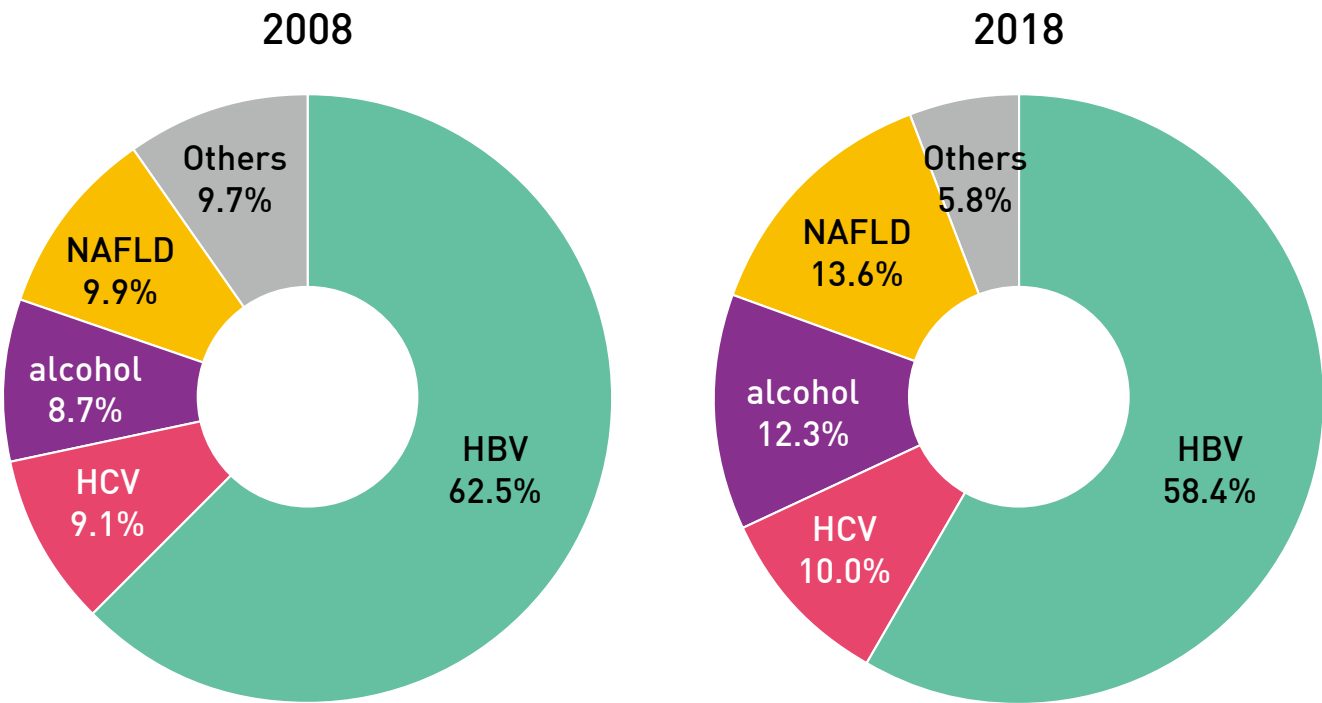
Korean National Health Insurance Service (KNHIS)



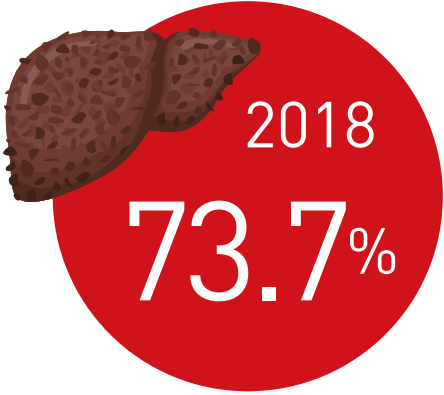
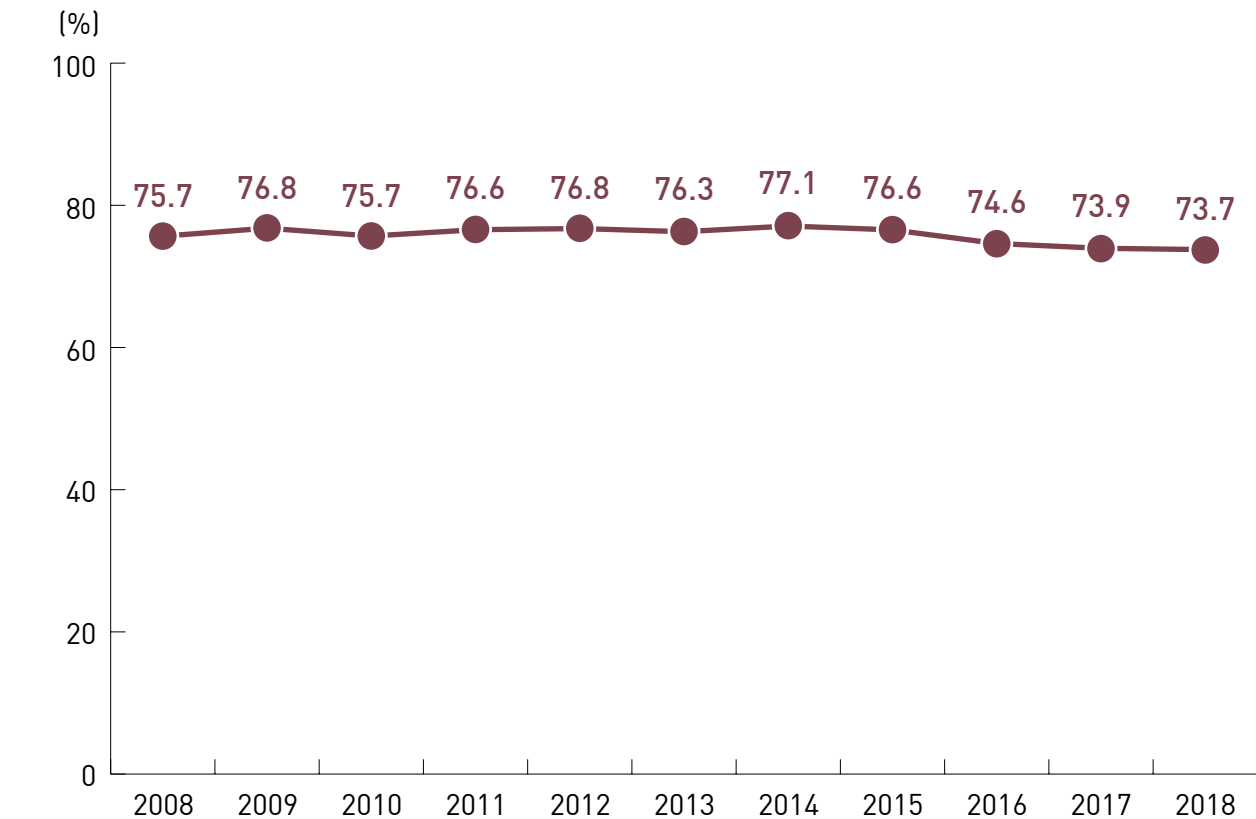
Etiology of HCC (2008-2018)



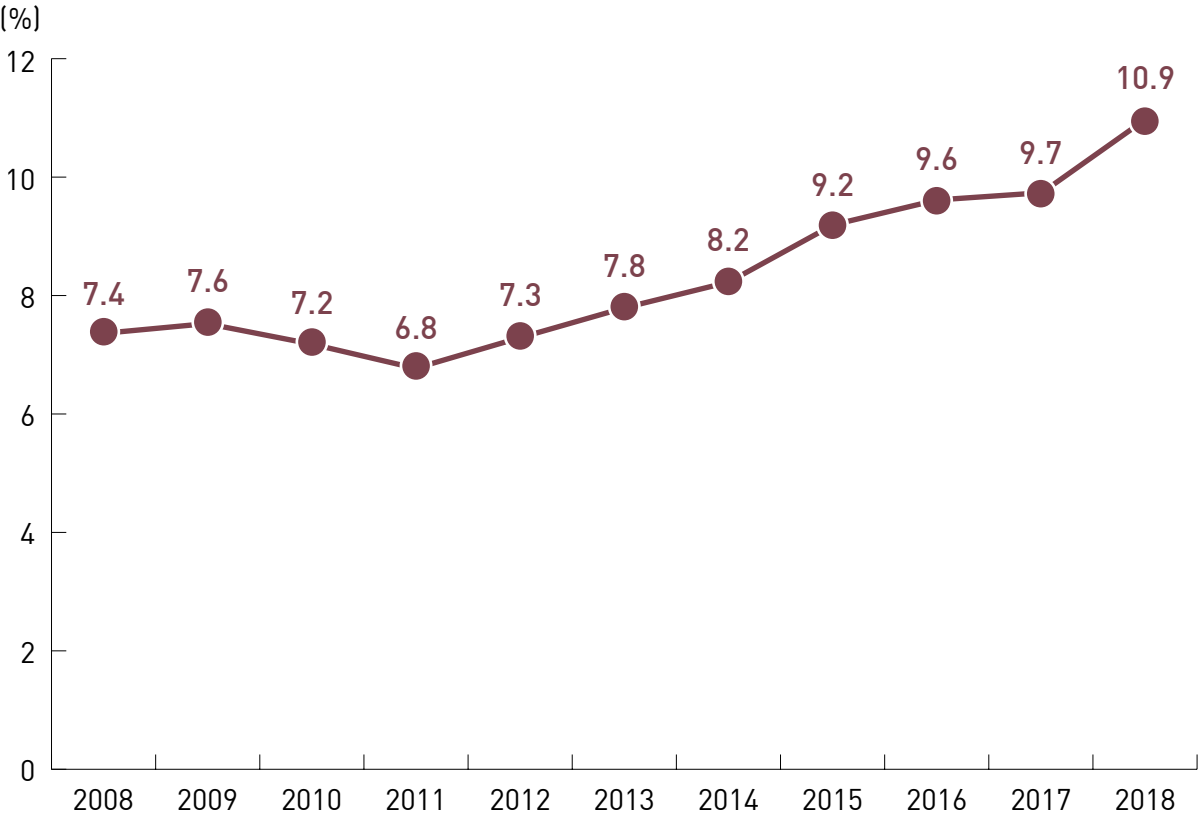
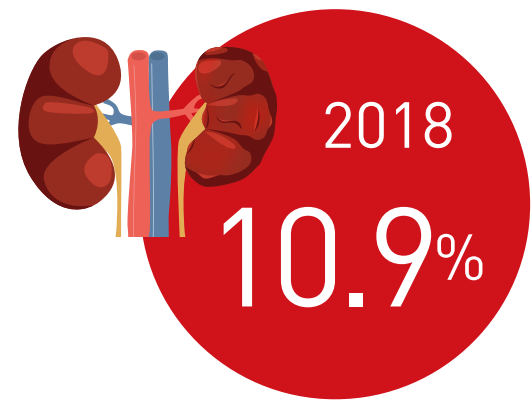
Etiology of HCC (2008 vs. 2018)



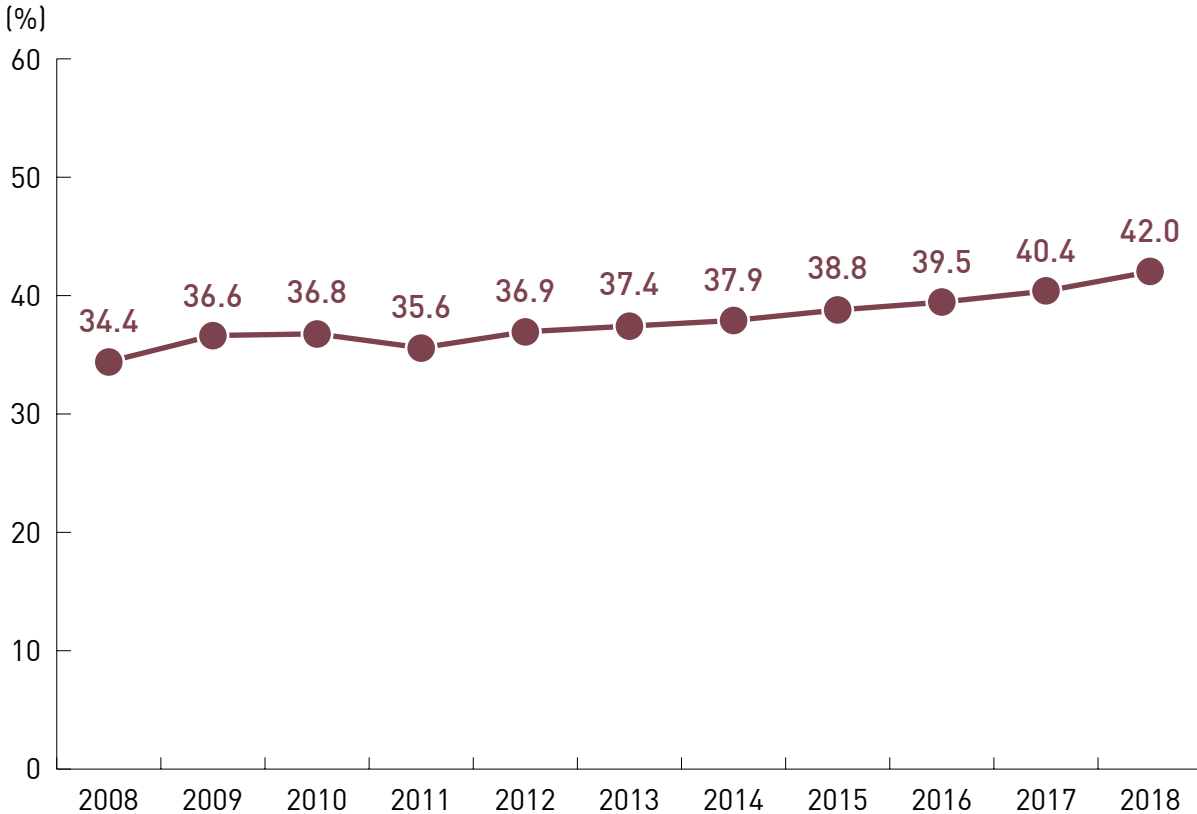
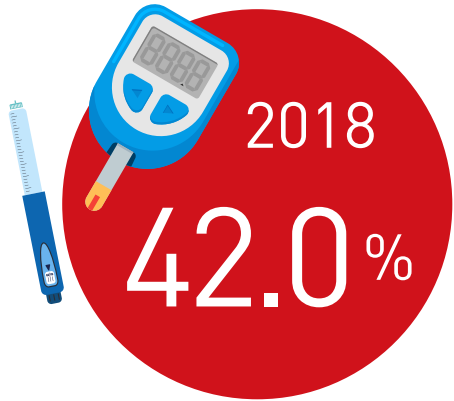
Liver cirrhosis in HCC (2008-2018)



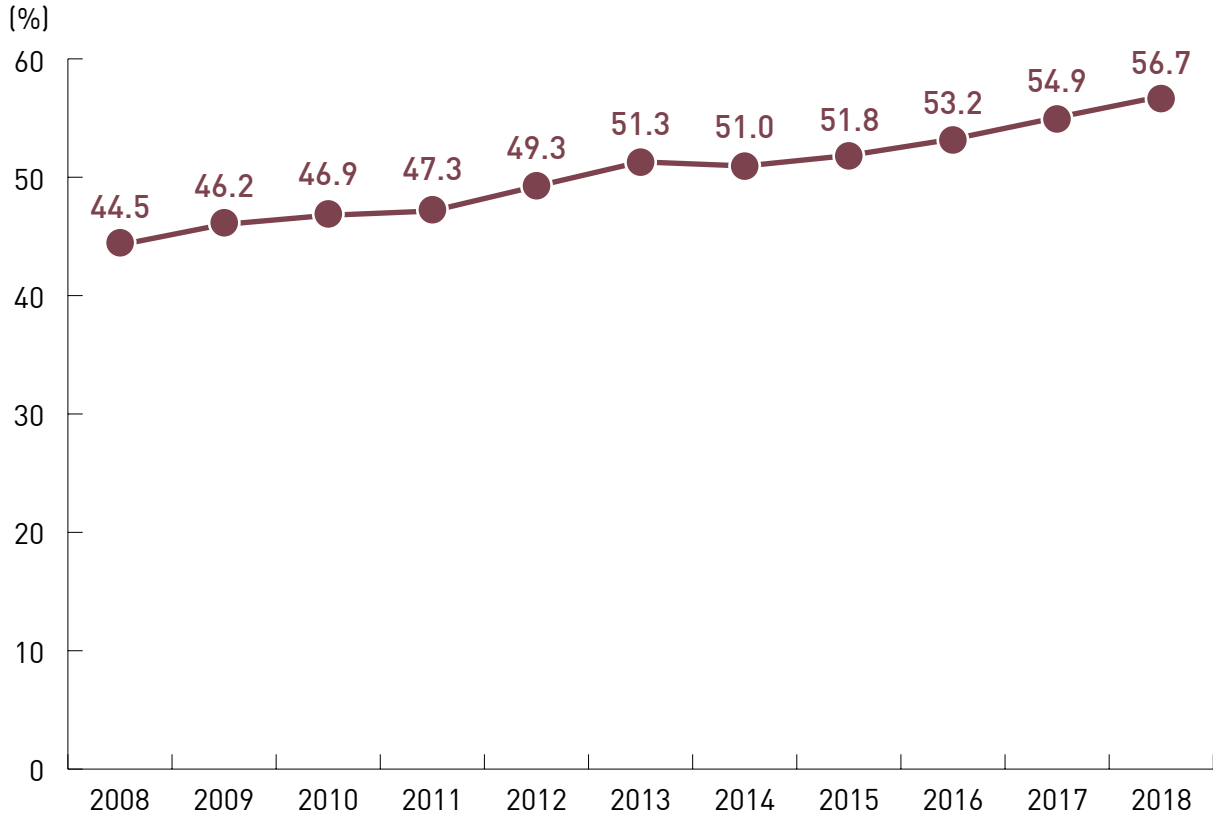
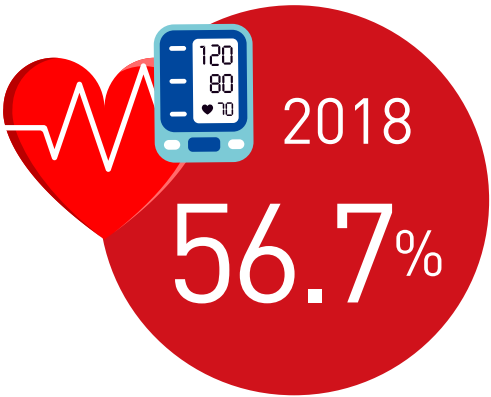
Chronic kidney disease in HCC (2008-2018)



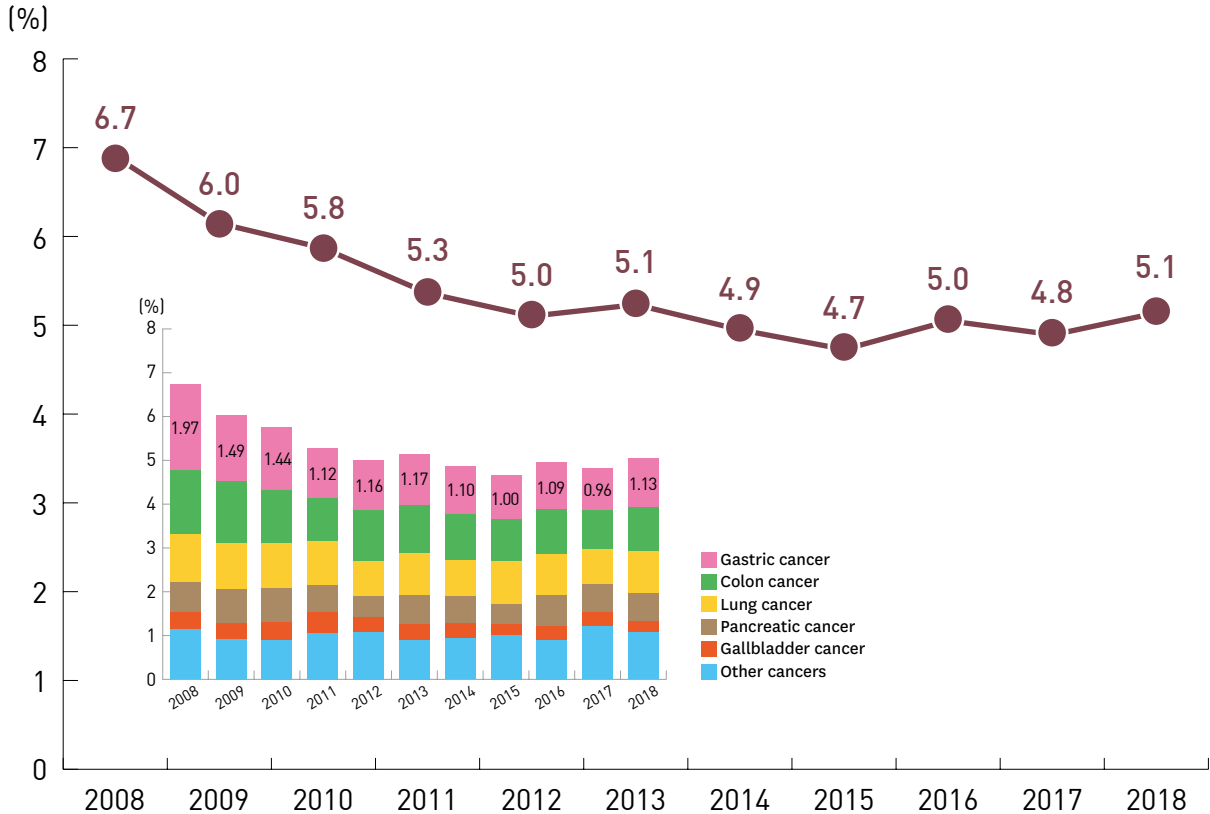
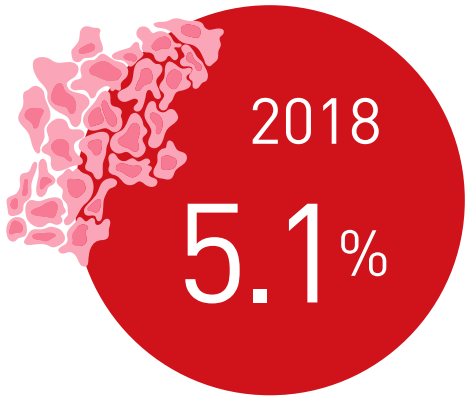
Type 2 diabetes mellitus in HCC (2008-2018)



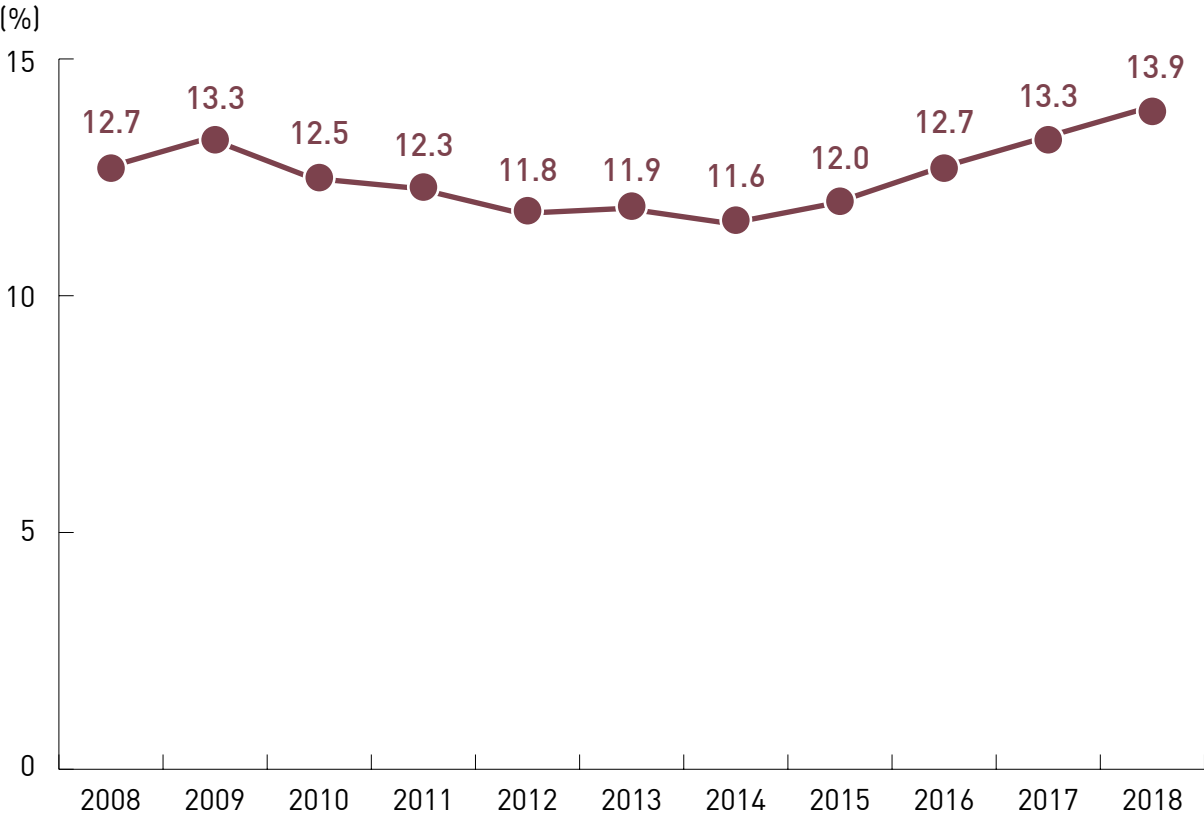
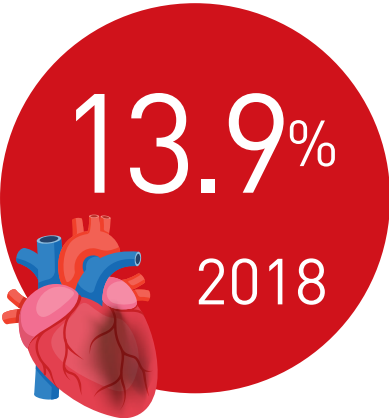
Hypertension in HCC (2008-2018)



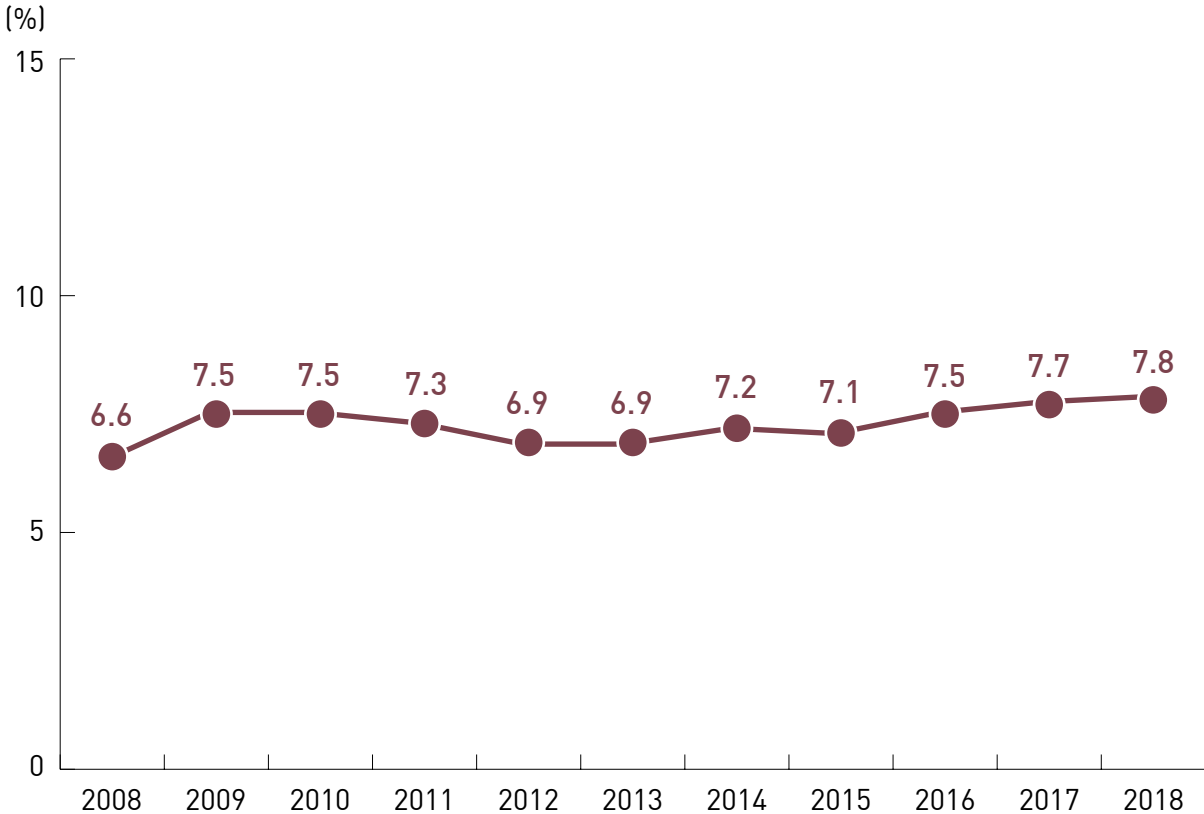
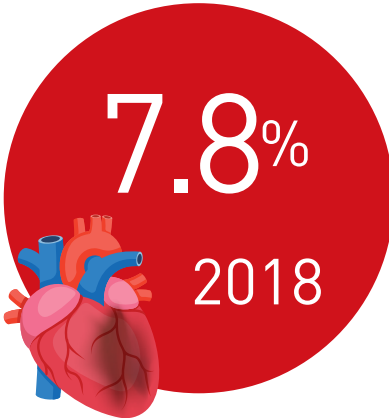
Other malignancies in HCC (2008-2018)



Cardiovascular disease in HCC (2008-2018)



Cerebrovascular disease in HCC (2008-2018)



Annual antiviral treatment rates in hepatitis B virus-related HCC

03

Annual trends of antiviral treatment rates at the time of hepatitis B virus-related HCC diagnosis
Annual antiviral treatment rates in patients with hepatitis B virus-related HCC by gender

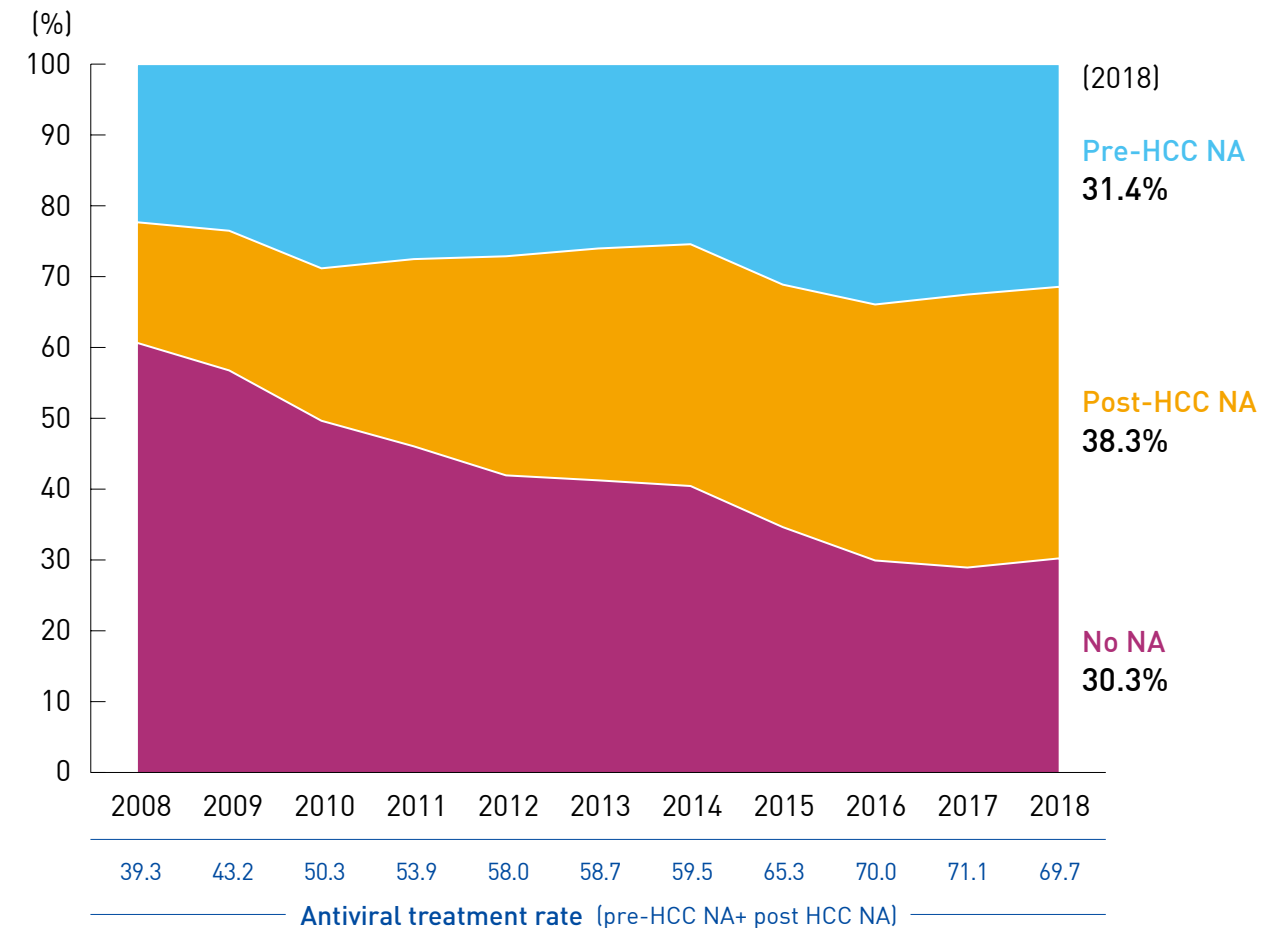
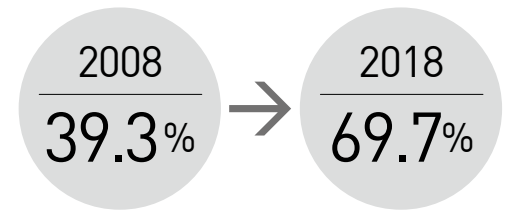
Data source

Data from 2008-2018,
Korean National Health
Insurance Service (KNHIS)



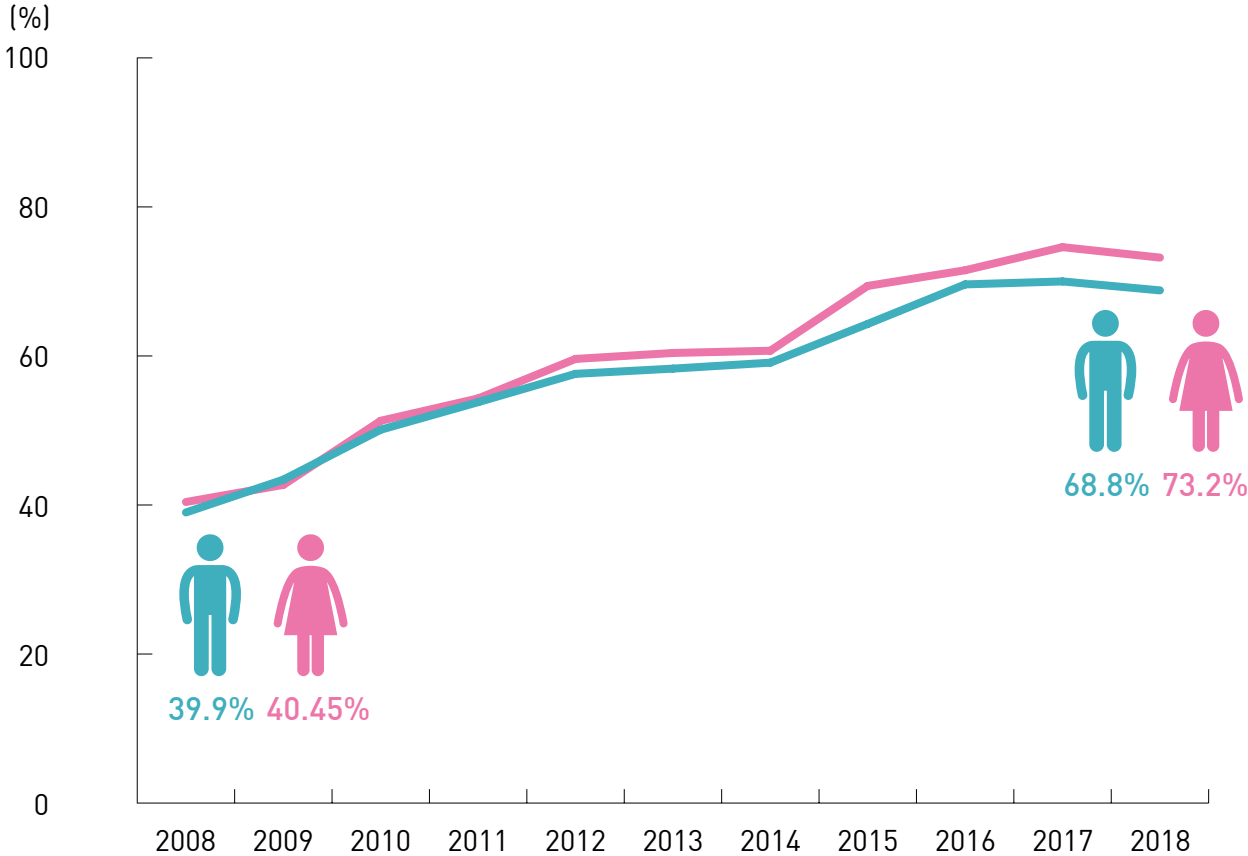
Annual trends of antiviral treatment rates at the time of hepatitis B virus-related HCC diagnosis

Antiviral treatment rate



NA, nucleos(t)ide analogue

Annual antiviral treatment rates in patients with hepatitis B virus-related HCC by gender



Treatment of HCC

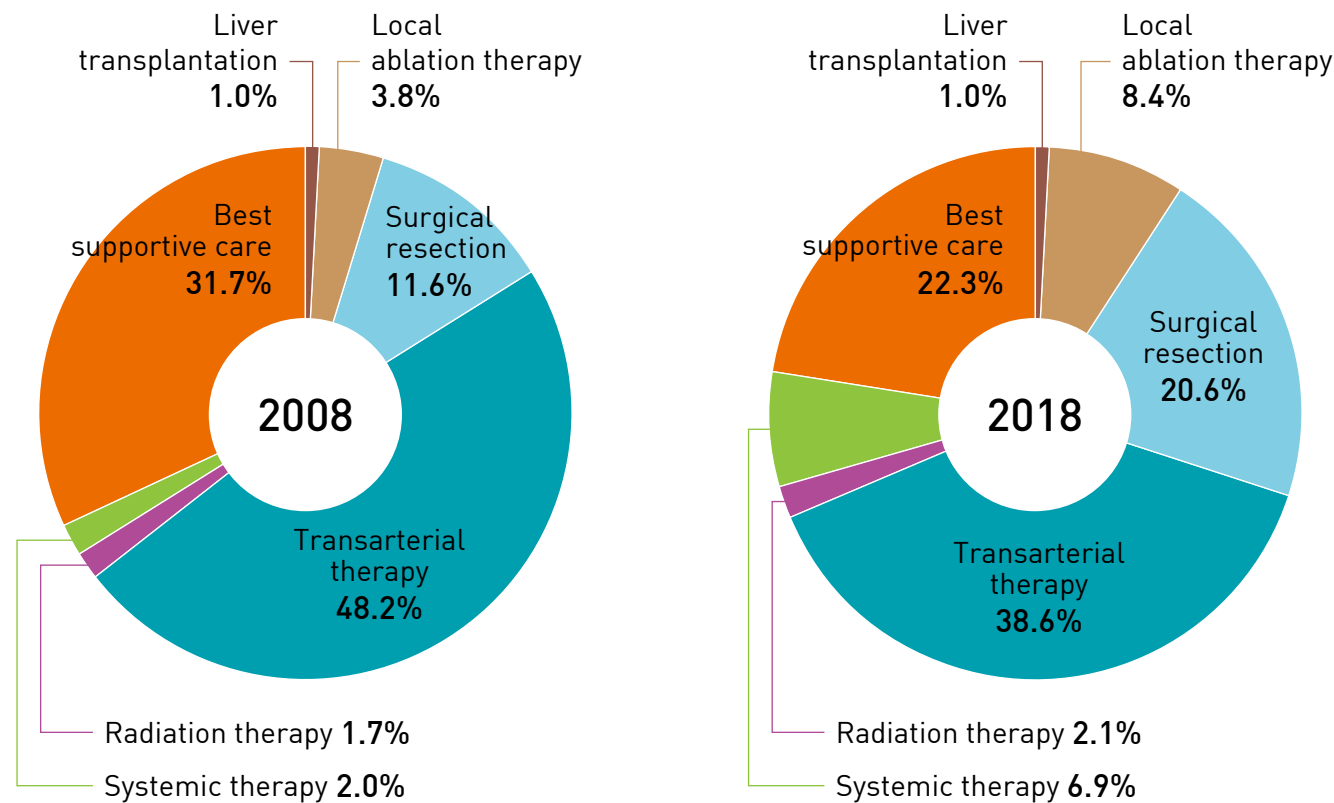
04

Primary treatment of HCC (2008 vs. 2018)
Changes in the primary treatment of HCC in recent 10 years (2008-2018)

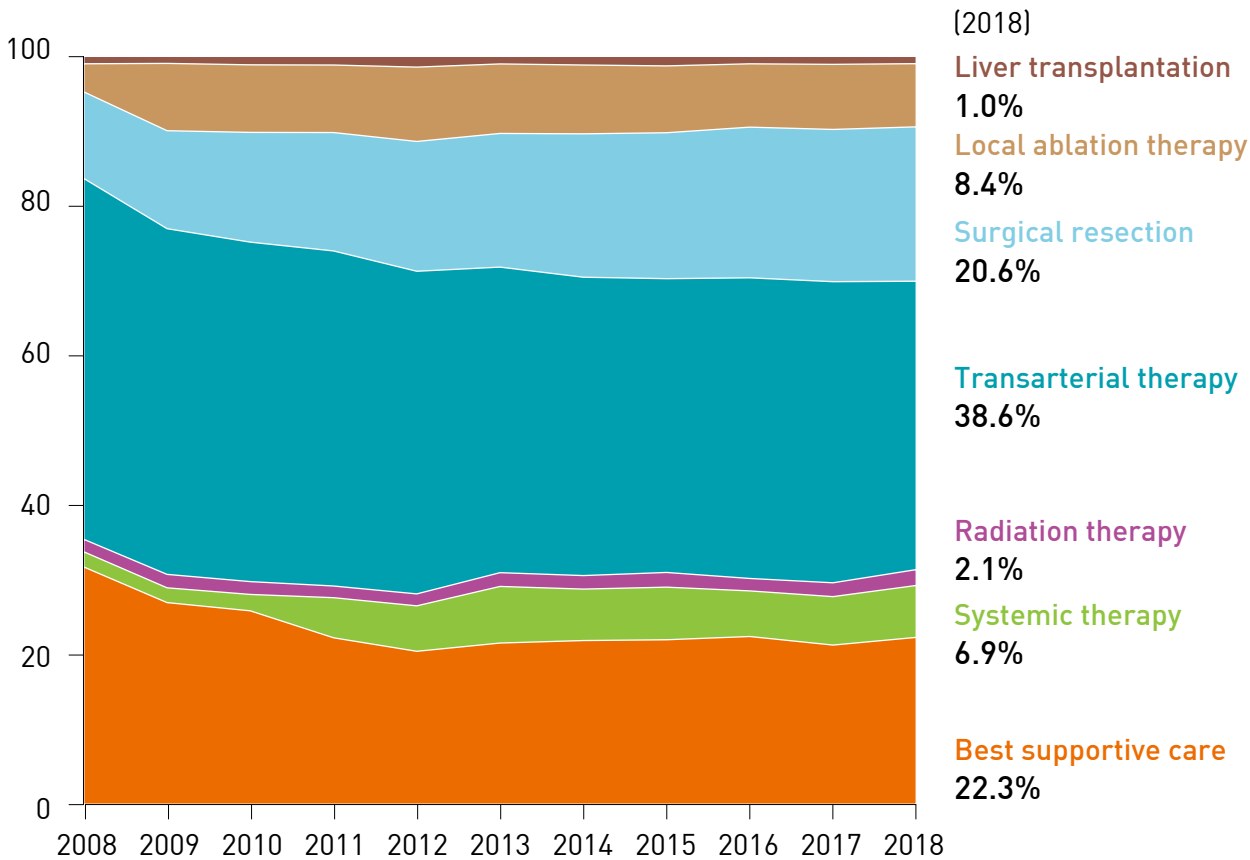
Data source
Data from 2008-2018,
Korean National Health Insurance Service (KNHIS)



Primary treatment of HCC (2008 vs. 2018)



Changes in the primary treatment of HCC in recent 10 years (2008-2018)



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