

## Cancer Statistics Digest

# Age-specific incidence rate of leukaemia in the world

In order to make a comparison of the age-specific incidence rate of leukaemia between Japan and other countries, we abstracted cancer incidence rate from the Cancer Incidence in Five Continents Vol. XI (CI5) (1). The International Agency for Research on Cancer provides the CI5 databases on the incidence of cancer recorded by cancer registries (regional and national) worldwide. We used cancer incidence rate in five countries in Asia (China, India, Japan, Republic of Korea and Thailand), three countries in America (the USA, Canada and Brazil), two countries in Oceania (Australia and New Zealand) and four countries in Europe (the UK, France, Germany and Italy). Some countries have plural cancer registries and we aggregated all the registries to calculate the incidence rate in the countries from the CI5-XI database. The period of years at cancer diagnosis was from 2008 to 2012. In this study, leukaemia included lymphoid leukaemia coded as C91, Myeloid leukaemia coded as C92-C94 and leukaemia unspecified coded as C95 based on ICD-10.

Figure 1 shows the age-specific incidence rate of leukaemia in male by 5-year age groups for the selected countries.

The pattern of the age-specific incidence curves was similar in the most countries, studied. The incidence rates decreased until 20–30 years of age, then increased with age. There is little difference between areas and countries up to about age 30, but it becomes greater at later age. In general, the incident rates were higher in

America and Oceania (except Brazil) and European countries than those in Asia and Brazil, especially among over 45 years of age.

In Asia, the incidence rates were highest in Japan, lowest in India and similar between the other three countries (China, the Republic of Korea and Thailand). The incidence rates for the oldest age group (85 years and older, 75 years and older only in India) were 48 (per 100 000 population) in Japan and 16 in India, and about 30 in the other three countries.

The incidence rates for countries in America (except Brazil) and Oceania were similar with little difference. The rates in Brazil were similar to that of other American countries for those under 30 years of age, but the difference increases for those over 30 years of age. In Europe, the difference in incidence rate among four countries was relatively small. The UK had the highest incidence rate at 122 (per 100 000 population aged 85 and over), followed by France at 116, Germany at 106 and Italy at 97.

Figure 2 shows the age-specific incidence rates of leukaemia in female. In most countries, the incidence rate for female was lower than for male at almost all ages, and the gender difference increased with age, especially after 45 years of age. In the age group, which has the highest incidence (75–79 or 80–84 years of age in many countries), the incidence rate of females was about half those of males. The trends of high or low incidence rates by age group in

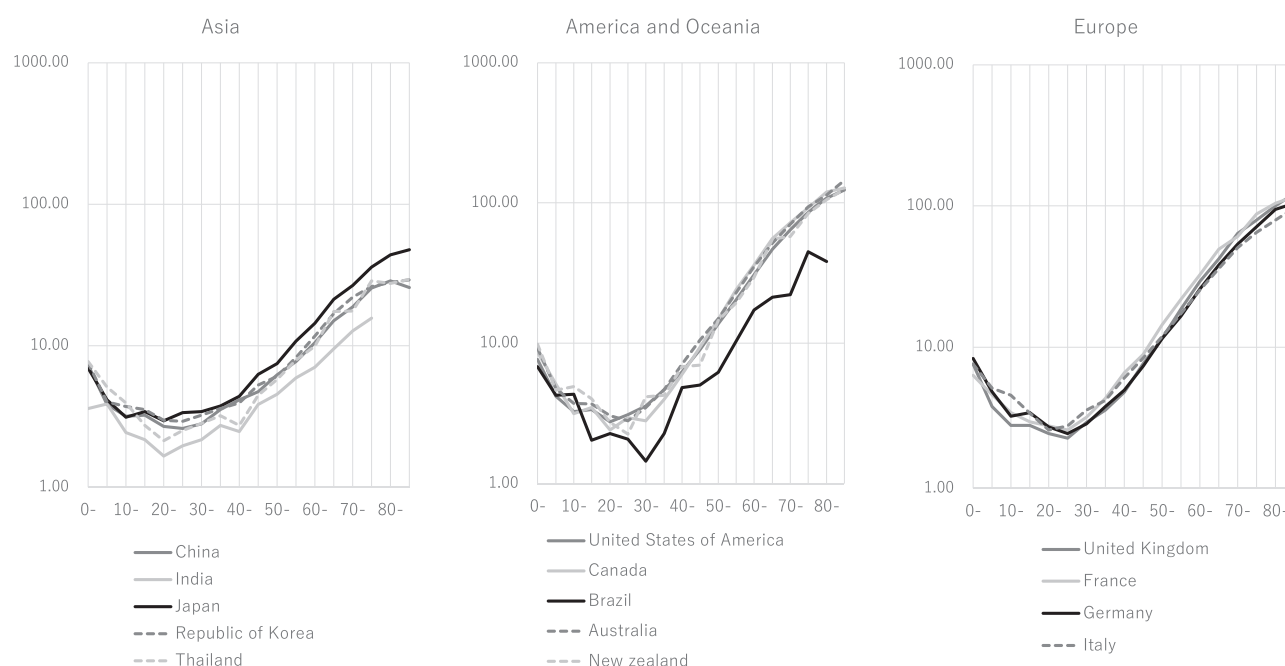
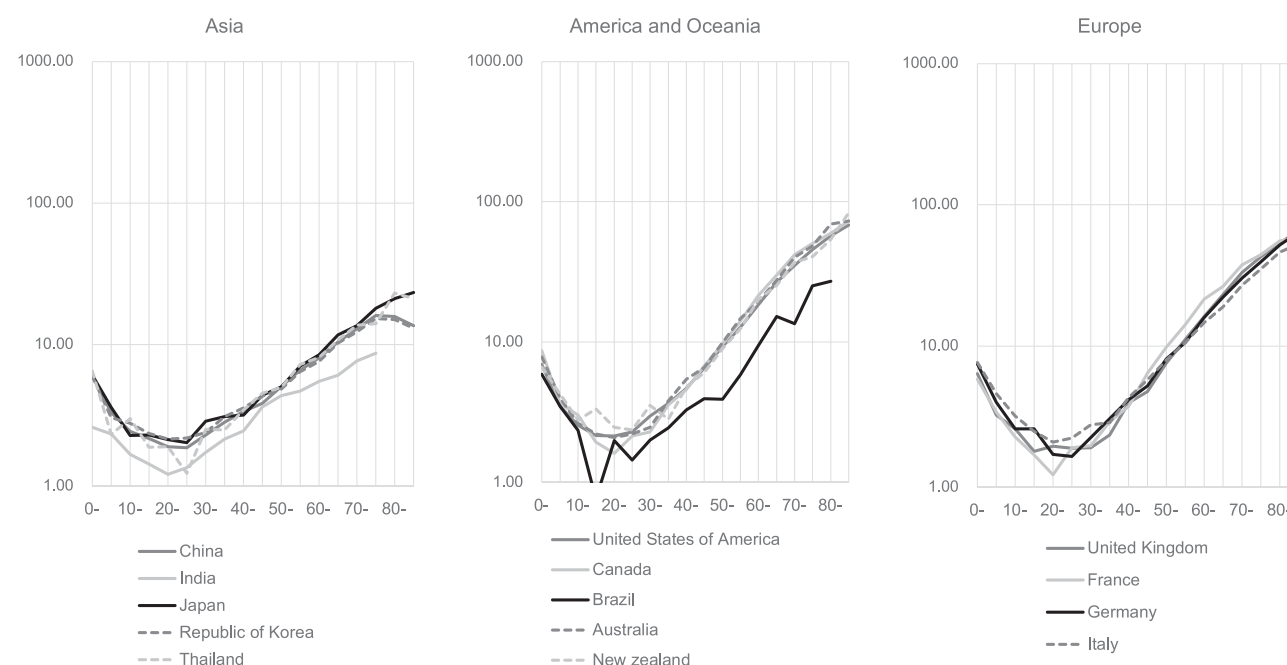


Figure 1. Age-specific incidence rate of leukaemia per 100,000 people in male.



**Figure 2.** Age-specific incidence rate of leukaemia per 100,000 people in female.

the countries of the Americas, Oceania and Europe were similar in male and female but were slightly different in Asia. For women, the Republic of Korea, but not Japan, had the highest incidence rates among those under 70 years of age. However, the incidence rates in the Republic of Korea peak in the 75–79 age group and then rapidly decreased, and in the 85 and older age group, the incidence rate is about the same as those in countries other than Japan in Asia.

Note: Data were downloaded from the Global Cancer Observatory, which is an interactive web-based platform presenting global cancer statistics (<https://gco.iarc.fr/>). Responsibility for this presentation and interpretation lies with the authors of this article.

## References

1. Bray F, Colombet M, Mery L, Piñeros M, Znaor A, Zanetti R, Ferlay J, editors. *Cancer Incidence in Five Continents 2021*;XI (electronic version). Lyon: International Agency for Research on Cancer. <http://ci5.iarc.fr> (10 November 2021, date last accessed).

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