We compared time trends of age-standardized incidence rate of liver cancer (ICD-10: C22) across 13 cancer registries and ethnic/racial groups in Asia. We obtained the cancer incidence data from the Cancer Incidence in Five Continents, Vols IV–IX (years at diagnosis: 1973–77, 1978–82, 1983–87, 1993–97 and 1998–2002, respectively) and used the world population for age-standardization. Asia was divided into Eastern Asia (Japan and China), South-Eastern Asia (Philippines, Thailand and Singapore) and South-Central and Western Asia (India, Kuwait and Israel).

Figure 1 shows the time trends of liver cancer incidence for males. In Eastern Asia, Miyagi (Japan) had the lowest incidence through the observation period. The incidence rate in Osaka (Japan) was the highest from 1983–87 to 1998–2002. The incidence rate in Shanghai (China) decreased until 1993–97 and increased afterward. Miyagi, Osaka (Japan) and Hong Kong (China) showed the decreasing trends recently. In South-Eastern Asia, ethnic Indians in Singapore had the lowest incidence rate. From 1988 to 1992 Manila (Philippine) had the highest incidence. South-Central and Western Asia had lower incidence rate compared with the other areas. Two areas in India (Mumbai and Chennai) and Kuwait had an upward trend, but the Jews in Israel had a downward trend from 1993 to 2002.
Figure 2 shows the corresponding data for females in the same period. Since the liver cancer incidence rate among females was generally lower than those for male, the scale of Y-axis of Fig. 2 is different from that of Fig. 1. In Eastern Asia, Miyagi (Japan) had the lowest incidence through the observation period. The incidence of Osaka (Japan) was the highest from 1988–92 to 1998–2002. The incidence in Shanghai (China) had decreasing trend for the entire period. In South-Eastern Asia, Chiang Mai (Thailand) had the highest incidence. The incidence among ethnic Chinese in Singapore showed a downward trend throughout the observation period. The Chiang Mai (Thailand) and Manila (Philippines) showed the decreasing trends recently. South-Central and Western Asia had a low incidence rate compared with the other areas in observation. Kuwait and India (Mumbai) had an increase, whereas India (Chennai) and Israel had a decrease recently.

Mingji Zhang
Cancer Information Services and Surveillance Division
Center for Cancer Control and Information Services
National Cancer Center, Tokyo, Japan

doi:10.1093/jjco/hyp027