

번호: OP-F-001					
제 목	Age Conditional Probabilities of Developing 6 Major Cancers in Korean population based on the KNCIDB				
저 자 및 소 속	Seon-Hee Yim1), Kyu-Won Jung1), Seung-Sik Hwang2), Young-Joo Won1), So-Hee Park2), Byeoung-Ho Nam3), Hai-Rim Shin1) 1)Cancer Registration Branch, National Cancer Center, 2) Cancer Cohort Study Branch, National Cancer Center, 3) Cancer Biostatistics Branch National Cancer Center				
분 야	역 학 [암]	발 표 자	임선희 전공의	발 표 형 식	구 연
<p>Background: Because cancer is a disease of which incidence rates are highly dependent on age, in order to interpret the results properly, we must account for the age distribution in the population. One simple statistic is the age-standardized rate (ASR). The ASRs are useful for gaining on overall picture of how the incidence and mortality of each cancer in different populations, while controlling for the effect of differing age structure between populations being compared. A disadvantage of the ASRs is that it is hard to relate to an individual's risk. To get more individualized risks, we calculated age conditional probabilities of 6 major cancers in Korea using the DevCan software.</p> <p>Materials &Methods: We used age-specific cancer incidence data from the Korea National Cancer Incidence Data Base (KNCIDB) and mortality data from the National Statistical Office. Using the DevCan, which is available at the NCI website, we calculated age conditional probability of developing cancers. The DevCan uses the PMAJ (piecewise mid-age group joint) model.</p> <p>Results: If men survive up to 55 without cancer, their probabilities of developing cancer until the age of 74 will be 23.3% for any type of cancer, 5.5% for stomach cancer, 4.7% for lung, 3.3% for liver, and 2.2% for colorectal cancer. In case of women, probabilities will be 11.8% for any type of cancer, 2.2% for stomach, 1.2% for lung, 1.1% for liver, 1.5% for colorectum, 0.8% for breast and 0.9% for cervical cancer.</p> <p>Discussion: This statistic seems slightly different from cumulative incidence rates, but it is likely due to differences in modelling assumptions. For example, cumulative incidence rates assume that persons remain at risk for the period of interest, and are not subject to competing risks of death from other causes, which is different in the PMAJ model. Although age conditional probability of developing a cancer is based on population-based data without taking into account individual behaviors and risk factors, it can provide more detailed information about cancer risks and have the potential to promote greater cancer awareness among the general public.</p>					