

UICC-Japan Convenes International Session at 84th Annual Meeting of the Japanese Cancer Association

Speakers address “Inequality and Cancer Outcomes,” highlighting the existence of various inequalities that exist in all countries and the need for strong evidence to underpin the promotion of equitable cancer control plans

(September 27, 2025) The Japan National Committee for UICC (UICC-Japan) convened an international session at the 84th Annual Meeting of the Japanese Cancer Association. The meeting was co-chaired by Dr. Keitaro Matsuo (Aichi Cancer Center) and Dr. Salvatore Vaccarella (International Agency for Research on Cancer) and focused on the theme “Inequality and Cancer Outcomes.”

Dr. Matsuo provided an introduction to the work of the UICC, the mission of which is to unite and support the cancer community to reduce the global cancer burden, promote greater equity and ensure that cancer control continues to be a priority in the global health agenda. UICC is the oldest and largest cancer fighting organization globally, established in 1933, with more than 1,200 members across 173 countries. UICC-Japan was established in 1962 and currently consists of 30 member organizations. UICC has various areas of focus, from convening and capacity building to advocacy, and UICC-Japan has funded the Y-Y Fellowship grants for many years. Dr. Matsuo noted that the session aligns with the UICC mission to reduce the global cancer burden by addressing inequalities in cancer care and outcomes.

The first of five speakers was co-chair Dr. Vaccarella, who spoke on the topic of “Underuse and Overuse of Medical Care in Cancer.” While on the one hand major inequalities between countries suggests underuse of health care, it is also conversely the case that resources are often devoted to interventions that offer minimal benefit, which is suggestive of overuse of medical care in some countries. This paradox was identified many years ago, but continues to this day, with cancer inequalities existing between and within countries. Cancer incidence increases dramatically as countries become more developed, driven by lifestyle factors. High-income countries like Japan have high cancer incidence but relatively low mortality due to robust health systems and early detection. Conversely, low-resource countries face similar mortality rates despite lower incidence, revealing fundamental inequalities in cancer care access and quality. Educational level, serving as a proxy for socioeconomic status, represents the single most powerful predictor of cancer mortality, more significant than any other risk factor in cancer epidemiology. The intersection of gender and socioeconomic status creates additional vulnerability. Among adults under 50, two-thirds of all cancer cases now occur in women.

A further concern is overdiagnosis of cancer. Overdiagnosis unnecessarily turns healthy individuals into patients and leads to overtreatment, and is an unintended consequence of the desire to detect cancer early.

Dr. Vaccarella concluded that by instead of allocating resources to interventions offering minimal benefit it is preferable to engage in effective interventions that reduce health inequalities. Before pursuing novel cancer detection technologies, healthcare systems must ensure equitable access to established preventive measures.

Dr. Tomoki Nakaya (Tohoku University) spoke on the topic of “Social Disparities in Cancer Through the Dual Lens of Place,” noting how geographic disparities in cancer outcomes across Japan are not random but systematically reflect structural area deprivation. Statistics from the Area Deprivation Index (ADI) developed from national census data demonstrate that inequalities appear across the entire cancer control continuum—from prevention and early detection through treatment, survivorship, and mortality. Analysis of national data reveals that while cancer mortality has declined overall, deprivation by area has widened over time, with projections suggesting further widening through 2040. These disparities are particularly pronounced in urban settings with strong residential segregation. Moving beyond documentation, future work must identify specific contextual factors in deprived areas to design effective interventions, with cancer mapping serving as a crucial tool for targeting communities with heightened burdens.

Speaking on the topic of “Socioeconomic Inequalities and Cancer Outcomes at the Community Level: A Spatial Epidemiological Approach,” Dr. Hidemi Ito (Aichi Cancer Center Research Institute) noted how socioeconomic inequalities in cancer outcomes represent an emerging global

priority. She introduced a study where spatial epidemiological methods and national cancer registry data were used to examine area-level deprivation across approximately 1,900 municipalities. Higher deprivation was linked to increased cancer mortality, particularly in urban areas, likely driven by lower screening uptake, higher smoking rates, and reduced healthcare access. The impact varied by cancer site and urbanicity level, with stronger mortality inequalities in cities. These findings underscore that neighborhood poverty significantly influences cancer outcomes through modifiable mediators such as health behaviors and healthcare access, highlighting actionable targets for community-level prevention strategies.

Speaking on the topic of “Current Situations of Socioeconomic Inequalities in Cancer Mortality in Japan,” Dr. Hirokazu Tanaka (National Cancer Center Institute for Cancer Control) introduced research based on Japan's census-linked mortality database, which covers 92% of the population, to examine cancer mortality among adults aged 25-84 years by educational level. Results revealed approximately 1.5-fold all-cancer mortality inequalities for both sexes, with individuals of lower education experiencing higher mortality across nearly all cancer sites. Lung, stomach, liver, and colorectal cancers contributed 60% of these inequalities, largely driven by differences in risk factors like smoking prevalence. Notably, pancreatic cancer showed no educational gradient, while breast cancer exhibited a remarkable transition from higher mortality among educated women in the 2010s to lower mortality by the 2020s. This database enables systematic monitoring of socioeconomic cancer inequalities in Japan.

Dr. Chang Kyun Choi (National Cancer Control Institute, National Cancer Center Korea) provided an overview to “Social Inequality in Cancer Outcomes” in Korea. Korea's National Cancer Screening Program, established in 2002, now covers six major cancers with tiered financial support based on income levels. While participation has increased from 39% in 2004 to 66% in 2023, significant socioeconomic disparities persist. Lower-income patients experience higher rates of distant-stage diagnosis and worse survival across all cancer types, with mortality risks elevated in both lower-income groups and deprived areas. Screening uptake and follow-up after positive results remain suboptimal among disadvantaged populations. To address these challenges, the National Cancer Center Korea is revising screening guidelines using GRADE methodology, piloting colonoscopy as primary screening, and developing the Cancer Public Library Database—a comprehensive resource linking registry, insurance claims, and mortality data for enhanced research capabilities.

In closing, Dr. Matsuo noted that the session had clearly highlighted the continued existence of inequalities in cancer outcomes in all countries and regions, highlighting the importance of gathering further evidence and data in order to best tackle and overcome such inequalities in cancer care.