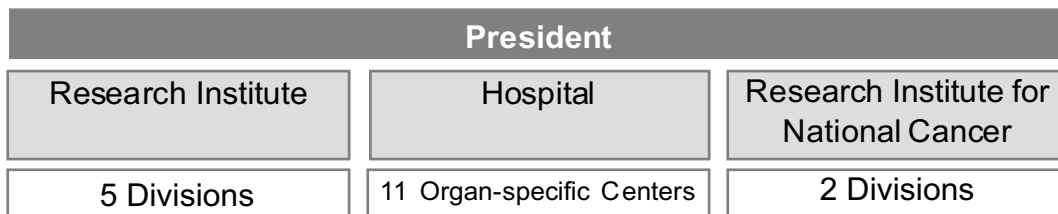


CANCER INSTITUTE

National Cancer Center of Korea (NCC)

Overview

The National Cancer Center of Korea (NCC) aims to improve the health and welfare of the people of Korea by reducing cancer incidence and mortality through a wide spectrum of cancer research, specialized medical care services for cancer patients, and support for the national cancer control programs in Korea. Founded in early 2000 as a government-funded institution, the NCC has now grown into one of the world-class cancer centers within such a short period of time thanks to the continued support from the Korean government and the devotion of all the NCC staff. To more effectively function as a hub for cancer research, control and education in Korea, the NCC was reorganized into the following three main divisions in April 2005: Research Institute, Affiliated Hospital, and Research Institute for National Cancer Control. Currently, those groups work in close cooperation with each other functioning as an organic whole.



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Research Institute

The Research Institute is committed to developing innovative technologies to prevent, facilitate accurate early diagnosis, and allow successful treatment of cancer through multidisciplinary approaches. As part of this endeavor, the researchers are conducting studies to further elucidate:

- molecular mechanisms of carcinogenesis such as cellular differentiation, tumorigenesis, and metastasis;
- molecular profiles of cancer cells by identifying molecular targets, and developing anti-cancer drug candidates through determination of their mechanisms of action at the molecular level;
- molecular and cellular therapeutics for cancer, incorporating gene therapies with cancer-oriented delivery systems and therapeutic antibodies;
- improved methods for functional imaging by visualizing physiological, cellular/molecular processes in living tissues.

Much progress has been made in exploring new frontiers of cancer research and this has resulted in a large number of publications in science citation index referenced journals:

Year	2001	2002	2003	2004	2005	2006
Intramural	13	26	39	62	66	Ongoing
Extramural	25	27	36	31	57	Ongoing

Besides its own intramural program, the institute supports extramural research activities in Korea by functioning as a

funding agency for the Health and Welfare Ministry's National R&D Program for Cancer Control.

The Institute is also playing important roles as a national support center for cancer research by operating a Tumor Bank, an Animal Breeding Facility for Transgenic & Knockout Mice, and a Molecular Imaging Core Laboratory, which provide cancer scientists with communal access to essential advances in biotechnology.

Affiliated Hospital

Having a 500-bed capacity, the Affiliated Hospital has successfully established a patient-oriented medical care system for the first time in Korea by operating eleven multidisciplinary organ-specific centers, including those for the stomach, liver, lung, colorectum, breast and uterus cancers which are the most prevalent in Korea. Each center houses medical and radiation oncologists, surgeons, nurses, therapists and other support staff that specialize in oncology, thus meeting a wide range of cancer patients' needs through a holistic and multidisciplinary team approach. What distinguishes this system from the traditional approach is that the medical staff usually visit the patients' wards, not vice versa.

With a view to the improved outcome of cancer care, the hospital is endeavouring to enhance the infrastructure for clinical cancer research by playing a leading role in developing standardized treatment protocols for the six common cancers in Korea. Furthermore, the hospital supports multi-institutional clinical trials in cancer through



The National Cancer Center, Korea

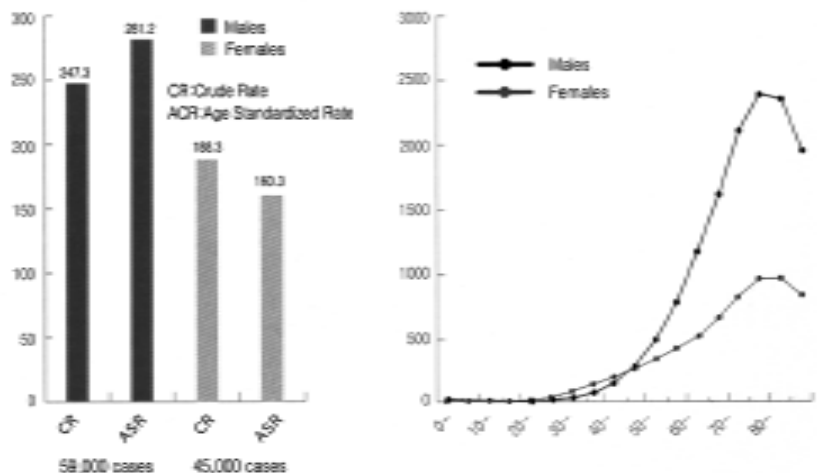
operation of the Clinical Research Center for Solid Tumors (CRCST) under the aegis of the Ministry of Health & Welfare. Currently, it functions as a coordinator for developing the practical guidelines for the hemato-oncologic treatment.

The hospital is one of the few institutions in the world – the first and only one in Korea – that are equipped with a proton therapy facility. Proton therapy is one of the most advanced forms of radiation therapy that allows physicians to offensively attack tumors with higher doses of radiation while minimizing its impact on healthy surrounding normal tissues.

The Cancer Prevention and Early Detection Center, one of the hospital’s eleven sub centers, provides a one-stop cancer check-up service for the customers. This center’s cancer prevention and detection services takes only two hours, this being made possible by the introduction of the state-of-the-art approaches such as PET-CT, CT, and endoscopy.






Research Institute for National Cancer Control

The Research Institute for National Cancer Control (RINCC) provides the government with the best policy



Cancer Incidence in Korea 1999-2001

National Cancer Screening Program

Cancer	Target Population	Interval	Test or Procedure
 Stomach	≥40 (adults)	2 yrs	Endoscopy/UGI
 Breast	≥40 (women)	2 yrs	Mammography/CBE
 Cervix	≥30 (women)	2 yrs	Pap smear
 Liver	≥40 (HRG*)	6 mths	Sonography/AFP
 Colorectal	≥50 (adults)	1 yr	FOBT/ Colonoscopy/ Barium enema

*, High risk group (HBsAg or anti-HCV positive or cirrhosis)

alternatives for implementing national cancer control programs by actively supporting, monitoring and evaluating the various ongoing programs. Indeed, the RINCC played a think-tank role in 2005 when the Health and Welfare Ministry formulated the second-phase 10-year comprehensive cancer control plan (2006-2015).

The RINCC is composed of two main divisions: the Division of Cancer Registration & Epidemiology and the Division of Cancer Policy & Management. These conduct a variety of activities on cancer control as follows:

- Statistical research on the incidence, mortality and survival of cancer;
- Studies to improve the quality of the national cancer screening programs
- Development of a management system for improving the quality of life of cancer patients and their families
- Epidemiological studies on cancer risk factors

Currently, the RINCC is has the following national cancer control responsibilities in close cooperation with the Health and Welfare Ministry of Korea:

- provide a Headquarters for the Central Cancer Registry: The national cancer incidence data for 1999-2001 was published in April 2005 based upon the national cancer incidence database that covers the whole population of 47 millions. This is one of the largest nationwide cancer registries in the world.
- conduct the National Cancer Screening Program: Recommendations of Screening for the Five Common Cancers in Korea were finalized announced in 2004.
- house the National Cancer Information Center: RINCC started to provide a comprehensive cancer information service by opening the National Cancer Information Center in April 2005. The center is designed to give cancer patients and their families the up-to-date, evidence-based information on all types of cancer through a call center service (www.cancer.go.kr) and publications.
- carry out the Home-based Cancer Patient Management Program: The RINCC joined in developing the cancer patients management program and developed a national model of both home- and inpatient-based care in 2004. Also, the home-based cancer patient management program has been implemented by the public health centers across the country since 2001.
- others: the RINCC is also assisting the Health and

Welfare Ministry in implementing the National Cancer Control Program for Terminal Cancer Care by developing the Pain Control Guidelines in Cancer, the Cancer Patients Financial Aid Program. It also supported the government's designation of the nine Regional Cancer Centers in Korea.

International Cooperation

The NCC pursues mutually beneficial cooperative relations with other organizations around the world. Some examples of bilateral cooperation are:

- a Letter of Intent for Cooperation was made with the National Cancer Institute, U.S.A. in July 2005 and a agreement of cooperation with the National Cancer Center of Japan in August, 2001. The modes of cooperation with the above institutions are primarily joint research, and exchange of personnel and information.
- as a responsible member of the international cancer community, the center is actively participating in the multilateral cooperative activities organized by international organizations such as the International Union Against Cancer (UICC) and the World Health Organization (WHO). NCC is currently designated as the WHO Collaborating Center for Cancer Registration, Prevention and Early Detection.

Vision 2020

Finally, NCC aims to become the best cancer center in the world by 2020. In order to achieve this goal, it is currently trying to create a new frontier in cancer research, set the best example of quality patient care through innovative clinical practice system, and play a 'think-tank' role in effectively implementing the government's 2nd-phase 10-year Plan for Cancer Control.



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