
CANCER RESEARCH INSTITUTE

The Cancer Institute of Iran

History

The history of the Cancer Institute of the Islamic Republic of Iran dates back to 1949, when a cancer hospital was established as a result of a collaborative agreement between Tehran University Medical School and the Red Crescent Organization of the country. The hospital provided surgical, pathological, and outpatient services to referred cancer patients nationwide. In 1950, the radiotherapy unit was established and one year later, under an agreement with the World Health Organization, the first cobalt unit in the Institute was established and radiotherapeutic services were provided to patients. In 1960, cytotechnology and in 1962 experimental units were added. By 1970, the Cancer Institute was fully equipped and included pathology, surgery, radiotherapy, chemotherapy, medical genetics, and experimental research laboratory. Now the Cancer Institute consists of 14 departments and acts as a leading center in campaigns involving all aspects of cancer control, from generating population data (population-based cancer registry) to state of the art patient care at a national level. Recently the cancer institute was ranked as second among Iranian medical research institutes for Excellency in research.

Mission and Objectives

The Cancer Institute of the Islamic Republic of Iran has been developed to contribute to all aspects of the nationwide fight against cancer. It is designed as a comprehensive cancer center and acts as a national focus for diverse programs in prevention, early detection, patient care, education, cancer statistics, research, community and international collaborations.

In order to achieve its mission the Cancer Institute has the following objectives:

- To provide state of the art multidisciplinary care for cancer patients.
- To advance scientific and medical knowledge in prevention, diagnosis, and treatment of cancer nationwide.

- To promote all aspects of campaign against cancer throughout the country.
- To promote basic and clinical as well as epidemiological research activities based on national and institutional research priorities.
- To facilitate and participate in coordination of activities sponsored by other agencies, both national and international.
- To assist in the development of public understanding of the matters of primary prevention of cancer.

Educational Activities

The Cancer Institute as an academic institution of Tehran University of Medical Sciences & Health Services (TUMJS)



The 50-year old Cancer Institute Building

conducts a wide spectrum of educational activities in areas of cancer diagnosis, treatment, and prevention (primary, secondary and tertiary).

In addition to several short courses and continuing Medical Education programs, the Cancer Institute offers the following residency, fellowship, and full programs in conjunction with other departments at Tehran University:

- Residency programs for the following specialties:

- Radiation Oncology
- Anatomical Pathology
- General Surgery (4 months surgical oncology course)
- General Anesthesia

- Fellowship programs for the following areas:

- Medical Oncology
- Pediatric Oncology (Radiation Oncology course)
- Head & Neck Surgery
- Genitourinary Oncology
- Obstetrics & Gynecological

- Cytology Technologists Training program
- Radiotherapy Technologists Training program
- Anesthesia and Operating Room Technologists Training program

Research Activities

The Cancer Institute is involved in all aspect of cancer related research from basic science to clinical and epidemiologic research. The following are some of active research programs currently ongoing in the Institute:

1) Basic Science and Experimental Research:

- Induction of experimental tumors in animal model
- Design and manufacturing of bioadhesive and evaluation of its haemostatic function in animal model
- Implantation and evaluation of artificial cartilage in animal model
- Genotype, phenotype and immunological aspects of esophageal cancer in Iran;
- Genotype and phenotype of breast cancer in Iran
- Carcinogenesis in the Razi mouse model
- Effects of a new medium on rabbit internal mammary & femoral arteries.

2) Clinical Research:

- UKCCR International ABC (Adjuvant Breast Cancer)
- UK Oxford International ATLAS (Adjuvant Tamoxifen: Longer Against Shorter) Trial
- Double-blind randomized placebo-controlled trial of concurrent pilocarpine for prevention of radiation- induced xerostomia, Cancer Institute's Dept. of Radiation-Oncology,
- Randomized trial of neoadjuvant concurrent chemoradiation for esophageal carcinoma, Cancer Institute's Dept. of Radiation-Oncology and Surgical-Oncology.
- Neoadjuvant concurrent chemoradiation for sphincter preservation in low rectal carcinoma, Cancer Institute's Dept. of Radiation-Oncology and Surgical-Oncology
- Randomized trial of single-fraction versus multi-fraction

palliative radiotherapy for bone metastasis (TUMS Trial), Cancer Institute's Dept. of Radiation-Oncology;

- Endocrine side-effects of head & neck radiotherapy, Cancer Institute's Dept. of Radiation-Oncology,
- Tumor marker assay for colorectal cancer patients;
- Malignant diseases in chemical combat casualties;
- Neoadjuvant therapy of sarcomas;
- Mucosal melanoma in Cancer Institute, a 10-year experience;
- MG-CSF healing effects on cancer related wounds.
- Skin tumors rising in previous burn scars (Marjolin's ulcer).

3) Epidemiological Research:

- Tehran Metropolitan Area Population-based Cancer Registry (the project is a collaborative program between IARC and the Cancer Institute). This project is named after an honored pathologist, the late Dr. Seyed Abdol-Mahmood Ziae Shamsa.
- Data quality in the Tehran Metropolitan Area Population-based Cancer Registry
- Epidemiological assessment of established risk factors of frequently occurring cancers among cancer patients in a defined population in Iran.
- Etiology and pathogenesis of gastric cancer in Iran.
- Risk factors of breast cancer in Iranian women.
- Community based case control study of esophageal cancer risks in Tehran population.
- People's knowledge & attitude towards cancer;
- Narcotics drug use in cancer patients
- Rationalizing the use of antineoplastic medication in Iran, utilizing standard treatment guidelines

International Relations

The Cancer Institute is currently a member of the International Union against Cancer (UICC) and has an affiliation with the Asia-Pacific Cancer Society. It maintains active collaboration with other internationally known organizations in research, training and other cancer related fields and is looking forward to extend its collaboration with scientific centers throughout the world.

The Cancer Institute is currently involved in 4 international research programs in esophageal and breast cancer:

- 1) ABC (Adjuvant Breast Cancer) Trial -an international multicenter clinical trial, UKCCR, UK;
- 2) ATLAS (Adjuvant Tamoxifen: Longer against Shorter) Trial -an international multicenter clinical trial, Oxford University, UK;
- 3) Genotype and phenotype of breast cancer in Iran;
- 4) Genotype, phenotype and immunological aspects of esophageal cancer in Iran.

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