

# Iranian Cancer Network: Introduction, Mission and Its Role in Cancer Management

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## Abstract

**Objectives:** The Iranian Cancer Network was established in May 2003. Our aim was to coordinate research and treatment programs in all cancer centers in Iran in order to save time and money and enable patients, wherever they live, to receive a uniformly high-standard treatment and care.

**Methods:** After signing a mutual contract with fellow (collaborator) university and holding some shared sessions, the project was planned on the basis of the network missions. Network structure guidelines and the responsibility of the sections and staff in the network were being defined. Cancer teams include physicians, epidemiologists, pathologists, basic scientists, and executive authorities related to cancer management.

**Results:** The Iranian Cancer Network has started its work as a preliminary study between two centers. Then some other cancer centers in the country joined it and it is developing gradually. Several common research projects and clinical trials have been started in this network. Genomic DNA bank for patients with hematopoietic malignancies is being constructed. Data bank for all cancers referring to these centers is being constructed and its result will be published later.

**Conclusion:** Cancer networks make a systematic connection between all cancer centers around a country (or abroad) to ensure delivery of new information, interventions, and best practices and help others to share their research and laboratory facilities.

**Key words:** cancer networks, cancer research, cancer care

## Introduction

Cancer is one of the most common causes of mortality and morbidity in the world. The costs of screening, diagnosis, treatment, and prevention are too high and increases rapidly everyday. Research in the field of cancer also costs too much. While we have more to learn about this complex and diverse disease, better understanding of cancer at different levels provides considerable opportunity to interrupt the initiation and progression of the disease. Research without systematic planning wastes time and money; so coordinating research and treatment programs to achieve the best results seems to be necessary. This coordination is possible only by establishing a cancer network. Cancer network makes a systematic connection between all cancer centers around a country (or a province) to

ensure delivery of new information, interventions, and best practices and help others to share their research and laboratory facilities.

Cancer networks have been established with different missions; one of them is to make a structure to inform people, especially patients with cancer, so they can get necessary information about their questions. Usually there is "Frequently Asked Questions (FAQs)" section in these networks to respond to patients' questions.

The second types of networks are made for physicians. Their mission is to provide facilities for accessing study and research results in different centers, improve access to treatment guidelines, and plan for shared clinical trials to save time and money. For example, the National Comprehensive Cancer Network

(NCCN), an alliance of 19 of the world's leading cancer centers, is an authoritative source of information to help patients and health professionals make informed decisions about cancer care. Through the collective expertise of its member institutions, the National Comprehensive Cancer Network develops, updates, and disseminates a complete library of clinical practice guidelines. These guidelines are the standard for clinical policy in oncology. Its website provides access to its member institutes, programs, treatment guidelines, results, news, and information about cancer.

The National Cancer Institute (NCI) is a component of the National Institutes of Health (NIH), one of eight agencies that compose the Public Health Service (PHS) in the Department of Health and Human Services (DHHS). The National Cancer Institute coordinates the National Cancer Program, which conducts and supports research, training, health information dissemination, and other programs with respect to the cause, diagnosis, prevention, and treatment of cancer, rehabilitation from cancer, and the continuing care of cancer patients and their families.

International Agency for Research on Cancer (IARC) is another large network which conducts epidemiologic research on cancer etiology. It studies cancer incidence, mortality and survival rates all around the world.

In brief, cancer studies are of several kinds:

- 1) Registration and epidemiological studies
- 2) Biological studies to recognize biological changes in cancer and predictive factors
- 3) Screening and early detection
- 4) Prevention
- 5) Clinical trials
- 6) Rehabilitation and patients' quality of life
- 7) Ethical studies.

The aim of the Iranian Cancer Network is to coordinate research and treatment programs around the Islamic Republic of Iran in order to save time and money.

### **Objectives**

The Iranian Cancer Network was established as a preliminary project at Hematology-Oncology, and BMT Research Center in Tehran University of Medical Sciences in 1382.

Its mission statements are as follows:

- 1) Increase knowledge about cancer information needs, beliefs, decision making processes, and behaviors.
- 2) Support and coordinate research projects conducted by universities, hospitals, and research foundations all over the country and abroad through research grants and cooperative agreements.
- 3) Coordinate clinical trials and treatment protocols.
- 4) Support patients' treatment in their own region.
- 5) Develop more effective, less harmful approaches to cancer prevention, early detection, diagnosis, treatment, and control.
- 6) Register cancer cases according to populations and study cancer etiology, incidence, mortality, and survival rates.
- 7) Support research in biology and basic sciences.
- 8) Collaborate with voluntary organizations and other national and foreign institutions engaged in cancer research and training activities.
- 9) Collect and disseminate information via journal- and web-based publications.
- 10) Hold conferences and symposia about cancer.
- 11) Enhance the development and use of tools to assess health-related quality of life and quality of care for post-treatment survivors.
- 12) Support construction of laboratories, clinics, and related facilities necessary for cancer research through the award of construction grants.
- 13) Provide facilities to inform and train younger oncologists.
- 14) Use information technology to communicate with other networks worldwide and increase participation of members.

### **Methods**

After signing a mutual contract with fellow (collaborator) university and holding some shared sessions, the project is planned on the basis of the network missions. Cancer teams include physicians, epidemiologists, pathologists, basic scientists, and executive authorities related to cancer management. Network structure guidelines are being defined in these sessions. Next, and along training research fellows and providing necessary facilities, collaboration begins between two universities.

Initially, achieving three essential parts of the network missions is considered:

- 1) Epidemiology and registration of cancer
- 2) Genetics and biology of cancer
- 3) Clinical trials

Cancer registration groups make a population-based cancer registry. Genetics groups collect and preserve DNA samples from patients with hematopoietic malignancies and develop a DNA bank. Data from these two centers are transferred via internet and kept in the Iranian Cancer Network website. Genetic materials are belonged (and samples are kept in) both centers.

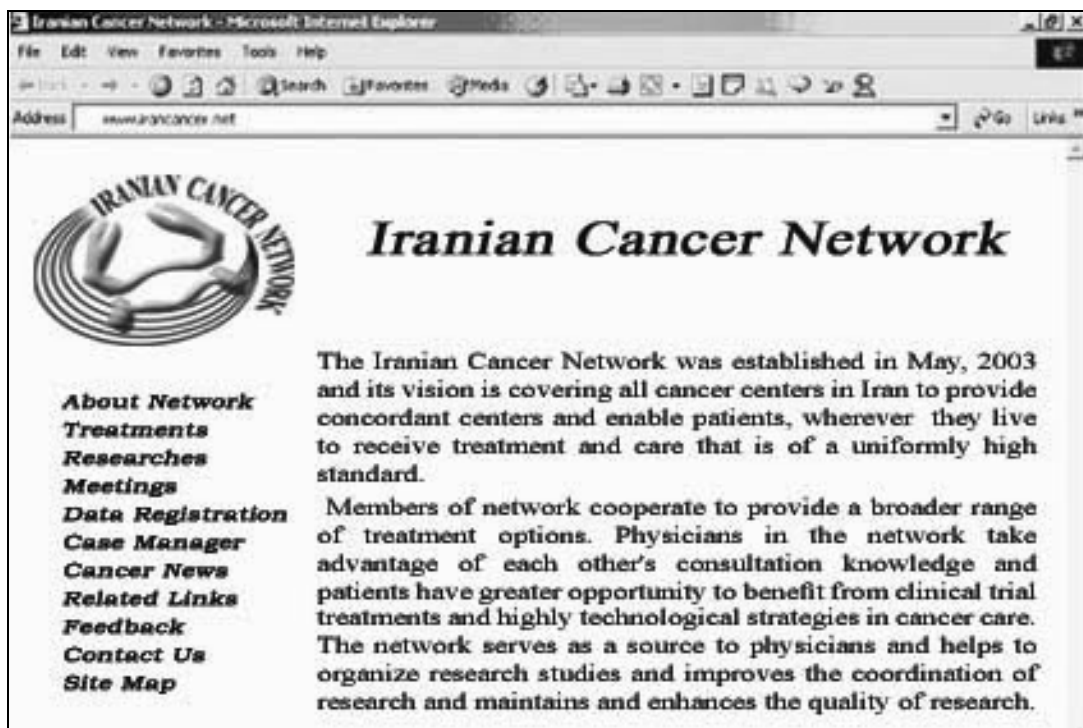
### Activities

The Iranian Cancer Network now has started its work as a preliminary study between Hematology, Oncology, and BMT Research Center in Tehran University of Medical Sciences, and Kermanshah University of Medical Sciences in 1382. Several common research projects and clinical trials have started in this network. Other centers include Gilan, Kerman, Zahedan, Hamedan, Arak, Kashan, Yazd, and Tonekabon universities of medical sciences who agreed to participate in this project. Several projects being conducted include:

- 1) Construction of genomic DNA bank for patients with hematopoietic malignancies: Tehran and Kermanshah
- 2) Efficacy of arsenic trioxide in remission induction of patients with acute promyelocytic leukemia (APL) diagnosis. : Tehran, Kermanshah, and Kerman
- 3) Suggested protocol for patients with acute lymphoblastic leukemia (ALL).: Tehran, Zahedan, Kerman, Hamedan, Kermanshah, and Kashan
- 4) Suggested protocol for patients with Ewing's Sarcoma.: Tehran and Hamedan
- 5) Suggested protocol for Osteosarcoma.: Tehran, Zahedan, and Hamedan
- 6) Clinical course of breast cancer in patients under 35 years, between 35-50 years and over 50 years of age on the basis of clinical, biological and pathological characteristics: Kermanshah
- 7) Phase II study of Irinotecan, 5-FU and Leucovorin in advanced gastric cancer: Kermanshah and Tehran

### The Iranian Cancer Network Website

The Iranian Cancer Network website is available at: "[www.irancancer.net](http://www.irancancer.net)". To contact us, just send an e-mail to: [info@irancancer.net](mailto:info@irancancer.net).



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- 7) MD Anderson cancer center Anderson Network:  
[www.Anderson.org/departments/andersonnet](http://www.Anderson.org/departments/andersonnet)
- 8) European Network of Cancer Registries (ENCR):  
[www.dep.iarc.fr/encr](http://www.dep.iarc.fr/encr)