

# Investigational Drug Development for Solid Tumors

## Introduction

Investigational drug development for solid tumors is a major research activity at the Division of Oncology/Hematology. In daily medical practice, patients with different types of cancers, including breast and genitourinary, and malignant lymphomas are treated with chemotherapy. These are the major and specific targets of the Division; most patients with these malignancies are treated by standard chemotherapy and/or in clinical trials. Additionally, as the major division of Medical Oncology at the National Cancer Center Hospital East, primary unknown malignancy is another major target, as well as gynecological malignancies and soft-tissue sarcomas that are treated by chemotherapy at the Division. Other types of solid tumors, including gastrointestinal, lung, and head & neck cancers are treated mainly in early clinical trials of anticancer agents.

Our clinical and research activities are focused on the following six fields.

1. Developmental therapeutics using new anticancer agents in phase I trials sponsored by pharmaceutical companies.
2. Clinical pharmacology studies for optimal dose adjustment of drugs in common use.
3. Development of combination chemotherapy involving newly developed drugs or new combinations of chemotherapy using currently available drugs.
4. Disease-oriented clinical trials, especially for breast cancer, malignant lymphomas, and hematological malignancies.
5. High-dose chemotherapy with peripheral blood stem cell support in experimental or standard treatments.
6. Standard treatment with chemotherapy in medical

practice.

7. Research on supportive and palliative care for patients treated with chemotherapy or patients in terminal stage.

## Practice Activities

A variety of malignant diseases was treated in the past year. The major and specific target diseases of the Division were breast cancer and malignant lymphomas, with 251 and 154 new patients, respectively, attending clinics at the Division in 2006. These patients accounted for 67% of the total of 665 patients who visited our clinics during that year. Eligible patients were invited to participate in large phase II or III studies. The number of patients with genitourinary malignancies is increasing, and 51 patients visited our clinics in 2006. Primary unknown cancers were the other major targets of the Division, and we saw 23 new patients with these diseases in 2006. Other hematological malignancies, gastrointestinal cancers including esophageal and colorectal cancers, lung cancer, pancreatic cancer, soft tissue sarcomas, and gynecological cancers, including uterine and ovarian cancers, were also treated at the Division. For patients with diseases for which established standard chemotherapy is available but no phase II or III clinical trials are ongoing, standard chemotherapy was administered in routine medical practice. Patients who failed standard chemotherapy or patients with cancer for which standard chemotherapy was not available were asked to participate in clinical studies of experimental therapy, a major part of our research activities.

● H. Minami ●

New patients at the Oncology/Hematology Clinic in 2006

Breast cancer	251	
Neoadjuvant chemotherapy		56
Adjuvant chemotherapy		65
Metastatic disease		130
Malignant lymphoma	154	
Genitourinary malignancies	51	
Kidney		14
Bladder		13
Prostate		11
Others		13
Leukemia	27	
Gynecological malignancies	26	
Ovary		15
Uterus		11
Carcinoma of unknown primary	23	
Lung cancer	19	
Soft tissue sarcomas	13	
Multiple myeloma	11	
Gastrointestinal malignancies	11	
Germ cell tumors	8	
Head and neck cancer	5	
Others	66	