

# Thoracic Oncology

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## Introduction

The Division of Thoracic Oncology cares for patients with lung cancer both primary and metastatic, mediastinal tumors and pleural tumors. To help our patients in the multidisciplinary care, we work closely with comedicals, thoracic surgeons, radiation oncologists and psychiatrists who have special expertise in these areas. We also conduct clinical research to understand more about these malignant tumors and to develop new and more effective diagnoses and treatments. Residents and trainees from domestic and foreign institutions have joined the Thoracic Oncology Program.

## Routine Activities

An Outpatient Clinic conducted by staff members is open from Monday to Friday to examine all new patients referred to the Thoracic Oncology Division and to see returning patients. We also examine the patients who are candidate of surgical resection. The staff of the Thoracic Oncology Division are responsible for the reading of chest X-rays and chest CTs in the hospital. Bronchoscopy for diagnosis and treatment is done from Monday to Thursday afternoon. Fluoroscopic-CT guided needle lung biopsy and fluoroscopic guided needle biopsy are done on the same day as bronchoscopy is performed. We use approximately 90 beds in conjunction with the Thoracic Surgery Division for patient management.

Case conferences with thoracic surgery, medical oncology and nursing staff are scheduled on Tuesday evenings, Wednesday evenings and Friday afternoons, respectively. The staff members and residents join the journal club on Wednesday mornings with members of thoracic surgery. In monthly meeting with physicians in private practices, we present case reports and research results for subspecialty education.

## Research Activities

Our research activities are concentrated in four areas: (1) detection and diagnosis of peripheral-type minute lung cancer that are not visible on plain chest X-ray; (2) Positron emission tomography (PET) trials for diagnosis and staging; (3) development of new and effective treatment modalities; (4) performing a basic collaborative study with the Research Institute East; correlation between gene abnormality and clinical characteristics, study of precancerous lesions; atypical adenomatous hyperplasia. (5) Mental status of patients with lung cancer.

## New Developments

PET trials for diagnosis and accurate staging have been completed and demonstrated that PET plus CT is more accurate for the diagnosis of mediastinal lymphnode metastasis than CT alone and more sensitive for the diagnosis of solitary pulmonary nodules. Follow-up study of focal pure ground-glass opacity (pGGO) detected by low-dose CT screening showed that the size of pGGO increase or decrease in size suggesting close follow-up may be a valid option for the management of pGGOs. An accrual goal for the four-arm trial comparing cisplatin plus irinotecan with cisplatin plus gemcitabine, cisplatin plus vinorelbine and carboplatin plus paclitaxel for advanced non-small-cell lung cancer was met. The study will be reported at 2004 ASCO. It would define a standard treatment for disseminated non-small cell lung cancer (NSCLC). Based on the pilot study of cisplatin and etoposide plus concurrent thoracic radiotherapy followed by cisplatin and irinotecan for limited small-cell lung cancer (LD-SCLC), a phase III trial to evaluate the efficacy of irinotecan and cisplatin in LD-SCLC is ongoing. A phase II study of ZD 1839 (Iressa) for chemotherapy-naive patients has been completed. Interim analysis of the study

suggested similar activity of Iressa to patients who previously received chemotherapy.

● K. Kubota ●

Statistics											
Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total number of lung cancer patients	269	295	301	363	402	385	424	445	530	522	559
Stage of disease											
I	85	88	101	139	128	141	155	189	209	199	214
II	18	11	12	8	21	18	40	21	30	35	44
IIIA	42	45	53	49	46	30	28	39	44	53	47
IIIB	51	49	44	72	69	64	61	78	109	102	86
IV	73	102	91	95	138	132	140	118	138	133	168
Histology											
Adenocarcinoma	166	165	169	220	238	228	268	263	306	283	326
Squamous cell ca.	57	68	76	88	90	90	83	95	116	117	124
Small cell ca.	36	39	37	35	50	48	36	41	58	68	49
Large cell ca.	8	19	10	13	21	9	29	41	42	47	50
Others	2	4	9	7	3	10	8	5	8	7	10
Treatment											
Chemo+surgery	9	5	4	8	3	0	1	0	2	5	5
Surgery	106	113	133	150	162	168	186	199	232	227	245
Chemotherapy (CT)	106	117	112	124	145	145	137	138	192	211	215
CT+RT								49	62	51	63
Radiotherapy (RT)	13	13	23	29	23	19	25	27	18	13	10
Laser therapy	-	2	-	4	1	0	1	1	2	1	3
Palliative care	35	45	29	48	68	53	45	31	22	14	18