

Division of Pulmonary Medicine
Annual Divisional Report
April 1, 2007– March 31, 2008

I HIGHLIGHTS OF PAST YEAR

This past year has been an extremely active one for the Pulmonary Division in all aspects. Our clinical and research programs continue to grow at an exponential rate. Some of the highlights are the following:

Dr. Carmela Pepe has started clinical activities both in pulmonary and pulmonary oncology as well as continuing her research in the field of pulmonary oncology in the elderly. She continues to work on her Masters in Epidemiology.

Our Pulmonary Oncology program remains the major site in the McGill system. In fact, the Pulmonary Oncology Division at JGH remains a major referral centre throughout the province of Quebec. We deliver comprehensive care from initial diagnosis through all stages of treatment as well as palliative care,

The overwhelming success of the Division of Pulmonary Lung Cancer Awareness Month in November 2006, prompted us to repeat these activities in November of 2007 with numerous events such as a presentation at Nurses Grand Rounds, and a public information booth, manned by our physicians, pulmonary oncology nurses, and others to educate and sensitize the public about lung cancer and its prevention. In addition, information on the JGH non-smoking program was distributed.

The culmination of the whole month's program was the Annual Patient Appreciation Party in honor of the courage, dignity, and dedication of our patients and their families organized in partnership with Hope and Cope and the Cancer Prevention Centre held at the Gelber Conference Centre.

The work of our Tumor Board continues to be one of the most important tools in the comprehensive approach to the treatment of our oncology patients. Tumor Board includes the participation and detailed discussion by physicians from surgery, radiotherapy, nuclear medicine (reviewing PET CTs), pathologists (presenting and reviewing pathology slides), in addition to our pulmonary oncology team (physicians, nurses,) and our Cancer Nutrition and Rehabilitation group. This comprehensive approach to treatment of our lung cancer patients has led to numerous requests for second opinions.

For several years the McGill Cancer Centre has been offering the Experimental and Clinical Oncology Course to its medical students and as part of that course students are asked to attend the Pulmonary Tumor Board meetings at the JGH as part of the workshop portion of their course.

The use of Endo-Bronchial Ultra-Sonography (EBUS) and Cryotherapy in our state of the art Interventional Bronchoscopy suite is fully operational. As many as thirty-five interventional bronchoscopies have been performed, including EBUS, cryotherapy, etc. Patients no longer have to be sent to Notre Dame Hospital for these procedures.

Cancer Nutrition-Rehabilitation Program :(CNRP) The program has developed considerably with three clinics weekly. Patients with anorexia-cachexia secondary to lung cancer are seen in CNRP. This program remains unique in offering a combined nutrition-rehabilitation opportunity for patients with lung cancer. Currently, all newly diagnosed lung cancer patients are screened for nutritional and functional problems at first presentation. Guidelines are in place for referral of patients with problems in these areas to the CNRP. In the CNRP patients and families work with an interdisciplinary team including physiotherapists, a dietitian and a physician One on one counseling and patient and family education is the major aim of CNRP. After evaluation, patients receive nutritional counseling, nutrient supplementation and based on their physical capacity, are enrolled in an exercise program. If needed they are prescribed selected pharmaceuticals for appetite stimulation and or gastric emptying.

Our research program in different aspects of pulmonary oncology has led to the hiring of additional support staff. Research continues as well in obstructive lung disease and asthma with a number of studies ongoing at any given time.

Pulmonary vascular and thromboembolic diseases, with the collaboration of Dr. Andrew Hirsch and the Divisions of Internal Medicine, Haematology and Cardiology has become a premiere clinical program within the hospital with over thirty referrals monthly. This represents a 30% increase over last year.

TB clinic continues to grow under the co-leadership of Dr. Mark Palayew and Dr. Chris Greenaway, of the Division of Infectious Diseases. There have been approximately 25-40 visits weekly to this clinic in the past year.

The collaboration between our Division and the Mt. Sinai pulmonary rehabilitation and asthma education programs has been very beneficial to our patients. In addition, the Mt Sinai Sleep Clinic, coordinated by Dr. Norman Wolkove, caters to patients with sleep problems. Both Dr. Palayew and Dr. Small see patients with sleep pathology there. They conduct 5 half-day clinics per week at Mount Sinai Hospital. There are approximately twenty-one sleep studies ordered each and every week. In addition they also run a very successful smoking cessation program.

ASCO – We were fortunate in that five abstracts were presented at ASCO last June 2007.

MASCC – In addition three abstracts were presented at MASCC in Switzerland, June 2007.

II EVALUATION OF PAST ACADEMIC YEAR

The initiation of many new research projects and the significant increase in clinical activities has resulted in a very active year. Teaching remains of the highest caliber.

1. Teaching Activities

The JGH Pulmonary Division is very involved in teaching at all levels. Four members spent one month as attending staff on the medical wards. While there, they are responsible for supervising a medical team consisting of medical students and junior and senior residents and conducting daily teaching rounds.

The consult service is always extremely active, and medical students, residents and pulmonary fellows all participate throughout the year. While on their pulmonary rotation the residents and students have daily teaching rounds around the cases they have seen, participate in outpatient clinics as well as having weekly didactic rounds and case conferences. Fellows and residents are also taught invasive procedures such as bronchoscope and thoracentesis. During the course of the year pulmonary fellows also participated in their continuing outpatient clinics under the supervision of Dr. Small, and in sub-specialty clinics in pulmonary oncology, pulmonary hypertension and tuberculosis.

In addition, both Drs. Jason Agulnik, Carmela Pepe and Andrew Hirsch have supervised evening Journal Clubs with the Pulmonary and Oncology fellows as well as Haematology, Thrombosis and Internal Medicine residents.

In addition to the clinical teaching, all members of the division regularly participated in lecture series to family physicians at the Thursday Evening Lecture Series (TELS), to the medical residents and students at their CXR teaching sessions and Core medicine lectures.

With the ongoing success of the Experimental and Clinical Oncology Course 56-635D, undergraduate students continue to participate in our Pulmonary Tumor Board meetings (held weekly) as part of the workshop portion of their course. This year again, the students greatly appreciated the opportunity to attend the Tumor Board meetings and thereby gain a unique experience in participating in the work of this multi-disciplinary, innovative team.

Divisional weekly pulmonary rounds take place throughout the academic year. This involves presentations by our own staff, including fellows, residents and physicians from other divisions of the Jewish General, as well as many visiting professors. This year, guest speakers have included:

Murray Baron, M.D.
Martin Chasen, M.D.
Eva Cohen, (Pharmacy)
Lorenzo Ferri, M.D.

Gad Friedman, M.D.
Bruce Mazer, M.D.
Andy Nguyen, M.D.
Richard Sheppard, M.D.
Vicky Tagalakakis, M.D.

A weekly Clinical/X-Ray conference is held in conjunction with the Radiology and Thoracic Surgery Departments.

Members of our Respiratory Physiology Department are also active in the ongoing clinical teaching of Vanier College Respiratory and Anesthesia students, including HOP students.

2. Research

Research studies have been undertaken in pulmonary oncology, obstructive lung disease, asthma, thromboembolism and pulmonary hypertension.

Research studies, many of which are ongoing include:

Ortho Biotech LEAD, A Prospective Study to Evaluate Anemia and Transfusion Requirements in NSCLC Patients with Completely Resected Tumors Undergoing Adjuvant Chemotherapy

Pharmacyclics PCYC-0229, Phase II Trial of Motexafin Gadolinium and Docetaxel for Second Line Treatment of Patients with Advanced Non-Small Cell Lung Cancer

Pfizer A3671015, A Phase 2 Randomized, Non-comparative Study of Ticilimumab or Best supportive care Immediately Following First-LINE, Platinum-Based Therapy in patients with Stage IIIB (with effusion) or Stage IV Non-small Cell Lung Cancer that has responded or remained stable

Abbott M05-782, A Phase 1/2 Study Evaluating the Safety and Efficacy of ABT-751 in Combination with Docetaxel Versus Docetaxel Alone in Subjects with Advanced or Metastatic Non-Small Cell Lung Cancer

Astra Zeneca Zactima 57, A phase III, randomized, Double-Blind, Multi-Center Parallel-Group Study to Assess the Efficacy of ZACTIMA (ZD6474) Versus TARCEVA (Erlotinib) in Patient With Locally Advanced or Metastatic (Stage 3B-4) NSCLC after Failure to at least One Prior Chemotherapy

Novelos NOV-002, A Randomized, Open-label, Phase 3 Trial of NOV-002 (Oxidized glutathione based compound) in Combination with Paclitaxel and Carboplatin vs. Paclitaxel and Carboplatin Alone for the Treatment of Advanced Non-Small Cell Lung Cancer

Merck SAHA, A Phase II/III Randomized, Double-Blind Study of Paclitaxel plus Carboplatin in Combination with Vorinostat (MK-0683) or Placebo in Patients with Stage IIIB (with pleural effusion) or Stage IV Non-small-Cell Lung Cancer (NSCLC), 056-01

Astra Zeneca Zactima 44, A phase III, International, Randomized, Double-Blind, Parallel-Group, Multi-Center Study to Assess the Efficacy of ZACTIMA (ZD6474) Plus Best Supportive Care Versus Placebo Plus Best Supportive Care With Locally Advanced or Metastatic (Stage 3B-4) NSCLC after Prior Therapy with an EGFR Inhibitor

Novartis XCEED, A post-registration evaluation of long term Xolair Therapy on patient-relevant outcomes, medical resource use and asthma medication requirements, in a prospective cohort of asthma patients treated under real world medical practice conditions

Novartis Xolair 2425, A randomized, open label, parallel-group, international, multicenter study evaluating persistency of response to omalizumab during 32 weeks treatment given as add on to optimized asthma therapy, in adult and adolescent patients with severe persistent allergic asthma. Who remain inadequately controlled despite GINA (2004) step 4 therapy

3. Clinical Activities

Patients visits (new patients and follow-ups): 9,681
Pulmonary oncology visits: 2,978

Laboratory Investigations:
Pulmonary function tests, Histamine challenge studies,
Cardio-pulmonary exercise studies: 3,707

Procedures:
-Bronchoscopies (including EBUS and Cryotherapy): 406
-Thoracocentesis: 123

4. Academic staff

We are very pleased to welcome Dr.Thomas Jagoe into the Division of Pulmonary Medicine and Oncology (as Director of the Cancer Nutrition and Rehabilitation Program).He is a pulmonologist by training, who has engaged in both clinical and laboratory research in the problem of muscle wasting in the cancer context. He is based at the JGH with clinical responsibilities and his laboratory in the Cancer Centre. His work, we are certain, will have important implications for a range of chronic illnesses.

In addition, we are pleased to welcome Dr. Pierre Ernst, an accomplished physician with an outstanding academic and research record. He brings a wealth

of clinical and research experience in the field of asthma. He has authored some of the pivotal studies on asthma care, treatment and treatment side effects. Under the direction of Dr. Ernst, the JGH will see the creation of a first class Asthma Centre. He will be starting in July 2008

After 33 years as an active member of the Pulmonary Division, including many years as Chief of the Division, Dr. Harvey Kreisman, an outstanding physician and administrator, has retired as of September 2007.

5. Consulting activities: Not applicable

6. Honors, Awards and Prizes

Dr. Carmela Pepe: CIHR Fellowship Award for Master's Thesis Project

Ms. Goulnar Kasymjanova: The Mona Zavalkoff Grant for Pulmonary Oncology: "Quality of Life in Lung Cancer Patients"

7. Publications

--Néron S, Correa JA, **Dajczman E, Kasymjanova G, Kreisman H, Small D**, Screening for depressive symptoms in patients with unresectable lung cancer, Support Care Cancer. 2007; 15:1207-12

--Tagalakakis V, Levi D, **Agulnik JS, Cohen V, Kasymjanova G, Small D**, High risk of deep vein thrombosis in patients with non-small cell lung cancer: a cohort study of 493 patients. J Thorac Oncol. 2007; 2:729-34.

--Retornaz F, **Small D**, Bergman H et al, Usefulness of frailty markers in the assessment of the health and functional status of older cancer patients referred for chemotherapy: a pilot study. Canadian Journal of Geriatrics, Vol. 10 Number 11, 2007

--**Wolkove N**, Elkholy O, Baltzan M, **Palayew M**, Sleep and aging: 2. Management of sleep disorders in older people. CMAJ. 2007 May 8;176(10):1449-54. Review

-- **Wolkove N**, Elkholy O, Baltzan M, **Palayew M**, Sleep and aging: 1. Sleep disorders commonly found in older people. CMAJ. 2007 Apr 24; 176(9):1299-304. Review

Abstracts

--Feld R, Weirzbicki R., Walde, D, Card, C, **Small, D** , Plante, RK, Sharma, D, Camacho, F, and the LEAD investigators, Anemia rates in completely resected non small cell lung cancer (NSCLC) patients receiving adjuvant chemotherapy; An interim analysis. Abstract for World Lung Conference, 2007

--**Kasymjanova G, Small D** et al, Influence of baseline inflammatory markers on the response to first-line chemotherapy in advanced NSCLC. Poster presentation at ECCO 14, Barcelona, Spain, September 2007

--Cohen V, **Agulnik JS, Small D**, et al, Clinicopathologic Features and Prognostic Implications of Epidermal Growth Factor Receptor (EGFR) Gene Mutations Detected by Denaturing High-Performance Liquid Chromatography (dHPLC) in Non-Small Cell Lung Cancer (NSCLC). ASCO 2007 Journal of Clinical Oncology, 2007 ASCO Annual Meeting Proceedings Part I. Vol 25, No. 18S (June 20 Supplement), 2007: 7594

-- St-Pierre DM, **Small D** et al, Quality of Life and Survival in Patients Receiving chemotherapy for Advanced Non-Small Cell Lung Cancer (NSCLC). ASCO 2007, Abstract- No.19649

--**Kasymjanova G, Small D** et al, Effect of Chemotherapy on Exercise Capacity in Patients with Advanced NSCLC. ASCO 2007, Abstract No.9115

-- **Dajczman E, Small D** et al, Does NSCLC Patient-Rated Performance Status Predict Survival More Accurately than Physician Ratings? ASCO 2007, Abstract No.9022

--Swinton N, **Small D**, et al, Do Most Newly Diagnosed Advanced NSCLC Patients Need Nutritional Intervention? ASCO 2007, Abstract No.9108

--MacDonald N, **Small D** et al, The Role of a Cancer Nutrition-Rehabilitation Program in the Care of Lung Cancer Patients. MASCC 2007

-- **Steinberg T, Small D** et al, Prevalence of Emotional Distress in Newly Diagnosed Lung Cancer Patients. MASCC 2007

--St-Pierre DM, **Kreisman H, Small D** et al, Quality of Life and Survival in Patients Receiving chemotherapy for Advanced Non-Small Cell Lung Cancer (NSCLC). MASCC, 2007

--Ang C, Cohen V, **Agulnik JS, Kasymjanova G**, Chong G, Tejada A, **Pepe C**, Batist G, **Small D** et al, Epidermal Growth Factor Receptor (EGFR) Mutations Detected by Denaturing High Performance Liquid Chromatography (dHPLC) in Non-Small Cell Lung Cancer (NSCLC): Impact on Response to Therapy with Tyrosine Kinase Inhibitors. Oral presentation at National Cancer Institute of Canada Annual Meeting. November 2007, Toronto

III. OBJECTIVES AND PRIORITIES

This past year has been an extremely successful one for the Pulmonary Division. Our Clinical and Research activities have increased but nonetheless we feel that our patients have not at all been hindered by this growth.

We look forward to the arrival of Dr. Pierre Ernst and the development of the Asthma Center, which will be a major new clinical and research activity for the upcoming year.

Our ongoing research and clinical programs in lung cancer, tuberculosis, pulmonary hypertension and our collaboration with Mount Sinai will continue to expand in the upcoming year. As usual, we are extremely fortunate to have an outstanding staff including our nurses, technical and support staff, all of who strive for excellence on a day to day basis.

Respectfully submitted,

David Small, M.D., F.R.C.P.(C)
Chief, Division of Pulmonary Diseases