

**Annual Report
Pulmonary Division
Department of Medicine - Jewish General Hospital
January 1 - December 31, 2012**

SUMMARY

It has been a very exciting year for the Pulmonary Division. We have had significant growth in all our clinical programs. Specifically our sub-specialty programs are continuing to grow in both clinical activities and research. I would like to summarize the past clinical year under the sub-specialty programs that we offer.

1. Clinical Activities, Research and Publications

Pulmonary Oncology

This past year, our pulmonary oncology program moved into the brand new Peter Brojde Lung Cancer Center on the 10th floor of the Segal Cancer Center. This state of the art Center enables our patients to receive both standard conventional therapies along with complimentary modalities, all in one Center. We continue to offer our patients new therapies and clinical trials in addition to numerous resources including a dietitian, physiotherapist and an acupuncturist. We are fortunate to have had Dr. Lama Sakr join our pulmonary oncology group this year. Dr. Sakr has also been extremely involved in developing our interventional bronchoscopy program, which has recently expanded to include ultra-sound guided insertion of tunneled pleural catheters (pleurX). These are becoming an increasingly important option for patients with malignant pleural effusions. We are also receiving more referrals and have been performing an increased number of EBUS/TBNA procedures. Our pulmonary oncology program is also integrated with the McGill thoracic surgery program. Surgeons now see patients once a week in the Peter Brojde Lung Cancer Center. In addition to thoracic surgery, we also partner closely with the Department of Radiation Oncology, the Cancer Nutrition and Rehabilitation Program and our pathology colleagues. Our Pathology Department has become one of the centers in Canada to routinely screen our patients for ALK translocations.

The work of our Tumour Board continues to be one of the most important tools in the comprehensive approach and treatment of lung oncology patients. The Tumour Board includes the participation and detailed discussion by physicians from Surgery, Radiotherapy, Nuclear Medicine, Pathology, in addition to our pulmonary oncology team (physicians, nurses, physiotherapists, a nutritionist) and the Cancer Nutrition Rehabilitation Program.

This year, we had a very successful fundraiser for lung cancer research: The first annual Lungevity Masquerade Ball, which was initiated by family members of our patients. It not only raised a significant amount of money, but also raised lung cancer awareness. A second event has been planned this year and other events are currently in the planning phase.

We continue to provide public information sessions about lung cancer, especially during Lung Cancer Awareness Month in November.

Our lung cancer research continues to grow with several publications this past year in peer reviewed journals and presentations at major international conferences including ASCO and the World Lung Cancer Conference.

Airways Center

At the Airways Center we offer state-of-the-art multi-dimensional and inter-disciplinary care for patients with asthma and COPD. Our nurse/ clinical specialists (CNS) Pascale Rioux (for asthma) and Ester Dajczman (for COPD) coordinate the care of the patients and follow them over their illness trajectory in conjunction with their pulmonary physician partners. We have expanded our asthma program to include sputum inflammatory profiles to patients not responding to usual therapeutic approach.

The COPD clinic continues to thrive and is based on the chronic care model striving to attend to patient's needs through continued education and self-managing support, smoking cessation, and integrated services. We have developed close links with Mount Sinai Hospital so that patients have access to pulmonary rehab and the CNS who works in both centers is able to transition many patients.

There is ongoing research in both asthma and COPD. A recently completed quality assurance project done following the introduction of the COPD program has shown that there was an important decrease in the number of visits to the Emergency Room, as well as admissions to the hospital for patients followed with our inter-disciplinary approach to COPD.

We are also partnering with programs in the pre-admission clinic for screening of lung disease and with the YM- YWHA to facilitate exercise for patients with COPD in the community.

Pulmonary Vascular Diseases

The pulmonary vascular aspect of the Division continues to be very active. With respect to acute thrombosis, we are in the completion of the recruitment phase of the ELOPE study. This is a CIHR, multi-center cohort study led out of the Jewish General Hospital looking at the long-term outcomes of patients with acute pulmonary embolism. We are also about to embark on another CIHR-funded study looking at the safety of withholding anti-coagulation in patients with small sub-segmental pulmonary emboli. The thrombosis consult service continues to grow and sees patients with a wide variety of coagulation disorders and the outpatient thrombosis clinic follows almost all patients with acute and chronic thrombotic disorders. The thrombosis service works closely with the Divisions of Hematology and Internal Medicine.

From a pulmonary hypertension standpoint, the pulmonary thromboendartectomy program continues to grow. We are having good surgical results in patients with chronic thromboembolic pulmonary hypertension and are looking at long-term outcomes. Clinically, we continue to co-operate very closely with the divisions of Cardiology and Rheumatology and see patients from all over the province with all forms of pulmonary hypertension. We provide rapid and thorough clinical assessment, follow-up and treatment of these complex disorders.

Tuberculosis

Our Tuberculosis clinic continues to be very active. During 2012, the clinic had over 1500 patient visits. During that year, 20-25 patients with active tuberculosis were being followed at any one time. Most of these patients require active contact tracing, which is done by both the TB clinic nurse and, depending on the extent of the exposure, by la Direction de la Santé Publique with whom we have very close ties. Research studies during this past year have included a health utility scale for patients for both latent and active TB, as well as creation of a database to understand host, environmental and mycobacterial characteristics in patients with tuberculosis.

Mount Sinai Hospital

Our patients benefit from close relationship with Mount Sinai Hospital and several of our physicians contribute to the clinical staffing and research activities there. The pulmonary programs and laboratory services complement those available at the Jewish General Hospital.

A comprehensive multidisciplinary program for the care of patients with chronic lung disease has been developed and has proven to be very successful. This program is coordinated by a dedicated nurse practitioner who divides her time between the JGH and Mount Sinai Hospital. Patients are followed by the nurse practitioner who is able to optimize the medical management, intervene early for exacerbations and facilitate the transfer of patients from the JGH to Mount Sinai when additional respiratory care and/or pulmonary rehabilitation is needed.

Many ongoing research initiatives have also been started at Mount Sinai Hospital year.

Publications:

Smith B.M., Schwartzman K., Kovacina B., Taylor J., Kasymjanova G., Brandao G., and **Agulnik J.S.**, Lung cancer histologies associated with emphysema on computed tomography. *Lung Cancer*. **76**(1): p. 61-6, 2012.

Suissa S., Dell'Aniello S., and **Ernst P.**, Long-term natural history of chronic obstructive pulmonary disease: severe exacerbations and mortality. *Thorax*. **67**(11): p. 957-63, 2012.

Suissa S. and **Ernst P.**, beta-blockers for COPD inpatients. *Thorax*. **67**(11): p. 936-7, 2012.

2. Teaching and learning (undergraduate and graduate)

The Division is fortunate enough to have medical students, residents and fellows throughout the academic year. Dr. P. Ernst supervised Dr. Lama Sakr in her Master of Science program in Epidemiology and Biostatistics.

Dr. Hirsch participates in Residency Training Committee and evaluation of Residents, as well as Mock Royal College Exams for Fellows.

Dr. Palayew is an examiner for Pulmonary Medicine for the Royal College of Physicians and Surgeons of Canada.

3. Involvement in the community:

We are intimately involved with the community in outreach teaching programs for our lung cancer program, as mentioned in the above summary. We also provide teaching to community doctors on a regular basis for lung diseases with conferences and rounds.

4. Partnerships:

Our lung cancer program is a model of inter-disciplinary approach with many other departments within the hospital, such as Radiology, Pathology, Nuclear Medicine and Radiation Oncology. Our Airways Center collaborates extensively with Mount Sinai Hospital and various CLSCs, in particular CLSC Cavendish, as well as the SDRSD. Our Tuberculosis program is in intimate contact with the Direction de la Santé Publique because of the nature of the illness.

5. Milestones:

The opening of the Peter Brojde Lung Cancer Center was a major milestone for us. Another milestone was the first successful fundraiser for lung cancer research that occurred during the past year and hopefully will be ongoing for many years.

New hires, promotions, and retirements

Dr. Lama Sakr has joined us during the past year. She has an expertise in pulmonary oncology and interventional bronchoscopy and will make an excellent addition to the Division. Dr. Andrew Hirsch received a promotion to Associate Professor of Medicine during the past year.

6. Honours, awards, and prizes:

In May 2012, Esther Dajczman was awarded the Prix Florance in the category of illness prevention for her many years' of innovative work with pulmonary patient population.

7. Fundraising:

Fundraising has been very active in our Division. We are fortunate enough to receive many donations that help support our research and clinical activities within our Division.

SECTION I – DIVISION STATUS UPDATE

1. Mission and objectives of the Division

The mission of the Division of Pulmonary Diseases is to offer excellent clinical care for patients suffering from pulmonary diseases. We also strive to provide excellent teaching to medical students, residents and fellows as well as the community at large. Research in all aspects of pulmonary diseases is also an extremely important activity within the Division.

2. A nominative list of academic staff, their academic rank

Dr. D. Small	Associate Professor of Medicine, Chief
Dr. J. Agulnik	Assistant Professor of Medicine, Associate Chief of Pulmonary Medicine, Director of Pulmonary Oncology
Dr. P. Ernst	Professor of Medicine
Dr. A. Hirsch	Associate Professor of Medicine
Dr. T. Jagoe	Assistant Professor of Medicine
Dr. M. Palayew	Assistant Professor of Medicine
Dr. C. Pepe	Assistant Professor of Medicine
Dr. L. Sakr	Assistant Professor of Medicine
Dr. N. Wolkove	Associate Professor of Medicine

SECTION II - GRANTS, PUBLICATIONS, AND SERVICE OUTSIDE OF MCGILL

1. Grants and awards received

Pulmonary and Pulmonary Oncology Ongoing Pharmaceutical Trials 2012

Hoffman-La Roche/Quintiles: A randomized, double-blind, placebo-controlled, phase 3 study of 1st line maintenance erlotinib (Tarceva®) versus erlotinib (Tarceva®) at the time of progression in patients with advanced NSCLC who have not progressed following 4 cycles of platinum-based chemotherapy

Bristol-Myers Squibb: Randomized, multicenter, double-blind, phase 3 trial comparing the efficacy of Ipilimumab in addition to paclitaxel and carboplatin versus placebo in addition to paclitaxel and carboplatin in subjects with stage IV/recurrent Non-Small Cell Lung

Novartis: An open label two-stage study of orally administered BKM120 in patients with metastatic non-small cell lung cancer with activated PI3K pathway

Morphotek: A randomized, double-blind, placebo-controlled, study of the safety and efficacy of farletuzumab in combination with carbo/taxol or docetaxel followed by pemetrexed in chemotherapy naïve subjects with stage IV adenocarcinoma with wild type EGFR

Astellas Pharma (OSI): A Randomized, Double-Blind, Phase 2 Study of erlotinib (Tarceva®) in combination with OSI-906 or placebo in Chemonaive Patients with Advanced NSCLC with Activating Mutations of the Epidermal Growth Factor Receptor (EGFR) Gene

Imclone (0805): A Randomized, Multicenter, Open-Label Phase 3 Study of Pemetrexed-Cisplatin Chemotherapy Plus Necitumumab (IMC-11F8) Versus Pemetrexed-Cisplatin Chemotherapy Alone in the First-Line Treatment of Patients with Stage IV Nonsquamous Non-Small Cell Lung Cancer (NSCLC)

GSK: (MAGE) A double-blind, randomized, placebo-controlled Phase III study to assess the efficacy of recMAGE-A3 + AS15 Antigen-Specific Cancer Immunotherapeutic as adjuvant therapy in patients with resectable MAGE-A3-positive Non-Small Cell Lung Cancer

Merck KGaA: START: Stimulating Targeted Antigenic Response To NSCLC - “A multi-center phase III randomized, double-blind placebo-controlled study of the cancer vaccine Stimuvax® (L-BLP25 or BLP25 liposome vaccine) in non-small cell lung cancer (NSCLC) subjects with unresectable stage III disease

Boehringer Ingelheim: Multicenter, randomized, double-blind, Phase III trial to investigate the efficacy and safety of oral BIBF 1120 plus standard pemetrexed therapy compared to placebo plus standard pemetrexed therapy in patients with stage IIIB/IV or recurrent non small cell lung cancer after failure of first line chemotherapy

Sanofi Aventis: (Cantarisk) A prospective, non-interventional, cohort survey on VTE risk patients receiving new chemotherapy for cancer

Sunnybrook/Scimega: A Randomized study of standard treatment with chemotherapy +/- the addition of enoxaparin in small cell lung cancer – RASTEN

Imclone (0806): A Randomized, Multicenter, Open-Label, Phase 3 Study of Gemcitabine-Cisplatin Chemotherapy Plus Necitumumab (IMC-11F8) Versus Gemcitabine-Cisplatin Chemotherapy Alone in the First- Line Treatment of Patients With Stage IV Squamous Non-Small Cell Lung Cancer (NSCLC)

CIHR - STATCOPE – Phase III Clinical Trial: Prospective Randomized Placebo-Controlled Trial of SimvaSTATin the Prevention of COPD Exacerbations (STATCOPE)

Boehringer –Ingelheim “A Randomized, Active Controlled, Double-Blind, Double-Dummy, Parallel Group design, multi-center trial to compare the efficacy and safety of 2.5µg and 5µg Tiotropium Inhalation Solution delivered by the Respimat® Inhaler with Tiotropium Inhalation Capsules 18µg delivered by the HandiHaler”

2. Scholarly works published in the 2012 calendar year

1. **Ernst P.**, Renoux C., Dell'aniello S., and Suissa S., Pramipexole use and the risk of pneumonia. BMC Neurol. **12**: p. 113, 2012.
2. **Ernst P.** and Suissa S., Systemic effects of inhaled corticosteroids. Curr Opin Pulm Med. **18**(1): p. 85-9, 2012.
3. Fox B., Langleben D., **Hirsch A.M.**, Schlesinger R.D., Eisenberg M.J., Joyal D., Blenkhorn F., and Lesenko L., Hemodynamic Stability After Transitioning Between Endothelin Receptor Antagonists in Patients With Pulmonary Arterial Hypertension. Can J Cardiol.2012 [Epub ahead of print]
4. Grossman M., **Agulnik J.**, and Batist G., The Peter Brojde lung cancer centre: a model of integrative practice. Curr Oncol. **19**(3): p. e145-59,2012.
5. Lapi F., Kezouh A., Suissa S., and **Ernst P.**, The use of inhaled corticosteroids and the risk of adrenal insufficiency. Eur Respir J.2012. [Epub ahead of print]

6. Lapi F., Wilchesky M., Kezouh A., Benisty J.I., **Ernst P.**, and Suissa S., Fluoroquinolones and the risk of serious arrhythmia: a population-based study. Clinical infectious diseases : an official publication of the Infectious Diseases Society of America. **55**(11): p. 1457-65, 2012.
7. Pinelli V., Laroumagne S., **Sakr L.**, Marchetti G.P., Tassi G.F., and Astoul P., Pleural fluid cytological yield and visceral pleural invasion in patients with epithelioid malignant pleural mesothelioma. J Thorac Oncol. **7**(3): p. 595-8, 2012.
8. **Sakr L.**, Roll P., Payan M.J., Liprandi A., Dutau H., Astoul P., Robaglia-Schlupp A., Loundou A., and Barlesi F., Cytology-based treatment decision in primary lung cancer: is it accurate enough? Lung Cancer. **75**(3): p. 293-9, 2012.
9. Smith B.M., Schwartzman K., Kovacina B., Taylor J., Kasymjanova G., Brandao G., and **Agulnik J.S.**, Lung cancer histologies associated with emphysema on computed tomography. Lung Cancer. **76**(1): p. 61-6, 2012.
10. Suissa S., Dell'Aniello S., and **Ernst P.**, Long-term natural history of chronic obstructive pulmonary disease: severe exacerbations and mortality. Thorax. **67**(11): p. 957-63, 2012.
11. Suissa S. and **Ernst P.**, beta-blockers for COPD inpatients. Thorax. **67**(11): p. 936-7, 2012.
12. Wilchesky M., **Ernst P.**, Brophy J.M., Platt R.W., and Suissa S., Bronchodilator use and the risk of arrhythmia in COPD: part 1: Saskatchewan cohort study. Chest. **142**(2): p. 298-304, 2012.
13. Baltzan, M.A., A.S. Scott, and **N. Wolkove**, Unilateral hemidiaphragm weakness is associated with positional hypoxemia in REM sleep. J Clin Sleep Med, **8**(1): p. 51-8, 2012.

SECTION III – CONFIDENTIAL INFORMATION

1. Consulting activities

Name of Faculty Member	Private Sector Consulting (# days)	Public Sector Consulting (# days)	Other (# of days) Please explain	Total
David Small	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
P. Ernst	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Submitted by:

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