



## Highlights of the Canadian Lung Cancer Conference 2016

### If two heads are better than one, how about 350?

In February 2016, 350 cancer specialists from across Canada gathered in Vancouver for the 16<sup>th</sup> annual Canadian Lung Cancer Conference chaired by Dr. Barb Melosky and Dr. Cheryl Ho. Participants included medical oncologists, radiation oncologists, surgeons, pathologists, oncology nurses as well as members of the pharmaceutical industry, who came together with a common interest in improving the care of patients with lung cancer in Canada.

### Getting the right drug to the right patient

Dr. Roy Herbst (Yale Cancer Centre, CT) and Dr. Peter Ellis (Juravinski Cancer Centre, ON) reviewed the advances in lung cancer drug treatment from global and Canadian perspectives. Dr. Ellis aptly summarized the evolution of therapy – *“It’s an exciting time to be a lung cancer doctor. There are a plethora of treatment options. The challenge is how to integrate them into practice.”*

Advances in the treatment of patients with EGFR-positive non-small cell lung cancer were discussed in a number of sessions. Dr. Frances Shepherd (University of Toronto, ON) presented on The Changing World of EGFR mutations, reviewing recent trials involving gefitinib and afatinib – EGFR inhibitors that are currently available in Canada. She also discussed the potential future role of osimertinib and rociletinib. These investigational 3<sup>rd</sup> generation oral EGFR TKI therapies have been shown to be effective in patients whose lung cancer cells have developed a specific EGFR mutation, T790M, that makes their cancer resistant to their initial EGFR-targeted therapy. Osimertinib and rociletinib are still in the research phase and not yet approved for use in Canada.

Immuno-oncology is a growing area of interest that focuses on how the body’s immune system functions and where it fails when cancer is present. Several conference presenters discussed nivolumab and pembrolizumab, new immune checkpoint inhibitors in development, which utilize PD-L1 inhibition to destroy lung cancer cells. These immunotherapies have been studied in advanced non-small cell lung cancer (both squamous and non-squamous cell types) and show promise in patients whose lung cancer has worsened during or after chemotherapy.

### Working together to deliver precision medicine

Getting the right drug to the right patient means understanding the unique features of the patient’s lung cancer cells. As new treatments become available, some patients may require additional biopsies over the course of their disease to determine if they are candidates for new drug therapies that target specific



cancer cell changes. Experts pointed out to conference-goers that delivering precision medicine will require cooperation and change in a number of areas in the healthcare system, such as the surgical and interventional radiology teams that perform the biopsies as well as the molecular testing department.

Dr. David Yankelevitz (Mount Sinai Medical Center, NY) discussed important advances made in lung imaging technologies and lung biopsy techniques. His fascinating talk on guided lung biopsy included images of a mosquito-inspired needle insertion process. Dr. Tom D'Amico (Duke Cancer Institute, NC) discussed the benefits of minimally invasive lung surgery and the ongoing need for surgeons to learn and adopt new surgical techniques into routine practice in order to continue to advance the standard of care.

### **Canadians committed to lung cancer research**

Dr. Glenwood Goss of the Canadian Cancer Trials Group (CCTG) acknowledged Canada's strong and successful history in conducting clinical research in lung cancer. He reviewed a number of trials currently recruiting patients, as well as other studies that will be opening later in 2016. The ongoing interest in lung cancer research across Canada provides important opportunities for patients with various types of lung cancer to potentially benefit from new therapies as well as contribute to a knowledge base that will help patients in the future.

The conference concluded with Dr. Cheryl Ho presenting the BMS Lifetime Achievement Award to Dr. Frances Shepherd. Over her career, Dr. Shepherd has designed and led more than 100 clinical trials that brought new therapies into daily practice and improved the care of patients with lung cancer around the world. Earlier this year, Dr. Shepherd was named Officer of the Order of Canada.

Information about the Canadian Lung Cancer Conference 2016 can be found at [www.clcco.ca](http://www.clcco.ca).

**This conference summary was prepared by FUSE Health ([www.fusehealth.ca](http://www.fusehealth.ca)) with editorial review by Dr. Barb Melosky and Dr. Cheryl Ho.**