



## Optimism about breakthroughs in the age of targeted therapy: the Canadian Lung Cancer Conference 2014; Vancouver, British Columbia; February 7, 2014

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### ABSTRACT

The Canadian Lung Cancer Conference 2014, held in Vancouver, British Columbia, was an opportunity for Canadian lung cancer researchers and treatment experts to meet and discuss current breakthroughs and paradigm shifts in the field. The full-day program featured lectures, discussion, and debates, with ample time for informal networking. We are already looking forward to next year's meeting (scheduled for February 6, 2015), where we expect to discuss and reflect on some of the latest results and breakthroughs from both the American Society of Clinical Oncology and the European Society for Medical Oncology.

### KEY WORDS

Lung cancer conferences, biomarker testing, targeted therapies, individualized therapies, quality measures

### 1. INTRODUCTION

On February 7, 2014, more than 250 participants gathered in Vancouver to attend the annual Canadian Lung Cancer Conference, with the common goal to improve the care of patients with lung cancer. This multidisciplinary continuing medical education–accredited meeting featured a range of topics for medical oncologists, oncology nurses, respirologists, radiation oncologists, and thoracic surgeons. Growing enthusiasm for this topic is evidenced by the growth in the annual conference from the original 32 participants in 2000.

The conference had an atmosphere of optimism and excitement, as international experts and Canadian lung cancer gurus discussed emerging treatment innovations and the results of recent trials. Common presentation themes included biomarker testing and targeted therapies, the promise of individualized therapies, the potential for new radiation techniques to improve outcomes, and the need for more quality measures.

### 2. PROGRAM

At the breakfast symposium, Dr. James Yang, National Taiwan University Hospital, provided a history of therapies targeted to the epidermal growth factor receptor, and introduced the newest generation of mutation-selective therapies that improve survival in lung cancer patients. Dr. Sunil Verma, Odette Cancer Centre, presented the results of a recent biomarker survey and suggested that a national biomarker strategy for lung testing is necessary in advance of an anticipated “biomarker tsunami.”

Dr. Alice Shaw, Massachusetts General Hospital, reviewed the current landscape of lung cancer therapy, enlightened the audience about new second- and third-line treatments for patients with *ALK* mutations, and discussed moving crizotinib into a first-line setting. Immunotherapy through inhibition of PD-1 and PD-L1 are exciting and will likely be the next breakthrough in lung cancer, treating both squamous and nonsquamous lung cancers.

Dr. Robert El-Maraghi, Simcoe Muskoka Regional Cancer Centre, emphasized the importance of upfront mutational testing for non-small-cell lung cancer and multidisciplinary involvement to ensure that appropriate biomarker information is available before the start of treatment. Dr. Martin Tammemagi, Brock University, presented a validated Canadian risk prediction model to improve the accuracy of lung cancer screening.

The radiation oncology session featured Dr. Corinne Faivre-Finn, Christie NHS Foundation Trust (United Kingdom), who gave an educational talk on radiotherapy technology advances and outcomes. Dr. Andrea Bezjak, University of Toronto, reflected on Dr. Faivre-Finn's conclusions and lent a Canadian perspective to the discussion. Both speakers emphasized the need to identify the patients that are most likely to benefit from radiotherapy and to provide more individualized therapy.

The surgical oncology session featured Dr. Richard Whyte, a thoracic surgeon from Beth Israel

Deaconess Medical Centre, who provided a broad perspective on technical innovations as they pertain to surgery. He provided examples of “disruptive innovations” that are changing the surgical treatment of lung cancer and the benefits and issues of each one.

After a networking lunch, participants attended breakout sessions in radiation oncology, nursing oncology, and medical oncology. The radiation oncology session focused on issues pertaining to stereotactic body radiation therapy, with presentations by Drs. Corinne Faivre–Finn, Andrea Bezjak, Patrick Cheung, and Arand Swaminath. The nursing oncology session featured talks on patient care issues by Michelle Turner, Elizabeth Beddard–Huber, and Ruth Topolnick.

The well-attended medical oncology session featured a discussion about rare tumours such as carcinoid and small-cell carcinoma, and the pathologic differences between those entities. Dr. Diana Ionescu, BC Cancer Agency, emphasized the heterogeneity and characteristics associated with neuroendocrine tumours of the lung. Dr. James Yao, world carcinoid expert, discussed trials and potential new treatments for carcinoid non-small-cell lung cancer, emphasizing the need for a multidisciplinary approach. Finally Dr. Randeep Sangha described the possible driver mutations and targets in small-cell lung cancer.

The entire group then reconvened for the Great Debates. Dr. Benoit Samson debated against Dr. Mark Vincent about whether patients with stage IV lung cancer and bone metastasis should be started on bone-targeted drugs. A debate about the best immunotherapy for non-small-cell lung cancer featured Dr. Victor Cohen arguing the merits of

targeting PD-1 and Dr. Paul Wheatley–Price arguing for PD-L1. Finally, Drs. Shantanu Banerji and Janine Davies debated whether pharmaceutical companies should pay for the biomarker companion tests for their drugs. The debates prompted much discussion, and touchpad voting yielded unexpected results in all cases. This annual event is the highlight of the meeting, features humorous—and yet extremely educational—exchanges on several provocative lung cancer topics.

### 3. SUMMARY

This year’s meeting was successful for all. We thank our many outstanding guests and speakers, our hard-working committee members, and our many generous sponsors. Please set aside February 6, 2014, for next year’s conference in Vancouver. We look forward to meeting you then!

### 4. CONFLICT OF INTEREST DISCLOSURES

BM has received honoraria from Roche, Lilly, and Boehringer Ingelheim for participation in advisory board meetings. CH has no financial conflicts of interest to disclose.

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