Prof. Nir Peled: CT first, biomarkers next

Submitted Nov 07, 2017. Accepted for publication Nov 28, 2017. doi: 10.21037/tlcr.2017.12.04

View this article at: http://dx.doi.org/10.21037/tlcr.2017.12.04

Editor's Note

The 18th World Conference on Lung Cancer (WCLC) organized by the International Association for the Study of Lung Cancer (IASLC) was held in Yokohama, Japan from 14–18 October, 2017. As the world's largest multidisciplinary oncology conference on lung cancer, it gathered more than 7,000 key opinion leaders, professionals and researchers from over 100 countries, who came together to unfold a series of in-depth academic exchanges and collaborations. In the meantime, AME seized the opportunity to conduct interviews with a number of experts.

Expert introduction

Prof. Nir Peled, MD, PhD, FCCP (Figure 1) is the Associate Professor at the Faculty of Medicine, Ben-Gurion University, Beer Sheva, Israel. He is a pulmonologist and medical oncologist. Prof. Peled is the Director of the Cancer Center at Soroka Medical Center. Previously he was the head of the Thoracic Cancer Unit and the Center for Precision Cancer Care at Davidoff Cancer Center at Rabin Medical Center. In addition, Prof. Peled is the head of the Thoracic Oncology Assembly of the European Respiratory Society (ERS) and the Chair of the Early Detection & Prevention Committee of the IASLC. He is also a member of the Editorial Board of the Journal of Thoracic Oncology (IASLC), the Journal of Global Oncology [the American Society of Clinical Oncology (ASCO)] and the Framingham program in Immuno-Oncology. Prof. Peled focuses on the wide clinical and translational perspectives of lung cancer and studies specifically the biomarkers of lung cancer, personalized based medicine in lung cancer and immunooncology.

Prof. Peled has graduated medical school, as MD, PhD, Cum Lauda degree, at the Rappaport Faculty of medicine, Technion-Israel Institute of Technology, Haifa, Israel at 1994. Thereafter, he served as a physician in the Israeli Defense Forces until 1998. At 2003 Prof. Peled has finished

Internal Medicine Residency at Rabin Medical Center, Tel-Aviv and at 2007 he has been certified as an expert pulmonologist in the same institute.

Focusing on lung cancer, Prof. Peled has started his third residency in Medical Oncology at Davidoff Cancer Center, Rabin Medical Center, Tel-Aviv University, Israel, and continued his education focusing on lung cancer at the thoracic program at the University of Colorado Cancer Center under Prof. Paul Bunn and Prof. Fred Hirsch as a Fogarty Fellow (Fulbright Scholar). Thereafter, he has established a unit for translational studies for thoracic malignancies in Israel, which became the biggest and the most active in Israel with more than 400 new advanced lung cancer patients every year.

Prof. Peled has published more than 120 peer-reviewed manuscripts mainly in the field of lung cancer and other pulmonary diseases, wrote several book chapters and a reviewer for numerous international journals. During 2010, Prof. Peled has achieved the MERIT award from the ASCO; at 2008 the "IASLC Fellowship/Young Investigator Award"; and at 2007 he received the "Young Investigators Honorable Mention Award" by the American Academy of Sleep Medicine (AASM). Prof. Peled is collaborating with the top opinion leaders in the field of lung cancer and highly active in international committees and conferences in the field of lung cancer.

Interview

TLCR: What makes you interested in the field of lung cancer?

Prof. Peled: Lung cancer is the No. 1 killer among all cancers. The impact of diagnosis of lung cancers is tremendous. Over the past year, we were able to increase the survival rate and diagnose more patients with the implementation of lung cancer screening, which would ultimately avoid many deaths by providing patients with curative care.

The use of CT screening is highly efficient and highly



Figure 1 Prof. Nir Peled and our editor at WCLC 2017.



Figure 2 Prof. Nir Peled: CT first, biomarkers next (1). Available online: http://asvidett.amegroups.com/article/view/22844

beneficial. Patients at the ages of 54–74 are recommended to receive low-dose CT every year which can effectively reduce the risk of the cancer-related mortality. Only if we detect the disease early can we treat the disease as soon as possible.

On the systemic arena, it is a fascinating field where we can switch between modes of treatment significantly. We can decide which technologies to use that make the best of them to patients. For instance, we can choose to use immunotherapy or targeted therapy, and avoid using chemotherapy for our patients. It is therefore devastating!

TLCR: How do you see the prospect of CT screening for lung cancer? Is there any room for improvement?

Prof. Peled: Evidence has proven that screening for lung cancer saves life. The next thing we should consider is how we implement it around the world. Each region has its own approaches to conduct the CT, but what we need to do is

to implement it with the intervention of multi-disciplinary teams. The next step is to manage patients with tiny nodules that are picked up by the CT and to make use of non-invasive biomarkers on top of the screening platform. That would allow us to have a higher specificity of the diagnosis, and to effectively reduce invasive procedures for patients with tiny nodules who have normal biomarkers. I think this is the next topic that we should focus on in terms of research and clinical implications.

TLCR: What's the most promising biomarker for early detection of lung cancer?

Prof. Peled: There are several potential biomarkers for early detection of lung cancer that seem to be promising. For example, exhaled breath, protein biomarkers in blood, microRNA signatures in bronchial airways and autoantibodies. However, so far the sensitivity of biomarkers is not as good as that of low-dose CT scan. This is why we recommend to conduct CT first, then biomarkers.

TLCR: Do you think circulating biomarkers will eventually replace CT?

Prof. Peled: CT screening should be the first test to perform due to higher sensitivity. As I have just mentioned, the sensitivity of the current circulating biomarkers is not high enough. As a result, we may miss out many of our patients. However, if we carry out CT screening first, and then circulating or non-invasive biomarkers, we can increase the specificity of the test and treat the patients accordingly. At the moment, I won't confuse the community. The data of CT screening is the best and hence I think it is what we should do first.

TLCR: What's your advice to younger physicians?

Prof. Peled: Younger physicians are having much better tools today than we used to have in the past. Therefore, we have to train our physicians to acquire a set of different skills. In time, they will be able to apply their knowledge into practice and manage to make good use of the technologies and make clinical decisions. Not only should they read the textbooks but also be given the tools to learn in a practical manner. Ultimately, we will be able to cultivate more and more great physicians in the future.

For the original content, please view the interview video (*Figure 2*).

Acknowledgements

None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Cite this article as: Li B, Xie L. Prof. Nir Peled: CT first, biomarkers next. Transl Lung Cancer Res 2018;7(Suppl 1):S64-S66. doi: 10.21037/tlcr.2017.12.04

References

 Li B, Xie L. Prof. Nir Peled: CT first, biomarkers next. Asvide 2018;5:074. Available online: http://asvidett. amegroups.com/article/view/22844

(Science Editors: Brad Li, Lilian Xie, TLCR, tlcr@amepc.org)