Editor's Note:
The 18th World Conference of Lung Cancer (WCLC), hosted by International Association for the Study of Lung Cancer (IASLC), was held from October 15th–18th in Yokohama, Japan. It's our great pleasure to have a brief interview with Dr. Tetsuya Mitsudomi.

Meet the Professor

Dr. Tetsuya Mitsudomi: next generation sequencing may become the focus of the future study in the field of lung cancer

Submitted Nov 16, 2017. Accepted for publication Nov 25, 2017.
doi: 10.21037/tlcr.2017.12.02
View this article at: http://dx.doi.org/10.21037/tlcr.2017.12.02

Expert Introduction

Dr. Tetsuya Mitsudomi is from the Department of Surgery, Division of Thoracic Surgery, Kinki University Faculty of Medicine, Osaka-Sayama, Japan (*Figure 1*).

He is a president of Japanese Lung Cancer Society [2014–] and is a board of director of IASLC [2011–2015], Japanese Association of Chest Surgery [2013–] and Japanese Society of Medical Oncology [2013–]. He is an active member of AACR, ASCO, ESMO, Japanese Surgical Society, Japanese Cancer Association, Japanese Association of Thoracic Surgery, Japan Society of Chest Diseases, etc.

He is a recipient of Shinoi-Kawai Award from the Japan Lung Cancer Society [2001], JCA–Mauvernay Award from the Japanese Cancer Association [2005] and Mary Matthews Award from the International Association of Study of Lung Cancer [2013] and Kiyoko and Paul Bourdarie-Goto Scientific Prize [2014].

Figure 1 Dr. Tetsuya Mitsudomi and our Science Editor Macy on WCLC held in Yokohama, Japan in October, 2017.

Interview (*Figure 2*)

TLCR: Would you like to share with us the recent advances of molecular diagnosis in targeted therapy of lung cancer?

Dr. Mitsudomi: Until the end of last century, chemotherapy was the only treatment for lung cancer. As a result, the average survival time for the stage four patients was about 1 year. After that time, the target agents came into the market. Initially, we did not know what patients would benefit from such kind of therapy. After the discovery of the many gene mutations, for example, EGFR and ROS1 mutation, we could find out what patients would benefit from this kind of therapy. In Japan this year, we have found a drug to treat ROS1 mutated lung cancer patients. The testing of new oncogene drivers becomes very important in Japan now. Also, in these 5 years, the immune checkpoint therapy has been introduced into the clinical practice for the patient selection in PD-L1 testing.

TLCR: What is the challenge and research tendency in this area?

Dr. Mitsudomi: The problem is that, compared to the EGFR mutation, the translocation of some new drivers, such as ROS1, MET and RET, is very rare. As Asians, we are lucky that the EGFR mutation is presented to be about 50% in the patients with lung carcinoma. Only 1% or 2% of such new driver gene alterations is very difficult to find. So in the future we may have to introduce next generation

Figure 2 The video of interview with Dr. Tetsuya Mitsudomi on WCLC 2017 in Yokohama, Japan (1).
Available online: http://www.asvide.com/articles/1899

sequencing to screen out all the possible driver gene mutations. I think we will concentrate more on the next generation sequencing, which can test any gene mutation as well as the expression level of PD-L1.

TLCR: As an experienced and outstanding pathologist, would you like to give young researchers a piece of advice?

Dr. Mitsudomi: To attend this kind of meeting, I mean, World Conference of Lung Cancer is very important to make a network with people. You can talk to many famous researchers over the world and get friends of your age. This step is very important to develop your career. I hope the young researchers treat patients with patience and care. If you find something different from what you have known already, then that may be the source of your research. That's my suggestion.

Cite this article as: Li G, Liu M. Dr. Tetsuya Mitsudomi: next generation sequencing may become the focus of the future study in the field of lung cancer. Transl Lung Cancer Res 2017;6(Suppl 1):S92-S93. doi: 10.21037/tlcr.2017.12.02

Acknowledgements

None.

Footnote

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

References

1. Li G, Liu M. The video of interview with Dr. Tetsuya Mitsudomi on WCLC 2017 in Yokohama, Japan. Asvide 2017;4:577. Available online: http://www.asvide.com/articles/1899

(Science Editor: Gin Li, Macy Liu, TLCR, editor@tlcr.org)

