

The era of a “liquid biopsy” may be on the horizon in non-small cell lung cancer

As an integral part of precision medicine, the role of liquid biopsy in non-small cell lung cancer (NSCLC) is highlighted in this special issue of *Journal of Thoracic Disease* with a selection of articles written by a panel of eminent experts. There are many reasons to consider NSCLC as a potential ideal field of application for liquid biopsy: first, the availability of a non-invasive and repeatable method for diagnosis and disease monitoring could be extremely useful in NSCLC patients, considering that physicians have difficulty in obtaining an adequate tumor tissue with standard procedures and that patients are not always suitable to receive a re-biopsy; second, analysis of circulating tumor cells (CTCs) or circulating tumor DNA (ctDNA) which originate from all potential lesions could overcome the disadvantages of single site biopsy; last but not least, recent studies showed either that CTCs count may have a prognostic value in NSCLC or that molecular characterization of CTCs/ctDNA may permit the assessment of druggable alterations.

On the other hand, several issues still remain to be addressed in this field such as standardization of CTCs detection methods, development of more powerful and less expensive technologies and comparison between different liquid biomarkers (e.g., CTCs, ctDNA, exosomes, secretome).

Acknowledgements

I would like to thank the Editorial Team of *Journal of Thoracic Disease* for giving me the opportunity to coordinate this special issue and all the experts who have so greatly contributed to this project.



Dr. Alfredo Tartarone

Alfredo Tartarone

Division of Medical Oncology, Department of Onco-Hematology, IRCCS-CROB Referral Cancer Center of Basilicata, Rionero in Vulture (Pz), Italy.

(Email: tarta1@virgilio.it)

doi: 10.21037/jtd.2017.07.29

Conflicts of Interest: The author has no conflicts of interest to declare.

View this article at: <http://dx.doi.org/10.21037/jtd.2017.07.29>

Cite this article as: Tartarone A. The era of a “liquid biopsy” may be on the horizon in non-small cell lung cancer. *J Thorac Dis* 2017;9(Suppl 13):S1322. doi: 10.21037/jtd.2017.07.29