

The importance both of early diagnosis and smoking cessation in the battle against lung cancer

Alfredo Tartarone

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

Correspondence to: Dr. Alfredo Tartarone. Department of Onco-Hematology, Division of Medical Oncology, IRCCS-CROB Referral Cancer Center of Basilicata via Padre Pio 1, 85028 Rionero in Vulture (PZ), Italy. Email: tarta1@virgilio.it.

Submitted Jan 30, 2019. Accepted for publication Feb 03, 2020. doi: 10.21037/jtd.2020.02.18 **View this article at:** http://dx.doi.org/10.21037/jtd.2020.02.18

The importance both of early diagnosis and smoking cessation to reduce the incidence and mortality of lung cancer (LC) is highlighted in this special issue of *Journal of Thoracic Disease* with a selection of articles written by a panel of eminent experts.

Screening programs are fundamental to detect early LC and to reduce the mortality rate, as demonstrated by several randomized trials with low-dose computed tomography (LDCT) in high-risk subjects (1-3). However, although LDCT screening is already available in some countries, its large-scale implementation has not yet taken place.

Since 1950 Wynder and Graham in their study published in the Journal of the American Medical Association (now known as 7AMA) reported the correlation between tobacco smoking and LC (4). Tobacco smoking is a leading cause not only of LC but also of cardiovascular diseases. The magnitude of the problem has forced many nations to formulate public policies related to tobacco usage with the aim to encourage smokers to stop smoking, to discourage non-smokers from starting and to protect non-smokers from the effects of passive smoking. However, the number of smokers is declining only in developed countries, while in the rest of the world the number of smokers is increasing. As recently reported, in USA the continuous decrease in LC cancer mortality is mainly due to smoking reduction interventions, as well as to advances in LC treatment; moreover, LC incidence declines twice as fast in men as in women, reflecting differences in tobacco uptake and cessation between males and females (5).

In conclusion, implementation of screening programmes, tobacco control policies, new smoking cessation methods, as

well as advances in diagnosis and treatment, represent the best strategy to transform LC in a preventable and a curable disease.

Acknowledgments

I would like to thank all the experts who have so greatly contributed to this project. *Funding:* None.

Footnote

Provenance and peer review: This article was commissioned by the editorial office, *Journal of Thoracic Disease* for the series "Improving Outcomes in Lung Cancer Through Early Diagnosis and Smoking Cessation". The article did not undergo external peer review.

Conflicts of Interest: The author has completed the ICMJE uniform disclosure form (available at http://dx.doi. org/10.21037/jtd.2020.02.18). The series "Improving Outcomes in Lung Cancer Through Early Diagnosis and Smoking Cessation" was commissioned by the editorial office without any funding or sponsorship. AT served as the unpaid Guest Editor of the series and serves as an unpaid editorial board member of *Journal of Thoracic Disease* from Aug 2019 to Jul 2021.

Ethical Statement: The author is accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are

appropriately investigated and resolved.

Open Access Statement: This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: https://creativecommons.org/licenses/by-nc-nd/4.0/.

References

 National Lung Screening Trial Research Team, Aberle DR, Adams AM, et al. Reduced lung-cancer mortality with

Cite this article as: Tartarone A. The importance both of early diagnosis and smoking cessation in the battle against lung cancer. J Thorac Dis 2020;12(7):3813-3814. doi: 10.21037/jtd.2020.02.18

low-dose computed tomographic screening. N Engl J Med 2011;365:395-409.

- De Koning H, Van Der Aalst C, Ten Haaf K, et al. Effects of volume CT lung cancer screening. Mortality results of the NELSON randomized-controlled population based trial. J Thorac Oncol 2018;13:S185.
- Pastorino U, Silva M, Sestini S, et al. Prolonged lung cancer screening reduced 10-year mortality in the MILD trial: new confirmation of lung cancer screening efficacy. Ann Oncol 2019;30:1162-9.
- 4. Wynder EL, Graham EA. Tobacco smoking as a possible etiologic factor in bronchiogenic carcinoma; a study of 684 proved cases. J Am Med Assoc 1950;143:329-36.
- Siegel RL, Miller KD, Jemal A. Cancer statistics, 2020. CA Cancer J Clin 2020;70:7-30.