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Emphysema and lung cancer in population-based CT screening

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Propositions

Emphysema and lung cancer in population-based CT screening

1. Chinese never smokers have a higher prevalence of emphysema than Dutch never smokers after adjusting for; demographic, smoking, and fume exposure variables. (Chapter 2)
2. Older age and male sex increases the odds of emphysema; a similar increase is observed in both Chinese and Dutch general populations. (Chapter 2)
3. Per-lobe analysis for emphysema severity shows good reproducibility in Chinese and Dutch general populations. (Chapter 3)
4. Visual emphysema assessed on chest CT is associated with a higher odds of lung cancer and lung nodules, with the strength of association increasing with emphysema severity. (Chapters 4 & 5)
5. In a general Chinese population, detected lung nodules are more likely to be in the positive Lung-RADs category in individuals with centrilobular emphysema compared to individuals with no emphysema. (Chapter 5)
6. Researchers should adopt a more uniform approach to assessing CT-defined emphysema in order to determine the true burden of emphysema across different populations and CT systems. (This thesis)
7. CT-defined emphysema may be considered an imaging marker for lung cancer, in turn helping to improve eligibility criteria and determine an optimal screening frequency for lung cancer screening. (This thesis)
8. “We should take comfort that while we may have more still to endure, better days will return.”
尽管我们可能还要忍受更多苦难，但美好的日子终将到来。 - Queen Elizabeth II
9. Success only comes through hard work. 艰难困苦，玉汝于成。 - 张载《正蒙·乾称篇》

Xiaofei Yang

The Netherlands, March. 2023