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Letter

## Understanding the lung cancer mortality reductions produced by low-dose CT screening

Yuki Furukawa\*

Tokyo Musashino Hospital, Tokyo, Japan; Department of Neuropsychiatry, University of Tokyo Hospital, Tokyo, Japan

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I read with great interest the publication entitled “Results from the randomised UKLS trial: Lung cancer mortality reduction by LDCT screening confirmed in an international meta-analysis” [1]. The authors reported the results of the UKLS trial, which was prematurely stopped and therefore underpowered. Results were non-significant both for lung cancer mortality and all-cause mortality in this single trial, but when they were pooled with previous trials, they showed an improvement in lung cancer mortality, as well as in all-cause mortality. They reported the effect sizes, however, only in terms of relative risks, which often lead to readers’ misinterpretations of the magnitude of benefits or harms [2,3]. Providing absolute risks together would be preferable [2,3].

I have calculated the absolute risk differences using numbers provided in the publication [1]. Given the control event rate among people aged 50–75 with an elevated risk of developing lung cancer as found in UKLS trial, which is, in the median follow-up period of 7.3 years, 23 per 1,000 (46/1,981) for lung cancer mortality and 134

per 1,000 (266/1,981) for all-cause mortality, low-dose chest CT screening would lead to 20 per 1,000 [95%CI 18 to 21] for cancer mortality and 130 per 1,000 [126 to 134] for all-cause mortality [1].

I believe that providing this information together with relative risks will make the interpretability of the publication better and enhance the implication of this research for policy making even more.

#### Author Contribution

YF conceptualized the letter and wrote it.

#### Declaration of Interests

YF declares no conflicts of interest.

#### References

- [1] Field JK, Vulkan D, Davies MPA, Baldwin DR, Brain KE, Devaraj A, et al. Results from the randomised UKLS trial: Lung cancer mortality reduction by LDCT screening confirmed in an international meta-analysis. *Lancet Reg Health Europe* 2021. doi: [10.1016/j.lanepe.2021.100179](https://doi.org/10.1016/j.lanepe.2021.100179).
- [2] Schwartz LM, Woloshin S, Dvorin EL, Welch GH. Ratio measures in leading medical journals: structured review of accessibility of underlying absolute risks. *BMJ* 2006. doi: [10.1136/bmj.38985.564317.7C](https://doi.org/10.1136/bmj.38985.564317.7C).
- [3] Akl EA, Oxman AD, Herrin J, Vist GE, Terrenato I, Sperati F, et al. Using alternative statistical formats for presenting risks and risk reductions. *Cochrane Database Syst Rev* 2011. doi: [10.1002/14651858.cd006776.pub2](https://doi.org/10.1002/14651858.cd006776.pub2).

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\* Corresponding author: Dr. Yuki Furukawa, MD., Tokyo Musashino Hospital, 4-11-11, Komone, Itabashi-ku, Tokyo, 173-0037, Japan, Phone: +81- 3-5986-3111

E-mail address: [furukawa.y.psy@gmail.com](mailto:furukawa.y.psy@gmail.com)

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