



Reply to: Measuring longitudinal adherence to screening needs international standards

Dear Editor,

We would like to thank dr Braendle and dr Bulliard for their corresponding letter on our paper on the influence of irregular screening on the presence of advanced breast cancer. In this paper we found that irregular screening increased the risk of advanced stage breast cancer at diagnosis by 17% compared to regular screening, and that never attenders had even an almost 6 fold increased risk compared to regular attenders [1]. We fully agree with the comment that the time since last mammography (TSLM) is another good indicator for the probability of finding an advanced cancer in an irregular screened population.

We also agree that the probability of the presence of advanced breast cancer is very dependent on the definition of irregularity. Repeated participation (longitudinal adherence) is a key indicator of the potential effectiveness of any cancer screening program [2]. However, the definition of longitudinal adherence, and how it can be calculated from the available data of a given screening program, strongly influences the outcomes on effectiveness as has also be pointed out by Doria-Rose et al. [3] We therefore fully agree that a standardization of indicators for adherence assessment is needed in order to compare benefits of regular screening between different screening programs. This will allow us to better inform women and policy makers on the possible risks of non-participation in breast cancer screening.

References

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diagnosis: a population-based study. *Breast* 2022 Oct;65:61–6. <https://doi.org/10.1016/j.breast.2022.07.004>. Epub 2022 Jul 8. PMID: 35820298; PMCID: PMC9284440.

- [2] Bulliard JL. Time to use measures of longitudinal adherence in cancer screening programmes. *Int J Cancer* 2021 Jul 15;149(2):248–9. <https://doi.org/10.1002/ijc.33582>. Epub 2021 Apr 17. PMID: 33834483.
- [3] Doria-Rose VP, Lansdorp-Vogelaar I, McCarthy S, Puricelli-Perin DM, Butera V, Segnan N, Taplin SH, Senore C. Measures of longitudinal adherence to fecal-based colorectal cancer screening: literature review and recommended approaches. *Int J Cancer* 2021 Jul 15;149(2):316–26. <https://doi.org/10.1002/ijc.33589>. Epub 2021 Apr 17. PMID: 33811643.

Lilu Ding^{a,*}, Marcel J.W. Greuter^{b,c}, Guido Van Hal^{d,e}, Geertruida H. de Bock^a

^a Department of Epidemiology, University of Groningen, University Medical Center Groningen, Groningen, the Netherlands

^b Department of Radiology, University of Groningen, University Medical Center Groningen, Groningen, the Netherlands

^c Department of Robotics and Mechatronics, University of Twente, Enschede, the Netherlands

^d Department of Social Epidemiology and Health Policy, University of Antwerp, Antwerp, Belgium

^e Center for Cancer Detection (CvKO) in Flanders, Belgium

* Corresponding author.

E-mail address: l.ding@umcg.nl (L. Ding).

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