

Author's reply to Thyroid cancer: An epidemic of disease or an epidemic of diagnosis?

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Dear Sir,

We thank Drs. Franceschi and Vaccarella¹ for their interest in our work, and for the additional comments and insights they provided on the recent apparent epidemic of early papillary thyroid cancers.²

The choice of the scales in figures of trends in rates in different countries remains arbitrary. The use of different scales for various countries optimizes the within-country information, whereas the use of a single scale for all countries optimizes the between-country comparison; however, it makes difficult to investigate country-specific trends, in particular for those with low rates.

A key observation by Drs. Franceschi and Vaccarella is that the rise in female thyroid cancer incidence over the last two decades has been largely heterogeneous across selected highincome countries providing data, and that there are at least three countries (Denmark, UK and Japan) where the rise has been modest in absolute terms—though not in relative ones as indicated in Figure 5. Such a moderate rise has already been observed in selected well-surveilled populations.³ Drs. Franceschi and Vaccarella attributed the relatively modest absolute rise in thyroid cancer incidence in Denmark, UK and Japan to different organization in their health systems and in their utilization of innovative diagnostic practices, although the quantification of the role of these factors remains elusive.

We agree with Drs. Franceschi and Vaccarella that overdiagnosis of thyroid cancer can have serious long-term consequences, and that more conservative approaches to the management of low-risk thyroid cancers are required. We also agree that the implementation of randomized clinical trials on such management would assist in providing evidencebased indications.

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References

- Franceschi S, Vaccarella S. Thyroid cancer: An epidemic of disease or an epidemic of diagnosis? *Int J Cancer*. 2014 Nov 4. doi: 10.1002/ijc.29311. [Epub ahead of print].
- La Vecchia C, Malvezzi M, Bosetti C, et al. Thyroid cancer mortality and incidence: A global overview. *Int J Cancer.* 2014 Oct 4. doi: 10.1002/ijc.29251. [Epub ahead of print].
- Levi F, Randimbison L, Te VC, et al. Thyroid cancer in Vaud, Switzerland: An update. *Thyroid* 2002;12:163–8.

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