

Letter to the Editor

Re: "Smokeless tobacco use and risk of cancer of the pancreas and other organs" by Boffetta *et al.*

Lars Ramström^{1*}

¹*Institute for Tobacco Studies, Stockholm, Sweden*

Dear Sir,

The study presented recently in the *Journal of Cancer* by Boffetta *et al.*¹ suffers from several weaknesses that make the conclusions highly questionable.

Their conclusion that "...smokeless tobacco products may be carcinogenic on the pancreas" is, somewhat surprisingly, based on the finding that users of smokeless tobacco had an increase of the relative risk of pancreatic cancer that "...was restricted to current tobacco smokers." This calls for a careful assessment of the possible confounding of tobacco smoking, something that requires a good set of exposure data both at baseline and follow-up. Baseline data are weak by neglecting to identify the different kinds of smokeless tobaccos (skrå, Norwegian snuff, Swedish snuff) with different characteristics that were in use in Norway at that time. Even more seriously, follow-up data are totally absent. Commenting on this, Boffetta *et al.*¹ speak about "...the decrease in the prevalence and use of snus among Norwegian men during the study period." This is highly misleading, because the full picture shows a downward trend till 1983 only, and after that year, a substantial increase. According to the official Norwegian statistics the per capita consumption of snuff at the end of the study period, 2001, was 41% higher than that in 1983. During the study period there have also been quite substantial changes of the smoking habits of Norwegian men. The annual smoking surveys by Statistics Norway, commissioned by the Directorate for Health and Social Affairs, report that the prevalence of daily smoking among Norwegian men has decreased from above 50% in 1973 to 30% in 2001. The picture is further complicated by the probability that, in addition to the changes during the study period in smoking and snus use *per se*, there has been an interaction between smoking and snuff use. Many of those who have quit smoking may have done so using snus as a cessation aid, so as has been the case in Sweden. Another development during the study period is the switch from Norwegian snuff to Swedish snuff, the only one of these products that has been recognized as a low-Nitrosamine product. At the beginning of the study period the market share of Swedish snuff was small, but has thereafter been rapidly increasing to reach a dominating position.² The total absence of analysis of

all these developments during follow-up is a very serious weakness of the study.

Beside their core subject area Boffetta *et al.*¹ also discuss whether the use of products like low-Nitrosamine snuff should be encouraged as an alternative to tobacco smoking. Although their own findings confirm that snuff entails no risk for a number of cancers and less risk than smoking for pancreatic cancer, they try to deny that tobacco-attributed mortality would be lower if people were using snuff instead of smoking. The absurdity of this "conclusion" of theirs is well illustrated by the recent study by Levi *et al.*³ They report an international expert consensus that snuff users' excess mortality above the level of non-tobacco-users is <10% of smokers' excess mortality. This is well consistent with assessments by prestigious and authoritative bodies like the Royal College of Physicians of London, that in its *Response to Commissioner Byrne's Reflection Process for a New EU Health Strategy*, makes the following statement (under the headline "Encourage the use of safer sources of nicotine"): "Medicinal nicotine products are safe and should be strongly encouraged as an alternative regular source of nicotine. Some smokeless tobacco products (such as snus, which is widely used in Sweden) can also provide nicotine in a formulation that is a proven acceptable alternative to cigarettes for many smokers, and although more harmful than medicinal nicotine is much less harmful than cigarettes."

The divergent position expressed by Boffetta *et al.*¹ further illustrates the weakness of their article.

Yours sincerely,

Lars RAMSTRÖM

References

1. Boffetta P, Aagnes B, Weiderpass E, Andersen A. Smokeless tobacco use and risk of cancer of the pancreas and other organs. *Int J Cancer* (Early View, published online in advance of print), October 15, 2004.
2. Lund K. Bruk av snus i Norge, (Norwegian: Use of snus in Norway), In: Tobaksskaderådets "store brune" snusrapport, Oslo, Statens Tobaksskaderåd (presently re-organized as: Directorate for Health and Social Affairs, Department for Tobacco Control), 1990;15–44.
3. Levy D, Mumford E, Cummings M, Gilpin E, Giovino G, Hyland A, Sweanor D, Warner K. The relative risks of a low-nitrosamine smokeless tobacco product compared with smoking cigarettes: estimates of a panel of experts. *Cancer Epidemiol Biomarkers Prev* 2004;13:2035–42.

*Correspondence to: Institute for Tobacco Studies, Ingemarsgatan 4B, SE-113 54 Stockholm, Sweden. Fax: +46-8-642-06-75.

E-mail: tobstud@algonet.se

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