Sir,
The paper by Jensen et al. (1) reported a 9% [95% confidence interval (CI) 7–11%] reduction in mortality rate for patients with basal cell carcinoma (BCC), but a 54% (95% CI, 41–68%) increase for patients with cutaneous squamous cell carcinoma. Smoking is a risk factor for SCC, but not BCC [Ref. 3 in (1)]. Alcohol and tobacco consumption rates are much higher in Denmark than in Sweden. Based on death rates for categories of disease related to alcohol and tobacco, it is estimated that alcohol and smoking account for almost the entire difference between Danish and Swedish men and for 75% of the difference between Danish and Swedish women (2). The role of smoking in the risk of a second cancer after development of non-melanoma skin cancer (NMSC) has been reviewed (3).

Further evidence that long-term higher serum 25-hydroxyvitamin D levels are associated with incidence of BCC is provided by a study of cancer cases listed in the Rhineland-Palatinate cancer registry in Germany (4). Those living in the winegrowing regions had a higher incidence of NMSC and malignant melanoma but significantly lower risk of vitamin D-sensitive cancers, including those of the stomach, colon, rectum, lung and ovary (5). A similar result was found in Spain, where mortality rates for 15 types of cancer were found to be inversely correlated with NMSC mortality rates (6).

While more research is required to more fully understand the findings, they add to the evidence supporting the hypothesis that solar ultraviolet-B irradiance is more beneficial than harmful. In addition to cancer (5), vitamin D reduces the risk of cardiovascular disease and diabetes (7), as well as infectious diseases (8). It has been estimated that a doubling of solar ultraviolet-B irradiance and serum 25-hydroxyvitamin D concentrations in Denmark would reduce the all-cause mortality by 17% (9).

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REFERENCES