

## COMMENTS AND RESPONSES

### Prospective Study of Type 1 and Type 2 Diabetes and Risk of Stroke Subtypes: the Nurses' Health Study

Response to Tuttolomondo et al.

**W**e thank Tuttolomondo et al. (1) for their interest in our study (2). In response, we would like to clarify several points. First, coding of strokes has been ongoing in the Nurses' Health Study since 1976. We have not had funding to implement coding by TOAST (Trial of Org 10172 in Acute Stroke Treatment) classification (3) but hope to do so in the future. In an internal comparison of coding by Perth criteria (4) versus TOAST, the concordance rate for lacunar infarction was very high (91%); however, a percentage of large artery infarctions as classified by Perth coding criteria was classified as "unknown type" by TOAST criteria due to inconclusive carotid Doppler findings. Thus, it is possible that differences in stroke classification may have lead to slightly higher risk estimates for large artery infarction in our population.

Second, our results are consistent with diabetes being a strong risk factor for lacunar infarction. As shown in Table 2 of the article, incidence rates for lacunar infarction were higher than for large artery infarction among women with type 2 diabetes (50 and 36 per 100,000 person-years, respectively), and risk estimates were also slightly higher for lacunar than large artery infarction (3.6 vs. 2.7 in age-adjusted analyses) compared with women without diabetes.

Third, both fatal and nonfatal infarctions were included, but only first events were considered. Thus, our methods do differ from some hospital-based studies in that only first stroke events were included. As stated in the article, results were similar for confirmed (medical records) and probable (letter or telephone corroboration) cases, thus the combined results were presented (see p. 1731, column 2).

Finally, as suggested by Tuttolomondo et al., it is possible that there are sex differences in the strength of association between diabetes and large artery infarction. Our results are limited to women, and we encourage further sex-specific evaluations of these associations.

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