Reviewer's report

Title: Maternal and neonatal risk factors for childhood type 1 diabetes: a matched case-control study

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Reviewer: Chris Patterson

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In general I was happy with the authors responses. However they did not accept the suggestion that interactions should be used in preference to subgroup analyses in checking if findings for risk factors differed between early and late onset cases. Their stated reason was

However, tests for interactions can only be performed when both cases and controls have the characteristic of interest. Since controls do not have an age of diagnosis, it is not possible to perform tests for interactions between age of onset of diabetes and the risk factors being investigated.

Because controls are matched individually to cases there is no requirement for controls to have their own age at diagnosis since they adopt the age at diagnosis of their matching case. The interaction will be between a risk factor and a two category age-at-diagnosis variable determined by the case. So effectively the interaction is testing if the risk factor is more common in early onset cases (relative to their matched controls) than in late onset cases (relative to their matched controls).

I do still believe that this approach would be preferable to a subgroup analysis strategy adopted by the authors.