Reviewer's report

Title: A Novel Method for Studying the Temporal Relationship between Type 2 Diabetes Mellitus and Cancer using the Electronic Medical Record

Version: 3 Date: 10 March 2014

Reviewer: Emma Eggleston

Reviewer's report:

Revisions to the manuscript are thorough and have generally strengthened it; however two compulsory revisions remain unaddressed. The first and most important is the lack of data on validation of the Type 2 diabetes algorithm. If the recently published algorithm referenced is the algorithm used, then the utility of the manuscript is significantly lowered as it becomes a description of a cohort detected. If it is not the algorithm used, the validation data for the diabetes detection algorithm employed in this work, specifically sensitivity, specificity, and positive and negative predictive value are strongly recommended.

The second is the continued overstatement of the ability of the algorithm to allow for detection of the hyperinsulinemic pre-diabetes onset stage. No data on insulin or c-peptide are given and there is again no validation that one is able to detect this stage. While it may be that the algorithm can facilitate detection of that stage, in the absence of data demonstrating that is speculation that goes in the discussion section, not as a primary conclusion about the work.

More minor concerns are addressed below

Minor Compulsory revisions

Methods:
1) Authors state they have removed the measure of “glucose control” to predict A1C based on glycemic values; however reference to it remains in the manuscript in the last paragraph of the results sections.

Major Compulsory Revisions

See above

Declaration of competing interests:

I have no competing interests.