Reviewer's report

Title: Laboratory Testing and Diagnostic Coding for Cytomegalovirus among Privately Insured Infants in the United States: a Retrospective Study using Administrative Claims Data

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Reviewer: Liliane Grangeot-Keros

Reviewer's report:

The article submitted for publication explores rates of laboratory testing and diagnostic practices for congenital CMV among privately-insured infants in the United States by using healthcare claims data.

The data provided suggest gaps in knowledge of laboratory confirmation of CMV infection and show low prevalence of diagnosed symptomatic congenital CMV disease in the studied population.

There are a number of limitations to this study which are well explained by the authors.

Comments (Minor essential Revisions):

Methods
- Infants with a Diagnostic Code for Congenital CMV infection or CMV disease
Among the 17 infants with a code for CMV disease and 5 with a code for both CMV infection and CMV disease, only 7 had a code for CMV-specific testing! Can the authors please explain how the ICD-9-CM code defines CMV disease?
- Infants with CMV laboratory testing
It is said that 101 (44%) had a code for serologic testing (CMV IgG, IgM, or EIA). Code for EIA is indicated in the Appendix, but codes for IgG and IgM are missing. In addition, which class of antibody is supposed to be detected by EIA (IgG, or IgM, or both)?

Results
Infants with CMV laboratory testing
Page 7, lines 1-2: the fact that the authors give the number/percent of IgM and IgG testing enforces the idea that there is a specific code for these classes of antibodies even if these codes are not mentioned (see above).

Page 7, lines 4-5: it is written: "Most infants with a code for CMV-specific testing (187/229; 82%) had # 1 codes for a potentially CMV-associated condition [Table 1], while fewer of those with only non-specific viral or molecular testing (599/1091; 55%) did. It does not seem that the data of the second part of the sentence are shown in a Table: the text would be more understandable if the data of non-specific viral or molecular testing were shown (also see the first
paragraph of Results).

Conclusion
This study would be worth publishing after taking into account the referee’s comments.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
I declare that I have no competing interests.