Reviewer's report

Title: Congenital heart disease in men - birth characteristics and reproduction. A national cohort study.

Version: 1 Date: 25 August 2013

Reviewer: GARY D WEBB

Reviewer's report:

I have some difficulty understanding how you want me to submit my review.

I found the manuscript have to be of interest, and the data to be publishable. The question posed is well defined. The methods are appropriate, but have limitations as described below. The data is clearly valuable, but also has limitations. The authors have taken a very responsible approach to reporting and analyzing the data. The discussion is very appropriate. The limitations are not as fully described as I would like. English usage is excellent.

My main concern has to do with the various diagnoses attached to the males in the study, and how and when these diagnoses were made.

In table 1, the diagnoses and their frequency are documented. Tetralogy should be more common than TGA, but is not. What is congenital aortic insufficiency? There are a lot of these patients. There are lot of patients with congenital anomalies of the great pains. I don't know what this means. In neonates, VSDs should be the dominant congenital diagnosis. It is not dominant enough in this series. In other words, I don't think that the patients represented in this study are truly representative of all congenital heart males.

Again, the overall incidence of CHD was 0.5%, lower than the generally acknowledged 0.8%. Also of concern is the fact that only 14.7% had complex CHD, possibly reflecting the terminology included in this group, but lower than expected.

The limitations of the data in the registry is noted. Whether this applies to the putative parent or just to the putative offspring is not entirely clear.

That having been said, the data is unique enough that I think it is worth publishing. I would like to have the authors comment further on the methodology and the limitations of it.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I have no competing interests.