Reviewer's report

Title: Sudden cardiac death in the young (5-39 years) in the canton of Vaud, Switzerland

Version: 4 Date: 8 July 2014

Reviewer: Christian van der Werf

Reviewer's report:

These authors report on incidence of SCD and the autopsy rate for individuals from 5 to 39 years of age in Switzerland. This reviewer has the following comments:

Major Compulsory Revisions

1. Information on whether or not autopsy was performed and the results of autopsy are missing in a significant number of cases. What are the reasons for this missing data? And does the IUMSP also provide the result of the autopsy performed or did the authors use other methods to obtain these results?

Minor Essential Revisions

1. P4 l50: “The Canton of Vaud is ...”. These two sentenced should be moved to the methods section.
2. P7 l113: “The average population of individuals who were between 5 and 39 years of age between 2000 and 2007 was of 292'546 inhabitants.” This sentence should also be moved to the methods section.
3. Despite the table legend, Table 3 is difficult to understand. Perhaps it is better to change this table into a flowchart. And the denominator in the percentages of cases in which cause of death was confirmed after an autopsy should be the total number in which autopsy was performed, not the total number of cases.

Discretionary Revisions

1. P4 l38: “… and often occur in otherwise healthy individuals.” In our experience most sudden death events in the young occur in individuals with a relevant medical history. Please note that in most studies on the epidemiology of sudden (cardiac) death in the young, individuals with a relevant medical history are excluded.
2. P4 l42: “… but only by performing postmortem genetic analyses.” Another strategy, which is probably applied more often, is to screen the first-degree relatives for inherited cardiac diseases (Heart Rhythm 2010;7:1383-9; Eur Heart J 2008;29:1670–80).

3. Are there any circumstances in which autopsy is mandatory by law in Switzerland? And what kind of physicians are involved in cases of sudden death...
in the young and what is their role in requesting an autopsy? It would be interesting to get more information on the reasons for the low autopsy rate.

**Level of interest:** An article of limited interest

**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.