

# Review of: "Cryptic evidence on underreporting of mRNA vaccine-induced cardiomyositis in the elderly: a need to modify antihypertensive therapy"

Giuseppa Minutolo<sup>1</sup>

<sup>1</sup> University of Palermo

Potential competing interests: No potential competing interests to declare.

Dear Editor,

I have read the paper paying close attention. Despite the relevance of this issue, the research methodology is too poor, so I try to explain my reasons for this.

1) First of all, the study design seems unclear: it might be a case report which describes author's cardiovascular symptoms after COVID-19 vaccination, but this was not reported. Moreover, the materials and methods appear too unclear: some data (age, weight, height, chronic disease, close relatives with chronic/not-communicable diseases, assumption of drugs, smoking, alcohol abuse, and so on) are lacking; there is no a setting and the results section of the manuscript reports laboratory data which is not mentioned above (in reference to BP values); there is no methodology to obtain and archive data (clinical data was drawn by himself or another physician?); there is no a statement about physical activity done before and after COVID-19 vaccination. Since the case is not well-described, the manuscript should be rewritten following the study methodology of a case report.

2) Secondly, there is no a clinical documentation of the Author's health condition before COVID-19 vaccination neither after each dose of the vaccine. Therefore, it is unclear whether the clinical conditions had worsened after COVID-19 vaccination or it was focused them only after the vaccination but not previously. If there is a clinical documentation about them, it should be introduced in the manuscript.

3) There are lots of biases such as other symptoms and signs after vaccination (fever? local pain? muscle pain?) and the onset of cardiovascular symptoms after physical activity (pulse rate during jogging before and after vaccination?), as well as emotional status towards a new vaccine (the cardiovascular symptoms might be due to a basic anxious component) and measures errors both laboratory analysis and blood pressure/pulse rates measurement. The biases should be reported.

4) The results section seems to be too confidential to be a scientific report. Indeed, the phrase "In my dotage, my love of running has moderated to 15-minute jogs twice weekly in a nearby park." should not be written in a manuscript. Furthermore, the section is little understanding and it is tough to read, leading the readers to get confused. The results should be reported clearly firstly to describe the phenomenon, secondly to assess the factors which determine the health

condition after COVID-19. For these reasons, this section should be rewritten.

5) Also the discussion section should be rewritten, focusing a comparison with other similar case reports in the literature and give some hypothesis about the case.