Authors examined which of two “paradigm”, i.e. statistical tests or likelihood ratios, do medical students use for assessing “evidence” in data by measuring students’ answers to diagnostic scenarios.

Authors used hypothetical diagnostic scenarios. In some scenarios interpretations by statistical tests and likelihood ratios agree, in the other scenarios results disagree.

Basic idea of this research is interesting. But there are some major points.

1. Authors rely on the assumption that medical students adopt one or the other of two paradigms in this study. But it is unobvious that students do not interpret data with using different idea. It is also possible that students might answer irresponsibly. This concern is supported by high number of undecided answers.

I would like to know the reproducibility of students’ response between different versions of diagnostic scenario. If students conduct answers according to the paradigms, the answers should be consistent.

Both paradigm of statistical tests and likelihood ratios seems not to be innate manner of human thinking. Students learn the paradigms by being educated and trained. Therefore it is pretty unreasonable to presume that students use one or the other of two paradigms.

These considerations are at least needed in limitation statement.

2. The background of medical students should be stated. In specific I would like to know situation of statistics education in Swiss medical school.

Discretionary Revisions

1. The use of the term “evidence” or “paradigm” bring me a feeling of strangeness, because these terms are conceptually-defined technical terminologies. I think that more descriptive expression is more suitable, such as interpretation of data.

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.