

Peer Review Report

Review Report on An analysis of epidemiological characteristics of microvascular complications and comorbidities among type 1 diabetes patients

Original Research, Acta Biochim. Pol.

Reviewer: Kamila Sobaś

Submitted on: 22 Apr 2025

Article DOI: 10.3389/abp.2025.14569

EVALUATION

Q 1 Please summarize the main findings of the study.

Dear Authors,

I have accepted for review the article: "An analysis of epidemiological characteristics, microvascular complications and comorbidities among type 1 diabetes patients". The paper meets the requirements of a research paper. The paper addresses an important and, importantly, widespread health as well as socioeconomic problem that affects patients. A great advantage of the study is the accurate assessment of the patients' health status.

The conclusion states: "Patient BMI also typically increases over the course of diabetes. BMI was associated with other markers of health status, such as CRP levels, uric acid and FT3." However, the number of people (% fat) with a normal or too high BMI was not given.

Q 2 Please highlight the limitations and strengths.

The paper addresses an important and, importantly, widespread health as well as socioeconomic problem that affects patients.

Q 3 Please comment on the methods, results and data interpretation. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

I suggest the following changes in the text of the paper:

1. Methods: Please describe in detail the exclusion criteria of the study.
2. Results: Please standardize the values when citing in the results, because the authors give once 1 decimal place once 2. The p-value is also given with $p=0.951$ or $p<0.05$. This should be standardized and corrected in the tables
3. Tables: Please format the tables exactly the same way. Currently they look like raw data. The authors do not stick to one form of the study. No legend under the tables. Numbers are given in different ways with the same variables.
- 4 Figures: please describe the values shown accurately. A measure of median variability is the quartile range.
5. Line 528: The conclusion states: "Patient BMI also typically increases over the course of diabetes. BMI was associated with other markers of health status, such as CRP levels, uric acid and FT3." However, the number of people (% fat) with a normal or too high BMI was not given.
- 6 The literature at the end of the paper also needs formal corrections according to the journal's guidelines.

Check List

Q 4 Please provide your detailed review report to the editor and authors (including any comments on the Q4 Check List)

Dear Authors,

I have accepted for review the article: "An analysis of epidemiological characteristics, microvascular complications and comorbidities among type 1 diabetes patients". The paper meets the requirements of a research paper. The paper addresses an important and, importantly, widespread health as well as

socioeconomic problem that affects patients. A great advantage of the study is the accurate assessment of the patients' health status. So, I consider a positive review evaluation.

I suggest the following changes in the text of the paper:

1. Methods: Please describe in detail the exclusion criteria of the study.
2. Results: Please standardize the values when citing in the results, because the authors give once 1 decimal place once 2. The p-value is also given with $p=0.951$ or $p<0.05$. This should be standardized and corrected in the tables
3. Tables: Please format the tables exactly the same way. Currently they look like raw data. The authors do not stick to one form of the study. No legend under the tables. Numbers are given in different ways with the same variables.
- 4 Figures: please describe the values shown accurately. A measure of median variability is the quartile range.
5. Line 528: The conclusion states: "Patient BMI also typically increases over the course of diabetes. BMI was associated with other markers of health status, such as CRP levels, uric acid and FT3." However, the number of people (% fat) with a normal or too high BMI was not given.
- 6 The literature at the end of the paper also needs formal corrections according to the journal's guidelines.

Thank you kindly

Q 5 Is the English language of sufficient quality?

Yes.

Q 6 Is the quality of the figures and tables satisfactory?

No.

Q 7 Does the reference list cover the relevant literature adequately and in an unbiased manner?

Yes.

Q 8 Are the statistical methods valid and correctly applied? (e.g. sample size, choice of test)

Yes.

Q 9 Are the methods sufficiently documented to allow replication studies?

Yes.

Q 10 Are the data underlying the study available in either the article, supplement, or deposited in a repository? (Sequence/expression data, protein/molecule characterizations, annotations, and taxonomy data are required to be deposited in public repositories prior to publication)

Not Applicable.

Q 11 Does the study adhere to ethical standards including ethics committee approval and consent procedure?

Yes.

Q 12 Have standard biosecurity and institutional safety procedures been adhered to?

Yes.

QUALITY ASSESSMENT

Q 13 Originality

Q 14 Rigor

Q 15 Significance to the field

Q 16 Interest to general audience

Q 17 Quality of the writing

Q 18 Overall quality of the study