

Review of: "[Review Article] Pitavastatin: A Comprehensive Overview of its Mechanisms, Pharmacokinetics, Pharmacodynamics, and Adverse Effects"

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Potential competing interests: No potential competing interests to declare.

Reviewer Comments:

This manuscript requires substantial revisions. The author should provide more specific information regarding Pitavastatin and compare it with other statins only when necessary. Below are comments organized by section:

1. Introduction:

1. Line no. 18: Reference no 11 is not properly cited in references. Advice to site properly.
2. Advise to Author to includes some adverse effects related comments in introduction section

2. Chemical Structure:

The description of

Pitavastatin's chemical structure needs improvement. Focus on a detailed explanation of the structure only.

1. Line no. 08: Pitavastatin is mentioned, while you are again mentioning in next sentences. Author need to be correct this sentence and make relevant changes so that next sentence makes sense.
2. Fig. 1: refence needed from where this structure has been taken. Also mentioned is this structure is of Pitavastatin or Pitavastatin Calcium. As shown in this figure it seems Pitavastatin and caption is Pitavastatin Calcium. Advise to author to check and correct.

3. Pharmacodynamics of Pitavastatin:

Introduction part of this section

need to be more specific to PD parts only, here author has included PK parts too, like bioavailability and tmax. Author advise to revise this section and be specific to Pharmacodynamics only. Mechanism of action was not properly described; author advise to rewrite MOA with proper references with data.

1. In sub section (3.1), author advice to be more specific to mechanism of action only with experimental evidences from literature with data.
2. Fig.2 caption need to be in full i.e. Mechanism of Action of Pitavastatin, and also mentioned reference for your illustrations.
3. In sub section (3.2), data collection was from publication of 2011 (reference 19), Advice author to referrer recently published data if possible. Also proper citation of 19 no reference is needed.

4. Pharmacokinetics of Pitavastatin:

1. In subsection (4.1), author advice to justify, why food has no clinically significant effects on Pitavastatin's Pharmacokinetics while Cmax is decreased when it is administered with high fat-meal.
2. In subsection (4.2), author advice to justify, if Pitavastatin is metabolized and glucuronidate in Liver than how it can be useful to lower the cholesterol. Is its metabolites are doing this role?
3. In subsection (4.2) line no. 9, which genes were talked about either CYPs or UGTs.

5. Lipid Lowering Agents:

Author need to be more

specific for lipid lowering effects of Pitavastatin with relevant data of studies conducted in patients. Here generalized views of Pitavastatin was given.

1. In sub section (5.1), as per heading there is no need to have rats study as written in line no. 9.
2. Author need be described more specific on effects of Pitavastatin, in writeup generalized view of Pitavastatin was mentioned.
3. In sub section (5.2), Author has mentioned other studies which is not relevant to T2D as mentioned in line no. 3 to 6. Advise to remove this part.

6. Drug Interaction:

1. In line no. 3, validation of OATP2B1, author has validated with two methods, described those methods.
2. Description from line no. 4 to 11, are not clear, reader may not understand what author want to says. Advice author to be more specific and clear description of what they want to deliver to the reader.
3. From line 12 to 18, author has described for generalized statin class. Author advise to be specific for Pitavastatin.

7. Other Side Effects:

Author advise to

change title of 7.0 section, as Side effect only because in manuscript only this section having a side effect portion. Author is not sure about context of this section, as they mentioned beneficial effects of statins rather its side effect. Also, author has described about antitumor activity of Pitavastatin which is not aligned with context to side effects.

Author advised to rewrite this section which is relevant to side effects of Pitavastatin.

This manuscript seems to have unclear, poorly organized content, making it difficult for readers to understand. Advise the author to look into the comments.