Reviewer’s report

Title: The chemotactic properties of various topical brimonidine tartrate ophthalmic preparations

Version: 0 Date: 18 Nov 2019

Reviewer: Heba A. Gad

Reviewer's report:

In the manuscript, the authors investigated the chemotactic properties of various topical brimonidine tartrate ophthalmic preparations, however some important points should be considered.

The abstract should be restructured to give a real digital results rather than vague sentences.

The figures legends should represent a standalone part of the manuscript where all data should be written in the form of phrases instead of long sentences.

The resolution in figures should be improved.

The references list should be checked and some mistake should be corrected in references 1 and 33.

Extensive editing of English language and style are required with some sentences need rephrasing.

More specs about the pharmaceutical products (expiry and production dates and batches should be given).

The following parts need rephrasing.

Abstract, line 20: These have revealed that the character of chemotactic leukocyte migration can be described through changes in the speed or rate of motion of cells. Please rephrase.

- Background

- Page 4, line 36: Glaucoma and ocular hypertension are related eye conditions that stem from an increase in eye pressure and often lead to damage on the optic nerve.

- Page 4, line 39: Left untreated, this can lead to permanent vision loss in the affected eye.

- Page 4, line 56: This BT 0.2% formulation is an alpha-2 selective adrenergic agonist that has been widely used for the treatment of glaucoma (please remove the word this).
- Page 5, line 19, There are some adverse effects that are more common than other drugs, such as mouth dryness, eyelid edema, and a burning sensation.

- Page 5, line 40, With the inactive ingredients sodium carboxymethylcellulose; sodium borate; boric acid; sodium chloride; potassium chloride; calcium chloride; magnesium chloride; purified water; and hydrochloric acid and/or sodium hydroxide to adjust pH of 7.4. sentences with no meaning

- Page 6, line 38 more widely used in isolation or in combination.

- Page 6 line 38 Nor is it known as to whether they have chemotactic properties that may lead to inflammation

- Page 10, line 4, Analysis of variance (ANOVA) tests were used to determine if between-group differences in mean migration distance were significant.
In addition the following points have to be considered

- Page 6, line 58, This will lead to improved recommendations for the treatment of ocular hypotension and better outcomes for patients
Do you mean hypotension or hypertension?

- Page 8 line 44 Batches of membranes were screened to ensure consistency of performance and accuracy.

How did you screen the batches?

- In graphic 1, the X-axis shows migration, what do you mean? It is migration distance or what?

- The authors should change the decimal sign with point rather than with coma

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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