Reviewer’s report

Title: A newly developed oxime K203 is the most effective reactivator of tabun-inhibited acetylcholinesterase

Version: 1 Date: 31 Jul 2017

Reviewer: Usman Tambunan

Reviewer's report:

GENERAL COMMENTS

There is a progress of the revised manuscript. However Authors have not been able to express significantly the novelty of the research in the revised manuscript.

COMMENTS:

ABSTRACT:

1. I don't see the relevancy of choosing keyword: chemical warfare agents and treatment in the abstract.

2. Based on in vitro and in vivo rat experiments, the newly developed acetylcholinesterase (AChE) reactivator, K203, appears to be much more effective in the treatment of tabun poisonings than currently fielded oximes. To determine if this reactivating efficacy would extend to humans, studies were conducted in vitro using human brain homogenate as the source of AChE. In this manuscript the Authors did in vitro research in addition of using experimental animal (rat) also used AchE humans. Does in any drug discovery and development this protocol always be done? The Authors claim this is a novelty? Do You?????? Did at the time of discovery and development of commercial oximes, in vitro assays always performed with human AChE?

INTRODUCTION:

1. This raises the intriguing question of how to improve the action of drugs. The question is : Do the Authors answer the question?
METHODOLOGY.

Figure 3. Currently commercially available oximes (????) ---Currently it is commercially available oximes

RESULT:

1. The authors could not expose the result of docking, instead of show the Tabel 1. That's all, nothing left????

DISCUSSION:

Why on the "RESULT SUBTITLE" there is not any result of the docking and why the explanation of the docking theory is in the material and method?

The Authors could not explain the interrelationship of each section, so this manuscript still does not provide enough information.

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

No

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.

Not relevant to this manuscript
Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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