Reviewer’s report

Title: Interstitial pneumonia and other adverse events in riluzole-administered amyotrophic lateral sclerosis patients: a retrospective observational study

Version: 1  Date: 25 Dec 2018

Reviewer: Isabella Simone

Reviewer's report:

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The authors reported a retrospective observational study on adverse events in riluzole-administered amyotrophic lateral sclerosis patients.

Although riluzole is approved since 1995, updates on drug-related side effects are interesting and for this purpose the authors have to add a recent reference on this issue (see Introna et al, Neuropsychiatric Disease and Treatment 2018) as well as regarding the benefit of riluzole (see Dharmadasa T, Kiernan MC, Lancet Neurol. 2018)

The paper might be interesting, but there are several aspects to revise

First of all to better understand the presence and type of side effects, I suggest to specify both the absolute number and the frequency of each adverse event in the text and in the reference table. Number of patients with increased liver enzymes were 5/20 in the discontinued cases and 8/72 in continued cases, then the total number with liver dysfunction is 13/92 (that is 14% of all cases and not 5.4%)

In addition in Table 1 what does "1 dementia" mean in the continued cases? what type of dementia? different from the FTD?

On page 8 line 1 why the decline in FVC is a factor of discontinuation?

In the discussion the authors argue on the mechanism of IP in riluzole-administered patient and they suggests: 1) a "possible influence of omeprazole". As reported by Cassiman D et al (Cassiman D et al., NEUROLOGY 2003) omeprazole might be protective versus IP, reducing the effect of riluzole by enhancing its metabolism via induction of cytochrome p450 1A2. Therefore what means "possible influence of omeprazole"? It is not clear.
2) "via a cell-mediated type of allergy which depends on dosage" What means?? Could hypothesize a possible influence with the cigarette smoking, considering that case 2 was a past smoker of 30 cigarettes per day for 25 years? The authors have to clarify these issues.

Another point that the authors have to better clarify is the cut-off of <18 months that they define as the more frequent period to occurring adverse events.

Finally, the English form is often hard (e.g. see in discussion line 32-35 page 12, or line 21 and 24 page 13, or line 25 and line 32 page 16 etc etc …).

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.

Unable to assess

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

Yes

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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