
From: Hertl Peter CHBS <peter.hertl@syngenta.com>
Sent: Tuesday, September 10, 2013 7:30 AM
To: Breckenridge Charles USGR; Botham Phil GBJH
Subject: FW:

Gents,

I shared the Brent and Breck et al. paper with Mirva – her background is in PD research (ETH Lausanne) and she recently joined our seeds group as operational support person – a few steps down from my office. I was interested to know what critique points could be brought up by individuals familiar with the subject area. I followed these 2 up with the Widnes paper.

I followed up with her on her critique points.

I don't need a reaction from your side – just FYI.

Peter

From: Hejjaoui Mirva CHBS
Sent: Donnerstag, 5. September 2013 17:07
To: Hertl Peter CHBS
Subject: RE:

Dear Peter,

Thank you for sending the paper.

Please find below my comments on the papers you have sent previously:

Paper by Brent et al. :

- The papers investigated were not cited
- No cases other than intoxication by oral ingestion were investigated
- No possibility to assess PD symptoms (bradykinesia, tremor at rest, rigidity, postural instability) with those patients as they were in a coma state or unconscious
- The authors did not want to consider other hypothesis than that PQ and MPTP have the same mode of action and they did not present arguments to back this up.
- Clear indication of PQ toxicity
- Not convincing to evaluate the results of other studies since no access to the raw data or follow-up is possible

Paper by Breckenridge et al.:

- Different protocols were used for PQ and MPTP administration (different age of the mice, different concentrations and different injection frequency)
- PQ was shown to cross the BBB and a concentration twice as high was found in the olfactory bulb > one of the first non-motor symptoms of PD patients is olfactory dysfunction. It would have been interesting to check that and do behavioral studies on the mice.
- Different results were observed from the literature concerning the PQ-induced TH+ neuron reduction, but there was no elaboration on the possible causes of the discrepancy.

- It is appreciated that blinded groups/experiments were used in the course of this study and that the authors acknowledged the existence of a different mode of action of PQ in respect to MPTP
- Strong supporting data was shown for the effect of MPTP on neuron degeneration and alteration of dopamine levels while no effect or little effect was shown with PQ

Best regards,

Mirva

From: Hertl Peter CHBS

Sent: Donnerstag, 5. September 2013 13:58

To: Hejjaoui Mirva CHBS

Subject:

Mirva,
this is the worker study.
Peter
