

Message

From: Akins Jonathan USGR [/O=NOVARTIS-AG/OU=USGRPP01P/CN=RECIPIENTS/CN=394950]
Sent: 4/6/2004 1:04:47 PM
To: Clapp Mike GBAP [/O=NOVARTIS-AG/OU=GBRGCP01P/CN=RECIPIENTS/CN=802648]; Pastoor Tim USGR [/O=NOVARTIS-AG/OU=USGRPP01P/CN=RECIPIENTS/CN=535863]
Subject: FW: Paraquat Poster
Attachments: SOT 2004 Abby Li.pdf

Mike,

I emailed Abby Li yesterday, and here is her response.

Enjoy,

Jonathan Akins, Ph.D., DABT
Group Leader - Human Safety Assessment Dept.
Syngenta Crop Protection, Inc.,
410 Swing Road, Greensboro, NC 27409
800-334-9481 x 3903

-----Original Message-----

From: Abby Li [mailto:abbyli@exponent.com]
Sent: Monday, April 05, 2004 6:42 PM
To: Akins Jonathan USGR
Subject: RE: Paraquat Poster

Dear Jonathan,

I am working on a project for CLA that tries to evaluate the association between pesticides and parkinson's disease. Attached is poster we presented at SOT. I'm told it is difficult to read when printed out, but you can blow it up on your screen.

There are mixed results with paraquat in animal models that need to be addressed. These include studies in which there is consistent decrease in cell count in the substantia nigra. The authors claim that the doses of paraquat used are low (10 mg/kg i.p.). I'd like to have more accurate information on exposure estimates for both dietary and occupational exposure. In the poster I compare against the chronic RfD, but the population at greater risk is occupational. I found an EPAa estimate, but felt that it was likely your company has actual exposure levels (or you are available of information in the literature) given the long history of use of paraquat. In addition, any data (marketing info, EPA BEAD info) that helps define extent of overlap of occupational exposure to maneb and paraquat is also important.

Exposure estimates and risk assessment is clearly beyond the scope of our task with CLA and so I cannot spend much time/effort on this and must rely on your company to provide well-documented/rigorous information to support whatever we put into the paper. However, as we prepare the final paper, it is clear to me that we are leaving the discussion for paraquat quite open without a good discussion of exposure to paraquat. We need data (preferably reliable public sources that we can cite) or other information (we can cite if you provide the back-up data) that we can reference in the paper.

The key animal models with strongest data sets are rotenone, paraquat and paraquat/maneb. The only epidemiology data that suggests an association with PD is paraquat based on LIOU study. Although this is just one study and we articulate the weaknesses, this study together with the animal study makes it difficult to ignore the paraquat data. It may be possible to weaken it's direct association with PD, but the new phrase used by Dr. DiMonte (the more credible of the DiMonte/Cory-Slechta team) is that paraquat may be an "environmental risk factor" for PD. In otherwords, the damage to DA neurons in substantia nigra may not exactly mimic effects of PD, but they bring a susceptible person that much closer to PD.

I'll try to call tomorrow,
Kind Regards,
Abby

-----Original Message-----

From: jonathan.akins@syngenta.com [mailto:jonathan.akins@syngenta.com]
Sent: Monday, April 05, 2004 11:54 AM
To: abbyli@exponent.com
Subject: Paraquat Poster

Abby Li,

I just moved into a new position here at Syngenta (Group Leader - Human Safety Assessment Dept.), and one of my colleagues requested that I contact you regarding additional information needs (e.g., use patterns of paraquat and maneb/mancozeb).

Please give me a call (800-334-9481 x 3903) so I can get a better understanding of your needs, because I will likely be the one tracking this information down for you.

Thank you,

Jonathan Akins, Ph.D., DABT
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