Message

From: JENKINS, DANIEL J [AG/1920] [/O=MONSANTO/OU=NA-1000-01/CN=RECIPIENTS/CN=813004]
Sent: 9/3/2015 1:23:14 PM
To: REYNOLDS, TRACEY L [AG/1000] [/O=MONSANTO/OU=Na-1000-01/cn=recipients/cn=133378]; HEERING, DAVID C [AG/1000] [/O=MONSANTO/OU=NA-1000-01/cn=RECIPIENTS/cn=68681]; VAUGHN, TY T [AG/1000] [/O=MONSANTO/OU=NA-1000-01/cn=Recipients/cn=555738]; MCKAY, TRACY R [AG/1000] [/O=MONSANTO/OU=NA-1000-01/cn=Recipients/cn=TRMCKA]; MARTINO-CATT, SUSAN J [AG/1000] [/O=MONSANTO/OU=NA-1000-01/cn=Recipients/cn=655584]; DYKES, MICHAEL D [AG/1920] [/O=MONSANTO/OU=NA-1000-01/cn=Recipients/cn=MDDYKE]; AGUSTIN, MELISSA [AG/1000] [/O=MONSANTO/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=MRAGUS]; MILLER, PHILIP W [AG/1000] [/O=MONSANTO/OU=NA-1000-01/cn=Recipients/cn=212392]; HEGGER, DANIEL [AG/1000] [/O=MONSANTO/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DHEGGa6f]; STATER, STACEY L [AG/1000] [/O=MONSANTO/OU=NA-1000-01/cn=Recipients/cn=604991]
Subject: RE: High Level Summary of 2 recent Mesnage studies (also low dose response as FYI)

No questions but Dr Jess Rowland at EPA is quite proud of their recent endocrine conclusions and is also on point regarding their IARC response. Jess will be retiring from EPA in ~5-6 mos and could be useful as we move forward with ongoing glyphosate defense.

Dan Jenkins
U.S. Agency Lead
Regulatory Affairs
Monsanto Company
[redacted]

From: REYNOLDS, TRACEY L [AG/1000]
Sent: Thursday, September 03, 2015 6:22 AM
To: HEERING, DAVID C [AG/1000]; VAUGHN, TY T [AG/1000]; MCKAY, TRACY R [AG/1000]; MARTINO-CATT, SUSAN J [AG/1000]; DYKES, MICHAEL D [AG/1920]; AGUSTIN, MELISSA [AG/1000]; MILLER, PHILIP W [AG/1000]; HEGGER, DANIEL [AG/1000]; STATER, STACEY L [AG/1000]; JENKINS, DANIEL J [AG/1920]
Subject: Re: High Level Summary of 2 recent Mesnage studies (also low dose response as FYI)

Please let John know if you have any questions.

Sent from my iPhone

On Sep 2, 2015, at 11:11 AM, SWARTHOUT, JOHN T [AG/1000] <john.t.swarthout@monsanto.com> wrote:

Tracey, high is the high level summary

Mesnage et al., 2015, Potential toxic effects of glyphosate and its commercial formulations below regulatory limits

1. Claims that glyphosate-based herbicides cause teratogenic (birth defects), tumorigenic and hepatorenal effects
2. Effects mediated by endocrine disruption and oxidative stress
    a. *This is all based on the *in vitro* studies with formulated product*
3. Some effects were observed within or below the recommended acceptable daily intake
    a. *This is the low dose claim*

Mesnage et al., 2015, Transcriptome profile analysis reflects rat liver and kidney damage following chronic ultra-low dose Roundup exposure

1. Claims low dose and endocrine disruptor effects mediate liver and kidney pathology
2. Represents an attempt to address one shortcoming of the Seralini et al., 2012 study being the complete lack of data regarding purported liver or kidney histopathology
3. While technically a new study in reality it represents a continuation of the Seralini et al., 2012 rat study
    1. *Mesnage uses RNA from the same samples so all previous issues with the study from 2012 still apply*

Also, a couple of notes for you:

Mesnage (say it like message but with an n – like messnage)

As we discussed yesterday regarding Mesnage - He appears to no longer be affiliated with Seralini and University of Caen. It is unclear whether or not there remains an affiliation with Seralini's science advisory group CRIIGEN as it is not listed in this most recent publication. Robin Mesnage is now a Research Associate at the King's College of London under the direction of Michael Antoniou. Michael Antoniou has direct ties to Earth Open Source and John Fagan (Maharishi and Genetic ID).

Here is my current summary of the low dose tactic:

Low Doses

- While the authors argue for some type of low-dose phenomenon or maximal response phenomenon in which maximal response is reached at the lower dose levels, it should be noted that a) the phenomenon of low dose response is highly contentious in the scientific community and that b) when accepted, is usually argued for endocrine effects. General systemic effects like mortality, as well as the occurrence of tumors (especially nonendocrine tumors) are expected to follow a dose-response pattern. This response may not be simple, but higher dose should reliably produce greater response. The Vandenberg et al., 2012 paper cited by Mesnage et al. and others in support of low-dose response effects is entirely about endocrine effects and the existence of this phenomenon has been questioned.

- While glyphosate is not an endocrine disrupter (see next bullet), the study by Vandenberg is perhaps a reason why the researchers like Mesnage and others have tried so hard to show that glyphosate does have endocrine disrupter effects. Establishing that glyphosate is an endocrine disruptor would enable the hypothesis that glyphosate can cause harm at low doses. Importantly, a review of Vandenberg et al. by Rhomberg and Goodman, 2012 soundly refutes the low dose claim put for the by Vandenberg.

- Regulatory agencies around the world have thoroughly studied glyphosate and concluded that it is not an endocrine disruptor. This was most recently confirmed by the U.S. EPA's multi-year Endocrine Disruptor Screening Program, which looked at 11 different validated assays assessing the potential for effects of glyphosate on endocrine pathways in humans and wildlife. Based on its review of the data, EPA concluded 'there was no convincing evidence of potential interaction with the estrogen, androgen or thyroid pathways.

- Regulatory agencies around the world have overwhelmingly concluded that all labeled uses of glyphosate are safe for human health and the environment. More information about EPA's Endocrine Disruptor Screening Program review of glyphosate is available here. General safety information about glyphosate is available here."