

Message

**From:** SWARTHOUT, JOHN T [AG/1000] [john.t.swarthout@monsanto.com]  
**Sent:** 6/16/2014 8:25:20 PM  
**To:** REYNOLDS, TRACEY L [AG/1000] [tracey.l.reynolds@monsanto.com]  
**CC:** GOLDSTEIN, DANIEL A [AG/1000] [daniel.a.goldstein@monsanto.com]  
**Subject:** Re: New Paper

Yes we have. The write up is complete.

John

Sent from my iPhone

> On Jun 16, 2014, at 3:17 PM, "REYNOLDS, TRACEY L [AG/1000]" <tracey.l.reynolds@monsanto.com> wrote:  
>  
>  
>> Dan/John,  
> Have we assessed this paper?  
> Tracey  
>>  
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>>  
>>  
>>  
>> David et all --  
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>>  
>>  
>>> I wanted to bring to your attention a just-published  
>>> meta-analysis of 44 papers exploring the impacts of pesticide  
>>> exposure on non-Hogkin lymphoma  
>>> (NHL) -- see attached. It was done by a team at the International  
>>> Agency for Research on Cancer in France. These results will be taken  
>>> seriously worldwide.  
>>>  
>>> This was a mammoth project that required a very  
>>> significant time investment. The findings are pretty clear and  
>>> consistent with my read of most of these studies over the last 20 years.  
>>>  
>>> The data in Table 2 on the phenoxy herbicides <  
>>> including 2,4-D and dicamba < is particularly chilling given that use  
>>> of these herbicides has already gone up several-fold since bottoming  
>>> out in the early 2000s, and use will further explode if 2,4-D and  
>>> dicamba herbicide tolerant crops are approved. The phenoxies are  
>>> clearly associated with three distinct types of NHL, with Relative  
>>> Risk Ratios (RR) in the 1.8-2.0 range (pretty high).  
>>>  
>>> From reading the literature on phenoxy herbicide  
>>> health impacts over many years, I actually feel the data is even more  
>>> compelling on developmental and reproductive impacts, but when added  
>>> to such clear evidence of heightened cancer risk, a chilly wind doth blow.  
>>>  
>>> The data on glyphosate is also worth looking over;  
>>> Table 4, page 4505, summarizes six studies on glyphosate and NHL, 3  
>>> or 4 of which report significant increases in the risk ratio. The  
>>> strongest evidence < a risk ratio of 2 < is reported for glyphosate  
>>> and B cell lymphoma. Again, these are old studies, mostly based on  
>>> pre-GE crop use patterns that would not be producing the diversity or levels of exposure common  
>>> today.  
>>>  
>>> The paper properly emphasizes the need for more  
>>> research in developing countries, where NHL accounts for 37% of all  
>>> cancers according to the WHO. The team suspects exposures will be  
>>> much higher in many developing countries, likely leading to even  
>>> stronger associations in this type of epi study.  
>>  
>>  
>> chuck  
>>  
>> Charles Benbrook, Research Professor and Program Leader "Measure to

Plaintiff Exhibit

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>> --  
>> David Friedberg  
>> CEO, The Climate Corporation  
>> <mime-attachment.gif>  
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>> <Schinasi\_glyphosate\_cancer\_2014.pdf>  
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