

OPINION

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OPEN FORUM *On Science and Politics*

How safe is Monsanto's Roundup? Jury verdict gives cause for pause

By Nathan Donley and Carey Gillam

It's been three weeks since a San Francisco jury found that exposure to Monsanto's Roundup herbicides contributed to former school groundskeeper Dwayne "Lee" Johnson's terminal cancer and awarded a stunning \$289 million in damages to the 46-year-old father. And during that time, we've seen repeated assertions from the pesticide giant and its allies that, in fact, the jury was wrong and the weed killer of choice for millions of Americans is perfectly safe.

Monsanto Vice President Scott Partridge repeated the familiar mantra: Hundreds of scientific studies, as well as reviews by regulatory agencies across the globe, including the U.S. Environmental Protection Agency, have found that glyphosate — the active ingredient in Roundup — does not cause cancer. Monsanto's new owner, Bayer AG, went further. Bayer CEO Werner Baumann told investors that the jury was just flat-out "wrong" and that Bayer would work to ensure that sales of the weed-killing products were not interrupted. "More than 800 scientific studies and reviews" support glyphosate safety, he told investors.

Unchallenged, the carefully honed talking points sound impressive and conclusive — exactly as intended.

But in the wake of the jury's award, many people across the United States who have been spraying the pesticide on their lawns and gardens for years doubt those reassuring words. And with good reason.

Corporate assurances of safety leave out one important word — a word that is critically important to anyone who wants to make an informed decision about the cancer risk



Georges Gobet / AFP / Getty Images 2017

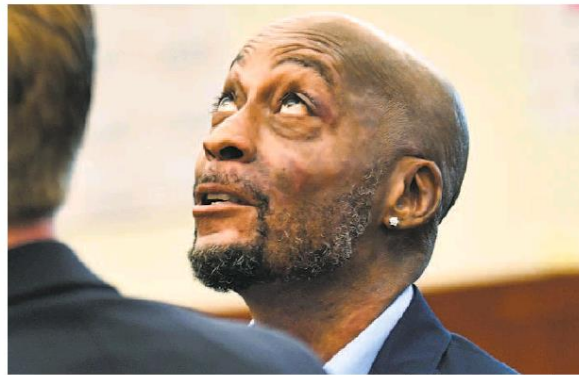
A cancer victim's court victory over herbicide-maker Monsanto could open the floodgates to a slew of lawsuits, leaving the new German owner Bayer with a buyer's remorse.

associated with Roundup and the hundreds of other glyphosate-based herbicides on the market.

That word is "independent," as in "independent scientific studies and reviews."

As was laid out in the trial, there is a wealth of evidence, much of it from within Monsanto's own internal documents, detailing how much of the research suggesting that Roundup is safe has been orchestrated and/or influenced by Monsanto and its chemical industry allies.

But truly independent research has shown that there is reason for concern. As Roundup use on U.S. farms, residential lawns and gardens has soared from roughly 40 million pounds a year in the 1990s to nearly 300 million pounds in recent years, the dangers of the chemical have been documented in numerous peer-reviewed studies.



Josh Edelson / Associated Press

A San Francisco jury ordered Monsanto to pay \$289 million to Dwayne "Lee" Johnson, a groundskeeper dying of cancer.

It was those independent and peer-reviewed works that convinced the cancer research arm of the World Health Organization to determine that glyphosate is a probable human carcinogen. In the wake of that WHO finding, California added

glyphosate to the state's list of cancer-causing chemicals.

Monsanto's response to that 2015 classification was more manipulated science. An "independent review" of glyphosate showed up in a peer-reviewed scientific journal decri-

ing the IARC classification. The review not only was titled as being independent, but declared that no Monsanto employee had any involvement in the writing of it. Yet the company's internal emails, turned over in discovery associated with the litigation, revealed that a Monsanto scientist in fact aggressively edited and reviewed the analysis prior to its publication.

That was but one of multiple examples detailed in the unsealed documents of similar efforts, referred to by Monsanto's own employees as "ghostwriting."

The EPA has sided with Monsanto over independent scientists, declaring the pesticide is not likely to cause cancer. By doing so, the agency has ignored the fact that its own Office of Research and Development expressed unease with the EPA's handling of the glyphosate evaluation, as did a scientific advisory panel convened by the agency to peer-review the evaluation.

Perhaps not surprisingly, the trial evidence also included communications detailing what can only be described as cozy collaborations between Monsanto and certain EPA officials.

Americans deserve better from their regulators, whose priority should be to put the public's health far before corporate profits.

Instead, it took a brave man dying of cancer and jury of 12 ordinary citizens to step up and face the challenge of taking a hard look at the scientific facts and calling for justice.

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