A155940 & A156706

In The California Court of Appeal

First Appellate District

Division One

Dewayne Lee Johnson,

Plaintiff and Respondent/Cross-Appellant,

v.

Monsanto Company

Defendant and Appellant/Cross-Respondent

APPEAL FROM THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, COUNTY OF SAN FRANCISCO HONORABLE SUZANNE R. BOLANOS

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CROSS-APPELLANT'S REPLY BRIEF

I. INTRODUCTION

The consensus of the three juries and four trial court judges that have considered the evidence of Monsanto's conduct is that "Monsanto deserves to be punished." *In re Roundup Products Liability Litigation* (N.D. Cal., July 15, 2019) 2019 WL 3219363, at *2. The question before this Court is a *de novo* determination of the maximum punishment that comports with due process based on the jury's findings of fact. That amount must be sufficient for Monsanto to understand that its "behavior will not be tolerated." *Bardis v. Oates* (2004) 119 Cal.App.4th 1, 26. That amount must be large enough to "sting." *Simon v. San Paolo U.S. Holding Co., Inc.* (2005) 35 Cal.4th 1159, 1186 fn. 9. Here, the punitive damages awarded by the jury of only 3.8% of Monsanto's net worth amounts to little more than a "slap on the wrist." *Century Surety Co. v. Polisso* (2006) 139 Cal.App.4th 922, 967; *see also*

Motorola Credit Corp. v. Uzan (2d Cir. 2007) 509 F.3d 74, 84 (affirming \$1 billion in punitive damages at 20% of net worth).

This jury's finding was not the result of a breakdown of the judicial system wherein Monsanto claims "virtually everything in this trial went wrong." ARB-XRB at 20. Instead, it was a reasoned finding repeatedly confirmed based on Monsanto's reprehensible conduct. No one but Monsanto is responsible for its behavior.

The Honorable Vince G. Chhabria, the federal district judge in the Northern District of California who presided for the last three years over the coordinated Roundup multi-district litigation involving over one thousand plaintiffs, ruled in post-trial motions for the first federal trial that it was reasonable for the jury to find that Monsanto acted with "despicable conduct which [was] carried on by the defendant with a willful and conscious disregard of the rights or safety of others." *In re Roundup*, 2019 WL 3219363, at *2. Judge Chhabria held that "the evidence at trial painted the picture of a company focused on attacking or undermining the people who raised concerns, to the exclusion of being an objective arbiter of Roundup's safety." *Id*.

The Honorable Winifred E. Smith, Superior Court Judge for Alameda County overseeing the actions of over 500 plaintiffs in the consolidated California litigation, concluded in her post-trial ruling that the evidence demonstrated "Monsanto made an ongoing effort to impede, discourage, or distort scientific inquiry and the resulting science about glyphosate and thereby showed a conscious disregard for public health. Consistent with the purpose of punitive damages, this is reprehensible conduct that affects the public and therefore warrants punitive damages." MJN, Ex. A, pp. 24-25.

The Honorable Curtis E.A. Karnow, in denying summary judgment concluded that the evidence:

could support a jury finding that Monsanto has long been aware of the risk that its glyphosate-based herbicides are carcinogenic, and more dangerous than glyphosate in isolation, but has continuously sought to influence the scientific literature to prevent its internal concerns from reaching the public sphere and to bolster its defenses in products liability actions.

4-AA-3213-3214.

The Honorable Suzanne R. Bolanos, after full consideration of the evidence determined that, "the jury could conclude that Monsanto acted with malice by consciously disregarding a probable safety risk of [Roundup] and continuing to market and sell its product without a warning." 6-AA-6651. Monsanto continues to inappropriately rely on comments in oral argument by Judge Bolanos to impeach her final order. "[A] judge's comments in oral argument may never be used to impeach the final order, however valuable to illustrate the court's theory they might be under some circumstances." *Jespersen v. Zubiate-Beauchamp* (2003) 114 Cal.App.4th 624, 633.

Monsanto inappropriately attempts to reargue the evidence on appeal and make credibility assessments rejected by the jury. *People v. Thompson* (2010) 49 Cal.4th 79, 125 ("We reject defendant's attempt to reargue the evidence on appeal and reiterate that it is not a proper appellate function to reassess the credibility of the witnesses.") (quotations omitted). Monsanto's re-argument of the evidence is not factual and betrays an unfamiliarity with the record. For example, Monsanto claims that Dr. Parry reviewed only four published studies, however, the record is clear that Dr. Parry's review included all 24 of Monsanto's confidential genotoxicity studies. 6-AA-6320-6322, 6-AA-6363-6376.

Monsanto inappropriately seeks to bring into dispute at the appellate level facts undisputed at trial. For example, at trial, the parties agreed and the record supports that Mr. Johnson continued spraying until January 2016. 3377:1-2. Monsanto's trial attorneys conceded and <u>argued to the jury</u> that

the evidence through January 2016 was relevant to an assessment of Monsanto's conduct. 5186:2-11. Yet, Monsanto's appellate attorneys now claim that any conduct after March 2015 is irrelevant to punitive damages. ARB-XRB 75.

Judge Smith rejected Monsanto's reliance on *Johnson & Johnson Talcum Powder Cases* (2019) 37 Cal.App.5th 292 ("J&J"), holding "In this case, however, Monsanto made efforts to interfere with the underlying public scientific inquiry and as a result cannot have in good faith relied on the available public science in making its decisions about the danger of glyphosate." *Id.* at p. 20. The jury likewise rejected Monsanto's claim that it could in good faith rely on approval of Roundup by regulators (ARB-XRB 107) as those regulators were heavily influenced by Monsanto and relied on the public inquiry that Monsanto manipulated. *Infra* Section III(D)(4).

The jury's punitive damage award of \$250 million which constitutes a 6.4:1 ratio of punitive to compensatory damages comports with due process in light of the reprehensibility of Monsanto's conduct, the deathly harm to Johnson, and the high net worth of Monsanto.

II. STANDARD OF REVIEW

The parties agree that review of the constitutional limits of punitive damages is *de novo*. ¹ However, the Court should "defer to the jury's findings of historical fact..." *Pfeifer v. John Crane, Inc.* (2013) 220 Cal.App.4th 1270, 1311. "In enforcing federal due process limits, an appellate court does not sit as a replacement for the jury but only as a check on arbitrary awards." *Simon*, 35 Cal.4th at 1188.

¹ The question of whether punitive damages are excessive under state law is also a question of law. *Neal v. Farmers Ins. Exchange* (1978) 21 Cal.3d 910, 92.

Jurors, not appellate justices, hear the evidence and determine the facts...It is they, with their collective understanding of the limits of what decent citizens ought to have to tolerate, who are charged with assessing the degree of reprehensibility and meting out an appropriate financial disincentive for untoward claims practices.

George F. Hillenbrand, Inc. v. Insurance Co. of North America (2002) 104 Cal.App.4th 784, 816

Therefore, on review, the Court accepts the jury's finding that a defendant acted with malice and makes an independent determination of the maximum punishment that comports with due process. "[T]he constitutional mission is only to find a level higher than which an award *may not* go; it is not to find the 'right' level in the court's own view." *Simon*, 35 Cal.4th at 1188. The Court then should order that judgment be entered to reflect that amount without further proceedings below. *Id.* at 1187, 1190.

III. ARGUMENT

A. The U.S. Supreme Court and Congress Encourage States to use Tort Litigation to Impose Penalties on Pesticide Manufacturers Who Fail to Warn of Safety Risks.

The U.S. Supreme Court encourages California juries to protect the consuming public from the undisclosed dangers of pesticides, holding that "[t]he long history of tort litigation against manufacturers of poisonous substances adds force to the basic presumption against pre-emption... this history emphasizes the importance of providing an incentive to manufacturers to use the utmost care in the business of distributing inherently dangerous items." *Bates v. Dow Agrosciences LLC* (2005) 544 U.S. 431, 449–450.

Bates dictates that "[s]tates have ample authority to review pesticide labels to ensure that they comply with both federal and state labeling requirements. Nothing in the text of FIFRA would prevent a State from

making the violation of a federal labeling or packaging requirement a state offense, thereby imposing its own sanctions on pesticide manufacturers who violate federal law." *Bates*, 544 U.S. at 442. Congress makes clear that "[i]n no event shall registration of an article be construed as a defense for the commission of any offense under this subchapter." 7 U.S.C.A. § 136a(f)(2).

A California jury is not bound by the biased and flawed decisions of a few EPA employees. "Indeed, if the EPA's registration decision is not preemptive, it follows that the factual findings on which it relied in making that decision also are not preemptive." *Hernandez v. Monsanto*, (C.D. Cal., July 12, 2016) 2016 WL 6822311, at *8. The EPA cannot strip California of its sovereign power to protect its citizens from pesticides, expressly reserved to them by Congress. A state jury is entitled to conclude that the "EPA failed to enforce FIFRA correctly when it approved that label. And *Bates* tells us that the EPA's authority to enforce FIFRA...isn't exclusive." *Hardeman v. Monsanto Company* (N.D. Cal. 2016) 216 F.Supp.3d 10371039. In rejecting impossibility preemption, *Ansagay v. Dow Agrosciences LLC*, held "a state's ability to ban or restrict the use of an EPA-approved pesticide clearly undercuts Dow's sweeping contention that any state law that impedes Dow's ability to sell its registered product runs afoul of FIFRA." *Ansagay v. Dow Agrosciences LLC* (D. Hawaii 2015) 153 F.Supp.3d 1270, 1283.

Monsanto cannot hide behind the EPA to avoid the consequences of its reprehensible conduct under California law. It could have added a cancer warning to its label at any time Johnson was spraying Roundup with the EPA's approval. Indeed, on September 6, 2017, the EPA approved a request

by Ragan and Massey² (a glyphosate manufacture) to add the following warning to its glyphosate label³:

For California:

A WARNING: This product can expose you to chemicals including glyphosate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

This approval proves conclusively that it was not impossible to add a cancer warning to the Roundup label during the relevant times Johnson was spraying Roundup. *Merck Sharp & Dohme Corp. v. Albrecht* (2019) 139 S.Ct. 1668, 1682 ("...neither agency musings nor hypothetical future rejections constitute pre-emptive 'Laws' under the Supremacy Clause.") (J. Thomas concurring).

The federal government, in fact, requires Monsanto to warn commercial applicators, such as Johnson, about IARC's findings that glyphosate is a probable carcinogen on the Safety Data Sheets relied upon by Johnson. 18B-RT-3230:10-3232:4; 5-AA-5646; 3637:2-4. OSHA requires manufacturers to treat "IARC monographs, 'as establishing that a chemical is a carcinogen *or potential carcinogen* for hazard communication purposes.' (29 C.F.R.1910.1200(d)(4) (2012), italics added.)" *Styrene Information & Research Center v. Office of Environmental Health Hazard Assessment* (2012) 210 Cal.App.4th 1082, 1099.

B. California Law Supports a Substantial Punitive Damage Award to Serve the Policy Goals of Deterring Future Bad Conduct and Punishing Monsanto.

The U.S. Supreme Court allows California its "constitutional freedom to use punitive damages as a tool to protect the consuming public." *Johnson* v. *Ford Motor Co.* (2005) 35 Cal.4th 1191, 1206. Punitive damages "remain

² Plaintiff only cites outside of the record to defend against Monsanto's citation to documents outside of the record. This document was discovered after trial.

³ https://www3.epa.gov/pesticides/chem_search/ppls/084009-00029-20170906.pdf, page 9.

the most effective remedy for consumer protection against defectively designed mass-produced articles" precisely because "[g]overnmental safety standards and the criminal law have failed to provide adequate consumer protection." *Buell–Wilson v. Ford Motor Co.* (2006) 141 Cal.App.4th 525, 562.

Punitive damages may be assessed by a jury against a Defendant for the "sake of example and by way of punishing the defendant." Civ. Code, § 3294. "In order to serve these aims, a punitive damages award must send a message to the offender and others in similar positions that this sort of behavior will not be tolerated." *Bardis*, 119 Cal.App.4th at 26. The award must be large enough to "sting" in light of the Defendant's net worth and the reprehensibility of its conduct. *Simon*, 35 Cal.4th at1186 fn. 9. "The ultimately proper level of punitive damages is an amount not so low that the defendant can absorb it with little or no discomfort [citation], nor so high that it destroys, annihilates, or cripples the defendant." *Pfeifer*, 220 Cal.App.4th at 1308. Therefore, "[w]ealth is an important consideration in determining the excessiveness of a punitive damage award...the wealthier the wrongdoer, the larger the award of punitive damages." *Bankhead v. ArvinMeritor, Inc.* (2012) 205 Cal.App.4th 68, 77–78.

Courts have found that punitive damage awards smaller than 3.2% of a Defendant's "net worth" are only a "slap on the wrist" even where conduct is only moderately reprehensible. *Century Surety*, 139 Cal.App.4th at 967. Therefore, based upon Monsanto's stipulated net worth of \$6.8 billion (4017:13-17), a punitive damage award of 3.8% or \$250 million, is a light punishment considering Monsanto's highly reprehensible behavior. *Bigler-Engler v. Breg, Inc.* (2017) 7 Cal.App.5th 276, 309-310 (a punitive damage award of 5% of net worth is appropriate for even minimally reprehensible behavior). Punitive damage awards amounting to 23% of net worth have been held to strike an appropriate balance of deterrence and financial

devastation because it leaves a Defendant with 77% of their net worth intact. *Vallbona v. Springer* (1996) 43 Cal.App.4th 1525, 1540.

In approving an award of \$1 billion that amounted to 20% of a Defendant's net worth the U.S. Court of Appeals for the Second Circuit noted the defendants still "remain billionaires..." *Motorola*, 509 F.3d at 84. A Louisiana appellate court upheld an \$850 million dollar punitive damages amounting to 18% of defendants' net worth stating:

The question is, in effect, how much will *this defendant* be punished or deterred by an \$850 million punitive damages award?we cannot say that 18% is indisputably more than necessary to effectuate the *Billiot* purposes of punishment and deterrence.

In re New Orleans Train Car Leakage Fire Litigation (La. Ct. App. 2001) 795 So.2d 364, 388. "In this day and age it is becoming more and more commonplace for settlements, civil fines, and penalties imposed on such large corporations to range in the billions of dollars..." In re Actos (Pioglitazone) Products Liability Litigation (W.D. La., 2014) 2014 WL 5461859, at *35. Therefore, large punitive damage awards are "no longer as shocking in the context of settlements, sums of money, fines, penalties, and sales of today's multi-national and multi-billion dollar corporations..." Id. In Actos, the court found that the jury was reasonable in awarding punitive damages totaling \$9 billion noting that:

If the goal is to punish and deter, when faced with companies of this size who generated sales, in the billions, off of the very product they hid the risk of, over the very period they hid that risk, was the jury unreasonable to fashion its award reflecting those realities? This Court finds they were not." *Id.* at *33.

The *Actos* Court however, felt it necessary to reduce the award to a ratio of 25 to 1 based on the proportionality prong of the punitive damage analysis. *Id*.at *55.

Here, the punitive damage award of \$250 million is not unreasonable and it appropriately serves California's goals of protecting public health, deterring future corporate malfeasance and punishing Monsanto. Far from crippling Monsanto, the award simply means that Monsanto's net worth would be \$6.55 billion instead of \$6.8 billion.

C. The Amount of Punitive Damages is not Limited to a 1:1 Ratio with Compensatory Damages.

Monsanto concedes that it is necessary to assess a defendant's conduct in order to set a proper ratio. ARB-XRB 102-203. However, Monsanto incorrectly states that Judge Bolanos assessed Monsanto's reprehensibility in concluding that a ratio of 1:1 was appropriate. Judge Bolanos never described the evidence of punitive damages as "thin" in her final order and declined to evaluate the degree of Monsanto's reprehensibility. 6-AA-6153. Judge Bolanos' final order was based solely on the size of the compensatory damages. *Id.* This was error.

Punitive damages cannot be reduced to a 1:1 ratio simply because the compensatory damages are high. "[W]e do not regard the amount of compensatory damages as a fixed upper limit where damages are 'substantial,'...the constitutional limit depends facts on the and circumstances of each case." Bullock v. Philip Morris USA, Inc. (2011) 198 Cal.App.4th 543, 569. A 1:1 ratio requires there be both "relatively low reprehensibility" and a "substantial award of noneconomic damages" containing a punitive element. Roby v. McKesson Corp. (2009) 47 Cal.4th 686, 718; Gober v. Ralphs Grocery Co. (2006) 137 Cal.App.4th 204, 222-223 (a "modest" degree of reprehensibility supports a 6 to 1 ratio even where damages contained a punitive element.); Pfeifer, 220 Cal.App.4th at 1314 ("...a one-to-one ratio is not the maximum allowable under the circumstances, in view of JCI's highly reprehensible conduct.").

Here, there was no punitive element in the compensatory damages and the reprehensibility was high. The jury was instructed clearly about the distinction between compensatory and punitive damages in the instructions. 5049:11-5052:3. "Absent some contrary indication in the record, we presume the jury follows its instructions." *Cassim v. Allstate Ins. Co.* (2004) 33 Cal.4th 780, 803. Johnson's counsel did not ask the jury to include any punitive element within the compensatory damages. Instead, consistent with the court's instructions, Johnson's counsel emphasized that punitive damages are "separate and apart from compensatory damages." 29A-RT-5109:7-5111:24. The compensatory damages of \$39,253,209.32 resulted from the twelve jurors assessing Johnson's horrific injuries and applying their collective wisdom to the Trial Court's instructions and these facts. RB/X-AOB 44-48.

A punitive element in compensatory damages occurs where the Plaintiff directly experienced and witnessed the reprehensible conduct and thus felt outrage and humiliation by how Defendant was treating them. In *State Farm*, the U.S. Supreme Court found a punitive element because there was no physical injury and "[m]uch of the distress was caused by the outrage and humiliation the Campbells suffered at the actions of their insurer." *State Farm Mut. Auto. Ins. Co. v. Campbell* (2003) 538 U.S. 408, 426. Likewise, in *Roby*, the compensatory damages resulted primarily from harassment directed at plaintiff by her superiors with an intent to humiliate and not from personal injury. 47 Cal.4th at 710.

Here, no evidence was presented that Johnson's distress was caused by outrage towards the company or humiliation from the way he was treated. 18B-RT-3274:14-24. For example, Johnson did not express outrage that Monsanto ghostwrote articles. Johnson knew nothing about such conduct before the lawsuit. Johnson had no idea Monsanto knew of a probable risk of NHL when he called the company. Instead, he testified that he spoke to a

"very nice lady." 18B-RT-3274:14-24. His damages testimony was exclusively related to how cancer affected his life. He sought no damages for outrage directed towards Monsanto. The jury awarded only the compensatory damages Johnson sought. This case is similar to *Bullock*, which distinguished *Roby* and *State Farm*, holding that:

Unlike the situation where the plaintiff is awarded a generous amount for emotional distress arising from economic harm with no physical injury... neither the circumstances here nor the amount of the emotional distress damages suggests that those damages reflect either Bullock's outrage and humiliation or the jury's indignation at Philip Morris's conduct.

Bullock, 198 Cal.App.4th at 566-567.

D. Monsanto's Highly Reprehensible Conduct Supports the Jury's Punitive Damage Award.

In determining the outermost limit of a constitutionally permissible ratio between punitive damages and compensatory damages, the Court should consider reprehensibility of a Defendant's conduct based on evidence considered by the jury's finding, including whether: (1) "the harm caused was physical as opposed to economic;" (2) "the tortious conduct evinced an indifference to or a reckless disregard of the health or safety of others;" (3) "the target of the conduct had financial vulnerability;" (4) "the conduct involved repeated actions or was an isolated incident;" and (5) "the harm was the result of intentional malice, trickery, or deceit, or mere accident." *Simon* (2005) 35 Cal.4th at 1172.

1. The Serious, Deadly Injury Suffered by Johnson Supports a Finding that Monsanto's Conduct Was Highly Reprehensible.

The compensatory damages awarded by the jury reflect its finding that Johnson's suffering is immense and that his injury is substantially more "physical as opposed to economic." *Id.* Johnson is suffering from extremely

painful, disfiguring lesions all over his body, a consequence of the fatal NHL induced by Roundup. RB/X-AOB 44-48. Likewise, the treatments for the fatal NHL have also caused Johnson to suffer debilitating pain and suffering. *Id.* This evidence supports a finding that Monsanto's actions were highly reprehensible because it "caused a high degree of physical harm, including deathly harm" *Romo v. Ford Motor Co.*, (2003)113 Cal.App.4th 738 at 755, 763.

2. Johnson Financial Vulnerability Supports a Finding That Monsanto's Conduct Was Highly Reprehensible.

Johnson was financially vulnerable because he was required to spray Roundup as part of his job and thus risked losing his job if he refused to spray. This fact renders Monsanto's behavior even more reprehensible. *Bankhead*, 205 Cal.App.4th at 86 (plaintiffs "were financially vulnerable in that they could not avoid the exposure without leaving their employment."); *Roby*, 47 Cal.4th at 713. When Johnson lost his job to cancer, his wife was forced to work two full time jobs. 18A-RT-3177:18-23.

3. Monsanto's Behavior Demonstrated a Reckless Disregard of the Health or Safety of Others and Involved Repeated Intentional Malice, Trickery, and Deceit.

a. The Jury Rejected Monsanto's Version of Facts.

Monsanto seeks on appeal to re-argue its interpretation of the facts rejected by the jury, and inappropriately asks this Court to serve as a fact-finder. *People v. Reynoso* (2003) 31 Cal.4th 903, 918 (Appellate courts cannot experience what the fact-finder experienced: "the nuances, the inflections, the body language which traditionally form part of the basis on which credibility is evaluated by triers of fact.").

The jury here viewed the body language of Monsanto's employees as they evaded questions or provided answers that strained credibility. Monsanto witnesses were trained to evade questions through "Blocking and Bridging" by moving from the "question to the answer you want to give." 6-AA-6455, 5-AA-5539. When Monsanto's Product Safety Assessment Strategy Lead Dr. William Heydens was asked at deposition about the prelawsuit email wherein he admitted to ghostwriting Williams (2000), he nonetheless denied ghostwriting the article because his "recall must have been bad..." when he wrote the email. 5-AA-5729. In a rare moment of candidness, Monsanto employee Dr. Goldstein admitted, "we have some limitations on our credibility when we are speaking as Monsanto publicly." 5-AA-5626.

Monsanto presented no documentary evidence that its scientists cared whether Roundup actually causes cancer. As Judge Chhabria aptly noted:

while the jury was shown emails of Monsanto employees crassly attempting to combat, undermine or explain away challenges to Roundup's safety, not once was it shown an email suggesting that Monsanto officials were actively committed to conducting an objective assessment of its product.

In re Roundup, (N.D. Cal. 209) 385 F.Supp.3d 1042, 1047.

The jury simply did not believe Monsanto's witnesses nor the argument of counsel that "Monsanto reasonably believes that Roundup is not a carcinogen." ARB-XRB 109. Private Monsanto emails even confirm "you cannot say that Roundup does not cause cancer..." 6-AA-6466-6468. Monsanto's argument on appeal that punitive damages are not warranted because it acted in good faith was rejected in *Pfeifer*, 220 Cal.App.4th at 1301. In *Pfeifer*, the Defendant argued that it "reasonably believed that" its product was safe and that "regulations supported its belief that the products were safe; that no specific study showed that the products were unsafe; and that its failure to test the products was consistent with industrywide

practices." *Id.* The Court rejected this argument, holding that JCI "misapprehends our role as an appellate court. Review for substantial evidence is not trial de novo." *Id.* The Court held "[t]he jury rejected the inferences that JCI proposes on appeal, and the trial evidence supports its decision to do so." *Id.*

This was not a jury that "ignores sound science." ARB-XRB 20. One of the several jurors with Ph.Ds., Juror 10, had "a fairly deep knowledge of genetic engineering and molecular biology" explaining how chemicals can cause cancer by "interpolate[ing] into DNA." 5B-RT-587:22-589:3. Juror 10 explained she would "really need to be presented with the data in order to making any...informed decision" on glyphosate. 5B-RT-590:14-16. Her questions made clear that she would decide the case on a rigorous and detailed review of the science. RA287, 290, 296, 300, 303; 2419:17-18 ("we are getting a lot of questions from Juror number 10."). Based on Juror 10's well-educated consideration of the scientific data, she joined her fellow jurors in finding clear and convincing evidence that Monsanto's behavior was malicious. As a scientist who works with carcinogenic chemicals in her laboratory and depends on honesty from chemical manufacturers (5B-RT-587:3-589:3), Juror 10 was in a particularly relevant position to determine "what decent citizens ought to have to tolerate" and to mete out the appropriate punishment.

b. Defendants Agreed and Argued to the Jury that Johnson Stopped Spraying Roundup in January 2016.

At trial, Monsanto's attorneys agreed that all of Monsanto's conduct before January 2016 is relevant to punitive damages. 19A-RT-3377:1-2. Monsanto's appellate attorneys cannot walk away from this concession on appeal. "The general rule confining the parties upon appeal to the theory advanced below is based on the rationale that the opposing party should not

be required to defend for the first time on appeal against a new theory that contemplates a factual situation the consequences of which are open to controversy and were not put in issue or presented at the trial." *C9 Ventures* v. *SVC-West*, *L.P.* (2012) 202 Cal.App.4th 1483, 1491–1492. (quotations omitted)

During pre-trial discovery it was established that Johnson did not stop spraying Roundup until late 2015 or early 2016 and was designated as an undisputed fact by Monsanto in its summary judgment motion. 1-AA-258; 3-AA-2271. Consistent with this undisputed fact, Monsanto argued to the jury in closing arguments that "2016 is actually when Mr. Johnson stopped using the product, I believe, and so it shows you **the relevant period of time."** 5186:2-11 (emphasis added).

Monsanto argued to the Trial Court that "foreign regulatory actions [that] took place prior to January 1, 2016" were admissible because the documents related to "the issue of notice to the company and the company's actions up until that point, and whether the company was acting in good faith." 1A-RT-27:8-17. Monsanto moved to exclude corporate conduct evidence for only "corporate activities after January 2016" because "[t]hat was Mr. Johnson's last use of glyphosate..." 19A-RT-3377:1-2.

Because this fact was undisputed, Plaintiff did not elicit testimony from Johnson on his exact stopping date at trial. However, Dr. Nabhan, who interviewed Johnson and reviewed Johnson's employment records, confirmed at trial that Johnson was still spraying as of September 24, 2015. 17B-RT-2882:22-2883:25; 17A-RT-2833:4-20. The evidence also demonstrated that Johnson would spray Roundup each January. 17B-RT-3036:15-21

Monsanto's new appellate attorneys misread the following testimony in arriving at an interpretation rejected by Monsanto's trial attorneys:

- Q. Did you -- and Dr. Ofodile testified she actually wrote a letter on your behalf; right?
- A. She did.
- Q. Did the school eventually allow you to not continue spraying?
- A. After I refused to totally stop spraying. They didn't do anything until I told them I refused to spray.

18B-RT-3236:4-10. This testimony does not support Monsanto's contention, raised for the first time on appeal, that Johnson stopped spraying in March 2015. Obviously, if the school did allow Johnson to stop spraying based on Dr. Ofodile's March 2015 letter then Johnson would not have had to eventually refuse. Monsanto's contention is also refuted by Johnson's testimony that he was still spraying on March 27, 2015 when he called Monsanto. 18B-RT-3282:18-3283:11. Johnson testified that he would not have continued spraying if Monsanto called him back indicating that he continued to spray after March 2015. *Id*.

Even if Monsanto did not agree that all of its pre-2016 actions related to punitive damages, the evidence supports that Johnson's injuries continued to worsen as he continued to use Roundup without being aware of the product's carcinogenic risk. *Anderson v. Owens-Corning Fiberglas Corp.* (1991) 53 Cal.3d 987, 1003 ("the user of the product must be given the option either to refrain from using the product at all or to use it in such a way as to minimize the degree of danger."). Roundup can act as a tumor promoter. 12B-RT-1863:19-20; 2812:21-24. Dr. Nabhan testified that Johnson's continued spraying could have caused his cancer to worsen, analogizing Johnson's situation to a smoker with lung cancer. 17A-RT-2865:1-12.

c. Post-Use and Post-Injury Conduct is Relevant to an Assessment of the Reprehensibility of Monsanto's Behavior.

Regardless of when Johnson stopped using Roundup, he "may present any evidence which would tend to prove the essential factors of the conscious disregard concept of malice. This includes evidence of subsequent activities ..." *Hilliard v. A. H. Robins Co.* (1983) 148 Cal.App.3d 374, 400–401; Evidence of post-use conduct is also directly relevant to the size of the punitive damages. "By placing the defendant's conduct on one occasion into the context of a business practice or policy, an individual plaintiff can demonstrate that the conduct toward him or her was more blameworthy and warrants a stronger penalty to deter continued or repeated conduct of the same nature." *Johnson* 35 Cal.4th at 1206.

Here, Monsanto's entire course of conduct from 1985 to present represents a continuum of the same behavior of consciously disregarding the risk of NHL with Roundup, intentionally manipulating the scientific literature and public debate through unethical practices such as ghostwriting, and attacking or undermining any scientists who disagree.

- d. The Evidence Supports the Jury's Findings that Monsanto Acted With Malice and Supports a Finding that Monsanto Acted with a High Degree of Reprehensibility Because of its Reckless Disregard for Human Health, Intentional Malice and Deceit.
 - Monsanto's Refusal to Conduct the Tests Dr. Parry Recommended and its Decision to Bury Dr. Parry's Report Is Reprehensible.

Monsanto's appellate brief falsely claims that world-renowned genetic toxicologist Dr. James Parry reviewed only four published studies. ARB-XRB 76-77. Trial Exhibit 218 identifies the twenty-four confidential Monsanto mutagenicity studies which were sent to Dr. Parry between his first and second report, which represent all "relevant reports" and the "full package" related to genotoxicity. 6-AA-6320-6322. Dr. Martens confirmed

that Monsanto gave Dr. Parry "all its proprietary rights studies, the regulatory studies..." 5-AA-5849-5850.4

Dr. Parry conducted a detailed critique of all of these studies. 6-AA-6363-6376. Specifically, Dr. Parry questioned Monsanto's continued use of contract labs notwithstanding their poor quality of research. 6-AA-6363. Dr. Parry noted that none of the confidential studies provided by Monsanto "were performed to a protocol equivalent to that of [the publicly available] Bolognesi et al (1997) which gave positive results with glyphosate" and there were "a number of deficiencies" in the confidential studies provided by Monsanto. 6-AA-6365-6367. Dr. Parry's conclusions that glyphosate and Roundup were likely genotoxic and his recommendations for further research were thus based on a review of both internal and public studies which represented the totality of genotoxicity data spanning Roundup's twenty-five years on the market. 6-A-6338-6339 (listing studies that supported his conclusion). And, the jury had good reason to place more weight on the publicly available data than taking Monsanto's word on the sufficiency of its internal studies.

Moreover, Monsanto never conducted all of the tests that Dr. Parry recommended. Dr. Farmer stated at deposition "I don't agree with what [Dr. Parry] said" about further testing 5-AA-5840. Dr. Farmer evaded repeated questions about whether the 2008 Monsanto study referenced by Monsanto's counsel - as support for the proposition that Monsanto conducted the additional recommended tests (ARB-XRB 77) - answered Dr. Parry's questions. 5-A-5845-5846. Instead, she testified "[I]et me put it this way: That Dr. Parry had a whole list of recommendations." *Id.* Dr. Portier reviewed the 2008 Monsanto study and confirmed that it addressed only one

⁴ By definition, none of these studies were available to the public or non-Monsanto scientists.

of Dr. Parry's recommendations. 13A-RT-1997:19-22. Monsanto rejected the other recommendations, including an assay which Dr. Parry advised would "provide the ability to determine whether damage is produced in a wide range of tissues following glyphosate exposure." 5-AA-5563. In short, as Dr. Heydens stated in 1999: "We simply aren't going to do the studies Parry suggests." 6-AA-6377. This is the definition of reckless disregard for a potential human health risk.

It is not true that "Monsanto ultimately gave due credence to Dr. Parry's recommendations." ARB-XRB at 77. Dr. Farmer stated "we obviously had a disagreement with him. And, sure, if we have someone who doesn't agree with the way we interpret the data, we're not going to obviously have them out there being spokespeople for us." 5-AA-5558. Because Monsanto hid Dr. Parry's conclusions they were never made public or submitted it to the EPA.

ii. Monsanto's Refusal to Test the Surfactants in Roundup and to Continue to Sell it in Light of its Toxicity Is Reprehensible.

Monsanto never gave credence to Parry's recommendation to study the surfactants in Roundup which he found may "act synergistically to increase the potential genotoxicity of glyphosate." 5-AA-5827. 5-AA-5823. One Monsanto scientist, Dr. Mark Martens, delivered an internal presentation to his Monsanto colleagues in the early 2000s wherein he cautioned that "Surfactants are biologically not 'inert' they can be toxic and this must be addressed." 6-AA-6300. However, Monsanto ignored Dr. Martens' concern and never adequately addressed the toxicity of surfactants in the formulated Roundup product used by consumers. Even in the EPA's September 2016 issue paper, the EPA reiterates Dr. Parry's recommendation, stating "additional research could also be performed to determine whether formulation components, such as surfactants, influence the toxicity of

glyphosate formulations." 7-AA-7287. This is of particular importance since Johnson sprayed formulated Roundup (containing the POEA surfactant) which has never undergone a long-term carcinogenicity assay.

Monsanto points to a "SAR analysis" as evidence that surfactants are not carcinogenic. However, a "SAR analysis" is simply a computer simulation. *See Forest Laboratories, Inc. v. Teva Pharmaceuticals USA, Inc.* (D. Del., Jan. 5, 2016) 2016 WL 54910, at *8 ("[N]o pharmacokineticist would rely solely on performance predictions from an *in silico* [simulated] model to determine the *in vivo* PK characteristics of a drug."). Dr. Sawyer testified that an SAR analysis is the "most crude and rudimentary approach" toxicologists use. 21B-RT-3733:10-3734:1. Dr. Sawyer confirmed there have been no carcinogenicity tests on surfactants used in Roundup even though the evidence shows they cause DNA damage. 21A-RT-3613:21-3616:3.

While not entered into evidence, the European assessment (ECHA) relied upon by Monsanto in its appellate brief confirms Dr. Sawyer's testimony about the lack of testing and confirms Dr. Heyden's testimony (5-AA-5781) that the surfactants used by Johnson are now banned in Europe:

...the co-formulant Polyethoxylated (POE)-tallowamine⁵ (CAS No 61791-26-2) was until quite recently allowed to be used in glyphosate-based herbicides in Europe. Since August 2016, Member States shall ensure that plant protection products containing glyphosate do not contain the co-formulant POE-tallowamine ...significant toxicity of POE-tallowamine has been observed for the endpoints for which data exists. However, no data are available regarding long-term toxicity and carcinogenicity of POE-tallowamine. 7-AA-6999 (emphasis added).

⁵ The Surfactant used in Roundup sold in the United States is alternatively referred to as POEA, Tallow Amine, or POE-tallowamine.

ECHA notes that the epidemiology "indicates a potential concern for human health" with NHL, but indicates that one reason a causal association with glyphosate "cannot be confirmed" is due to potential confounding by the "presence of a toxic co-formulant (POE-tallowamine)." 7-AA-7002.

It is telling that Monsanto claims that the ban on POEA due to its toxicity as assessed by regulatory agencies was "due to political reasons and is not supported by the scientific data." 5-AA-5781. It is egregious that Monsanto relies on the assessments of these regulatory agencies for its "good faith" belief that glyphosate is safe, while Monsanto continues to sell Roundup formulations containing the POEA deemed toxic by these same agencies. This is particularly so where Monsanto has long known of the "impending demise" of POEA in Europe because, as Monsanto scientists questioned in 2010 "there are non-hazardous formulations, so why sell a hazardous one?" 6-AA-6563.

Furthermore, it was Monsanto's Dr. Heydens who admitted internally that the "surfactant played a role" in the George (2010) tumor promotion study. 6-AA-6535-6538. Dr. Portier testified at length about the George (2010) study and how it supported the observation that Roundup acts as a tumor promotor even though the study was not a traditional carcinogenicity assay. 12B-RT-1861:1-1865:24. IARC did find that Roundup "was found to be a skin-tumour promoter" in the George (2010) study. 6-AA-6900.

iii. Monsanto's Ghostwriting of Scientific Literature Is Reprehensible.

In asserting that ghostwriting cannot support punitive damages as a matter of law, Monsanto mistakenly cites a vacated portion of a federal district court opinion. ARB-XRB 80. The 8th Circuit reversed the district court's JMOL finding cited by Monsanto, holding that "[a] jury reasonably could find that these efforts allowed Wyeth to promote the false

understanding that hormone replacement therapy was not linked to breast cancer and then to promote reliance on this understanding." *In re Prempro Prod. Liab. Litigation* (8th Cir. 2009) 586 F.3d 547, 572; *Wyeth v. Rowatt* (2010) 126 Nev. 446, 474 (upholding punitive damages award of \$58 million (ratio of 2.5:1) where "Wyeth's strategy to undermine scientific studies linking an increased risk of breast cancer to estrogen-progestin hormone therapy included ghostwriting multiple articles.").

Dr. Heydens clearly claims he "ghostwrote" the Williams (2000) in internal emails. 6-AA-6529. The jury could reasonably reject Dr. Heyden's self-serving post-lawsuit claims to the contrary. 5-AA-5728-5729; *In re Prempro*, 586 F.3d at 573. "[C]onsiderations of trustworthiness, whether based on his ability to recall or on other factors, are the exclusive province of the jury." *People v. Capers* (Cal., Aug. 8, 2019, No. S146939) 2019 WL 3720920, at *7. Dr. Farmer's claim that she only made minor edits to the Williams (2012) manuscript was likewise proven false by an email wherein she sent the authors the first 46 pages of the manuscript. 5-AA-5542-5544; 6-AA-6378.

Ghostwriting is deceptive and unethical. 6-AA-6380-6381. Honesty in scientific authorship is vital in advancing scientific knowledge. 22A-RT-3898:10-23. Monsanto's ghostwriting practices make a mockery of science because Monsanto starts with the knowingly false conclusion that Roundup is safe; drafts an article in support; and then finds outside scientists willing to sign their name to the article for compensation. This is not science and it is not behavior that "decent citizens ought to have to tolerate." *Hillenbrand*, 104 Cal.App.4th at 816.

Williams (2000) was initiated to support Monsanto's January 1999 press release that "we are confident that glyphosate herbicide products are not genotoxic and therefore do not present a mutagenic or carcinogenic risk to humans." 6-AA-6368. Monsanto first decided to use Dr. Parry to support

this statement, reserving Dr. Gary Williams to be used on a "contingency basis." 6-AA-6305. Dr. Parry's analysis did not support Monsanto's preordained conclusion that Roundup was safe. Therefore, Dr. Parry's report was buried, and a report ghostwritten by Monsanto scientists for Dr. Williams was published. Monsanto presented Williams (2000) to Dr. Parry in an effort to persuade him to reconsider his conclusions regarding the genotoxicity of Roundup and glyphosate, but the gambit failed and, after reading Williams (2000), Dr. Parry was "irritated by the language used in the mutagenicity section..." finding it to "...be very dismissive of other researchers work..." 6-AA-6398-6399.6

For Kier&Kirkland (2013), Monsanto started with the premise that the paper would defend against claims that Roundup was genotoxic several months before Monsanto even chose Dr. Kirkland to be an author. 6-AA-6604. Monsanto stuck to this pre-ordained conclusion despite the "large mess of studies reporting genetoxic effects." 6-AA-6610.

Monsanto recognized the importance of having authors on its publications appear independent of Monsanto. With Kier&Kirkland, Kirkland was added to "enhance credibility" because the claim that glyphosate was not genotoxic became a "very difficult story to tell" and "stretched the limits of credibility." 6-AA-6610. Before the Williams (2000) article, Monsanto discussed that they "may use our experts as authors" and "may have to divorce Monsanto from direct association with the expert." 6-AA-6556-6557.

Monsanto offered no documentary evidence to refute Dr. Heyden's admission that he ghostwrote Williams (2000). The disclosure on page 50

⁶ Dr. Parry never stated or published any work indicating that he was satisfied that Monsanto had carried out his recommended tests or that he reached the opposite conclusion regarding the genotoxicity of Roundup and glyphosate.

of the Williams (2000) paper, which states that Monsanto employees merely offered scientific support and provided data, is not the same as disclosing that Monsanto employees drafted the manuscript and the named authors just "edited and signed their names so to speak." 6-AA-6555, 6-AA-6529. Monsanto, in its brief, fails to address the other articles which involved ghostwriting or undisclosed influence by Monsanto including, Kier&Kirkland (2013), Williams (2012) (5-AA-5542-5543) Williams (2016), and the anti-IARC op-eds drafted by Dr. Goldstein. RB/X-AOB 55-56, 60.

Monsanto's disdain for scientific ethics is pathological. Even after Monsanto was sued by Johnson, it continued with its pre-lawsuit unethical behavior in creating an "independent" expert panel manuscript ("Intertek") as a means of "litigation support." RA-344. The editor of the journal which eventually published the manuscript emphasized that the acknowledgment section should be as "clear and transparent as possible" and "should make clear how individuals were engaged, i.e. by Intertek. If you can say without consultation with Monsanto that would be great. If there was any review of the reports by Monsanto or their legal representatives that needs to be disclosed." 6-AA-6524.

Rather than comport with scientific ethics, Monsanto lied. The final Intertek article stated in the acknowledgement section, with Monsanto's approval, that "neither any Monsanto Company employees nor any attorneys reviewed any of the expert panel manuscripts prior to submission to the journal." 5-AA-5757; 6-AA-6575. However, Dr. Heydens actually wrote the introduction to the papers. 5-AA-5758-5759. Dr. Farmer pulled together the background for the animal section of the manuscript and Monsanto instructed the scientists to focus only on glyphosate, not the formulated Roundup product. 5-AA-5761-5762. Dr. Heydens reviewed the manuscripts before they were published, stating that he went "through the entire document and

indicated what I think should stay, what can go, and in a couple spots did a little editing." 5-AA-5764-5768.

The declaration also stated that "[t]he Expert Panel Members recruitment and evaluation of the data was organized and conducted by Intertek...The Expert Panelists acted as consultants for Intertek." 6-AA-6575. Another lie. For example, Larry Kier, an expert panel member, was recruited by and had a direct consulting agreement with Monsanto to "support generation of a panel draft manuscript on glyphosate genotoxicity and oxidative stress." 6-AA-6526. Trial Exhibit 391 details Monsanto's initial organization of the expert panel and which scientists were to be recruited. RA-349. Monsanto involved Intertek only later to follow its legal department's advice that such a project would be "Appealing; best if use big names; better if sponsored by some group." RA-352. The panel members included Gary Williams and David Kirkland who had previously lent their names to articles ghost-authored by Monsanto. 5-AA-5720-5721.

The published Intertek article was deceptively titled "A review of the carcinogenic potential of glyphosate by four **independent expert panels** in comparison to the IARC assessment." 6-AA-6545, 5-AA-5720. (emphasis added). Independent means having no conflicts of interest, such as the 17 well-respected experts who reviewed glyphosate for IARC and were not paid for the analysis. 5-AA-5516-5517.

iv. Monsanto's Use of Ghostwritten Articles to Influence Regulatory Agencies is Reprehensible.

Monsanto's manipulation of the scientific literature heavily influenced the regulatory reviews it now hides behind. These ghostwritten articles are repeatedly referenced and relied upon in the very regulatory

reviews relied on by Monsanto.⁷ Dr. Heydens described the ghostwritten Williams (2000) article as a "very important paper" because if "people wanted to understand what the science of glyphosate says, that they had in one place a full review." 5-AA-5722.

In a PowerPoint titled "Glyphosate Toxicology Activities Supporting Registration Review", Williams (2000) was described as an "invaluable asset for response to agencies [and] regulatory reviews." RA327, 336. Monsanto expressed the need for "more current external expert publications...to support our FTO and registration reviews." *Id.* That powerpoint specifically references the article that Dr. Farmer ghostwrote and sent to "independent" expert, John DeSesso. RA-338; 6-AA-6378.

Incredibly, the EPA assigned more weight to the ghostwritten articles by Monsanto than it did IARC, stating:

Williams et al., (2000) concluded that "glyphosate is neither mutagenic nor clastogenic." Similarly, Kier and Kirkland (2013) concluded a "lack of genotoxic potential for both glyphosate and glyphosate based formulations (GBFs)....However, IARC (2015) concluded that "there is strong evidence that glyphosate causes genotoxicity."

7-AA-7117. This paragraph would carry significantly less weight if it substituted the word "Monsanto" for "Williams" and for "Kier and Kirkland." There is no evidence that the EPA was aware that Monsanto ghostwrote these papers.

The Intertek reports wherein Monsanto lied about its involvement were sent to the EPA and ECHA. Monsanto rushed publication of the Intertek manuscript because it would "be useful for ECHA which is a

⁷ 7-AA-7067-7069, 7117-7122, 7136, 7141, 7146, 7168, 7244, 7248, 7250, 7254, 7264, 7294, 7301, 7331, 7364, 7370, 7395, 7472, 7484, 7486, 7490, 7500, 7531, 7538, 7567, 7587, 7592, 7915; 8-AA-7978, 7981, 7986, 7992, 7993, 8047.

European Agency that is reviewing the safety of glyphosate. We would very much like to share our manuscripts with them to aid in their deliberations." 6-AA-6524. Monsanto actually hand-delivered a disc with copies of the Intertek manuscript to the EPA. 6-AA-6546. Monsanto did not inform either agency that the manuscripts were not independent.

v. The Fact That Monsanto's Safety Scientists Were Focused On Defending Glyphosate Sales And Gaining An Upper Hand In Potential Litigation Rather Than Focusing On Human Safety is Reprehensible.

Scientists in charge of the most widely used pesticide in human history should never choose managing liability over doing the right thing. However, Monsanto repeatedly tried to do this. Monsanto falsely assures the public that "The safety of our products, people, and communities has been, and always will be, a top priority." 6-AA-5610. The true top priority of Monsanto's "safety" scientists, as demonstrated in internal communications, is to "defend and maintain the glyphosate business." 6-AA-6405. Part of their duty was to "[d]efend against results from the AHS and other epidemiology studies" before they even knew the results of those studies. 6-AA-6408.8

Monsanto's scientific efforts were not designed to ensure the safety of its product, but rather to manipulate regulators to continue approving the unfettered sale of Roundup. Kier&Kirkland (2013) was ghostwritten for "future product defense against claims that glyphosate is mutagenic or genotoxic" 6-AA-6604. Monsanto attacked IARC to provide "cover for regulatory agencies" and "litigation support." 6-AA-6430, RA-344. Monsanto feared that "an adverse IARC evaluation ha[s] the real potential to

⁸ Ironically, before the AHS results were published, Monsanto feared that the study would conclude, consistent with previous epidemiology, that Roundup exposure is associated with NHL. However, Monsanto changed its tune to one of support for the study after the negative results were reported.

impact the results of regulatory reviews. 6-AA-6432. It is these very regulatory reviews that Monsanto is now using as litigation support to manage its punitive damages liability. The jury had ample evidence to conclude that it is reprehensible for scientists charged with ensuring the safety of Roundup to instead seek ways to minimize punitive liability in future litigation.

vi. Monsanto's Refusal to Warn of a Cancer Risk in Light of The EPA's 1985 Conclusion That Glyphosate Caused Tumors Is Reprehensible.

Monsanto could have added a cancer warning to the label more than three decades ago. In 1985, the EPA asked Monsanto to do just that; and the agency rejected Monsanto's claim that glyphosate did not cause tumors in animals and told Monsanto that "[o]ur viewpoint is one of protecting the public health when we see suspicious data." 26B-RT-4653:12-25. The EPA's consensus review in 1985, as confirmed by Monsanto's expert, was that glyphosate was a likely human oncogene, meaning it causes tumors. 26B-RT-4655:9-22. The EPA did not agree with Monsanto's re-analysis of the tumor slides. 22A-RT-3890:7-3897:19. The EPA even requested that Monsanto conduct another mouse study to look at tumors, but Monsanto never conducted that study. *Id.* Rather than being concerned about protecting public health, Monsanto was concerned about the "serious negative economic repercussions" of a Class C oncogene classification. 22A-RT-3851:13-23. This behavior supports enhanced punitive damages because "[a]ction taken or omitted in order to augment profit represents an enhanced degree of punishable culpability...." Exxon Shipping Co. v. Baker (2008) 554 U.S. 471, 494.

EPA's conclusion in 1985 that glyphosate caused tumors in mice was confirmed thirty years later by IARC, thirty years during which the public was using Roundup without a cancer warning. Monsanto on the other hand

avoided negative economic repercussions and this jury concluded that such conduct was reprehensible.

vii. Monsanto's Failure to Test Roundup as a Formulation is Reprehensible.

Failing to test a product is relevant to punitive damages. *Pfeifer*, 220 Cal.App.4th at 1300 (evidence that Defendant "never tested its products to determine whether those methods generated concentrations of asbestos fibers exceeding the regulatory limits" supportive of punitive damages.); *Romo*, 113 Cal.App.4th at 755 (evidence that Defendant "declined to test the strength of the roof before placing it in production" is relevant to punitive damages.). In *In re Prempro*, the Eighth Circuit held that Defendants decision to "avoid[] studying hormone replacement therapy's effect on breast cancer" supported punitive damages. 586 F.3d at 572. In *Bullock*, punitive damages were supported by the fact that Defendant "had no intention of funding research that would reveal the health hazards of smoking." *Bullock* 198 Cal.App.4th at 551.

The very purpose of conducting tests is to discover safety issues with a product in order to protect the public. Monsanto's suggestion that it must have "actual knowledge that Roundup could cause cancer" before it conducts any tests to discover if Roundup causes cancer belies reason. ARB-XRB 79. Monsanto failed to test precisely to avoid data evincing Roundup's carcinogenicity. Monsanto refused to conduct the tests requested by the EPA in 1985 (3890:7-3897:19); Monsanto refused to conduct the epidemiology studies of its manufacturing worker (6-AA-6236); Monsanto refused to conduct the tests recommended by Dr. Parry in 1999 (6-AA-6377). Monsanto refused Dr. Parry's offer to conduct those tests after Monsanto ran its own pilot tests on surfactants and did not like the results. 5-AA-5554-5556; 6-AA-6396 (deciding not to send Dr. Parry samples of surfactants after

tallow amine showed "an equivocal, but test article-related" mutagenic response.).

Monsanto is correct there are now many studies on Roundup. Some of the studies recommended by Dr. Parry, that Monsanto refused to conduct, have been published in the peer-reviewed literature by independent scientists. IARC extensively reviewed these studies. 6-AA-6871-6894. Dr. Parry's recommendation that Monsanto identify exposed human populations and have "their lymphocytes analysed [sic] for the presence of chromosome aberrations" was eventually conducted in Columbian agricultural workers exposed to Roundup and published in 2009. 6-AA-6360, 6-AA-6869-6870. That study provided strong evidence that Roundup is genotoxic in humans. 6-AA-6901. The comet assays and oxidative damage tests recommended by Dr. Parry (6-AA-6358-6359) have been conducted by independent scientists and demonstrate strong evidence that Roundup is genotoxic and causes oxidative stress. 6-AA-6871-6874, 6-AA-6892-6894

Repeat carcinogenicity studies of pure glyphosate in mice, which Monsanto refused to conduct, were eventually conducted by other manufacturers and these studies replicated the kidney tumor findings and replicated the findings of malignant lymphomas. 12B-RT-1825:19-1836:4. Yet to this day, no long-term animal carcinogenicity test has been conducted on Roundup formulations despite the need for such a test to determine whether the Roundup used by Johnson is more carcinogenic than glyphosate alone. 1994:8-11.

The George (2010) tumor promoter study did test a formulation of glyphosate that include surfactants. The authors explained that they were "prompted...to investigate its carcinogenic effect in long-term animal bioassay" because:

Case control studies suggested an association between glyphosate exposure and the risk of non-Hodgkin's lymphoma...glyphosate

exposure to human lymphocytes *in vitro* resulted in increased sister chromatid exchanges, chromosomal aberrations, and indicators of oxidative stress. A recent study from our laboratory also showed the clastogenic effects of glyphosate in bone marrow cells of Swiss albino mice.

26B-RT-4665:14-4666:5. If Monsanto had issues with the quality of this independent study then Monsanto should have funded a new study. This is particularly true where Dr. Heydens believes that "the surfactant played a role" in promoting tumors in George (2010). 6-AA-6537.

The public should not have to wait for independent scientists to obtain the funds to conduct such studies. Long-term carcinogenicity bioassays are expensive and time-consuming. 26B-RT-4648:16-17. Monsanto, who profited off the product, and has \$3.1 billion cash on hand should have funded a carcinogenicity study on Roundup long ago, particularly where Dr. Farmer concedes that "you cannot say that Roundup does not cause cancer ... we have not done carcinogenicity studies with 'Roundup.'" 6-AA-6466-6468; 31-RT-5301:14-16.

Monsanto's own epidemiologist, Dr. Acquavella, emphasized the importance of conducting an epidemiology study on the workers who handle glyphosate in Monsanto's plants due to the problems with the protocol of the AHS study. 6-AA-6236-6238. He stated that such a study would be necessary "before any conclusions [from the AHS study] can be established as valid." *Id.* Knowing that the AHS study is not valid, Monsanto nevertheless trumpets it as conclusive proof that Roundup is not carcinogenic. Only Monsanto can conduct a manufacturing worker study because Monsanto has exclusive access to the necessary data and yet does not report the incidence rates of its employees who develop NHL. AA5657.

It makes little sense to assert that more epidemiology studies would not add to the knowledge of the degree to which Roundup causes NHL. While IARC did find a statistically significant increased risk between Roundup and NHL⁹, more studies would be helpful. 6-AA-6854, 6899. However, as Dr. Neugut explained, it is extremely difficult to get an accurate exposure assessment for environmental exposures in epidemiology studies. 16B-RT-2735:12-25 (noting the essential problem of "Who's going to pay for it?" when you must mail out questionnaires and call tens of thousands of participants). Monsanto has refused to pay for such a study and has never done so in its 44 year history selling Roundup. 5-AA-5731-5732.

The reprehensibility of Monsanto's failure to test is compounded by its false public affirmations to the public that "the safety of our products, people, and communities has been, and always will be, a top priority." 5-AA-5610.

viii. Monsanto's Successful Efforts to Orchestrate Outcry over IARC is Reprehensible.

Monsanto's actions in response to IARC are indefensible. Monsanto's decision to "orchestrate outcry" over IARC – even before IARC announced the classification – is both direct evidence of Monsanto's knowledge that glyphosate is a probable carcinogen and evinces a crass disregard for human health. Monsanto decided to "orchestrate outcry" knowing that Roundup would be classified as either a 2A or 2B carcinogen. 6-AA-6426. Monsanto began its plans to "ghost-write the Exposure tox & Genetox sections" portions of a paper to counteract the IARC decision before IARC reached any conclusions. 6-AA-6529. Monsanto recruited the industry support group, the American Council for Science and Health

increased risks of NHL in association with exposure to glyphosate." 6-AA-6899. The IARC meta-analysis was also statistically significant. 6-AA-6854.

⁹ Monsanto incorrectly claims that IARC did not find a statistically significant relationship between Roundup and NHL. To the contrary, IARC found that multiple studies "reported statistically significant

(ACSH) to attack IARC before IARC reached any conclusions in the event "glyphosate is classified as a possible or probably human carcinogen." 6-AA-6449; 5-AA-5638-5640. Monsanto, months before IARC's evaluation, recognized that glyphosate had "vulnerabilities" in all the areas, "namely epi, exposure, genotox and mode of action." 6-AA-6432.

ix. Monsanto's Efforts to Manufacture Doubt on the Growing Consensus that Roundup is Genotoxic and Carcinogenic is Reprehensible.

IARC represents the consensus of the independent scientific community and is the "prime arbiter" as to which chemicals are carcinogenic. 16A-RT-2550:12-17. Monsanto's attacks on IARC are simply a continuation of its strategy to combat the scientific consensus that Roundup is genotoxic and carcinogenic.

Notably absent from Monsanto's attempt to retry the facts on this appellate review is reference to the public peer-reviewed literature which reflects a growing consensus Monsanto sought to combat. Even authors from the one independent study Monsanto relies on, the AHS study, have concluded that Roundup is a probable carcinogen. 5-AA-5553; 13A-RT-2015:5-2018:25.

As Dr. Benbrook testified, by 2005 there were a plethora of studies showing Roundup to be genotoxic. 22B-RT-3960:23-3961:1. Monsanto's own internal documents reference a "large mess of studies reporting genetoxic effects." 6-AA-6610. A published meta-analysis of these studies showed a statistically significant genotoxic effect of Roundup, particularly through dermal exposure. 13A-RT-1982:16-1989:9. Williams (2000) and Kier&Kirkland (2013) were ghostwritten specifically to undermine these studies. 6-AA-6483, 6-AA-6604. In 2007, investigators in South America reported that "[a]erial spraying of [Roundup] by the Colombian government on the border of Colombia and Ecuador has caused a high degree of DNA

damage in local Ecuadorian people." 6-AA-6483-6484. Monsanto coordinated efforts with its contacts in "the US State Department" to help get "in front of the story." 6-AA-6483.

When the epidemiological McDuffie, et al. study observed a dose-response relationship between NHL and glyphosate in 2001, Monsanto hand-delivered a copy of the ghostwritten Williams (2000) article to Dr. McDuffie and managed to convince the authors to keep the positive findings out of the abstract so the "usual suspects" couldn't find the data in internet searches. 6-AA-6472, 6-AA-6478-6479. Monsanto was worried that "[f]olks like Hardell might seize on the results to say they confirm his findings." 6-AA-6479. In 2002, Hardell, et al. concluded that "glyphosate was a risk factor for NHL." 24B-RT-4362:12-14.

In 2003, the De Roos study was released, and Monsanto noted that "[i]t looks like NHL and other lymphopoietic cancers continue to be the main cancer epidemiology issues [] for glyphosate..." 6-AA-6481. Monsanto was worried that De Roos (2003) might "add more fuel to the fire for Hardell." *Id.* Importantly, De Roos (2003) noted that its findings "provide some impetus for further investigation into the potential health effects of glyphosate, even though one review concluded that the active ingredient is non-carcinogenic and non-genotoxic." *Id.* The review referenced by De Roos (2003) was the ghostwritten Williams (2000) paper. 12B-RT-1888:7-1891:12.

In 2008, Eriksson et al., concluded that "Glyphosate was associated with a statistically significant odds ratio for lymphoma in our study, and the result was strengthened by a tendency to dose response effect..." 3027:6-9. Eriksson (2008) noted that "glyphosate treatment of human lymphocytes in vitro resulted in increased sister chromatid exchanges, chromosomal aberrations and oxidative stress." 4391:14-4392:2. This is particularly supportive of an NHL risk associated with Roundup given that the damage

occurred in human lymphocytes, the site from which NHL develops. Monsanto's initial reaction was how to "combat" the findings. 6-AA-6623.

In June 2014, Monsanto somehow obtained a private email from Dr. Benbrook reporting on the results of the Shinasi meta-analysis which showed significant increase with glyphosate and NHL, stating that the study would be "taken seriously worldwide." 6-AA-6487. By the time IARC reviewed Roundup there were scores of studies in the peer-reviewed literature supporting the genotoxic and carcinogenic nature of Roundup. In 2015, the post-IARC NAPP study authors concluded that "our results are also aligned with findings from epidemiological studies of other populations that found an elevated risk of NHL [and]... were supportive of the IARC evaluation of glyphosate..." 4415:10-18.

Ninety-five independent scientists concluded in 2016 that the totality of the data supports a finding that Roundup is a probable carcinogen. 13A-RT-2016:3-2019:25. Seventeen independent scientists unanimously concluded that Roundup was a probable carcinogen in the IARC evaluation. 5-AA-5737-5738. The 125 scientists who authored a peer-reviewed article defending IARC from industry attacks included "very famous" and "highly respected" cancer epidemiologists. 16A-RT-2606:20-2609:19.

Outside of the ghostwritten Monsanto studies and proprietary data, there is little support for Monsanto's position in the independent scientific community. As Monsanto's Dr. Goldstein noted when he had to resort to funding the ACSH "we don't have a lot of supporters and can't afford to lose the few we have." 6-AA-6489. The ACSH is the last refuge for any industry manufacturing doubt. Notably, in a 2008 En Banc Washington Supreme Court decision approving an indoor smoking ban, the lone dissent cited the ACSH for the debunked proposition that "the role of ETS [environmental tobacco smoke] in the development of chronic diseases like cancer and heart disease is uncertain and controversial." *American Legion Post #149 v.*

Washington State Dept. of Health (2008) 164 Wash.2d 570, 633. As Dr. Goldstein readily admitted, the ACSH has some "warts" and "...if you look back at them historically, some of their positions on tobacco, some of their positions on lead, are not positions that I would agree with." 5-AA-5639. Nonetheless, Monsanto hired them.

x. Monsanto's Failure to Call Johnson Back and Inform him of the Probably Risk of Cancer with his Use of Roundup Is Reprehensible.

Monsanto's failure to call Johnson back was much more than "discourteous" from the jury's perspective. Monsanto pledged to the public that it will be transparent and "we will ensure that information is available, accessible and understandable." 5-AA-5613. This pledge was deemed dishonest by the jury and contradicted by Monsanto's treatment of Johnson.

Johnson had a right to expect that Monsanto would honestly answer his questions. He testified at trial that he called Monsanto because "...it was a very scary, confusing time, and I didn't know what was happening." 18B-RT-3282:8-11. Johnson was told someone would call him back and no one ever did. *Id.* Importantly, when Johnson called, Monsanto was aware of IARC's classification, and should have, at the very least, informed Johnson accordingly, notwithstanding the company's disagreement with the classification; but Monsanto did neither. Had Monsanto informed Johnson and the school that Roundup could be a cause of NHL, or even just relay the IARC findings, then the school would likely have allowed Johnson to stop spraying. As Monsanto internally noted, several "bay area school districts" stopped using Roundup when they learned of IARC. 6-AA-6425.

To mitigate these lost sales in California due to IARC, the head of sales for the west coast was provided by Monsanto with "More resources than I have seen in my career!" 6-AA-6420-6425. No resources were dedicated to calling Johnson back or even informing its operators to inform

callers that IARC found Roundup to be a probable carcinogen. 5-AA-5645. Instead, Monsanto decided to "hold firm on the 'no cancer hazard' position as per the new press release." 5-AA-5645.

4. Monsanto Cannot in Good Faith Rely on the Politically Flawed Opinions of the Regulatory Agencies it Heavily Influenced.

The jury simply did not afford as much weight to the decisions of the regulatory agencies relied upon by Monsanto. And, for good reason. "The existence of governmental safety regulations does not bar an award of punitive damages for egregious misconduct that they are ineffective in preventing." *Pfeifer*, 220 Cal. App. 4th at 1301. It was within the jury's province to make a finding as to the effectiveness of the regulatory bodies. *Daniel v. Wyeth Pharm., Inc.* (Pa. Super. Ct. 2011) 15 A.3d 909, 932. ("a jury could reasonably find that Wyeth knew that additional [cancer] studies were required...In this regard, we also find that the trial court's reliance on Wyeth's compliance with the FDA's testing and labeling requirements was misplaced."). *Bates*, 544 U.S. at 451 ("Private remedies that enforce federal misbranding requirements would seem to aid, rather than hinder, the functioning of FIFRA.").

Monsanto referenced the findings of these regulatory agencies at every opportunity¹⁰ and the jury rejected Monsanto's arguments. Monsanto simply cannot hide behind the assessments of a handful of government agencies which Monsanto admits are subject to political influence. RA-341,

^{10 13}A-RT-2034:25-2035:2; 2037:7-2037:9; 2042:13-2042:23; 2047:15-

^{2048:4; 2049:17-2051:17; 2052:24-2053:4; 2054:10-2055:9-2055:25; 13}B-RT-2065:25-2066:3; 2075:23- 2082:18; 2085:2-11; 2087:22-2089:1;

^{2091:14-2106:11; 2105:16--2122:17; 2125:3-2125:19; 2127:16-2129:6;}

^{2132:18-2134:22; 2136:18-20; 2137:25-2139:4; 2147:9-17; 2154:6-}

^{2155:1; 2161:9-2164:23; 23}B-RT-4147:11-13; 26B-RT-4631:19-22; 26A-

RT-4557: 19-21; 29B-RT-5170:1-4; 5174:3-5175:11; 5178:19-5179:14; 5182:13-17; 5187:3-5188:20; 5196:16-5200:4; 5221:1-3

5-AA-5781; 6-AA-6564. Monsanto's political influence is vast and within two months of IARC's announcement of its classification of Roundup, Monsanto met with key staff from the EPA, the U.S. Department of Agriculture, U.S. Trade Representative, U.S. Department of State, key members of congress, the Senate Agricultural Committee, and Department of Health and Human Services. 6-AA-6594-6599. The goal of these meetings was for Monsanto to provide "proper context of the [IARC] classification for governments and regulators around the world" (even before the IARC monograph was published) and to "help protect international trade and the economy." 6-AA-6596, 6599.

If Monsanto actually held a good faith belief that Roundup was safe, then it would not have gone to such extraordinary lengths to orchestrate outcry over IARC. Monsanto cannot reasonably profess good faith belief in the validity of the regulatory assessments it so heavily influenced. The employee in charge of the EPA evaluation (Jess Rowland, who has neither a Ph.D. nor medical degree) told Monsanto he would conclude that glyphosate was not carcinogenic *before* he evaluated the evidence, and even asked Monsanto's advice on how to explain away increased tumors in one mouse study. 6-AA-6601. That same employee helped Monsanto "kill" the "IARC-like" ATSDR review of glyphosate. 6-AA-6601, 6592. The fact that Monsanto believed it could use politicians on "the hill" to pressure EPA officials so they "know they're being watched" precludes any good faith belief that the EPA is a neutral arbiter of scientific evidence. 6-AA-6581

It is therefore not surprising that the EPA failed to follow its own carcinogenicity guidelines in assessing glyphosate. These guidelines did not support the EPA's pre-ordained conclusions on glyphosate, so they perforce could not follow those guidelines. The SAP panel members unanimously concluded "that the EPA evaluation does not appear to follow the EPA cancer guidelines in several ways." 14B-RT-2395:6-12. The EPA was forced to use

"criteria that were not part of EPA guidelines for these assessments" which the EPA's Independent Scientific Advisory Panel ("SAP")¹¹ concluded "further reduces the credibility of the assessment." 26B-RT-4638:7-9. Several of the EPA SAP panel members concluded the "weight of the evidence based on the guidelines leads to suggest the evidence of potential carcinogenic effects." 26B-RT-4639:21-24. For example, the EPA and EFSA violated guidelines by disregarding any tumors in animals dosed with over 1000mg/kg of glyphosate per day. 26B-RT-4629:15-4632:21; 13A-RT-2006:4-2007:17; 2014:15-19. The EPA also violated its guidelines by "misinterpret[ing] the rule" on assessing the statistical significance of tumor findings. 26B-RT-4610:24-4611:25; 13B-RT-2097:15-2098:12.

The jury appropriately concluded that it was not reasonable for Monsanto to rely on the EPA's assessment. Monsanto does not even refute that it wrote the first draft of the assessment by one of the European regulators. ARB-XRB 61. This, again, along with the political pressure applied, explains why the European agencies failed to follow the guidelines modeled after IARC. 13A-RT-2014:1-17. When independent scientists conduct their own review of the data (such as IARC, Dr. Parry, or the scores of studies which observed a cancer risk following exposure to glyphosate or Roundup) using proper scientific methodology, then the most likely result is a conclusion that Roundup is a probable human carcinogen. However, politically motivated and captured regulators starting with a faulty conclusion necessarily means that proper scientific guidelines will be

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¹¹ Monsanto cites portions of the SAP panel report that were not entered or read into evidence. ARB-XRB 60-61. Monsanto cites to the Plaintiff's Motion for Judicial Notice at the trial court level of the report which Monsanto successfully opposed. A review of the entire document is supportive of Johnson's case which is why Monsanto sought to exclude it from evidence.

disregarded. It is akin to shooting an arrow into a wall and then drawing a bullseye where it lands.

Finally, the regulatory agencies are restricted in the data they consider. Nobody is exposed to only glyphosate, yet regulatory agencies limit their reviews to just the active glyphosate chemical as opposed to the formulated Roundup product. Dr. Benbrook testified that:

the big difference between IARC and, say, an EPA risk assessment is that IARC relies only on scientific studies published in peer-reviewed journals, where all the data is available, the methods are available, the science is transparent, if you will, fully explained. Whereas, regulatory agencies, and in the case of the US the EPA, largely base their risk assessments on registrant-done studies and only on the pure active ingredient... 22A-RT-3920:16-25.

Besides failing to follow guidelines, Monsanto and the EPA repeatedly violated 40 C.F.R. 155.52(a), which prohibits off-the-record contacts between EPA employees and pesticide manufacturers. 6-AA-6580, 6-AA-6593, 6-AA-6600-6601. An EPA that fails to follow its own rules and guidelines to support Monsanto is ineffective in preventing Monsanto's misconduct and does not mitigate Monsanto's liability. *Pfeifer*, 220 Cal. App. 4th at 1301.

Monsanto's inappropriate citation to another proposed interim review of glyphosate, outside of the record, still does not support a "good faith" reliance on the EPA. ARB-XRB 110. Monsanto attempted to have this document considered post-trial by both Judge Smith and Judge Chhabria. Both Judges rejected Monsanto's contentions that the document mitigated or preempted a finding of punitive damages. *See* Johnson's Motion to Strike, pp. 2-3. Judge Smith noted that "the EPA released the document after plaintiffs had rested their case...The court reasoned that admitting the new EPA document would add cumulative information and unduly consume additional time." RJN ex. A, p. 8. Judge Chhabria also rejected Monsanto's

reliance on this document and held that "Mr. Hardeman's claims are neither expressly nor impliedly preempted under current Supreme Court caselaw." *In re Roundup Products*, 2019 WL 3219360

There is no amount of scientific evidence that will lead the current officials at the EPA to require a cancer label on glyphosate without Monsanto's approval. For example, even where EPA scientists repeatedly recommended a ban on the pesticide Chlorpyrifos because of persuasive evidence that it causes neurodevelopmental disorders in children, current EPA officials now refuse to ban it. League of United Latin American Citizens v. Wheeler (9th Cir. 2018) 899 F.3d 814, 820. Discovery conducted after the Johnson trial only confirms the significant regulatory capture at the EPA. For example, in a 2018 Monsanto internal report on the EPA¹², administration officials stated "[w]e have Monsanto's back on pesticides regulation. We are prepared to go toe-to-toe on any disputes they may have with, for example the EU. Monsanto need not fear any additional regulation from this administration." ¹³ Monsanto was informed that "the way the EPA under the Trump administration has handled Chlorpyrifos might be instructive in how it would handle new science or new developments related The EPA accordingly ignored the recently published to glyphosate." *Id.* peer-reviewed article by three highly qualified scientists from the EPA SAP panel on glyphosate who concluded there was a "compelling link between exposures to GBHs [Roundup] and increased risk for NHL." ¹⁴ As such, any

¹² Johnson cites these documents only as select examples of the evidence available after his trial in the event that the Court considers Monsanto's efforts to cite outside of the record.

¹³ https://usrtk.org/wp-content/uploads/bsk-pdf-manager/2019/05/Monsanto-internal-emails-re-White-House-July-2018.pdf, Page 5 of PDF (Ex. A, p. 2)

¹⁴ Zhang, et al., Exposure to glyphosate-based herbicides and risk for non-Hodgkin lymphoma: a meta-analysis and supporting evidence

statements coming out of the EPA during this litigation in support of Monsanto, are "inherently suspect" and not entitled to deference by the Court. *Wyeth v. Levine* (2009) 555 U.S. 555, 577.

Monsanto's claimed "worldwide regulatory consensus" is thus based on the highly flawed assessments of a handful of regulators who work at government agencies subject to political pressure by Monsanto, which evaluate only pure glyphosate and rely on Monsanto's ghostwritten studies. The countries cited by Monsanto represent only about 13% of the population and excludes the vast majority of Asia, Africa, South America and California. And, in Europe, the findings of these agencies are being rejected and Roundup is being phased out. 2019:21-2020:2.

The jury is free to reject Monsanto's reliance on the findings of regulatory agencies where those findings were the direct result of Monsanto's intense lobbying efforts. *Perrine v. E.I. du Pont de Nemours and Co.* (2010) 225 W.Va. 482, 552.

5. J&J Does Not Support a Reduction in Punitive Damages.

J&J does not support a reduction of punitive damages against Monsanto. The evidence for causation is much stronger for Roundup and NHL than the causation evidence considered in J&J. 249 Cal.Rptr.3d at 678. There is a real difference between an IARC finding that a chemical is a possible carcinogen (as in talc) and that a chemical is a probable carcinogen (as in Roundup). Id. Approximately 30% of chemicals reviewed by IARC fall in the 2B possible classification, whereas only 10% of chemicals are deemed probable carcinogens like glyphosate. 12A-RT-

Mutat. Res. Rev. Mutat. Res. Vol. 781 (2019).

https://www.researchgate.net/publication/331019508_Exposure_to_Glyphosate-Based Herbicides and Risk for Non-Hodgkin Lymphoma A Meta-Analysis and Supporting Evidence/link/5d1c3ca2299bf1547c92d1d9/download

1713:23-1714:11. As opposed to 2A classifications, 2B classifications by IARC do not trigger a Prop 65 requirement for warnings. *Styrene*, 210 Cal.App.4th at 1095. Dr. Portier testified that he is 90% confident that Roundup is carcinogenic. 13A-RT-1994:1-13.

J&J reaffirms that "[a] defendant's compliance with, or actions consistent with, governmental regulations or determinations about a product do not necessarily eviscerate a claim for punitive damages." 249 Cal.Rptr.3d at 678. However, J&J held that JJCI's actions regarding talc presented a "close case" regarding punitive damages. Id. The reasons cited by the Court to support a finding that JJCI's actions did not rise to the level justifying punitive damages are not applicable to the present case:

- Unlike Monsanto's affirmative attack on scientists, its deceptive manipulation of the scientific literature and its political pressure on the EPA, JJCI's attempts to influencing the literature and regulatory agencies was limited "to describ[ing] the flaws of studies showing a link, point out inconclusive results, and highlight the absence of any established causal link." *Id.* at 677.
- -Unlike the actions by Monsanto in hiding the Parry report, its toxicology studies and other data such as reports of NHL among its employees, "[t]here was no evidence JJCI had any information about the dangers or risks of perineal talc use that was unavailable to the scientific or medical community." *Id*.
- Unlike Monsanto's unprecedented efforts to undermine IARC, JJCI's critiques of available evidence were largely consistent with IARC. *Id.*
- Unlike Monsanto's direct influence on the findings of the EPA and other regulatory authorities, there was no evidence that JJCI's efforts had any impact on the findings by third-parties. *Id*.
- Unlike the growing acceptance that Roundup causes cancer by qualified scientists, the scientific consensus at the time of plaintiff's diagnosis, including the opinion of plaintiff's expert, was that talc was not a probable carcinogen. *Id.* at 677,

In *Pilliod v. Monsanto*, Judge Smith specifically considered and distinguished *J&J* for punitive damages, holding that:

In J&J, the defendant looked [at] the public science and drew a conclusion from that science. The public science permitted different conclusions, so it was not reprehensible or despicable to draw the conclusion that there was no causal connection between the product and cancer. In this case, however, Monsanto made efforts to interfere with the underlying public scientific inquiry and as a result cannot have in good faith relied on the available public science in making its decisions about the danger of glyphosate.

MJN, Ex. A at 20.

Unlike JJCI, Monsanto did not engage in a civil debate on the merits of the scientific evidence. Monsanto sought to "orchestrate outcry" against IARC and engaged in an "unprecedented coordinated efforts to undermine the evaluation, the program and the organization." 16A-RT-2797:12-18. Monsanto did not simply express its disagreement with the scientific literature; it engaged in scientific fraud by repeatedly ghostwriting articles, failing to disclose conflicts of interest, undermining other scientists, combatting findings on the cancer risk of Roundup and glyphosate, and interfering with pending publications. *Supra* Sections III(D)(3)(d)(iii), (ix).

Unlike in *J&J*, much of the evidence of glyphosate's carcinogenicity and conduct was not available to the scientific community. Summary data from the animal carcinogenicity studies on glyphosate were not publicly available before 2015. 13B-RT-2052:20-2055:25, 13A-RT-2063:19-2066:3. The reports themselves are still confidential. 13B-RT-2132:3-8. Dr. Parry's report that examined Monsanto's confidential internal genotoxicity studies along with publicly available studies was never provided to the public until shortly before trial and were never provided to regulators by Monsanto. The evidence of Monsanto's ghostwriting and conflicts of interest were hidden

from the public until shortly before trial. Evidence that Monsanto scientists considered the surfactants to be hazardous, genotoxic and to have contributed to the tumor promoting effects of formulated Roundup was hidden from the public until shortly before trial.

Unlike JJCI, Monsanto was also well aware of strong evidence that Roundup was carcinogenic and genotoxic for decades. Monsanto was specifically told in 1999, by the renowned genotoxicity expert Dr. Parry that its formulations were genotoxic and caused oxidative stress. 5-AA-5828; 5-AA-6320. Monsanto knew of the hazardous nature of the formulated product used by Johnson. 6-AA-6563, 6-AA-6300. In 1985, EPA scientists explained to Monsanto that a finding of glyphosate as oncogenic was consistent with protection of public health. 26B-RT-4653:12-25. The EPA's consensus in 1985 was that glyphosate was a possible carcinogen. 26B-RT-4655:9-22.

Unlike the finding in J&J that JJCI had a good faith basis to say that talc did not cause cancer, Monsanto scientists internally concede that "you cannot say Roundup is not a carcinogen. We have not done the necessary testing on the formulation to make that statement." 6-AA-6466-6468. Monsanto's manipulations and influence directly affected the findings of regulatory authorities on which it now relies. *Supra* Section III(D)(3)(d)(iv), (4). Unlike in J&J, there are thus compelling reasons for a jury to conclude the findings of regulatory agencies were not valid and did not provide Monsanto a good faith basis to believe – and claim – that Roundup was not carcinogenic. *Id*.

6. Monsanto's Conduct Parallels the Conduct of the Tobacco Industry and Thus Supports the Jury's Punitive Damages Award.

Monsanto's recruitment of the ACSH to attack IARC and sow doubt about the carcinogenicity of glyphosate is one of many similarities between Monsanto's actions and the actions of the tobacco companies. In 1956, forty years after cigarettes were introduced, the scientific community still remained divided about whether smoking caused lung cancer. *Boeken v. Philip Morris, Inc.* (2005) 127 Cal.App.4th 1640, at 1651.

In 1954, while the evidence was still in dispute, "the tobacco industry embarked upon a decades-long strategy to create public doubt" Id. at 1652. The industry issued a press release stating "'[d]istinguished authorities point[ed] out' that there was no proof that cigarette smoking caused cancer." Bullock, 198 Cal.App.4th. at 551. The industry pledged to the public that "[w]e accept an interest in people's health as a basic responsibility" and announced the formation of an "[a]dvisory Board of scientists disinterested in the cigarette industry." Id. "In 1960, the World Health Organization issued a report stating that smoking was a cause of lung cancer." Boeken, 127 Cal.App.4th at 1653. Yet, the tobacco industry still "continued their campaign of doubt." Id. Privately acknowledging a link between smoking and cancer, the industry sought to "avoid promoting any research that would reveal that link." Bullock, 198 Cal.App.4th at 552. In a 1970 internal memo it was stated: "Let's face it. We are interested in evidence which we believe denies the allegation that cigarette smoking causes disease." *Id.* at 553. No warnings were added to cigarette packs until the mid to late 1960s. Boeken, 127 Cal.App.4th at 1663.

Monsanto's claim that the "EPA has approved the sale of glyphosate without a cancer warning since 1974" is not compelling in light of the fifty years that cigarettes were sold without a warning. ARB-XRB 67. Like the tobacco industry, Monsanto has been engaged in a campaign of doubt as a scientific consensus grows, while simultaneously assuring the public that safety is its "top priority." 6-AA-5610. Like the tobacco industry, which falsely claimed it created a panel of "disinterested" experts, Monsanto falsely created panels of "independent" experts. *Supra* Section III(D)(3)(d)(iv). Like the tobacco industry, Monsanto internally acknowledge a link between

Roundup and NHL, yet refused to test its product. *Supra* Sections III(D)(d)(i)-(ii), (viii)-(ix). Monsanto refused to conduct the tests Dr. Parry recommended and buried his report, because as Dr. Heydens proclaimed "what we are really trying to achieve here," is getting someone who can be "influential with regulators...when genotox issues arise." 6-AA-6377. Like the tobacco industry, Monsanto, is continuing its campaign of doubt even after the World Health Organization (IARC) concluded that glyphosate is a probable carcinogen. Monsanto is more aggressive than the tobacco industry as its attacks are "unprecedented." 6A-RT-2797:12-18.

In light of the similarities between Monsanto and the tobacco industry and the award of a 16:1 ratio between punitive and compensatory damages in *Bullock* (198 Cal.App.4th at 573) a 6.4:1 ratio in this matter is reasonable and well within the constitutional confines outlined in *Simon* and *State Farm*, under both California and federal law.

7. Comparable Statutory Fines are not Helpful for an Assessment of the Constitutionality of Punitive Damages.

The comparative civil fine guidepost requires a comparison to civil fines imposed by state government (not to other verdicts) and is not helpful in this case. "The third guidepost is less useful in a case like this one, where

¹⁵Monsanto's actions have not gone unnoticed in the scientific community. "[t]he Monsanto strategy parallels those used by the tobacco industry and others, but the glyphosate story is notable for its intensity, its reach to the working group members... the consequences for individual members of the glyphosate working group are unprecedented and could affect participation in future working groups" Samet, "Expert Review Under Attack: Glyphosate, Talc, and Cancer" American Journal of Public Health, 109, 976-978 (2019).

https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2019.305131

plaintiff prevailed only on a cause of action involving common law tort duties that do not lend themselves to a comparison with statutory penalties." *Simon*, 35 Cal. 4th at 1183–84; *Boeken*, 127 Cal. App. 4th at 1700; *In re Roundup Products*, 385 F.Supp.3d 1042 ("Because both state and federal law calculate penalties per violation, it seems entirely possible that Monsanto's liability could, over time, become quite high. But absent an explanation from either party about how these penalties would be calculated, it is difficult to use them as a benchmark."). A comparison to other jury verdicts is inappropriate "as the constitutional limit depends on the facts and circumstances of each case." *Bullock*, 198 Cal.App.4th at 569.

8. The Facts of Johnson's Case Warrant a Higher Ratio than that of the Ratios awarded by Judge Smith and Judge Chhabria in the Subsequent Roundup Trials.

In assessing the constitutionality of the punitive damages awarded in the *Pilliod v. Monsanto*, and *Hardeman v. Monsanto* cases, both Judge Smith and Judge Chhabria decided that a 4:1 ratio was appropriate. Plaintiffs will challenge those ratios as too low on appeal, but at a very minimum Johnson is also entitled to a 4:1 ratio. In fact, Johnson would be entitled to the higher ratio of 6.4:1 awarded by this jury.

Johnson is much younger than the Hardeman and Pilliod plaintiffs and his NHL is fatal, so his ratio should be higher than 4:1. 17B-RT-2887:4-19. *Romo* is instructive in such circumstances. 113 Cal.App.4th at 763. *Romo* involved a car accident with multiple victims where some lived and brought personal injury claims, whereas others died, and the estates brought wrongful death claims. *Id.* The Court awarded a punitive ratio of 3:1 to the still living victims, yet a ratio of 5:1 for the estates. Part of that calculus was "the public policy consideration that malicious conduct resulting in death should not be encouraged by making it less expensive for a defendant to kill than to injure..." *Id.*

Furthermore, Judge Chhabria viewed punitive damages through the "lens of the pre-IARC landscape." *In re Roundup*, 385 F.Supp.3d 1042. He also excluded post-2012 evidence including the "details of the IARC classification, the evidence surrounding Monsanto's attacks on IARC, and the attempts to influence U.S. regulators." *In re Roundup*, 2019 WL 3219360, at *4. Here, in addition to the post-2012 evidence being admitted, Monsanto's acts were particularly egregious because Johnson called Monsanto two weeks after Monsanto learned of the IARC classification and informed Monsanto that his "level of fear" was rising about his continued use of Roundup yet Monsanto still did not call him back or even inform him of IARC's classification. 6-AA-6519.

IV. CONCLUSION

In light of the high reprehensibility of Monsanto's behavior, the deathly harm to Johnson, and the high net worth of Monsanto, the punitive damages award of \$250 million dollars awarded by the jury comports with due process and should be upheld.

August 19, 2019

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¹⁶ Judge Smith did allow this evidence to be admitted at the Pilliod trial.

CERTIFICATE OF WORD COUNT (Cal. Rules of Court, rule 8.204(c)(1).)

The text of this brief consists of 13,995 words as counted by the Microsoft Word version 2013 word processing program used to generate the brief.

Dated: August 19, 2019

Jeffrey A. Travers

PROOF OF SERVICE

I am employed in the County of Orange, Commonwealth of Virginia. I am over the age of 18 years and not a party to the within action. My business address is 108 Railroad Avenue, Orange, VA 22960.

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I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on August 19, 2019, at Orange, VA.

Jeffrey A. Travers