IN THE CIRCUIT COURT OF ST. LOUIS COUNTY
STATE OF MISSOURI

JAMES ADAMS, JR. et al., Plaintiffs, v. MONSANTO COMPANY, Defendant.	Case Number: 17SL-CC02721

PLAINTIFF'S OPPOSITION TO MONSANTO COMPANY'S MOTION TO EXCLUDE THE TESTIMONY OF PLAINTIFF'S EXPERTS DR. NABHAN AND DR. WEISENBURGER

COMES NOW, Plaintiff, Sharlean Gordon, by and through her counsel of record, and respectfully submits this Opposition to Monsanto Company's Motion to Exclude The Testimony of Plaintiff's Experts Dr. Chadi Nabhan and Dr. Dennis Weisenburger.

MEMORANDUM OF POINTS AND AUTHORITIES

"Nothing in *Daubert*, or its progeny, properly understood, suggests that the most experienced and credentialed doctors in a given field should be barred from testifying based on a differential diagnosis," but nevertheless, this is exactly what Defendant Monsanto Company ("Monsanto") asks the Court to do here. *See Wendell v. GlaxoSmithKline LLC*, 858 F.3d 1227, 1235 (9th Cir. 2017). Because differential diagnosis has repeatedly been found to be a reliable methodology, the only question before the Court is whether "[each] expert has reliably applied the principles and methods to the facts of the case." Fed. R. Evid. 702. The Parties have spent over 2 years "ruling in" exposure to Roundup® as a potential cause of non-Hodgkin's lymphoma ("NHL"). *See In re Roundup Prods. Liab. Litig.*, No. 16-md-02741-VC, 2018 WL 3368534 (N.D. Cal. July 10, 2018). And, because the Court held that the evidence supports that Roundup® is, at a minimum, potentially capable of causing NHL, any reliable differential diagnosis must "rule in" Roundup® as a potential cause of NHL. *See Clausen v. M/V NEW CARISSA*, 339 F.3d 1049, 1057–58 (9th Cir. 2003) as amended on denial of reh'g (Sept. 25, 2003) (a differential diagnosis "is accomplished by determining the possible causes for the patient's symptoms and then eliminating each of these potential causes until reaching one that cannot be ruled out or determining which of those that cannot be excluded is the most likely.") (*quoting Westberry v. Gislaved Gummi AB*, 178 18 F.3d 257, 262 (4th Cir. 1999)).

Of course, a differential diagnosis may be unreliable where it "rules in a potential cause that is not so capable [of causing the disease]," *Clausen*, 339 F.3d at 1058 (emphasis original), but whether a potential cause is capable of causing a disease is a general causation question. *See In re Hanford Nuclear Reservation Litig.*, 292 F.3d 1124, 1133 (9th Cir. 2002) (general causation means "whether the substance at issue had the capacity to cause the harm alleged.")

(internal citations omitted). Ignoring the nearly three years Monsanto spent litigating this issue in Federal Court, Monsanto spends a significant portion of its brief on whether Roundup® was properly "ruled in." The only question relating to Drs. Nabhan and Weisenburger's specific causation testimony is a simple one: did each expert reliably rule out other causes and risk factors in determining that Roundup® was a, but not necessarily the *only*, substantial contributing factor in each Plaintiff's NHL?

Here, each expert evaluated the relevant medical and scientific literature surrounding glyphosate exposure as well as each Plaintiff's salient risk factors. The experts carefully considered Plaintiffs' risk factors and even concluded, where appropriate, that certain risk factors could not be ruled out entirely. However, as explained below, Missouri law does not require that experts rule out every risk factor or that the experts determine Roundup® exposure was the *only* cause of each Plaintiff's NHL. Rather, each expert must only opine that Roundup® exposure constitutes a substantial contributing factor and, importantly, the law holds Monsanto responsible even if there is more than one substantial contributing factor. *See Solis v. BASF Corp.*, 2012 IL App (1st) 110875, ¶ 43, 979 N.E.2d 419, 434; *Kirk v. Schaeffler Grp. USA, Inc.*, 887 F.3d 376, 390 (8th Cir. 2018); *Baker v. Guzon*, 950 S.W.2d 635, 647 (Mo. Ct. App. 1997); *Moreland v. Eagle Picher Techs., LLC*, 362 S.W.3d 491, 504 (Mo. Ct. App. 2012) (expert opinion is admissible based on "reasonable probability" defined as "more than 50%"). Curiously, Monsanto did not—and cannot—identify a single risk factor that Plaintiffs' experts did not explicitly consider. Rather, Monsanto argues the weight of the evidence and asks the Court to strike Plaintiffs' experts on the basis that it disagrees with their conclusions. However, Courts

should "resolve doubts regarding the usefulness of an expert's testimony in favor of admissibility." *Marmo v. Tyson Fresh Meats, Inc.*, 457 F.3d 748, 758 (8th Cir. 2006). This is because the Rule "only requires that an expert possess 'knowledge, skill, experience, training, or education' sufficient to 'assist' the trier of fact, which is 'satisfied where expert testimony advances the trier of fact's understanding to any degree.' " *Robinson v. GEICO Gen. Ins. Co.*, 447 F.3d 1096, 1100 (8th Cir. 2006) (internal citation omitted). For these reasons, there is no basis to exclude Plaintiffs' specific causation experts' opinions.

LEGAL STANDARD

The statute governing expert witness admissibility in Missouri was amended in August 2017, to mirror the language found in Federal Rules of Evidence 702-704; Missouri Revised Statute Section 490.065.2 requires the following:

> A witness who it qualified as an expert by knowledge, skill, experience, training or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the produce of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

RSMo § 490.065.2 (2017).

Case specific opinions may be reached by experts through a differential diagnosis.[1] In

[1] There is no dispute that a differential diagnosis is a reliable methodology. *Kennedy v. Collagen Corp*., 161 F.3d 1226, 1228-30 (9th Cir. 1998); *Zuchowicz v. United States*, 140 F.3d 381, 385-87 (2d Cir. 1998); *Ambrosini v. Labarraque*, 101 F.3d 129, 140-41 (D.C.Cir. 1996); *Moore v. Ashland Chem., Inc*., 151 F.3d 269, 277-79 (5th Cir. 1998) (en banc) *Hardman v. Norfolk*, 243 F.3d 255, 260-270 (6th Cir. 2001); *Schultz v. Akzo Nobel Paints, LLC*, 721 F.3d 426 (7th Cir. 2013); *Etherton v. Owners Ins. Co.*, 829 F. 3d 1209 (10th Cir. 2016); *Guinn v. AstraZeneca Pharm. LP*, 602 F. 3d 1245 (11th Cir. 2010)

conducting a differential diagnosis an expert "first assumes the pertinence of all potential causes, then rules out the ones as to which there is no plausible evidence of causation, and then determines the most likely cause among those that cannot be excluded. We have recognized that this method of conducting a differential diagnosis is scientifically sound. *Wendell v. GlaxoSmithKline LLC*, 858 F.3d 1227, 1234 (9th Cir. 2017).

It is important to note, "experts are not required to rule out all possible causes when performing the differential etiology analysis….Instead, such considerations go to the weight to be given the testimony by the fact finder, not its admissibility." *Kirk v. Schaeffler Grp. USA, Inc*., 887 F.3d 376, 392 (8th Cir. 2018); *Schultz v. Akzo Nobel Paints, LLC, 721 F.3d 426, 434 (7th Cir. 2013)* ("…reliable expert should consider alternative causes, they do not require an expert to rule out every alternative cause."); *Johnson*, 754 F.3d at 563–64 (8th Cir. 2014) ("However, we have consistently ruled that experts are not required to rule out all possible causes when performing the differential etiology analysis.")

Unlike federal courts, where judges undertake evidentiary hearings to determine whether *Daubert* standards are met, the Missouri General Assembly neither required nor even permitted such a mechanism to be followed before allowing the admission of expert testimony. Missouri's new statute appears to leave undisturbed the deference to be given to the trial court in determining the admissibility of expert witness testimony without mandating the mechanisms for doing so.

A key but sometimes forgotten principle of Rule 702 and *Daubert* is that they were intended to relax traditional barriers to admission of expert opinion testimony. *See e.g., Daubert*, 509 U.S. at 588. Accordingly, courts are in agreement that Rule 702 mandates a liberal standard

for the admissibility of expert testimony. *See Daubert*, 509 U.S. at 588 (Rule 702 is part of "liberal thrust" of Federal Rules of Evidence). As the Advisory Committee to the 2000 amendments to Rule 702 noted with apparent approval, "[a] review of the caselaw after *Daubert* shows that the rejection of expert testimony is the exception rather than the rule." *See Cook v. Rockwell International Corp.*, 580 F.Supp. 2d 1071 (2006). In general, "[a]ttacks on the foundation for an expert's opinion, as well as the expert's conclusions, go to the weight rather than the admissibility of the expert's testimony." *Sphere Drake Ins. PLC v. Trisko*, 226 F.3d 951, 955 (8th Cir. 2000); see also, *Larson v. Kempker*, 414 F.3d 936, 941 (8th Cir.2005) ("As a general rule, the factual basis of an expert opinion goes to the credibility of the testimony, not the admissibility, and it is up to the opposing party to examine the factual basis for the opinion in cross-examination.")

Thus, the *Daubert* analysis is not "a heightened threshold," but instead asks courts to merely avoid "subjective belief and unsupported speculation." *Ambrosini v. Labarraque*, 101 F.3d 129, 134 (D.C. Cir. 1996) (citing *Daubert*, 509 U.S. at 590) (internal quotation marks omitted). Indeed, the Eighth Circuit strongly embraces this liberal view of expert admissibility. *See In re St. Jude Med., Inc. Silzone Heart Valves Prod. Liab. Litig.*, 493 F. Supp. 2d 1082, 1087 (D. Minn. 2007) ("expert testimony should not be easily excluded given the "liberal thrust" of the Federal Rules of Evidence") (citing *Daubert*, 509 U.S. at 588, 113 S.Ct. 2786.); *Cromeans v. Morgan Keegan & Co.*, No. 2:12-CV-04269-NKL, 2014 WL 5351193, at *1 (W.D. Mo. Oct. 20, 2014) ("*Daubert* principles and Federal Rule of Evidence 702 call for liberal admission of expert testimony"); *Johnson v. Mead Johnson & Co., LLC*, 754 F.3d 557, 562 (8th Cir. 2014) ("*Daubert* and Rule 702 thus greatly liberalized what had been the strict *Frye* standards for

admission of expert scientific testimony"); *Goss Int'l Corp. v. Tokyo Kikai Seisakusho, Ltd.*, No. C00-0035, 2003 WL 25949302, at *4 (N.D. Iowa Nov. 17, 2003) ("[I]n keeping with the Eighth Circuit Court of Appeal's liberal interpretation of Rule 702, the Court finds that Mr. Sims' expert opinion is reliable and may be considered by the jury."); *Jackson v. Asplundh Constr. Corp.*, No. 4:15CV00714 ERW, 2016 WL 4705603, at *1 (E.D. Mo. Sept. 8, 2016) ("Rule 702 mandates a policy of liberal admissibility, and expert testimony is permitted if it will assist the trier of fact in understanding the evidence or to determine a fact in issue."); *Pitman v. Ameristep Corp.*, No. 2:14CV00085 ERW, 2016 WL 5341102, at *1 (E.D. Mo. Sept. 23, 2016) ("Rule 702 mandates a policy of liberal admissibility, and expert testimony is permitted if it will assist the trier of fact in understanding the evidence or to determine a fact in issue."); *Lauzon v. Senco Prod., Inc.*, 270 F.3d 681, 686 (8th Cir. 2001) ("Rule 702 reflects an attempt to liberalize the rules governing the admission of expert testimony.") [citing *Weisgram v. Marley Co.*, 169 F.3d 514, 523 (8th Cir.1999)].

Courts should "resolve doubts regarding the usefulness of an expert's testimony in favor of admissibility." *Marmo*, 457 F.3d at 758. This is because the Rule "only requires that an expert possess 'knowledge, skill, experience, training, or education' sufficient to 'assist' the trier of fact, which is 'satisfied where expert testimony advances the trier of fact's understanding to any degree.' " *Robinson v. GEICO Gen. Ins. Co.*, 447 F.3d 1096, 1100 (8th Cir. 2006) (internal citation omitted). As such, "[g]aps in an expert witness's qualifications or knowledge generally go to the weight of the witness's testimony, not its admissibility." *Id*. at 1100–01; *Jackson*, 2016 WL 4705603, at *2. Indeed, "[a]s with all other admissible evidence, expert testimony is subject to testing by 'vigorous cross-examination, presentation of contrary evidence, and careful

instruction on the burden of proof.'" *United States v. Moreland*, 437 F.3d 424, 431 (4th Cir.2006) (quoting *Daubert*, 509 U.S. at 596, 113 S.Ct. 2786).

The burden of proof is a substantive matter governed by Illinois law. Under Illinois "[plaintiff does not need to present unequivocal or unqualified evidence of causation but can meet his burden through the introduction of circumstantial evidence" *Knauerhaze v. Nelson*, 361 Ill. App. 3d 538, 549, 836 N.E.2d 640, 652 (2005). Therefore:

> It is permissible for a medical expert to testify concerning his or her opinions in terms of possibilities or probabilities. *Baird v. Adel*i, 214 Ill.App.3d 47, 157 Ill.Dec. 861, 573 N.E.2d 279 (1991). The expert may testify to what might or could have caused an injury despite any objection that the testimony is inconclusive. **686 ***67 *Geers v. Brichta*, 248 Ill.App.3d 398, 187 Ill.Dec. 940, 618 N.E.2d 531 (1993). The testimony need not be based on absolute certainty, but only a reasonable degree of medical and scientific certainty. *Nowicki v. Union Starch & Refining Co.*, 1 Ill.App.3d 92, 272 N.E.2d 674 (1971). It remains for the trier of fact to determine the facts and the inferences to be drawn from the testimony.

Matuszak v. Cerniak, 346 Ill. App. 3d 766, 772, 805 N.E.2d 681, 685–86 (2004).

With respect to occupational exposure to carcinogens, Plaintiff can demonstrate that a chemical is a substantial factor in causing a disease by through expert testimony that the chemical is capable of causing the disease; and that Plaintiff's exposure was "frequent, regular, and proximate." *Solis v. BASF Corp*., 2012 IL App (1st) 110875, ¶ 52, 979 N.E.2d 419, 437–38. It need not be the only cause of the disease. *Id.*

Under Missouri law, the standard is similar "[i]n a toxic tort case, the plaintiff's burden includes proof of 'an exposure to an identified harmful substance significant enough to activate disease[,] ... expert opinion that the disease found in plaintiff is consistent with exposure to the harmful substance[, and proof that] defendant was responsible for the etiologic agent of the

disease diagnosed in plaintiff.'" *Kirk v. Schaeffler Grp. USA, Inc*., 887 F.3d 376, 390 (8th Cir. 2018). An expert's opinion is admissible when the expert testifies that the Defendant "more probably than not" caused an injury. *Baker v. Guzon*, 950 S.W.2d 635, 647 (Mo. Ct. App. 1997); *Moreland v. Eagle Picher Techs., LLC*, 362 S.W.3d 491, 504 (Mo. Ct. App. 2012) (expert opinion is admissible based on "reasonable probability" defined as "more than 50%").

Finally, Defendants can't succeed on their motion by relying on their attorney's interpretation of the science. *Am. Eagle Waste Indus., LLC*, 463 S.W.3d at 26. (Motion to exclude properly denied where defendant "did not present any evidence or expert testimony which could have challenged the reliability of the sources of [expert]'s opinion."); *Massachusetts Gen. Life Ins. Co. v. Sellers*, 835 S.W.2d 475, 480 (Mo. Ct. App. 1992) (finding trial court did not err in admitting expert opinion where defendants did not introduce other records or evidence which might have convinced the trial court that expert's opinion was wrong).

ARGUMENT

I. PLAINTIFFS' EXPERTS RELIABLY RULED IN ROUDNUP AS A CAUSE OF MS. GORDON'S NHL

The Parties and the MDL Court spent years "ruling in" Roundup® as a potential cause of NHL utilizing much of the same expert testimony and evidence..[2] Monsanto nevertheless spends a considerable amount of time re-litigating whether Drs. Weisenburger and Nabhan considered

[2] As the Ninth Circuit explained, "[t]he first step [of a properly conducted differential diagnosis] is to compile a comprehensive list of hypotheses that might explain the set of salient clinical findings under consideration. The issue at this point in the process is which of the competing causes are generally capable of causing the patient's symptoms or mortality." *Clausen*, 339 F.3d at 1057–58 (emphasis in original) (internal citation omitted). Here, the MDL Court previously determined that Roundup® can be reliably ruled in as a potential cause of NHL. *In re Roundup*, 2018 WL 3368534.

evidence that properly "ruled in" Roundup®. For that reason alone, this argument should be rejected in total. However, for the reasons discussed below, even if this Court entertains Monsanto's re-litigation of general causation, the argument fails.

A. Plaintiffs' Experts Conducted a Proper Differential Diagnosis

"[D]ifferential diagnosis is not a method that lends itself to establishing a 'direct link' between an activity and an injury," but rather " a method by which a physician 'considers all relevant potential causes of the symptoms and then eliminates alternative causes….' In other words, it is a process of elimination." *Hardyman v. Norfolk & W. Ry. Co.*, 243 F.3d 255, 262 (6th Cir. 2001) (quoting Federal Judicial Center, Reference Manual on Scientific Evidence 214 (1994)). An expert may properly form case-specific opinions by " perform[ing] a differential diagnosis to 'rule in' and 'rule out' other possible causes of a disease…" *Cooper*, 239 Cal. App. 4th at 581. Indeed, a differential diagnosis is a "standard" as a well-accepted medical technique. *Baker v. Dalkon Shield Claimants Tr.*, 156 F.3d 248, 253 (1st Cir. 1998).

In conducting a differential diagnosis an expert "first assumes the pertinence of all potential causes, then rules out the ones as to which there is no plausible evidence of causation, and then determines the most likely cause among those that cannot be excluded. We have recognized that this method of conducting a differential diagnosis is scientifically sound. *Wendell v. GlaxoSmithKline LLC*, 858 F.3d 1227, 1234 (9th Cir. 2017). Moreover, "experts are not required to rule out all possible causes when performing the differential etiology analysis….Instead, such considerations go to the weight to be given the testimony by the fact finder, not its admissibility." *Kirk v. Schaeffler Grp. USA, Inc.*, 887 F.3d 376, 392 (8th Cir. 2018); *Schultz v. Akzo Nobel Paints, LLC, 721 F.3d 426, 434 (7th Cir. 2013)* ("…reliable expert

should consider alternative causes, they do not require an expert to rule out every alternative cause."); *Johnson*, 754 F.3d at 563–64 (8th Cir. 2014) ("However, we have consistently ruled that experts are not required to rule out all possible causes when performing the differential etiology analysis.").

i. Plaintiffs' Experts Have A Reliable Basis For Asserting That General Causation Has Been Established.

Dr. Weisenburger is designated as an expert in the area of general causation (consistent with his previous expert reports, deposition testimony and Daubert testimony). See Ex. 1, Plaintiff's Expert Witness Disclosure. For a complete recitation of the relevant facts and analysis establishing the admissibility of Dr. Weisenburger's general causation opinion, the Court is respectfully directed to Plaintiff's Memorandum of Points and Authorities in Opposition to Defendant Monsanto Company's Motion to Exclude Plaintiff's General Causation Experts ("Plaintiff's Opposition to Defendant's Motion to Exclude Plaintiff's General Causation Experts") filed contemporaneously herein. As of today, Dr. Weisenburger's qualifications and methodology have been vetted and approved by the Ninth Circuit, two federal district courts, and a California superior court. *See Wendell*, 858 F.3d at 1237 (praising Dr. Weisenburger's qualifications and expertise); *Ruff*, 168 F.Supp.2d at 1280 (finding Dr. Weisenburger's methodology reliable under similar factual circumstances); Ex. 2, MDL Order at 52-56 (admitting the entirety of Dr. Weisenburger's opinion); Ex. 3, Karnow Order at 12, 19-20 (holding same).; Ex. 4 *Barrera v. Monsanto Co*., C.A. No. N15C-10-118 at 40 (Del. Super. May 31, 2019) ("Medinilla Order") (holding same, applying Third Circuit law). Contrary to

Defendant's assertions, Dr. Weisenburger is eminently qualified and his general causation opinions are reliable.

Dr. Nabhan is one of the top lymphoma specialists in the country. Ex. 5, C.V. p. 3. He estimates he has seen approximately 1000 patients with NHL during his 20 years of clinical practice. Ex. 6, Nabhan 1/30/2018 Dep. at 17:2-21:16. Dr. Nabhan has published approximately 100 scientific articles on lymphomas. *Id.* at 14:19-15:5. At the *Johnson* trial, Dr. Nabhan was qualified "as an expert in the diagnosis, treatment, and prognosis of non-Hodgkin's lymphoma, including the causes and risk factors of non-Hodgkin's lymphoma" with no objection by Monsanto. Ex. 7, Johnson v. Monsanto Trial Tr. at 2787 ("Trial Tr."). Dr. Nabhan regularly relies on both epidemiology and toxicology studies in his clinical practice stating that, "Optimal care of NHL in any patient requires reducing exposure to potential associated factors if known, to this end, I regularly review NHL-related epidemiological and mechanistic studies. I routinely study and incorporate epidemiology and toxicology into my clinical practice, academic studies and present work; both serve as important foundations to the practice of oncology." Ex. 28, Nabhan Rpt. at 3-4. Dr. Nabhan is designated in areas of human cancers, causes of cancer, including exposure to glyphosate and Roundup, cancer diagnosis, cancer effects, cancer treatments, and the clinical practice of medicine generally, and specifically as to Plaintiff, the causes of her NHL, her clinical course and pain and suffering…" Ex. 9, Plaintiff's Expert Witness Disclosure.

Specific causation experts are permitted to build from the Plaintiffs' admissible general causation opinions. *See eg. Junk v. Terminix Int'l Co.*, 628 F.3d 439, 449 (8th Cir. 2010). (Plaintiff's expert's (Dr. Bearer) differential diagnosis was dependent on another experts (Dr.

Fenske) opinion on exposure. Dr. Bearer's opinion was excluded upon the court's exclusion of Dr. Fenske's opinion). Further, in the MDL, Monsanto's specific cause experts were allowed to, and did rely on Monsanto's general causation expert opinions. *See* Ex. 10, MDL Order 85 ("As this Court has previously ruled, the specific causation experts are permitted to build from plaintiffs' admissible general causation opinions. And the admissible general causation opinions grappled with the full body of evidence."); Ex. 11, Pretrial Order 74 ("Perhaps these experts [Monsanto's specific cause experts] may testify briefly that they do not believe NHL is a risk factor at all for the reasons given by Monsanto's general causation experts). As such, assuming the opinions are ruled admissible, both Dr. Weisenburger and Dr. Nabhan can properly rely on Dr. Weisenburger's general causation opinion, as well as Plaintiff's other designated general causation experts who conclude that GBH's are capable of causing NHL in humans.

ii. The Studies Relied Upon by Plaintiffs' Experts Provide a Reliable Basis For Ruling In Roundup As A Cause of Ms. Gordon's NHL

Defendant's characterization of the studies relied upon by Plaintiff's experts is misleading. As explained in-depth in Plaintiff's Opposition to Motion to Exclude Plaintiff's General Causation Experts filed contemporaneously herein, It is well-accepted that "it is necessary to carefully select the factors to include in the exposure-response models, rather than including every possible variable or to rely solely on statistical criteria to determine which variables may be potential confounders." Ex. 12, Christensen, et al. *The Use of Epidemiology in Risk Assessment: Challenges and Opportunities* 21 HUMAN ECO. RISK ASSES. 1644-1663, 1654 (2015). Furthermore:

> When a study population is exposed to multiple agents, and these exposures are highly correlated…it may be difficult to analytically disentangle individual

> exposure effects. This issue has been encountered in studies of many environmental contaminants, including ...certain pesticides. In this situation, confounding may be difficult to address with statistical analysis. ... When two or more agents are always encountered together, evaluating the risk of the combined exposure is a relevant consideration for public health since they better reflect real-world exposure

Id. at 205.

To further illustrate, both De Roos (2003) and the NAPP (2015) study *did* adjust fully for exposure to other pesticides and still found a statistically significant, doubling of the risk associated with exposure to GBFs and NHL. *See* Karnow Order at 12 ("[T]here is at least one study that controlled for other pesticides and still found a statistically significant association between glyphosate and NHL."); Ex. 2, MDL Order at 54 ("[Dr. Weisenburger] emphasized that the odds ratio for higher-intensity exposure remained statistically significant [in the NAPP]."). Moreover, Dr. Ritz clearly explains and justifies, based on generally accepted scientific principles, why she considers both adjusted and unadjusted numbers.

As such, it is not disqualifying for any expert to rely on unadjusted odds ratios in the epidemiological studies. In particular, Dr. Weisenburger considered the effects of potential confounding and concluded, based on his thorough review of the underlying studies, that the elevated odds ratios for glyphosate could not be explained away with confounding. *See e.g.*, Ex. 13, 9/11/17 Weisenburger Dep. at 69:25-70:6, 72:2 ("I think that the epidemiologic studies are well-constructed, they're well-done and they took every precaution to, as best they can, eliminate bias…no one would just look at one piece of the information to come to a conclusion."). In his report, Dr. Weisenburger "report[ed] both the adjusted and unadjusted odds ratios from these

studies" and acknowledged the benefits of thoughtful adjustment for potential confounders. Ex. 2, MDL Order at 52-53; Ex. 14, Weisenburger Rpt. at 4-7.

Similarly, Defendant's assertion that criticism of Dr. Nabhan's analysis of the *Eriksson* 2008 study is also misguided. In analyzing the causality between GBHs and NHL, Dr. Nabhan considers the totality of the evidence. *See* Ex. 15, Nabhan Report; Ex. 16, Daubert Tr. at 802. In doing so, Dr. Nabhan utilized years of clinical experience and familiarity with epidemiological, toxicological and genotoxic studies. *See* Ex. 3, Karnow Order at 24 ("Dr. Nabhan has extensive experience as a treating physician to support his conclusions.").

In summary, Monsanto's criticism, thus, is not really directed at the underlying methodology, but on the conclusions. That is grist for cross-examination, not exclusion.

iii. NHL Subtypes

An expert may rely upon epidemiology looking at NHL as one disease to support a causation opinion on any NHL subtype. To illustrate, Judge Karnow ruled: "I reject Monsanto's argument that there is no scientific basis for Dr. Nabhan to rely on studies that apply to NHL generally in the context of mycosis fungoides. There is a scientific basis for Dr. Nabhan's opinion - mycosis fungoides is a subtype of NHL." Ex. 3, *Karnow Order* at 23; *see also Ruff v. Ensign Bickford Industries, Inc.*, 168 F. Supp. 2d 1271 (D. Utah 2001) at 1285 ("[T]hat plaintiffs' expert opinion need not include data showing studies of the exact subtype of plaintiffs' NHL to satisfy their general causation burden."). In *Milward v. Acuity Specialty Products Group, Inc.*, 639 F.3d 11 (1st Cir. 2011), the court held that it was error to exclude an expert opinion that was based on epidemiology of benzene and AML, where the injury was a rare subtype of AML, APL. The court stated "the rarity of APL and difficulties of data collection in the United States make it

very difficult to perform an epidemiological study of the causes of APL that would yield statistically significant results." *Id.* at 24.

Monsanto's assertion that Plaintiffs' experts failed to consider specific subtypes within the epidemiological studies in ruling in Roundup® as a probable cause of each Plaintiff's NHL is wrong. At present, there are over 60 subtype classifications of NHL; that number is constantly changing and the classification evolving. Ex. 17, 8/23/2017 Nabhan Dep. at 32-33. With regard to causality/etiology of NHL, Dr. Nabhan has explained that subtypes are not considered to be independent. *Id.* at 30-33. Therefore, regardless of subtypes, the etiology of NHLs are generally studied together. Ex. 15, Nabhan Rep. at 4.

To further illustrate, in evaluating Ms. Stevick's CNS lymphoma in the MDL cases, Dr. Weisenburger explained that "Diffuse large B-cell lymphoma not otherwise specified has different subtypes. One of them is called the activated B-cell type, okay? And it just so happens that the primary CNS lymphomas are mainly of the activated B-cell type. So they have the same mutation patterns." Ex. 18, Weisenburger Stevick Dep 40:18-24. This is especially true here, where the precise lymphoid cells—here B-Cells—are affected.

The reasons why Plaintiffs' experts' were unable to draw definitive conclusions from studies pertaining to only specific subtypes is clear: as data are further divided by subtype, the number of cases become smaller and smaller and the power of the study to detect a statistically significant result diminishes. This is precisely because NHL is rare and becomes significantly rarer when atomized into subtypes. As Dr. Weisenburger explained:

> Q: And with regard to subtypes, how is it that you're not always able to determine odds ratios for particular subtypes in some of the epidemiological studies

> A: Well, often there aren't enough cases of specific subtypes to really – to really do meaningful analyses. So they did it in the Eriksson study, but they – they didn't have a lot of cases of the various different subtypes then. So although you see elevated odds ratios, they – they generally aren't statistically significant..."

Ex. 18, Weienburger Stevick Dep at 142:18-143:3.

Similarly, in one of his reports in the MDL cases, Dr. Nabhan explains that "[the number of subtypes] shows that epidemiologic studies would rarely be able to investigate association between any occupational hazard and types of NHL." Ex. 19, Nabhan Hardeman Rep. at 8.

iii. Days Per Year Approach

After reading the relevant medical records and literature, and prior to completing their specific causation opinions, Drs. Weisenburger and Nabhan, individually met with each Plaintiff.[3] During their in-person examinations, each doctor conducted a thorough physical examination and interviewed each Plaintiff regarding their particular Roundup® exposure and other risk factors. The doctors used that information to compare individual Plaintiffs' Roundup® exposure and circumstances to the cases in the epidemiological literature. Plaintiffs' experts' approach of using the results of epidemiological studies, which show increased risk at specified intervals of exposure, is reliable to infer specific causation. Just as Plaintiffs' experts do here, an expert may satisfy the specific causation burden by "present[ing] evidence that the specific level of [toxic] exposure actually experienced caused plaintiff's illness." *Milward v. Acuity Specialty Prods. Grp., Inc*., 969 F. Supp. 2d 101, 111 (D. Mass. 2013), aff'd sub nom. *Milward v. Rust-Oleum Corp*., 820 F.3d 469 (1st Cir. 2016).

Here, all of Plaintiffs' experts did exactly that by comparing Plaintiffs' reported exposures with the quantities of exposure that, according to peer-reviewed epidemiological

[3] Dr. Weisenburger interviewed Ms. Gordon by telephone and Dr. Nabhan met with and examined Ms. Gordon.

studies, significantly increase the risk of developing NHL. Dr. Nabhan's to determination as to whether exposure to Roundup truly impacted the risk factor for development of NHL is based upon whether the exposure in a particular patient he is assessing is in line with the published epidemiologic literature. Ex. 20, 11/15/18 Nabhan Dep at 105. More specifically, more than two days per year or more than ten days per lifetime. *Id*. Similarly, Dr. Weisenburger determined that Ms. Gordon's use and exposure to Roundup® placed her in the high-risk category for the development [of NHL]. Ex. 21, 11/26/18 Weisenburger Dep at 113. This type of analysis of "relative risk" is an appropriate means of establishing specific causation. *Schultz*, 721 F.3d at 432–33; see generally Reference Manual on Sci. Evid. 549, 2011 WL 772426, at 611–612 (discussing propriety of using magnitude of relative risk to establish specific causation); Restatement (Third) of Torts: Phys. & Emot. Harm § 28, cmt. c(4) rprts. note (2010).

Plaintiffs' use of and exposure to Roundup® is consistent with the epidemiological literature. Indeed, Monsanto fails to cite any case control epidemiological study indicating that Plaintiffs' exposures fall below levels otherwise correlated with an increased risk of NHL following exposure to GBFs. In fact, exposures for Ms. Gordon greatly exceed the exposure of the participants in the epidemiology studies.

For example, in Andreotti (2018), the median exposure to glyphosate was only 48 lifetime days, or eight years. In the NAPP study (pooling DeRoos (2003) and McDuffie (2008)), the participants used GBFs for an "average of 5 years and handled for an average of 5 days/year." Ex. 22, NAPP manuscript at 12. Conversely, Ms. Gordon used GBFs for approximately 14 years and handled them every week. Furthermore, it is simply not true that occupational users have more intense exposure than residential users. Monsanto's own study

shows that the single most important factor in reducing glyphosate exposure is wearing "rubber gloves when handling the pesticide formulation." Ex. 23, FFES study at 324. Plaintiffs unfortunately did not wear gloves or any protective gear because there was no warning on the label. In fact, Monsanto's own internal analyses using exposure modeling demonstrate that residential users have a much higher rate of exposure per hour than professional users. Ex. 24, MONGLY01075506; compare Appendix 8 (showing dose for tractor mounted sprayer after six hours without gloves to be 0.67 mg/kg/day) with Appendix 10 (dose for tractor mounted sprayer after six hours with gloves to be 0.066 mg/kg/day) and Appendix 14 (dose for home and garden user sprayer after only 30 minutes is 0.13 mg/kg/day). Under the UK POEM methodology, the highest dose for a professional user is therefore only 0.11 mg/kg/hr compared to a dose of 0.26 mg/kg/hr for residential users. *Id.*

It is entirely appropriate to rule in Roundup® as a possible cause of any individual's NHL where use and exposure conform to the epidemiological literature evincing increased risk. As noted above, ruling in Roundup® as a possible or potential cause of NHL under these circumstances is simply a step in any reliable differential diagnosis. *See Clausen* 339 F.3d at 1057 ("The first step [of a properly conducted differential diagnosis] is to compile a comprehensive list of hypotheses that might explain the set of salient clinical findings under consideration.").

II. PLAINTIFFS' EXPERTS RELIABLY RULED OUT OTHER CAUSES.

Importantly, in its bid to disqualify Plaintiffs' experts, Monsanto does not identify a single risk factor that Plaintiffs' experts did not consider (i.e., both "rule in" and "rule out") in their reports. A district court is justified in excluding evidence only if an expert "utterly fails

[...] to offer an explanation for why the proffered alternative cause" was ruled out. *Cooper v. Smith & Nephew, Inc.,* 259 F.3d 194, 202 (4th Cir. 2001). The expert must provide reasons for rejecting alternative hypotheses "using scientific methods and procedures" and the expert must base the elimination of those hypotheses on more than "subjective beliefs or unsupported speculation." *Claar v. Burlington N. R.R. Co.,* 29 F.3d 499, 502 (9th Cir.1994). However, Plaintiffs' experts are not required to show, nor do they purport to offer the opinion, that exposure to Roundup® is the sole cause of each Plaintiff's NHL. *See Solis v. BASF Corp.*, 2012 IL App (1st) 110875, ¶ 43, 979 N.E.2d 419, 434; *Kirk v. Schaeffler Grp. USA, Inc*., 887 F.3d 376, 390 (8th Cir. 2018); *Baker v. Guzon*, 950 S.W.2d 635, 647 (Mo. Ct. App. 1997); *Moreland v. Eagle Picher Techs., LLC,* 362 S.W.3d 491, 504 (Mo. Ct. App. 2012) (expert opinion is admissible based on "reasonable probability" defined as "more than 50%"); *See also e.g. Schultz*, 721 F.3d at 433 ("In order to show that a toxin is 'a cause' or 'a substantial factor,' [plaintiff] was not required to demonstrate that [toxin] exposure was the sole cause of his disease, so long as he showed that [the toxin] contributed substantially to the disease's development or significantly increased his risk of developing [the disease].") (emphasis in original).

Monsanto misstates this standard by implying that a differential diagnosis can only be reliable if all other potential causes are eliminated to an absolute certainty. *See. e.g., Mot* at 21 ("The experts ultimately admitted that they cannot rule out some of the risk factors…"). But this is contrary to medicine and science, and it is not what the law requires. As the Ninth Circuit explained in *Wendell*, "[w]e do not require experts to eliminate all other possible causes of a condition for the expert's testimony to be reliable." 858 F.3d at 1237; *Bitler v. A.O. Smith Corp*.,

400 F.3d 1227, 1238 n.6 (10th Cir. 2005) (A reliable differential diagnosis does not require that an expert consider and rule out every conceivable cause to be reliable); *Schultz* 721 F.3d at 434 ("[T]he Committee Notes [to Fed. R. Evid. 702] suggest that a reliable expert should consider alternative causes, they do not require an expert to rule out every alternative cause.") (emphasis added). And, where, as here, "a properly qualified medical expert performs a reliable differential diagnosis through which, to a reasonable degree of medical certainty, all other possible causes of the victims' condition can be eliminated, leaving only the toxic substance as the cause, a causation opinion based on that differential diagnosis should be admitted." *Turner v. Iowa Fire Equip. Co.*, 229 F.3d 1202, 1209 (8th Cir. 2000).

In conducting their differential diagnosis, Dr. Nabhan and Dr. Weisenburger have gone far beyond what was required of them under Illinois law.[4] Under Illinois law, an expert need only opine that an exposure "substantial factor" in causing plaintiff's disease, not the only factor. *Solis v. BASF Corp.*, 2012 IL App (1st) 110875, ¶ 43, 979 N.E.2d 419, 434. To satisfy the substantial factor test it is enough to show that a chemical can cause the disease and that the plaintiff had sufficient exposure to the chemical. *Id. at* ¶ 52. An expert need not rule out other exposures that also "contributing factors" to the injury, it is enough that the exposure simply be "one of the proximate causes of the injury." *Id.* It is defendants' burden at trial to provide

[4] Defendants cite no cases applying Illinois law that would suggest a differential diagnosis cannot be used in cases where there are unknown causes of a disease. Such a finding would conflict with both the Missouri and Illinois substantial factor tests, which was also utilized in *Wendell. See also Cooper v. Takeda Pharm. Am., Inc.*, 239 Cal. App. 4th 555, 585, 191 Cal. Rptr. 3d 67, 92 (2015) (Applying substantial factor test and holding that "Smith's acknowledgement that there are so many possible causes and so much still unknown about the causation of bladder cancer, in the absence of any substantial evidence to support the notion that Jack Cooper was in fact affected by those causes, was not a proper basis for the court to exclude Dr. Smith's testimony.").

evidence that another exposure was the "sole proximate cause." *Id.*

As a treating physician, Dr. Nabhan "always ask[s] about occupational exposure." Ex. 16, Daubert Tr. At 807:6-11. Dr. Nabhan explains that in the real world:

> .. There are situations that could be something linked to an occupation, something linked to a situation that you have, and that's when we tell a patient, I think this is why this occurred, and my advice to you is not to do this occupation or not do this function, because it may slow the progression of your disease, it may cause slowness of it, or it may prevent another type of lymphoma you have.
>
> Q. And that's what we want from your real world opinions. If you were with a patient tomorrow and they had symptoms of possibly having hematopoietic cancer and told you they were applying Roundup®, would you tell them that's a modifiable risk factor?
>
> A. Yes. I would...Absolutely.

Id. at 826:8-827:5

A. Plaintiffs' Experts Reliably Ruled Out Idiopathic Causes

Contrary to Defendants' assertions, differential diagnoses are appropriate even when there are is a high rate of unknown causes (idiopathic) for a disease and where the expert cannot completely rule out "idiopathic causes." As explained in *Wendell*:

> the district court erred when it excluded Plaintiffs' experts' opinion testimony because of the high rate of idiopathic [unknown] HSTCL and the alleged inability of the experts to rule out an idiopathic origin or IBD itself. We do not require experts to eliminate all other possible causes of a condition for the expert's testimony to be reliable. *Messick*, 747 F.3d at 1199. It is enough that the proposed cause "be a substantial causative factor." *Id*. This is true in patients with multiple risk factors, and analogously, in cases where there is a high rate of idiopathy. ..Moreover, when an expert establishes causation based on a differential diagnosis, the expert may rely on his or her extensive clinical experience as a basis for ruling out a potential cause of the disease. *See id*. at 1198.

Id. at 1237.

Wendell concluded that "[w]ere, as here, two doctors who stand at or near the top of their field and have extensive clinical experience with the rare disease or class of disease at issue, are

prepared to give expert opinions supporting causation, we conclude that *Daubert* poses no bar based on their principles and methodology." *Id.* The Eighth Circuit has also squarely rejected Defendants' argument. *In re Prempro Prod. Liab. Litig.*, 586 F.3d 547, 566 (8th Cir. 2009) (rejecting argument that "…differential diagnosis cannot be used to prove the cause of breast cancer because no one knows the cause of breast cancer.")

i. Dr. Nabhan

Dr. Nabhan's case specific opinion was not formed until after meeting with Ms. Gordon, personally examining her, talking to her, going through her medical history, going over her family history, going over all the details and complete review of her medical records, looking at exposure, looking at literature, and weighing the weight of each risk factor. Ex. 20, 11/15/18 Nabhan Dep. at 152:15-21; 165:13-15; 190:12-20. Dr. Nabhan also read Ms. Gordon's deposition and even reviewed the depositions of Ms. Gordon's treating physicians. *Id.* at 151-152; Dr. Nabhan took notes of his physical examination of Ms. Gordon, and noted that she was overweight, looked tired, appeared short of breath, that she was an ex-smoker and drank alcohol socially but had nod drank in years; that her step father died from cancer in 2004 and that she thought he had lymphoma, that Ms. Gordon's stepfather mixed roundup, that she and her stepfather lived in the same environment, Ex. 25 (Nabhan Notes on Physical Examination of Ms. Gordon); Ex. 20, 11/15/18 Nabhan Dep. at 164: 4-8; 194:21-22; 195:1-3. Dr. Nabhan also inquired about Ms. Gordon's history of Roundup® usage, noting that she began spraying in 1990 or 1992, that she was diagnosed in 2006. *Id.* at 209:1-9; 267:3-13.

At deposition, Dr. Nabhan explained that he considered Dr. Nabhan considered whether Ms. Gordon had any viral infections, such as HIV; autoimmune diseases, such as lupus,

Sjogren's syndrome, rheumatoid arthritis; or a suppressed immune system. *Id.* at pg. 42:11-15; 157:3-16. Dr. Nabhan also considered Ms. Gordon's pesticide exposure and her age. *Id.* at 42:16-23. He explained that Ms. Gordon's young age, "was a red flag" that prompted further investigation *Id.* at 45:14-18; 46:3-5. He further explained that pesticides are well known as increasing the risk of developing NHL, and that's [Roundup/glyphosate] was the only pesticide that she was exposed to. *Id.* at 42:16-23. Dr. Nabhan went on to further opine that her exposure as well as her youth fits within the published epidemiologic literature that supports the causation of non-Hodgkin lymphoma by glyphosate. *Id.*

Dr. Nabhan acknowledged that majorities of non-Hodgkin lymphoma are idiopathic, by virtue of the fact that we don't know what causes them, however, that does not rule out the fact that you look at every particular patient separately, "…you look at the medical records of the patient; you use your clinical expertise; you use your knowledge. You look at the epidemiology literature and you correlate everything together to see if this particular case is idiopathic or there's another cause that may have caused it…." *Id.* at 212:2-8. In discussing ruling out idiopathic causes for NHL, Dr. Nabhan further explained,

> So if you have a patient that has a known factor that is plausible, that is supported by the literature, and fits within what has been published from an epidemiologic standpoint, you can't ignore that and say, Well, I'm just going to forget about this and I'm going to say it's unknown. It's… like having somebody with HIV-positive and say, You know what? It's idiopathic…I'm going to ignore the HIV positivity. So we can't do that.

Id. at 212:22-225; 213:1-7

ii. Dr. Weisenburger

Dr. Weisenburger's did not form his opinion that Ms. Gordon's NHL (Diffuse B-Cell

Lymphoma) was more than likely caused by Roundup until after conducting a thorough investigation. Dr. Weisenburger's investigation of Ms. Gordon's case consisted of review of her medical records, including her pathology slides, and interviewing her for the purpose of investigating whether there were any other risk factors or causes for her NHL. Ex. 21, 11/26/18 Weisenburger Dep. at 61:10-16; 62:7-12; 148:18-20. Upon reading Ms. Gordon's medical records, he noted that there weren't any risk factors [for NHL] besides obesity. *Id.* at 62:2-6. Dr. Weisenburger then went on to conduct interviews with Ms. Gordon, wherein he asked her questions about specific details of her Roundup use, her health history, including whether she had a history of autoimmune disease, a history of cancer in the family, other infections, and he noted that all major causes for NHL were either covered in the medical record or covered in my interview with her. *Id.* Dr. Weisenburger also read Ms. Gordon's deposition, reviewed the depositions of Ms. Gordon's treating physicians. Dr. Weisenburger acknowledged that approximately 70 percent of HL cases are idiopathic. Dr. Weisenburger further explains that the only way to rule out idiopathic is if you find a real risk factor. *Id* at 201:5-6.

Therefore, although not required to, Dr. Nabhan and Dr. Weisenburger did consider and rule out idiopathic causes. Ex. 26, Bolanos Order at 2. (Holding Dr. Nabhan's differential diagnosis reliable where he testified that "Johnson was much younger than the average patient who developed the disease this raised a "red flag" that his cancer is not likely to be idiopathic and more likely to be caused by an exposure.").

B. Obesity

The method by which Plaintiff's experts effectively ruled out obesity as a risk factor specific to Ms. Gordon's NHL was methodologically sound, based upon their clinical judgment.

As appropriately and accurately summarized, Dr. Nabhan considered obesity as a risk factor for NHL. *Id at* 175:15-24; 176:1-12; 177:2-25; 178:1-25. However, upon his review of the literature, he deemed that the evidence was inconclusive. *Id. at* 177:2-25; 181:1-25; 182:1-6. Dr. Nabhan concluded, that in Ms. Gordon's situation in particular, given the other risk factors and what's going on with her, that particular risk factor could be eliminated in his methodology. *Id. at* 177-78. More specifically, Dr. Nabhan explained:

> …in this particular case in Ms. Gordon you have to – you look at the age as an example. To me the age was very important in this situation. I have a patient that is in her late 30s that is diagnosed with a disease that affects people in their late 60s. So she's being diagnosed 30 years earlier, and that's important. The fact that her stepfather was diagnosed with the disease –with kind of similar disease, you know, and she was using – they both were using the same occupational hazard, that's also very important. And you rule things in and rule things out, you have to weigh the evidence…that you are looking at. If we are going to take obesity as a risk factor for every single…cancer and we have about 30 to 35 percent of the U.S. is classified currently as overweight or obese, then we have one-third the of the population being diagnosed with cancers all over. So the math did not add p in her situation. It is still a risk factor that everyone should actually put in, but, again, you go through the process of elimination and that's with differential diagnosis what we do. So in her situation, the weight of the evidence with obesity already is wishy-washy in literature. Already is very – very inconclusive, and there is no reason for it to be conclusive in her. So if anything, it solidified the inconclusively of obesity in her.

Id at 180:4-25, 181:1-8.

Dr. Weisenburger ruled out obesity as a substantial contributing factor by comparing the risk ratios for obesity and Roundup. Ex. 21, 11/15/18 Weisenburger Dep. at 88:15-25, 89:1-3, 9-20; 116:12-14. Dr. Weisenburger further explained it is not fully understood how obesity causes cancer, particularly NHL, but that the based on peer reviewed, mechanistic literature, the evidence for genotoxicity and for oxidative stress was stronger for glyphosate in NHL than it is for obesity in NHL. Id. at 91:3-10.

Contrary to Monsanto's assertions, Dr. Nabhan and Dr. Weisenburger did not fail to faithfully apply the same arguments they used to rule out obesity to their analysis regarding Roundup. Dr. Weisenburger ruled out obesity as a cause for Ms. Gordon's NHL after considering Ms. Gordon's specific medical history, evaluating her condition and circumstances. They also both researched and evaluating the scientific literature with regard to the relationship between NHL and obesity and found it to be relatively inconclusive with regard to causation. In contrast, upon their review of the scientific literature regarding glyphosate, they both came to a different conclusion, namely that said literature showed that exposure to glyphosate presents a more clear risk factor for development of NHL. There is nothing methodologically suspect with weighing the strength of the evidence of various risk factors and making a clinical judgment about which risk factor is more important in a patient.

Defendants criticize Dr. Nabhan and Dr. Weisenburger for using their clinical judgment in determining and ruling out the potential causes of Ms. Gordon's NHL. However, that is exactly what experts do in conducting a differential diagnosis. *Wendell v. GlaxoSmithKline LLC,* 858 F.3d 1227, 1237 (9th Cir. 2017) ("the expert may rely on his or her extensive clinical experience as a basis for ruling out a potential cause of the disease."). Defendants offer no evidence or expert testimony to contradict Dr. Nabhan's testimony and provide no evidence that there was some other factor that was the cause of Ms. Gordon's disease beyond argument by counsel, and there motion should be denied on that basis alone. *Am. Eagle* 463 S.W.3d at 26 (Mo. Ct. App. 2015) (Motion to exclude properly denied where defendant "did not present any evidence or expert testimony which could have challenged the reliability of the sources of [expert]'s opinion.").

Dr. Nabhan and Dr. Weisenburger's case-specific causation opinions are reliable and admissible. Defendant's Motion should be denied.

CONCLUSION

For the foregoing reasons, Plaintiffs respectfully request that this honorable Court DENY Monsanto's Motion to Exclude the Testimony of Plaintiff's Experts Dr. Chadi Nabhan and Dr. Dennis Weisenburger.

DATED: JUNE 10, 2019

Respectfully submitted,

/s/ Aimee Wagstaff
Aimee H. Wagstaff
David J. Wool
Joseph Ryan Riegerix, #66372
ANDRUS WAGSTAFF, P.C.
7171 W. Alaska Dr.
Lakewood, CO 80226
Telephone: (303) 376-6360
Facsimile: (303) 376-6361
Aimee.wagstaff@andruswagstaff.com
David.wool@andruswagstaff.com
Joseph.riegerix@andruswagstaff.com

Eric D. Holland
R. Seth Crompton
Patrick R. Dowd
HOLLAND LAW FIRM
300 N Tucker, Suite 801
St. Louis, MO 63101
TEL: (314)241-8111
FAX: (314)241-5554
eholland@allfela.com
scrompton@allfela.com
pdowd@allfela.com

Attorneys for Plaintiff Sharlean Gordon

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing was filed and served this 10th day of June 2019 using the Court's electronic filing system.

ANDRUS WAGSTAFF, P.C.

/s/ Aimee Wagstaff
Aimee H. Wagstaff
ANDRUS WAGSTAFF, P.C.
7171 W. Alaska Dr.
Lakewood, CO 80226
Telephone: (303) 376-6360
Facsimile: (303) 376-6361
Aimee.wagstaff@andruswagstaff.com