UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANA

SALLY GROS VEDROS	CIVIL ACTION
VERSUS	NO: 11-1198
NORTHROP GRUMMAN SHIPBUILDING, INC., ET AL	SECTION: "J"(4)

ORDER & REASONS

Before the Court is a *Motion to Exclude Certain Testimony of Dr. Stephen Terry Kraus* **(Rec. Doc. 517)** filed by Defendants Northrop Grumman Shipbuilding, Inc. ("Avondale'), Albert L. Bossier, Jr., and J. Melton Garrett, and OneBeacon America Insurance Company and American Employers Insurance Company in their capacities as alleged insurers of Avondale's alleged executive officers (collectively the "Avondale Interests"), a supplemental memorandum in support filed by Defendants The McCarty Corporation ("McCarty"), Eagle, Inc. ("Eagle"), and Eagle's alleged insurers, OneBeacon America Insurance Company and American Employers Insurance Company, who joined and adopted the Avondale Interests motion (Rec. Doc. 554), an opposition thereto filed by Plaintiffs (Rec. Doc. 558), a reply filed by McCarty and Eagle (Rec. Doc. 580), a *Motion to Exclude Causation Opinions Regarding Benjamin Foster Products Based on the "No Safe Level of Exposure" Theory* **(Rec. Doc. 518)** filed by Defendant Bayer CropScience, Inc., as Successor to Rhone-Poulene

AG Company, f/k/a Amchem Products, Inc., f/k/a Benjamin Foster Company ("Amchem"), an opposition thereto filed by Plaintiffs (Rec. Doc. 534), a reply filed by Amchem (Rec. Doc. 585), and a sur-reply filed by Plaintiffs (Rec. Doc. 589).[1] Having considered the motions and legal memoranda, the record, and the applicable law, the Court finds that the motion should be **GRANTED in part** and **DENIED in part**.

FACTS AND PROCEDURAL BACKGROUND

At this point in the litigation, both the Court and the parties are extremely familiar with the facts of this case. The Court has previously set out the detailed facts of this matter in its Order and Reasons dated April 24, 2014. (Rec. Doc. 341). For purposes of the instant motion, only the following facts are pertinent.

This action arises from the death of Sally Gros Vedros ("Vedros") due to mesothelioma. Alton Gros, Vedros's father, worked at Avondale as a welder from 1943 to 1976, and Vedros claims to have spent many years washing her father's work clothes, which allegedly resulted in Vedros's secondary exposure to insulation dust containing asbestos. Vedros also worked at Avondale from 1960 to 1963 in the purchasing department, and she claims that she was directly exposed to asbestos while she

[1] Additionally, Defendants Maryland Casualty Company and the Continental Insurance Company joined and adopted the Avondale Interests' Motion (Rec. Doc. 517), the supplemental memorandum (Rec. Doc. 554), and Amchem's Motion (Rec. Doc. 518). (Rec. Doc. 543)

worked at Avondale. Before her death, Vedros filed suit against many defendants, and after her death, her children joined the suit as Plaintiffs.

In preparation for trial, Plaintiffs originally retained Dr. Samuel Hammar, a preeminent pathologist, to testify to Vedros's medical condition and the cause of same. However, due to Dr. Hammar's unavailability to provide deposition or trial testimony, the Court allowed Plaintiffs to replace Dr. Hammar with Dr. Stephen Terry Kraus, a board-certified radiation oncologist. Dr. Kraus received his medical degree from the University of Cincinnati College of Medicine. He has served as the medical director for the Department of Radiation Oncology at Tulane Cancer Center, and he has been treating patients with cancer, including malignant mesothelioma, since 1982.

To prepare his expert report, Dr. Kraus reviewed scientific and medical literature regarding asbestos and asbestos-related diseases, Vedros's medical records, and deposition testimony of Vedros, Janes Champagne, Gerald Vedros, Lori Vedros Kravet, and Bobby Jambon. Dr. Kraus's expert report details his opinions regarding Vedros's exposure to asbestos and the causal relationship between her exposure and her mesothelioma. For example, Dr. Kraus opined that "domestic or para occupational asbestos exposure 'is all that is required for mesothelioma to be asbestos related.'" He further quoted *The Congressional*

Record, October 2007, as follows: "There is no known safe level of asbestos exposure." In addition, he opined that "[t]here is no proof or evidence of a threshold value of occupational or para occupational exposure to asbestos that could cause malignant mesothelioma." (Rec. Doc. 518-2, pp. 5-6)

The Defendants have now filed the instant motions requesting that the Court exclude at trial the causation opinions of Plaintiffs' medical expert, Dr. Kraus, because he is unqualified as an expert and his methodology for specific causation is unreliable, speculative, unfairly prejudicial, and contrary to Louisiana law.

PARTIES' ARGUMENTS

Defendants present several arguments in support of their motions to exclude Dr. Kraus's causation opinions at trial. First, they argue that Dr. Kraus is not qualified to testify as an expert in this matter, because he cannot diagnose mesothelioma, he has never written an article regarding asbestos or diseases caused by asbestos, and his training and expertise in the field of radiation oncology does not qualify him to assess the genesis of a mesothelioma to a reasonable degree of scientific certainty. Second, Defendants argue that Kraus's causation opinions are not sufficiently reliable to be admitted,

because they are based on the flawed "Every Exposure"[2] Theory. Defendants contend that Dr. Kraus's causation opinions are purely speculative because he did nothing to characterize Vedros's alleged exposure to certain products and therefore has no basis to conclude that the alleged exposure was actually a substantial factor in causing her mesothelioma. Furthermore, Defendants contend that Dr. Kraus's opinions are reverse engineered and based on flawed logic rather than scientific knowledge or expertise.[3]

In response, Plaintiffs argue that Dr. Kraus is eminently qualified to offer medical causation opinions in this case, because causation is within his purview as a radiation oncologist and he is intimately familiar with the scientific and medical literature in this regard. Next, Plaintiffs argue that Dr. Kraus does not rely upon a "no safe level exposure" theory or an "every exposure" theory, but rather Dr. Kraus's opinion is that "it takes occupational and/or para-occupational exposures to asbestos (i.e. exposures above background)" to cause

[2] The theory that Defendants refer to has other names, including "No Safe Level of Exposure," "Each and Every Exposure," "Any Exposure," and "Single Fiber." All theories have as their basis the principle that all exposures to asbestos should be included as a cause of mesothelioma because there is no way to know which exposures caused it and which ones did not.

[3] In a footnote to its motion, Amchem states that its "motion is intended to apply to any other witness who might offer causation opinions relating to Benjamin Foster products based on the 'each and every exposure' theory, including Dr. Arnold Brody and/or Mr. Frank Parker." (Rec. Doc. 518-1, p. 2 n.3) However, because the deadline for filing motions in limine regarding the admissibility of expert testimony of anyone other than Dr. Kraus has passed, the Court does not consider these arguments.

mesothelioma. Dr. Kraus's theory and opinions, Plaintiffs argue, are supported by the peer-reviewed, published literature, and this theory has been recognized as valid by Louisiana courts. Moreover, Plaintiffs contend that the Defendants are asking this Court to require Dr. Kraus to opine as to a specific dose of asbestos that Vedros may have sustained from certain products, which is not required under Louisiana law.[4]

LEGAL STANDARD

Federal Rule of Evidence 702 provides that a witness who is qualified as an expert may testify if: (1) the expert's "specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue"; (2) the expert's testimony "is based on sufficient facts or data"; (3) the expert's testimony "is the product of reliable principles and methods"; and (4) the principles and methods employed by the expert have been reliably applied to the facts of the case. Fed. R. Evid. 702. The United States Supreme Court's decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), provides the analytical framework for determining whether expert testimony is admissible under Rule 702. Both scientific and nonscientific expert testimony are subject to the

[4] Plaintiffs also spend portions of their oppositions and sur-replies arguing that Dr. Paustenbach, one of Amchem's experts, relies on an "every exposure" theory. Because the deadline for filing motions in limine regarding the admissibility of expert testimony of Dr. Paustenbach has passed, the Court does not consider this argument.

Daubert framework, which requires trial courts to make a preliminary assessment of "whether the expert testimony is both reliable and relevant." *Burleson v. Tex. Dep't of Criminal Justice*, 393 F.3d 577, 584 (5th Cir. 2004); *see also Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 147 (1999). When expert testimony is challenged under *Daubert*, the party offering the expert's testimony bears the burden of proving its reliability and relevance by a preponderance of the evidence. *Moore v. Ashland Chem. Co.*, 151 F.3d 269, 276 (5th Cir. 1998).

The reliability of expert testimony "is determined by assessing whether the reasoning or methodology underlying the testimony is scientifically valid." *Knight v. Kirby Inland Marine Inc.*, 482 F.3d 347, 352 (5th Cir. 2007). A number of nonexclusive factors may be relevant to the reliability analysis, including: (1) whether the technique at issue has been tested, (2) whether the technique has been subjected to peer review and publication, (3) the potential error rate, (4) the existence and maintenance of standards controlling the technique's operation, and (5) whether the technique is generally accepted in the relevant scientific community. *Burleson*, 393 F.3d at 584. The reliability inquiry must remain flexible, however, as "not every *Daubert* factor will be applicable in every situation; and a court has discretion to consider other factors it deems relevant." *Guy v. Crown Equip.*

Corp., 394 F.3d 320, 325 (5th Cir. 2004); *see also Runnels v. Tex. Children's Hosp. Select Plan*, 167 F. App'x 377, 381 (5th Cir. 2006) ("[A] trial judge has considerable leeway in determining how to test an expert's reliability.") (internal quotation marks omitted).

DISCUSSION

A. Dr. Kraus's Qualifications as an Expert

First, the Court must determine whether Dr. Kraus has the expertise to assess the causation of Vedros's mesothelioma. To qualify as an expert, "the witness must have such knowledge or experience in [his] field or calling as to make it appear that his opinion or inference will probably aid the trier in his search for truth." *United States v. Hicks,* 389 F.3d 514, 524 (5th Cir. 2004) (quoting *United States v. Bourgeois,* 950 F.2d 980, 987 (5th Cir. 1992)). Additionally, Rule 702 states that an expert may be qualified based on "knowledge, skill, experience, training, or education." *Hicks,* 389 F.3d at 524; *see also Kumho Tire Co.*, 526 U.S. at 147 (discussing witnesses whose expertise is based purely on experience). "A district court should refuse to allow an expert witness to testify if it finds that the witness is not qualified to testify in a particular field or on a given subject." *Huss v. Gayden,* 571 F.3d 442, 452 (5th Cir. 2009) (quoting *Wilson v. Woods,* 163 F.3d 935, 937 (5th Cir. 1999)). However, "Rule 702 does not mandate that an expert be

highly qualified in order to testify about a given issue. Differences in expertise bear chiefly on the weight to be assigned to the testimony by the trier of fact, not its admissibility." *Id.* (citing *Daubert*, 509 U.S. at 596).

In support of their motion, Defendants highlight the "stark contrast in qualifications between Dr. Kraus and Dr. Hammar," Plaintiffs' original causation expert. (Rec. Doc. 554, p. 9) The qualifications of Dr. Hammar, however, are irrelevant to the issue of whether Dr. Kraus is qualified to testify as an expert in this matter. Defendants' also rely heavily on Dr. Kraus's lack of specialization in epidemiology, pathology, and toxicology. However, "[a] lack of specialization should generally go to the weight of the evidence, rather than its admissibility." *United States v. Wen Chyu Liu*, 716 F.3d 159, 168 (5th Cir. 2013). "[V]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Id.* (quoting *Daubert*, 509 U.S. at 596). "Thus 'an expert witness is not strictly confined to his area of practice, but may testify concerning related applications; a lack of specialization does not affect the admissibility of the opinion, but only its weight.'" *Id.* (quoting *Wheeler v. John Deere Co.*, 935 F.2d 1090, 1100 (10th Cir. 1991)).

Here, Dr. Kraus has a medical degree and is board certified in radiation oncology. He has been treating patients with mesothelioma for more than three decades. He has served as the medical director for the Department of Radiation Oncology at the Tulane Cancer Center, where he had both a clinical practice and teaching duties. Moreover, Dr. Kraus has reviewed scientific and medical literature regarding asbestos and asbestos related diseases as well as Vedros's medical records and deposition testimony. Accordingly, the Court concludes that Dr. Kraus is sufficiently qualified to offer expert testimony regarding causation, provided that those opinions meet the standard of reliability required under Rule 702 and *Daubert*. Defendants are free to challenge any perceived lack of expertise on cross-examination.

B. Reliability of Dr. Kraus's Causation Opinions

Next, the Court considers whether Dr. Kraus's specific causation opinions are sufficiently reliable to be admitted under Federal Rule of Evidence 702 and Daubert. The "every exposure" theory has been advanced by plaintiffs and their experts in a number of recent cases. *See* Joseph Sanders, *The "Every Exposure" Cases and the Beginning of the Asbestos Endgame*, 88 Tul. L. Rev. 1153, 1157 (2014). The "every exposure" theory "represents the viewpoint that, because science has failed to establish that any specific dosage of asbestos causes

injury, every exposure to asbestos should be considered a cause of injury." *Yates v. Ford Motor Co.*, No. 12-752, 2015 WL 3948303, at *2 (E.D.N.C. June 29, 2015); *see also Krik v. Crane Co.*, No. 10-7435, 2014 WL 7330901, at *2 (N.D. Ill. Dec. 22, 2014). The judicial reception to this theory has been largely negative. Numerous courts have excluded expert testimony or evidence grounded in this theory, reasoning that it lacks sufficient support in facts and data. *See, e.g.*, *Yates*, 2015 WL 3948303, at *3; *Comardelle v. Pa. Gen. Ins. Co.*, No. 13-6555, 2015 WL 64279, at *4 (E.D. La. Jan. 5, 2015); *Krik*, 2014 WL 7330901, at *4; *Davidson v. Ga. Pac. LLC*, No. 12-1463, 2014 WL 3510268, at *5 (W.D. La. July 14, 2014); *Anderson v. Ford Motor Co.*, 950 F. Supp. 2d 1217, 1225 (D. Utah 2013); *Sclafani v. Air & Liquid Sys. Corp.*, No. 12-3013, 2013 WL 2477077, at *5 (C.D. Cal. May 9, 2013); *Smith v. Ford Motor Co.*, No. 8-630, 2013 WL 214378, at *2 (D. Utah Jan. 18, 2013). Likewise, applying the *Daubert* factors, courts have found that the theory cannot be tested, has not been published in peer-reviewed works, and has no known error rate. *E.g.*, *Yates*, 2015 WL 3948303, at *3.

In *Comardelle v. Pennsylvania General Insurance Co.*, Judge Africk held that Dr. Hammar's proposed specific causation opinions, based on the "every exposure" theory, were unreliable and inadmissible, agreeing with the growing number of opinions

from other courts that have reached a similar result. 2015 WL 64279, at *4. In its reasoning, the court stated:

> Although there may be no known safe level of asbestos exposure, this does not support Dr. Hammar's leap to the conclusion that therefore every exposure Comardelle had to asbestos must have been a substantial contributing cause of his mesothelioma. The Court agrees that this "is not an acceptable approach for a causation expert to take[,]" and it is "precisely the kind of testimony the Supreme Court in *General Electric Co. v. Joiner* . . . observed as being nothing more than the 'ipse dixit of the expert.'" This kind of blanket specific causation opinion is not based on or tied to the specific facts and circumstances of any of Comardelle's exposures to asbestos and it elides any differences or nuances of duration, concentration, exposure, and the properties of the fibers to which he may have been exposed. The Court is not persuaded that such a one-size-fits-all approach is reliable expert testimony.

Id. (footnotes omitted) (citations omitted).

In their opposition, Plaintiffs do not argue that the "every exposure" theory is admissible. Instead they take great effort to distinguish Dr. Kraus's theory from the "every exposure" theory, on the grounds that Dr. Kraus made clear in his report that "[b]ackground asbestos exposure is negligible and not a factor in developing malignant mesothelioma." (Rec. Doc. 534, pp. 13-17) In other words, Plaintiffs argue that Dr. Kraus does not espouse an "every exposure" theory, but rather an "every exposure above background" theory.

The Court finds no meaningful distinction between the "every exposure" theory and an "every exposure above background"

theory. For example, in *Yates v. Ford Motor Co.*, Dr. Arnold Brody opined that "[e]ach and every exposure to asbestos that an individual with mesothelioma experienced in excess of a background level contributes to the development of the disease." 2015 WL 3948303, at *3. Like the Plaintiffs in the instant case, the plaintiffs in Yates argued that Dr. Brody did not espouse the "every exposure" theory. *Id.* at *4. However, the court disagreed, reasoning that "[Dr. Brody's] references to exposures 'above background' do not meaningfully distinguish his theory from other 'each and every exposure,' theories, because the same shortcomings that plague the latter equally apply to the former." *Id.*; *see also Comardelle*, 2015 WL 64279, at *3 n.12 (excluding "above the concentration identified in the case-control epidemiology studies" opinion); *Sclafani*, 2013 WL 2477077, at *5 (excluding "above background" opinion); *Henricksen v. ConocoPhillips Co.*, 605 F. Supp. 2d 1142, 1165-66 (E.D. Wash. 2009) (excluding "above background" opinion). Moreover, the court in *Yates* noted that "[a]t any rate, 'above background' is an amorphous concept." 2015 WL 3948303, at *4. Therefore, the same reasons articulated by the thoughtful opinions in *Yates*, *Comardelle*, and the cases cited therein apply to the "every exposure above background" theory.

In this case, Plaintiffs, as the proponents of the testimony, have not shown that Dr. Kraus's specific causation

opinions have the sufficient support of facts or data, nor have they shown that his "above background" theory is testable, published in peer-reviewed works, or has any error rate. Instead of explaining how Dr. Kraus can reliably opine that any particular exposure to a Defendant's product or premises was a cause of Vedros's mesothelioma, Plaintiffs refer cursorily to a broad array of cases, studies, and regulatory materials. (Rec. Doc. 534, pp. 6-9, 13-19) For example, one of the articles Plaintiffs cite in support is an article authored by Laura S. Welch entitled *Asbestos Exposure Causes Mesothelioma, But Not* This *Asbestos Exposure: An Amicus Brief to the Michigan Supreme Court*, 13 Int'l. J. Occupational Envtl. Health 318 (2007). (Rec. Doc. 534-5) However, courts have held that "this document, which was initially prepared for purposes of litigation, is not one that 'experts in the particular field would reasonably rely on' for purposes of satisfying Federal Rule of Evidence 703." *Yates*, 2015 WL 3948303, at *3.

Plaintiffs also rely heavily on the recent Louisiana First Circuit Court of Appeal decision in *Robertson v. Doug Ashy Bldg. Materials, Inc.*, No. 14-0141, 2014 WL 7277688 (La. App. 1 Cir. 2014). In *Robertson*, the court held that the trial court abused its discretion in prohibiting plaintiff's expert from testifying that each "special" exposure to asbestos constituted a significant contributing factor. *Id.* at *14. The court pointed

out that both the defendant and the trial court had mischaracterized the substance of the expert's testimony. According to the court, the expert did not espouse an "every exposure above background" theory. The court reasoned that "special exposure," the term used by the expert, "was intended to reflect the exposures that Dr. Mark considered, based on a *qualitative* cumulative assessment of the exposures, to have substantially contributed to causing mesothelioma." *Id.* at 15. Thus, the court found that "the term 'special exposure' was a phrase chosen by Dr. Mark to express the results of his methodology for determining causation of mesothelioma; it was ***not*** part of his methodology." *Id.*

The Plaintiffs reliance on *Robertson*, however, is misplaced. Louisiana courts, including the court in *Robertson*, require the claimant in an asbestos case to show that he had significant exposure to the product complained of to the extent that it was a substantial factor in bringing about his injury. *Id.* at 6. "In meeting this burden of proof, the plaintiff is not required to prove the quantitative level of exposure, *i.e.,* the exact or cumulative dose of asbestos . . . . Rather, a qualitative evaluation of the exposures to asbestos, *i.e.,* the level, frequency, nature, proximity, and duration of the exposures at issue, can sufficiently prove causation." *Id.* The court in *Robertson* found that the expert employed a reliable

methodology based on an extensive qualitative evaluation of the plaintiff's specific history of asbestos exposure to determine which exposures substantially contributed to causing mesothelioma, which he referred to as "special" exposures.[5] *Id.* at 15.

Here, Dr. Kraus fails to provide a similar qualitative evaluation of Vedros's specific history of exposures in forming his specific causation opinions. Instead, Dr. Kraus testified that exposure becomes significant "[i]f you develop mesothelioma." (Rec. Doc. 585-1, p. 43) Similarly, Dr. Kraus testified that "if someone develops malignant mesothelioma and they have an asbestos exposure, that asbestos exposure has caused the malignant mesothelioma." (Rec. Doc. 554-1, p. 7) Notably, when asked whether, by including all exposures above background, Dr. Kraus would be including exposures that, in fact, did not cause the disease, Dr. Kraus answered "who knows? I can't answer that question of which ones are causative and which ones are not. . . . All I can say is they are all causative. Every incidence of asbestos exposure is causative." (Rec. Doc. 554-1, pp. 17-18)

[5] In *Robertson*, Dr. Mark considered a number of factors, including "the nature of exposure, the level of exposure and the duration of exposure, whether a product gives off respirable asbestos fibers, whether a person was close or far from the source of fiber released, how frequently the exposure took place, how long the exposure lasted, whether engineering or other methods of dust control were in place, whether respiratory protection was used, the chemistry and physics of asbestos fibers, the pathophysiology of breathing; the movement of asbestos fibers in the lung, the molecular pathology of tumor development, and other scientific disciplines." 2014 WL 7277688, at *10.

Plaintiffs overstate or misstate the relevance of the sources cited. Many of the Plaintiffs arguments and sources cited support Dr. Kraus's opinions on general causation rather than specific causation.[6] Just as in *Comardelle*, "none of those citations plug the impermissible gap in Dr. [Kraus's] reasoning from the general causation proposition that exposure to asbestos increases the risk of mesothelioma, to the specific causation opinion that *in this case* [Vedros's] exposure to [a particular Defendant's product] was a cause of [her] mesothelioma giving rise to liability." *Comardelle*, 2015 WL 64279, at *4; *see also Anderson*, 950 F. Supp. 2d at 1225 (excluding testimony despite plaintiff's citation to "numerous scholarly articles and scientific studies" because those materials were not specific to "the type of exposure Mr. Anderson had to Defendants' products"). Accordingly, the Court concludes that Dr. Kraus's specific causation opinions are an unreliable product of the "every exposure above background" theory and must be excluded.

CONCLUSION

Accordingly,

[6] "'General causation is whether a substance is capable of causing a particular injury or condition in the general population, while specific causation is whether a substance caused a particular individual's injury.'" *Comardelle*, 2015 WL 64279, at *1 n.10 (quoting *Knight v. Kirby Inland Marine Inc.*, 482 F.3d 347, 351 (5th Cir. 2007)). Louisiana law recognizes this distinction. *See, e.g.*, *Zimko v. Am. Cyanamid,* 905 So. 2d 465, 485–86 (La. App. 4 Cir. 2005) ("Alternatively, American Cyanamid contends that Mrs. Zimko's experts, at best, established general causation—that asbestos fibers a worker brings home can cause disease—not specific causation—that asbestos fibers from American Cyanamid's facility actually caused Kenneth Zimko's mesothelioma.").

IT IS HEREBY ORDERED that the *Motion to Exclude Certain Testimony of Dr. Stephen Terry Kraus* **(Rec. Doc. 517)** is **GRANTED in part** and **DENIED in part**.

IT IS FURTHER ORDERED that the *Motion to Exclude Causation Opinions Regarding Benjamin Foster Products Based on the "No Safe Level of Exposure" Theory* **(Rec. Doc. 518)** is **GRANTED in part** and **DENIED in part**. At trial, Dr. Kraus may not offer specific causation testimony based on the "every exposure above background" theory, or any similar theory, that Vedros's mesothelioma was caused by any particular exposure to a defendant's product or premises. Dr. Kraus may opine regarding Vedros's diagnosis of mesothelioma and issues of general causation.

New Orleans, Louisiana this 4th day of August, 2015.

CARL J. BARBIER
UNITED STATES DISTRICT JUDGE