

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANAYOLANDE BURST, individually
and as the legal
representative of BERNARD
ERNEST BURST, JR.

CIVIL ACTION

VERSUS

NO: 14-109

SHELL OIL COMPANY, ET AL.

SECTION: R

ORDER AND REASONS

Defendants Shell Oil Company, Chevron U.S.A. Inc., and Texaco, Inc. move to exclude the testimony of plaintiff's expert Dr. Robert Harrison.¹ Because the Court finds that Dr. Harrison's opinion on general causation is unreliable, the Court excludes this testimony.

I. BACKGROUND

Plaintiff Yolande Burst filed this products liability action against defendants Shell, Chevron (as successor to Gulf Oil Corporation), and Texaco.² She alleges that her late husband, Bernard Burst, Jr., worked at various gas stations from 1958 through 1971, during which time he regularly used products manufactured, supplied, distributed, and sold by defendants.³ Specifically, she alleges that he would regularly come into contact

¹ R. Doc. 90.

² R. Doc. 1.

³ *Id.* at 3.

with gasoline containing benzene.

On June 20, 2013, physicians diagnosed Mr. Burst with acute myeloid leukemia (AML).⁴ He was 71 years old. He passed away as a result of the leukemia on December 21, 2013.⁵

Plaintiff alleges that her husband's regular exposure to gasoline containing benzene during the years he worked as a gas station attendant and mechanic caused his leukemia.⁶ She claims that defendants negligently manufactured and sold products containing benzene and that they negligently failed to warn foreseeable users about the health hazards associated with these products.⁷ She also alleges strict products liability.⁸

To demonstrate that Mr. Burst's exposure to gasoline caused his AML, plaintiff relies on an expert report from Dr. Robert Harrison, a physician, in which he opines both that benzene can cause AML and that Mr. Burst's exposure to benzene caused his AML. Defendants move to exclude Dr. Harrison's general causation opinion arguing that it is unreliable and irrelevant.

⁴ R. Doc. 28-5 at 18.

⁵ R. Doc. 28-6.

⁶ R. Doc. 1 at 5.

⁷ *Id.* at 9.

⁸ *Id.* at 10.

II. LEGAL STANDARD

This is a toxic torts case where plaintiff alleges that gasoline with benzene caused her husband's AML. Plaintiff must show general causation--that benzene as a component of gasoline can cause AML--and specific causation--that defendants' product caused Mr. Burst's AML. See *Knight v. Kirby Inland Marine Inc.*, 482 F.3d 347, 351 (5th Cir. 2007) ("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.") (quoting *Merrell Dow Pharm., Inc. v. Havner*, 953 S.W. 2d 706, 714 (Tex. 1997)). A court may admit specific-causation evidence only after the plaintiff has produced admissible evidence on general causation. See *id.* ("[I]f it concludes that there is admissible general-causation evidence, the district court must determine whether there is admissible specific causation evidence.").

A district court has considerable discretion to admit or exclude expert testimony under Rule 702. See *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 138-39 (1997); *Seatrax, Inc. v. Sonbeck Int'l, Inc.*, 200 F.3d 358, 371 (5th Cir. 2000). Rule 702, which governs the admissibility of expert witness testimony, provides:

A witness who is 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 product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, the Supreme Court held that Rule 702 requires the district court to act as a gatekeeper to ensure that "any and all scientific testimony or evidence admitted is not only relevant, but reliable." 509 U.S. at 589; see also *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 147 (1999) (clarifying that the *Daubert* gatekeeping function applies to all forms of expert testimony). The Court's gatekeeping function thus involves a two-part inquiry into reliability and relevance.

First, the Court must determine whether the proffered expert testimony is reliable. The party offering the testimony bears the burden of establishing its reliability by a preponderance of the evidence. See *Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 276 (5th Cir. 1998). The reliability inquiry requires the Court to assess whether the reasoning or methodology underlying the expert's testimony is valid. See *Daubert*, 509 U.S. at 592-93. The aim is to exclude expert testimony based merely on subjective belief or unsupported speculation. See *id.* at 590. The Court in *Daubert* articulated a flexible, non-exhaustive, five-factor test to assess the reliability of an expert's methodology: (1) whether the expert's theory can be or has been tested; (2) whether the theory has been subject to peer review and publication; (3) the known or

potential rate of error of a technique or theory when applied; (4) the existence and maintenance of standards and controls; and (5) the degree to which the technique or theory has been generally accepted in the scientific community. *Id.* at 593-95. The Supreme Court has emphasized, however, that these factors "do not constitute a 'definitive checklist or test.'" *Kumho*, 526 U.S. at 150 (quoting *Daubert*, 509 U.S. at 593). Rather, district courts "must have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable." *Id.* at 152. Courts have also considered whether experts are "proposing to testify about matters growing naturally and directly out of research they have conducted independent of the litigation, or whether they have developed their opinions expressly for purposes of testifying," *Daubert v. Merrell Down Pharms., Inc.*, 43 F.3d 1311, 1317 (9th Cir. 1995), whether the expert has adequately accounted for obvious alternative explanations, see *Claar v. Burlington N.R.R.*, 29 F.3d 499 (9th Cir. 1994), and whether the expert "is being as careful as he would be in his regular professional work outside his paid litigation consulting," *Sheehan v. Daily Racing Form, Inc.*, 104 F.3d 940, 942 (7th Cir. 1997).

A district court's gatekeeper function does not replace the traditional adversary system or the role of the jury within this system. See *Daubert*, 509 U.S. at 596. As the Supreme Court noted

in *Daubert*: "Vigorous 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.* The Fifth Circuit has held that, in determining the admissibility of expert testimony, district courts must accord proper deference to "the jury's role as the proper arbiter of disputes between conflicting opinions. As a general rule, questions relating to the bases and sources of an expert's opinion affect the weight to be assigned that opinion rather than its admissibility and should be left for the jury's consideration." *United States v. 14.38 Acres of Land, More or Less Situated in Leflore Cnty., Miss.*, 80 F.3d 1074, 1077 (5th Cir. 1996) (quoting *Viterbo v. Dow Chem. Co.*, 826 F.2d 420, 422 (5th Cir. 1987)) (internal quotation marks omitted). Nonetheless, expert testimony "must be reliable at each and every step or else it is inadmissible. The reliability analysis applies to all aspects of an expert's testimony: the methodology, the facts underlying the expert's opinion, the link between the facts and the conclusion, et alia." *Knight*, 482 F.3d at 355 (internal quotation marks omitted). "Where the expert's opinion is based on insufficient information, the analysis is unreliable." *Paz v. Brush Engineered Materials, Inc.*, 555 F.3d 383, 388 (5th Cir. 2009).

In *Joiner*, the Supreme Court explained that "nothing in either *Daubert* or the Federal Rules of Evidence requires a district court

to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert." 522 U.S. at 146. Rather, "[a] court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." *Id.*; see also *LeBlanc v. Chevron USA, Inc.* 396 F. App'x 94, 98 (5th Cir. 2010).

Second, the Court must determine whether the expert's reasoning or methodology is relevant. The question here is whether the reasoning or methodology "fits" the facts of the case and will thereby assist the trier of fact to understand the evidence. See *Daubert*, 509 U.S. at 591.

III. DISCUSSION

A. Introduction

Dr. Harrison is a medical doctor certified in occupational medicine and internal medicine. In his report, Dr. Harrison opines as to general and specific causation. As to general causation, Dr. Harrison concludes that "[t]he weight of the evidence supports a causal relationship between occupational exposure to benzene and benzene-containing organic solvents, including gasoline, in the development of AML."⁹

In his report, Dr. Harrison purports to have followed a

⁹ Harrison Report at 11. The parties did not attach a copy of Dr. Harrison's report to their briefing. The Court therefore refers to Dr. Harrison's report as supplied by plaintiff's counsel via e-mail.

generally accepted methodology for determining general causation: (1) identify all relevant studies; (2) read and critically evaluate all the relevant studies; (3) evaluate all the data based upon recognized scientific factors (the Bradford Hill viewpoints) and other factors relevant to the chemical and the disease; (4) exercise best professional judgment in reaching a conclusion on the issue of whether a particular chemical or class of chemicals can cause a particular disease; and (5) explain the factual basis and the reasoning supporting the conclusion.

The Bradford Hill criteria are: (1) temporal relationship, (2) strength of the association, (3) dose-response relationship, (4) replication of the findings, (5) biological plausibility, (6) consideration of alternative explanations, (7) cessation of exposure, (8) specificity of the association, and (9) consistency with other knowledge. See Federal Judicial Center, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE at 600 (3d ed. 2011).

The only specific scientific literature on general causation that Dr. Harrison cites in his report relates to benzene: (1) an International Agency for Research on Cancer (IARC) publication, *A Review of Human Carcinogens: Chemical Agents and Related Occupations*, Vol. 100F; (2) Baan R., et al., *A Review of Human Carcinogens--Part F: Chemical Agents and Related Occupations*, 10 LANCET ONCOL 1143 (2009); and (3) statements by the United States Environmental Protection Agency (EPA), the National Institute for

Occupational Safety and Health (NIOSH), the National Toxicology Program (NTP), the Occupational Safety and Health Administration (OSHA), and the California Environmental Protection Agency. Dr. Harrison also states that he relied on his review of "the epidemiological studies on benzene and human cancer," the studies cited by the IARC review, and his "own experience as an occupational and environmental specialist."¹⁰ Dr. Harrison does not refer to or cite any scientific literature besides that generally described.

Defendants move to exclude Dr. Harrison's opinion on general causation. Specifically, defendants contend that Dr. Harrison largely ignores the general causation question at issue in this case--whether gasoline can cause AML--and instead answers a question that is undisputed: whether exposure to benzene can cause AML.

B. Analysis

After reviewing Dr. Harrison's report, his deposition testimony, and the materials upon which he relied, the Court finds his report and opinion on general causation inadmissible because it is unreliable.

Dr. Harrison opines that benzene, including benzene-containing organic solvents, such as gasoline, can cause AML.¹¹ He states that

¹⁰ Harrison Report at 13.

¹¹ *Id.* at 11.

he has "reviewed the medical and scientific literature," as well as the report of plaintiff's other causation expert, Dr. Peter Infante, on benzene-induced cytogenetic damage in benzene-exposed workers.¹² In his report, however, he cites only benzene-specific scientific literature. See discussion *supra* Part III.A. Shedding light on why, Dr. Harrison testified: "It seems frankly a little bit dancing on the head of a pin, if you don't mind me saying, to parse out gasoline containing benzene from benzene and AML."¹³ In other words, Dr. Harrison did not think it necessary to evaluate studies pertaining to gasoline exposure, the relevant product in this products liability case. But Dr. Harrison has made no attempt to demonstrate why benzene-specific studies can reliably support the conclusion that gasoline can cause AML. See *Henricksen v. Conoco Phillips Co.*, 605 F. Supp. 2d 1142, 1156 (E.D. Wa. 2009) ("If it is possible to extrapolate from studies of benzene or other benzene-containing products conclusions regarding gasoline, then it will be incumbent upon [plaintiff] to explain and demonstrate why the extrapolation is scientifically proper."). The simple explanation that gasoline contains benzene, and benzene is a known carcinogen cannot be the justification for such extrapolation. Indeed, multiple agencies, including IARC and ATSDR, have concluded that benzene is carcinogenic but have not reached the same

¹² *Id.* at 10-11.

¹³ R. Doc. 90, Ex. A at 24.

conclusion regarding gasoline, even though all gasoline contains benzene. See IARC, Monographs on the Evaluation of Carcinogenic Risks to Humans, Vol. 45, Occupational Exposures in Petroleum Refining; Crude Oil and Major Petroleum Fuels (1989) ("There is *inadequate evidence* for the carcinogenicity in humans of gasoline."); ATSDR, Toxicological Profile for Gasoline (1995) ("[T]here is no conclusive evidence to support or refute the carcinogenic potential of gasoline in humans or animals based on the carcinogenicity of one of its components, benzene."). Without demonstrating how the benzene literature applies to gasoline exposure, Dr. Harrison's methodology leaves "too great an analytical gap between the data and the opinion proffered." *Joiner*, 522 U.S. at 146.

Dr. Harrison makes the omnibus statement that he reviewed the relevant medical and scientific literature, but he fails to cite any gasoline-specific literature. When asked whether he could name a single study showing a risk between workers occupationally exposed to gasoline and hematologic malignancies, Dr. Harrison could not: "You know, again, I don't know. I'd have to examine the papers. I'm not prepared to answer your question here."¹⁴ When asked whether he reviewed IARC's monograph on the carcinogenicity of gasoline, Dr. Harrison responded: "I've not looked at that monograph on gasoline. I didn't consider it particularly relevant.

¹⁴ *Id.* at 24.

I was focusing on benzene."¹⁵ Likewise, Dr. Harrison stated: "I haven't looked at the ATSDR monograph on gasoline or the general gasoline agency monographs."¹⁶ The only indication that Dr. Harrison reviewed any gasoline literature is his own assurances that he is "sure [he reviewed] papers on gasoline"¹⁷ and that he reviewed those studies cited by Dr. Infante. Dr. Harrison's failure to cite a gasoline-specific study in his report and his inability to do so at his deposition is grounds to exclude his opinion. *See Castellow v. Chevron USA*, 97 F. Supp. 2d 780, 794-96 (S.D. Tex. 2000) (excluding expert's general causation opinion on whether benzene, as a component of gasoline, can cause AML when the expert did not cite and was unable to identify any studies showing that gasoline can cause AML).

Even had Dr. Harrison cited gasoline-specific studies, his report exhibits no application of the methodology he states he applied, including the Bradford Hill criteria. There is no evidence that he considered, for example, strength of association, replication of findings, specificity of the association, *etc.* Without citation to any gasoline-specific studies and without any application of his methodology to such studies, Dr. Harrison's opinion is wholly conclusory *ipse dixit*.

¹⁵ *Id.* at 27.

¹⁶ *Id.* at 31.

¹⁷ *Id.*

Finally, to the extent Dr. Harrison relies on Dr. Infante's report and the studies cited therein, his opinion is inadmissible because it reflects no original analysis or any evaluation of Dr. Infante's methodology or the studies upon which he relies. See *Mooring Capital Fund, LLC v. Phoenix Cent., Inc.*, No. CIV-06-0006-HE, 2009 WL 4263359, at *5 (W.D. Okla. Feb. 12, 2009) (holding that an expert may rely "on the opinions of other experts so long as it does not involve the wholesale adoption of another expert's opinions without attempting to assess the validity of the opinions relied on" (citing *In re TMI Litig.*, 193 F.3d 613, 715-16 (3d Cir. 1999); *TK-7 Corp. v. Estate of Barbouti*, 993 F.2d 722, 732-33 (10th Cir. 1993))). Indeed, besides stating that he relied on Dr. Infante's report, Dr. Harrison analyzes no studies cited in that report and makes no assessment of the validity of Dr. Infante's conclusions. Instead, Dr. Harrison adopts Dr. Infante's opinions "wholesale." *Id.* Dr. Harrison's mere "me too" to Dr. Infante's report does not provide a reliable basis for his opinion.

Accordingly, the Court grants defendants' motion to exclude Dr. Harrison's general causation opinion because it is unreliable.

IV. CONCLUSION

For the foregoing reasons, the Court GRANTS defendants' motion to exclude Dr. Harrison's general causation opinion.

New Orleans, Louisiana, this 9th day of May, 2015.

Sarah Vance

SARAH S. VANCE

UNITED STATES DISTRICT JUDGE