

**IN THE UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT**

United States Court of Appeals
Fifth Circuit

FILED

September 23, 2010

No. 09-31149

Lyle W. Cayce
Clerk

VICTORIA RICHAUX LEBLANC, as Executrix of the Estate of Malcom Louis LeBlanc, deceased; TIMOTHY L. LEBLANC; HEIDI M. LEBLANC,

Plaintiffs - Appellants

v.

CHEVRON USA, INC., formerly known as Gulf Oil Corporation; EXXON MOBIL CORPORATION, formerly known as Exxon Corp.; MOBIL CORPORATION; MURPHY OIL USA, INC.; SHELL OIL COMPANY; EL PASO ENERGY, E.S.T. COMPANY, as Trustee for EPEC Oil Company Liquidating Trust, EPEC Oil Company,

Defendants - Appellees

Appeal from the United States District Court
for the Eastern District of Louisiana
USDC No. 2:05-CV-5485

Before CLEMENT, SOUTHWICK, and HAYNES, Circuit Judges.

PER CURIAM:*

Victoria Richaux LeBlanc, the representative of the estate of Malcolm LeBlanc; Timothy LeBlanc; and Heidi LeBlanc (the “LeBlanc family”) appeal the district court’s exclusion of their proffered expert witness testimony on causation

* Pursuant to 5TH CIR. R. 47.5, the court has determined that this opinion should not be published and is not precedent except under the limited circumstances set forth in 5TH CIR. R. 47.5.4.

No. 09-31149

and consequent grant of summary judgment in their toxic tort case against several oil and energy companies. Malcolm LeBlanc, a tanker truck driver, and his family sued Chevron USA, Inc.; Exxon Mobil Corp.; Mobil Corp.; Murphy Oil USA, Inc.; Shell Oil Co.; and El Paso Energy and its successor entities (collectively, the “Energy Companies”), seeking damages for his myelofibrosis with myeloid metaplasia. Mr. LeBlanc¹ alleged that he contracted the disease because of his exposure to benzene while loading and unloading pure benzene as well as gasoline, jet fuel, and diesel fuel—all of which contain benzene—at refineries owned or operated by the Energy Companies. The LeBlanc family offered Dr. Frank Gardner as an expert medical causation witness to show a link between benzene exposure and Mr. LeBlanc’s disease, as well as Professor Tumulesh Solanky as a statistical expert witness to support Dr. Gardner’s conclusion. After an extended series of proceedings before the district court and this court, the district court ultimately granted the Energy Companies’ motion to exclude Dr. Gardner’s and Prof. Solanky’s testimony. Without Dr. Gardner’s testimony as to causation, the district court found—and the LeBlanc family acknowledges—that summary judgment for the Energy Companies was required. The LeBlanc family timely appealed the dispositive exclusion of Dr. Gardner’s and Prof. Solanky’s respective testimony.

We AFFIRM.

I. Facts & Procedural History

From 1961 to 1991, Malcolm LeBlanc drove tanker trucks for Younger Brothers, Inc., and Matlack Tank Lines, Inc. As a tanker truck driver, he regularly loaded and unloaded pure benzene and benzene-containing fuel at several refineries owned or operated by the Energy Companies. In November of 2004, Mr. LeBlanc was diagnosed with myelofibrosis with myeloid metaplasia

¹ Mr. LeBlanc died during the pendency of this appeal, and his executrix was substituted in his place.

No. 09-31149

(“MMM”), a very rare terminal disease of the bone marrow. On February 8, 2010, Mr. LeBlanc died.

Prior to Mr. LeBlanc’s death, the LeBlanc family filed this suit as a diversity action, seeking compensatory and exemplary damages for personal injury and for loss of consortium and society on theories of negligence, products liability, misrepresentation, and unjust enrichment.² Prior to the first appeal of this case, the Energy Companies moved to exclude the reports and testimony of Dr. Gardner and Prof. Solanky. The district court excluded the two experts and granted summary judgment in favor of the Energy Companies. *LeBlanc v. Chevron USA, Inc. (LeBlanc I)*, 513 F. Supp. 2d 641, 644 (E.D. La. 2007). In the first appeal, we vacated the district court’s order and remanded for reconsideration in light of a report by the Federal Agency for Toxic Substances and Disease Registry (“ATSDR”) finalized between the time of the district court’s order and appellate oral argument. *LeBlanc v. Chevron USA Inc. (LeBlanc II)*, 275 F. App’x 319, 321–22 (2008) (unpublished). That report suggested a link between benzene and aplastic anemia, and then linked aplastic anemia to myelofibrosis. *Id.* at 321 (“[I]n the report, the ATSDR concluded that ‘[b]enzene also causes a life-threatening disorder called aplastic anemia in humans and animals.’ The report also states that myelofibrosis (the disease with which Appellant has been diagnosed) is a form of aplastic anemia.”).

On remand, the district court excluded Dr. Gardner’s testimony and again granted summary judgment in favor of the Energy Companies, concluding that the scientific evidence did not support Dr. Gardner’s conclusions. *LeBlanc v. Chevron USA Inc. (LeBlanc III)*, Civ. No. 05-5485, 2009 U.S. Dist. LEXIS

² The precise list of defendants has evolved since the original complaint; the Energy Companies are the defendants named in the final judgment.

No. 09-31149

106339, at *4–10 (E.D. La. Nov. 13, 2009).³ Again, without Dr. Gardner, the LeBlanc family had no causation evidence. The court entered judgment for the Energy Companies, and the LeBlanc family appealed.

II. Standard of Review

“We review the district court’s determination of admissibility of expert evidence . . . for abuse of discretion.” *Knight v. Kirby Inland Marine Inc.*, 482 F.3d 347, 351 (5th Cir. 2007). In this context, as in others, “[a] trial court abuses its discretion when its ruling is based on an erroneous view of the law or a clearly erroneous assessment of the evidence.” *See id.* (quoting *Bocanegra v. Vicmar Servs., Inc.*, 320 F.3d 581, 584 (5th Cir. 2003)).

The admissibility of expert witness testimony is governed by Federal Rule of Evidence 702. Under that Rule,

[i]f scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

FED. R. EVID. 702. The Supreme Court has explained that this Rule “imposes a special obligation upon a trial judge to ‘ensure that any and all scientific testimony . . . is not only relevant, but reliable.’” *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 147 (1999) (quoting *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589 (1993)). Summarizing *Daubert*, we have previously explained the meaning of “reliable” and “relevant” in this context in these terms: “Reliability is determined by assessing ‘whether the reasoning or methodology underlying

³ The court also excluded Prof. Solanky’s testimony because his work simply established the statistical significance of studies underlying Dr. Gardner’s conclusions that the court rejected as unreliable and irrelevant. *Id.* at *10–12.

No. 09-31149

the testimony is scientifically valid.’ Relevance depends upon ‘whether [that] reasoning or methodology properly can be applied to the facts in issue.’” *Knight*, 482 F.3d at 352 (quoting *Daubert*, 509 U.S. at 592–93) (alteration in original) (internal citations omitted).⁴

III. Analysis

The district court excluded Dr. Gardner’s and Prof. Solanky’s testimony pursuant to Federal Rule of Evidence 702. We discuss each expert in turn.

A. *Dr. Gardner*

The LeBlanc family’s theory of the Energy Companies’ liability depended on the premise that benzene exposure caused Mr. LeBlanc’s MMM. The LeBlanc family was therefore obligated to prove both a “general” and a “specific” causal link between the benzene exposure and the onset of Mr. LeBlanc’s MMM—that is, that benzene is capable of causing MMM in the general population and that benzene specifically caused Mr. LeBlanc’s MMM in this case. *See Knight*, 482 F.3d at 351.⁵ The LeBlanc family proffered Dr. Gardner as an expert witness on both causation questions. The district court excluded Dr. Gardner’s general causation testimony and therefore did not reach the question of specific

⁴ We reject the LeBlanc family’s invitation to apply a different standard of review that they have apparently devised by selectively quoting *Kumho Tire*. The LeBlanc family argues that the relevant and reliable standard requires reversal of the district court’s decision to exclude evidence if the testimony that the expert intends to give falls within “the range where experts might reasonably differ,” 526 U.S. at 153, even if the evidence underlying the expert’s testimony is “shaky.” Read properly in context, the language cited by the LeBlanc family stands for the unremarkable proposition that it is not an abuse of discretion for a district court to exclude an expert witness whose methods were sufficiently unreliable that they “fell outside the range where experts might reasonably differ.” *Id.*

⁵ Our opinion in *Knight* succinctly describes the proof of causation required in toxic tort cases: “General causation is whether a substance is capable of causing a particular injury in the general population, while specific causation is whether a substance caused a particular individual’s injury or condition.” 482 F.3d at 351 (quoting *Merrell Dow Pharms. v. Havner*, 953 S.W.2d 706, 714 (Tex. 1997)).

No. 09-31149

causation. *See id.* (“Evidence concerning specific causation in toxic tort cases is admissible only as a follow-up to admissible general causation evidence.”).

On the question of general causation, Dr. Gardner, whom the Energy Companies concede is a highly-qualified hematologist, intended to testify that it was his expert opinion that benzene can cause MMM. Dr. Gardner purported to base this conclusion on his evaluation of several studies. The Energy Companies argued to the district court and argue on appeal that none of these studies are relevant or reliable under *Daubert* and that Dr. Gardner’s methodology in reaching his conclusion is therefore invalid. In both the final order that preceded the LeBlanc family’s first appeal and the final order appealed in this case, the district court agreed with the Energy Companies.

Where, as here, the dispute between the parties concerns solely the propriety of the district court’s exclusion of expert witness testimony because the underlying studies cannot support the witness’s conclusion, the Supreme Court’s decision in *General Electric Co. v. Joiner*, 522 U.S. 136 (1997), governs. In *Joiner*, a toxic tort case in which the plaintiff sought to admit expert general causation testimony, the Court found no abuse of discretion where “[t]he District Court . . . concluded that the . . . epidemiological studies upon which [the plaintiff] relied were not a sufficient basis for the experts’ opinions.” *Id.* at 145.

The Court explained that, while

[t]rained experts commonly extrapolate from existing data[,] nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.

Id. at 146; *see also Knight*, 482 F.3d at 355 (“District courts must carefully analyze the studies upon which experts rely for their opinions before admitting their testimony.”). Applying *Knight* to the evidence before it, the district court

No. 09-31149

here found that the gap between the data and Dr. Gardner's opinion was indeed too great. *LeBlanc I*, 513 F. Supp. 2d at 664; *see also LeBlanc III*, 2009 U.S. Dist. LEXIS 106339, at *10–11 (adopting the findings made in *LeBlanc I* as to the reliability of the studies considered there and rejecting the newly-proffered studies).

After our remand in *LeBlanc II*, there were two related avenues open to the LeBlanc family to prove general causation: (1) to show that the disease from which Mr. LeBlanc suffered was a form of aplastic anemia and that benzene causes aplastic anemia, or (2) to otherwise convince the district court that benzene causes MMM. *See* 275 F. App'x at 321 (citing U.S. DEP'T OF HEALTH & HUMAN SERVS., PUB. HEALTH SERV., AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY, TOXICOLOGICAL PROFILE FOR BENZENE ("ATSDR REPORT") 12, 13 (2007)).

Dr. Gardner's disputed testimony in the district court—along with the testimony of other witnesses—attempted to show general causation through both avenues. On appeal, the LeBlanc family only expressly addresses whether benzene causes MMM, and we accordingly limit our review.⁶ Dr. Gardner purported to rely on both epidemiological studies and his "clinical experience" in his expert opinion. The district court ruled that neither provided a sufficient basis for his opinion.

1. Epidemiological Studies

Simply put, the several studies and reports on which Dr. Gardner purported to rely suffer from common deficiencies that this court in *Knight* and the Supreme Court in *Joiner* have explained support a district court's exclusion of expert testimony.

⁶ To the extent that the LeBlanc family appeals the district court's rejection of their argument that Mr. LeBlanc suffered from a form of aplastic anemia, we find no abuse of discretion; the evidence in the record—other than the conclusory testimony of witnesses excluded in an unappealed order—was uniformly to the contrary.

No. 09-31149

First, some of the studies do not represent statistically significant results. *Joiner*, 522 U.S. at 145 (holding that a study showing a statistically insignificant increase in disease incidence following exposure to the alleged causal chemical can properly be rejected by the district court as a foundation for the expert's opinion); see also David H. Kaye & David A. Freedman, *Reference Guide on Statistics*, in REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 83, 124 (Fed. Judicial Ctr. ed., 2d ed. 2000) (“[S]ignificant differences are evidence that something besides random error is at work . . .”). The Hanis study, Nancy M. Hanis, et al., *Epidemiologic Study of Refinery and Chemical Plant Workers*, 24 J. OCCUPATIONAL MEDICINE 203 (1982); Kaplan study, Samuel Kaplan, *Update of a Mortality Study of Workers in Petroleum Refineries*, 28 J. OCCUPATIONAL MED. 514 (1986); and Tondel report, Martin Tondel, Bodil Persson, & John Carstensen, *Myelofibrosis & Benzene Exposure*, 45 OCCUPATIONAL MED. 51 (1995), fall into this category.

Second, some of the studies do not assess the relationship between benzene exposure and myelofibrosis but rather only provide an arguable inferential starting point for doing so. The district court may permissibly conclude that such studies do not support an expert's conclusion. *Knight*, 482 F.3d at 353. Similarly, some of the studies note that the subjects were exposed to a range of substances and then nonspecifically note increases in disease incidence. Such studies also are not the type that compel a district court to accept the expert's reliance upon them. *Joiner*, 522 U.S. at 146. The Hanis study; the Honda/Delzell studies, Yashushi Honda, Elizabeth Delzell, & Philip Cole, *An Updated Study of Mortality Among Workers at a Petroleum Manufacturing Plant*, 37 J. OCCUPATIONAL & ENV'TL MED. 194 (1995), and Elizabeth Delzell, Philip Cole, & Yashushi Honda, *A Follow-Up Study of Mortality and Cancer Incidence Among Workers at the Wood River Manufacturing Complex* (1992) (unpublished); the Zoloth study, Stephen R.

No. 09-31149

Zoloth, et al., *Patterns of Mortality Among Commercial Pressmen*, 76 J. NAT'L CANCER INST. 1047 (1986); and the Rushton study, L.R. Rushton & M.R. Alderson, *Epidemiological Survey of Oil Distribution Centres in Britain*, 40 BRIT. J. INDUS. MED. 330 (1983), fall into this category.

Third, some of the studies expressly disclaim the causal connection between benzene and myelofibrosis that Dr. Gardner seeks to infer from the studies. In *Joiner*, the Supreme Court found no abuse of discretion in the district court's refusal to consider probative a study whose authors "were unwilling to say that . . . exposure [to the chemical at issue] had caused [the plaintiff's disease] among the workers they examined." *Id.* at 145. The district court properly rejected the studies as supporting causation because the authors of the studies concluded that there was no proof of causation. The Kaplan study and to some extent the Rushton study—whose authors later contradicted the finding relied upon by Dr. Gardner in a follow-up study with the same cohort—fall into this category.

Finally, some of the materials relied upon by Dr. Gardner are simply not scientific evidence; that is, they are merely secondary literature that purports to rely on scientific studies either not cited or that the district court properly rejected on their own. They therefore cannot meet the reliability requirement of *Daubert*. Cf. *Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 278 (5th Cir. 1998) (en banc) (approving district court's rejection of secondary material supporting expert causation testimony where expert "admitted that he did not know what tests [the secondary author] had conducted in generating the [secondary material]" and reaching the conclusion proffered). The *ATSDR Report* and Shell internal reports and correspondence fall into this category.⁷

⁷ The study and book chapter cited in the LeBlanc family's Federal Rule of Appellate Procedure 28(j) letter submission to the court, Brady L. Stein & Alison R. Moliterno, *Primary Myelofibrosis and the Myeloproliferative Neoplasms: The Role of Individual Variation*, 303 J. AM. MED. ASS'N 2513 (2010), and J. Thiele et al., *Primary Myelofibrosis*, in WHO

No. 09-31149

None of the scientific evidence upon which Dr. Gardner purported to rely was therefore sufficiently reliable as to render the district court's exclusion of his testimony an abuse of discretion.

2. Clinical Experience

Finally, Dr. Gardner sought to testify on causation based upon his clinical experience as a practitioner. The LeBlanc family correctly notes that the Supreme Court in both *Kumho Tire*, 526 U.S. at 148–49, and *Daubert*, 509 U.S. at 592, endorsed expert witness testimony based on personal observation and experience. But personal observation is still subject to the relevancy and reliability requirements of *Daubert*. *Kumho Tire*, 526 U.S. at 148–49.

Even when an expert is extrapolating from personal experience as a practitioner rather than from reviewing research undertaken by others, “nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert.” *Joiner*, 522 U.S. at 146. In other words, even Dr. Gardner's clinical opinion that benzene causes myelofibrosis must have some demonstrable and reliable basis in underlying facts.

Here, the district court concluded that Dr. Gardner had no such basis, and the LeBlanc family makes no argument on appeal that there was a factual basis for Dr. Gardner's opinion. Rather, they point only to his years of experience and the fact that he worked with myelofibrosis patients. Merely having observed myelofibrosis patients, without more, gives no basis for an expert opinion as to the general causal connection between myelofibrosis and benzene—it is not a

CLASSIFICATION OF TUMOURS OF HAEMATOPOIETIC AND LYMPHOID TISSUES 44 (Steven H. Swerdlow et al., World Health Org., Int'l Agency for Research on Cancer, eds., 4th ed. 2008), also suffer from this deficiency. Neither offers any primary scientific support for the proposition that benzene causes myelofibrosis but merely recite the results found in other studies or secondary literature. Moreover, we note that the appellants do not argue that Dr. Gardner actually relied on these texts in generating his opinion.

No. 09-31149

question as to which clinical experience is likely to provide insight. The Sixth Circuit explained the proper realm of “clinical experience” testimony thus:

[I]f one wanted to explain to a jury how a bumblebee is able to fly, an aeronautical engineer might be a helpful witness. Since flight principles have some universality, the expert could apply general principles to the case of the bumblebee. Conceivably, even if he had never seen a bumblebee, he still would be qualified to testify, as long as he was familiar with its component parts.

On the other hand, if one wanted to prove that bumblebees always take off into the wind, a beekeeper with no scientific training at all would be an acceptable expert witness *if* a proper foundation were laid for his conclusions. The foundation would not relate to his formal training, but to his firsthand observations. In other words, the beekeeper does not know any more about flight principles than the jurors, but he has seen a lot more bumblebees than they have.

Berry v. City of Detroit, 25 F.3d 1342, 1349–50 (6th Cir. 1994). The inquiry before Dr. Gardner here—whether benzene causes myelofibrosis—requires an epidemiological, scientific basis and is more akin to the mechanisms underlying a bumblebee’s ability to fly than to the fact that bumblebees take off into the wind. It is not a question as to which a clinician’s firsthand observation of patients offers much insight. The district court did not abuse its discretion in declining to allow Dr. Gardner’s conclusion that benzene causes myelofibrosis based on his clinical experience.

* * *

Even considering all of the possible sources that Dr. Gardner cites together, there is simply insufficient support for the proposition that benzene causes myelofibrosis. The district court therefore did not abuse its discretion in refusing to allow Dr. Gardner to testify that benzene causes myelofibrosis.

B. Prof. Solanky

The district court excluded Prof. Solanky’s testimony because its admissibility was derivative of the admissibility of Dr. Gardner’s testimony. The sole function of Prof. Solanky’s expert testimony was to conduct statistical

No. 09-31149

analyses of several of the studies underlying Dr. Gardner's causation opinion so as to assess the statistical significance of those studies' results when not reported in the studies themselves. Because we conclude that Dr. Gardner's testimony was properly excluded, Prof. Solanky's testimony was irrelevant and was also properly excluded under *Daubert*. See 509 U.S. at 591–92 (“Rule 702’s ‘helpfulness’ standard requires a valid scientific connection to the pertinent inquiry as a precondition to admissibility.”).

IV. Conclusion

For the reasons stated above, we hold that there was no abuse of discretion in the district court's exclusion of Dr. Gardner's and Prof. Solanky's testimony. The ruling of the district court and its consequent grant of summary judgment to the Energy Companies are therefore AFFIRMED.