IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF UTAH

| | |
|---|---|
| CLAYTON LEO THOMPSON,<br><br>Plaintiff,<br><br>v.<br><br>KINDER MORGAN ALTAMONT, LLC *et al.*,<br><br>Defendants. | **MEMORANDUM DECISION AND ORDER DENYING DEFENDANTS' MOTION TO EXCLUDE PLAINTIFF'S EXPERT WITNESS**<br><br>Case No. 2:15-cv-00623-JNP-BCW<br><br>District Judge Jill N. Parrish |

This matter comes before the court on Defendants' Motion to Exclude Plaintiff's Expert Witness filed on June 25, 2018. (ECF No. 90). On August 15, 2018, Plaintiff filed its opposition memorandum,[1] (ECF No. 103), to which defendants replied on September 5, 2018, (ECF No. 114). The court held two days of evidentiary hearings on this motion on September 13, 2018 and September 27, 2018.[2] For the reasons below, defendants' motion is denied.

[1] The court permitted plaintiff to file an overlength opposition memorandum no longer than 35 pages. (ECF No. 109). Relying on a seemingly feigned misunderstanding of the unambiguous local rule that governs the calculation of memoranda length, DUCivR 7-1(b)(2)(C), plaintiff's counsel flouted this ruling. That rule provides that a "concise introduction" does not count against a party's page count. It does not, as plaintiff's counsel "assumed," similarly exempt a "statement of facts" section. Even if it did, it would not permit what plaintiff's counsel did here, which is the insertion of headings titled "Introduction" and "Statement of Facts" into thirteen pages of arguments.

[2] The parties collectively submitted more than 90 pages of memoranda in connection with this motion. Alongside those filings, and during the course of the two-day *Daubert* hearing, the parties further submitted many hundreds of pages of exhibits and supplemental case law. These materials are more than sufficient, and the court does not believe that additional oral argument would assist in resolving this motion.

## I. BACKGROUND

On August 31, 2015, plaintiff Clayton Thompson filed this diversity action against a group of oil and gas associations that had, at different times over the last 44 years, owned or operated a natural gas compressor station that doubled as a petroleum storage and freight loading facility (the "South Compressor Station"). The operative Second Amended Complaint ("SAC") asserts six tort-based causes of action arising from the defendants' alleged negligent and intentional conduct in the construction and operation of this station. That conduct, Mr. Thompson alleges, resulted in the migration of pollutants onto his property, which is located next to the South Compressor Station.

In 2012, Mr. Thompson was diagnosed with chronic myeloid leukemia ("CML"), a cancer that Mr. Thompson's expert, Dr. Peter Infante, seeks to opine is more likely than not caused by exposure to benzene—one of the substances alleged to have contaminated his property. Although recovery in a toxic tort case requires that a plaintiff prove both general and specific causation, the parties have stipulated to resolving the general causation issue first. (ECF No. 90 at 4 n.2). As a result, defendants' motion seeks only to exclude Dr. Infante's opinion that benzene is a cause of CML in the abstract, rather than the specific cause of Mr. Thompson's CML.[3]

The court held two days of hearings on this motion during which Dr. Infante and defendants' expert, Dr. Kenneth Mundt, testified extensively about the epidemiological literature on benzene exposure and leukemia, as well as the proper weight that ought to be accorded to the relevant studies.

[3] Given the parties' agreement on the order of litigation, the court agrees with Mr. Thompson that defendants' passing references to alternative causes of his CML may not be considered in resolving this motion.

## II. LEGAL STANDARD

Rule 702 of the Federal Rules of Evidence provides that:

> 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. The Supreme Court has explained that Rule 702 creates a gatekeeping function for the district court, "assign[ing] to the trial judge the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 597 (1993).

"Under *Daubert*, proposed expert testimony must be supported by 'appropriate validation—i.e., good grounds based on what is known.'" *Mitchell v. Gencorp Inc.*, 165 F.3d 778, 781 (10th Cir. 1999) (quoting *Daubert*, 509 U.S. at 590) (internal quotation marks omitted). But the proponent of expert testimony need not prove that the "expert is undisputably correct or that the expert's theory is 'generally accepted' in the scientific community." *Id.* "Instead, the plaintiff must show that the method employed by the expert in reaching the conclusion is scientifically sound and that the opinion is based on facts which sufficiently satisfy Rule 702's reliability requirements." *Id.*

The Supreme Court has articulated four non-exclusive inquires that a district court might undertake in assessing the reliability of an expert's methodology: (1) whether the expert's theory has been or can be tested or falsified; (2) whether the theory or technique has been subject to peer review and publication; (3) whether there are known or potential rates of error with regard to specific techniques; and (4) whether the theory or approach has general acceptance. *Id.* at

593–94. Which, if any, of these considerations ought to be endeavored by a court is determined by their relevancy to the expert testimony at issue.[4]

Finally, although *Daubert* is principally concerned with the reliability of an expert's methodology, "conclusions and methodology are not entirely distinct from one another." *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997). Indeed, an expert's conclusion is inevitably scrutinized when examining whether "there is simply too great an analytical gap between the data and the opinion proffered." *Norris v. Baxter Healthcare Corp.*, 397 F.3d 878, 886 (10th Cir. 2005) (quoting *Joiner*, 522 at 146).

## III. ANALYSIS

The parties do not dispute that Dr. Infante's opinion, if based on good grounds, would be "relevant to the task at hand." *Daubert*, 509 U.S. at 597. Indeed, they agree that expert epidemiological testimony is indispensable to the resolution of this case. Rather, defendants' principal objection to Dr. Infante's opinion is that "there is simply too great an analytical gap between" the universe of literature that arguably bears on the relationship between benzene and CML and his conclusion that it is more likely than not that benzene is a cause of CML. Specifically, defendants identify the following defects in the methodology Dr. Infante used to arrive at this opinion: (1) he relies on studies that do not examine CML or do not find statistically significant relationships between benzene and CML; (2) he draws conclusions from studies that

[4] The parties cite, but subsequently ignore, these considerations. The court assumes this represents a recognition that they are mostly inapt to Dr. Infante's methodology. Defendants did attempt to establish during the hearing that Dr. Infante's approach to reviewing the epidemiological literature was not in accord with generally accepted principles. But as explained *infra* note 7, the court finds that the evidence was insufficient to establish that there is only one generally accepted approach to literature review.

the authors themselves did not make; and (3) the statistically significant studies that are included in his review "are insufficient to support his opinion."[5]

Defendants submit that these methodological defects combine to produce a causation opinion that cannot be supported by the data.[6] A review of Tenth Circuit cases excluding experts because their opinions are too far afield from the underlying research shows that this argument must fail. For example, in *Norris*, the Tenth Circuit affirmed a district court's exclusion of experts in a toxic tort case because their opinions were informed only by differential diagnoses in a clinical setting. 397 F.3d at 884–87. The experts failed to adduce any epidemiological research that supported their conclusions, and "ignored or discounted without explanation the contrary epidemiological studies." *Id.* at 886.

Here, Dr. Infante does much more than advance an untested theory against unanimous epidemiological research to the contrary. He relies on published studies that found statistically significant associations between benzene and CML. And for the studies that do not detect such a relationship, he offers scientific explanations premised on generally accepted statistical principles regarding the difficulties attendant to the study of rare events. That the defendants can find weaknesses in the statistically significant studies—or can point to a greater number of

[5] The parties' memoranda can only be described as scattershot. They appear to have included every argument that could conceivably bolster or discredit Dr. Infante, regardless of whether they run to the considerations that govern this motion. The above summary represents the court's best effort to discern those arguments relevant to the Rule 702 and *Daubert* analyses.

[6] Defendants also advance an argument that because a district court once excluded Dr. Infante's identical opinion, this court ought to reach the same result. In *Chambers v. Exxon Corp.*, 81 F. Supp. 2d 661, 664 (M.D. La. 2000), Dr. Infante and two other expert witnesses were precluded from testifying that benzene exposure causes CML because they "were unable to provide any research study that concludes that exposure to benzene causes CML." But as explained below, in the 18 years since *Chambers*, literature examining this relationship has apparently progressed enough for the world's premier carcinogen-identification body to conclude that there is an association between benzene and CML. Indeed, Dr. Infante relies on six studies published after the *Chambers* decision that find a statistically significant relationship between benzene and CML.

studies that have failed to demonstrate an association—does not mean that it was unscientific for Dr. Infante to rely on them in forming his opinion. Scientific consensus is not achieved at once, and the literature on this matter is not so one-sided that Dr. Infante's conclusion is patently unsupported by the data.

Because it is not the case that the epidemiological research on benzene and CML points in but one direction, the parties spend a significant amount of energy criticizing the studies on which the adverse party's expert relies. But these disagreements go directly to the weight, rather than the admissibility, of Dr. Infante's opinion.

Of course, a proposed expert cannot evade the requirements of Rule 702 and *Daubert* by simply pointing to the conclusions of others who have themselves employed dubious methodologies. But that is not the situation presented here. Drs. Mundt and Infante each have reasoned criticisms of various studies. They perceive the possibility of bias and confounding variables to different degrees in the studies they deem to be most trustworthy. But neither expert wholly ignores or fails to address contrary evidence. Rather, they each engage with the literature with mostly similar epidemiological starting points. They agree that different types of research design present advantages and drawbacks. They agree about the appropriate levels of statistical significance. Their disagreements relate principally to whether, and to what degree, certain methodological decisions ought to temper the conclusions reached by a particular study. But in interpreting the extant literature, Dr. Infante did not engage in the kind of baseless speculation that courts have rightly rejected. Instead, Dr. Mundt and Dr. Infante have different interpretations of a body of literature that is capable of giving rise to reasonable disputes. After making the gatekeeping determination that Dr. Infante's methodology is reliable and based on studies that themselves satisfy the standards of Rule 702 and *Daubert*, the court declines the parties'

invitation to further plumb the depths of the epidemiological literature to subsequently crown the winning expert.

Dr. Mundt implicitly conceded that Dr. Infante's interpretation of the literature is not outside the bounds of reasonable disagreement between scientists by placing near-complete reliance on the literature review process espoused by the International Agency for Research on Cancer ("IARC").[7] That organization has recently deployed that methodology to conclude that benzene is in fact "associated" with CML.[8] After Dr. Mundt testified that IARC's methodology is regarded as the gold standard, his explanation for why the court should nevertheless disregard that organization's conclusion that benzene is associated with CML was unpersuasive.

Defendants are, of course, free to illuminate the reasons they believe Dr. Infante's opinion is not persuasive at trial. It may be true, as defendants suggest, that Dr. Infante has placed too great an emphasis on the literature that tends to support his causation opinion while minimizing those studies that don't. But Dr. Mundt might be said to have done the same in suggesting that case-control studies are of so little worth that they ought to play no role in a literature review. The epidemiologists who serve as peer reviewers for the journals that accepted and published those case control studies apparently disagreed. Indeed, the evidence presented at the *Daubert* hearing tended to establish that it is generally accepted by epidemiologists that,

[7] The court finds that Dr. Mundt's testimony at the *Daubert* hearing and the exhibits introduced therein were insufficient to support a finding that "systematic review" is the only generally accepted method of reviewing and interpreting a broad and diffuse body of epidemiological research. The principles underlying that approach seem wise, but the court cannot say that adherents to the standard literature review methodology are engaging in unscientific conjecture.

[8] Defendants' recitation of the maxim "association does not imply causation" will not suffice to render Dr. Infante's opinion inadmissible. The court has identified no portion of Dr. Infante's opinion, or the literature that informs it, that merely identifies associations without acknowledging and controlling for the possibility of spuriousness. Dr. Infante readily admits that the studies he has examined that found non-statistically significant associations should not, on their own, be taken to establish causation.

while cohort studies more closely approximate true experiments, case control studies are useful for examining low-incidence maladies—like CML. The court does not credit either parties' absolutist position on the relative value of these two types of studies, but merely points out that this dispute is safely within the bounds of reasonable disagreement between genuine epidemiologists.

*Daubert* does not direct courts to determine which of two dueling experts is more persuasive. That is the factfinder's province. A district court's gatekeeping function is not fulfilled by selecting between two experts' interpretation of literature that is at least reasonably susceptible to different conclusions. Rather, "[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." *Daubert*, 509 U.S. at 596.

The court finds that Dr. Infante is well-qualified to render an opinion in this area, having been actively researching and publishing on benzene toxicity for over forty years, both on behalf of the federal government and in a private consulting practice. During two days of hearings, Dr. Infante testified about every step of his review of the literature. While defendants highlighted some choices Dr. Infante made that are subject to reasonable criticism by epidemiologists, the court does not find that he engaged in any unscientific leaps or baseless conjecture. Rather, the court finds that Dr. Infante's opinion "rests on a reliable foundation and is relevant to the task at hand." *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 597 (1993).

## IV. ORDER

For the reasons above, defendants' Motion to Exclude Plaintiff's Expert Witness is **DENIED.**

Signed October 19, 2018

BY THE COURT

Jill N. Parrish
United States District Court Judge