IN THE SUPERIOR COURT OF THE STATE OF DELAWARE

| KEITH A. WILANT, |) | |
|---|-------------|---------------------------|
| Plaintiff, |) | |
| V. |) | C.A. No.: N17C-10-365 CEB |
| BNSF RAILWAY COMPANY, f/k/a BURLINGTON NORTHERN AND |) | |
| SANTA FE RAILWAY COMPANY Defendant. |))) | |

Submitted: January 29, 2020 Decided: May 13, 2020

MEMORANDUM OPINION

On Defendant's Motion to Exclude Expert Testimony and Motion for Summary Judgment

GRANTED.

A. Dale Bowers, II, Esquire, LAW OFFICE OF A. DALE BOWERS, Wilmington, Delaware. Shawn A. Ricci, Esquire and Luke T. Pepper, Esquire, BERN CAPPELLI, LLC, Conshohocken, Pennsylvania. Attorneys for Plaintiff.

Maria R. Granaudo Gesty, Esquire, BURNS WHITE, LLC, Wilmington, Delaware. S. Camille Reifers, Esquire, BOYLE BRASHER, LLC, Memphis, Tennessee. Attorneys for Defendant.

BUTLER, J.

INTRODUCTION

Plaintiff Keith Wilant ("Wilant") worked for BNSF Railway Company ("BNSF") from 1969 to 1984. In 2015, Wilant found out he had contracted bladder cancer and, in 2017, saw a television advertisement suggesting that bladder cancer may be connected to inhalation of diesel fumes while working as a railroad worker. He brought suit in this Court.

In his complaint, Wilant says that he worked at a BNSF yard in Auburn, Washington and on tracks between Auburn, and Yakima Washington during his fifteen years of employment.³ The complaint alleges that while so employed, he inhaled diesel fumes which, years later, caused him to contract bladder cancer.

Discovery has proceeded through expert witnesses and now BNSF has moved for summary judgment. BNSF has argued first that the complaint was filed outside the statute of limitations.⁴ BNSF also argues that Plaintiff's expert witness on the "standard of care," Dr. Perez, should be excluded, thereby rendering Plaintiff's case deficient for lack of evidence of a breach of the standard of care.⁵ Finally, BNSF argues that Plaintiff's "causation expert," Dr. Harrison, should be excluded because

¹ Complaint, D.I. 1, at ¶ 5.

² Hearing Transcript, D.I. 104, at 11.

³ Complaint, D.I. 1, at ¶ 8.

⁴ BNSF Motion for Summary Judgment, D.I. 48.

⁵ Motion to exclude testimony of Dr. Hernando Perez, D.I. 50.

his testimony fails to meet the *Daubert* standard for admissibility of expert opinions.⁶ Because the Court finds that Plaintiff's general causation testimony does not meet the *Daubert* standard, that testimony will be excluded. The parties agree that such a ruling is essentially case dispositive of Plaintiff's complaint and therefore the Court will grant summary judgment to BNSF.

ANALYSIS

The Daubert Standard

Delaware has adopted the *Daubert* standard for the admissibility of expert testimony.⁷ Under *Daubert*, an expert may testify to his opinions (and, in cases such as this, those opinions may form the basis of a *prima facie* case)⁸ if the testimony meets the following criteria:

- (1) the witness is qualified as an expert by knowledge, skill experience, training or education;
- (2) the evidence is relevant;
- (3) the expert's opinion is based upon information reasonably relied upon by experts in the particular field;
- (4) the expert testimony will assist the trier of fact to understand the evidence or to determine a fact in issue; and

⁶ Motion to exclude testimony of Robert Harrison, D.I. 52.

⁷ Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579 (1993); Nelson v. State, 628 A.2d 69, 74 (Del. 1993) (adopting Daubert standard in Delaware).

⁸ See, e.g., Hopkins v. Astrazeneca Pharms., LP, 2010 WL 1267219, at *11 (Del. Super. Mar. 31, 2010) (after striking expert opinion testimony on causation, plaintiff cannot sustain a *prima facie* case; summary judgment granted for defense).

(5) the expert testimony will not create unfair prejudice or confuse or mislead the jury.

The party seeking to introduce expert testimony bears the burden of establishing its admissibility by a preponderance of the evidence.⁹

The Delaware Supreme Court has opined that *Daubert* "imposes a special obligation upon a trial judge to ensure that any and all scientific testimony . . . is not only relevant, but reliable" and that "the trial judge acts as the "gatekeeper" in deciding whether an expert's testimony "has a reliable basis in the knowledge and experience of [the relevant] discipline." ¹¹

Here, BNSF has not challenged Dr. Harrison's professional credentials, which are substantial.¹² Dr. Harrison's opinions are found in his written report and his deposition on the causal relationship between diesel exhaust and bladder cancer.¹³ BNSF challenges the basis for Dr. Harrison's opinion that there is a causal relationship between diesel exhaust and bladder cancer.¹⁴

⁹ Bowen v. E.I. DuPont de Nemours & Co., 906 A.2d 787, 795 (Del. 2006) (Internal citations omitted).

¹⁰ M.G. Bancorporation v. Le Beau, 737 A.2d 513, 521 (Del. 1999), quoting Daubert, 509 U.S. at 595.

¹¹ M.G. Bancorporation, 737 A.2d at 523.

¹² The Court notes that in *Daubert* itself, and in many cases coming thereafter, the issue is rarely the scholarly credentials of the expert. Rather, as the advisory committee to Fed. R. Evid. 702 put it, "The trial court's gatekeeping function requires more than simply taking the expert's word for it."

¹³ Plaintiff's Response to Motion for Summary Judgment, D.I. 86 Ex. 1&2.

¹⁴ Defendant's Opening Brief to Exclude Expert Testimony of Dr. Robert Harrison, D.I. 64.

The Scientific Basis for Causation Conclusions

Dr. Harrison's primary reliance is on a report from the International Agency for Research on Cancer ("IARC"). The IARC is:

[P]art of the World Health Organization. Its mission is to coordinate and conduct research on the causes of human cancer, the mechanisms of carcinogenesis, and to develop scientific strategies for cancer control. The Agency is involved in both epidemiological and laboratory research and disseminates scientific information through publications, meetings, courses, and fellowships.¹⁵

Monographs published by the IARC "identify environmental factors that are carcinogenic hazards to humans. These include chemicals, complex mixtures, occupational exposures, physical agents, biological agents, and lifestyle factors. National health agencies can use this information as scientific support for their actions to prevent exposure to potential carcinogens." ¹⁶

IARC Monograph No. 105 deals specifically with diesel exhaust and its carcinogenicity.¹⁷ Dr. Harrison referred to Monograph No. 105 as the "best summary" of his study on the subject.¹⁸

¹⁵ Press Release, International Agency for Research on Cancer, (Jun. 12, 2012) https://www.iarc.fr/pressrelease/iarc-diesel-engine-exhaust-carcinogenic/.

¹⁶ IARC Monographs, General Information, https://monographs.iarc.fr/home/iarc-monographs-general-information/.

¹⁷ See generally International Agency for Research on Cancer, DIESEL AND GASOLINE ENGINE EXHAUSTS AND SOME NITROARENES, Vol 105 (2012) available at https://publications.iarc.fr/129.

¹⁸ Dr. Harrison's Deposition, D.I. 86, Ex. 3 at 44.

Monograph No. 105 is quite clear when clarity is certain: that diesel fumes cause lung cancer. It says, "Diesel engine exhaust causes cancer of the lung." This conclusion is supported by many scientific studies demonstrating the positive epidemiological relationship between diesel exhaust and lung cancer.

But when Monograph No. 105 turns to the question of diesel exhaust and bladder cancer, its authors were less certain. Instead of a clear statement of causation, Monograph No. 105 concludes that "Overall, the epidemiological studies provide *some evidence* of a *positive association* between potential exposure to diesel engine exhaust and the risk of urinary bladder cancer."²⁰

Monograph No. 105 is a catalog of many studies on the subject of diesel fumes and its harmful effects. The studies cited all report a "confidence interval" of at least 95%. While more might be said of confidence intervals, for our purposes it is enough to say that a confidence interval provides "a range (interval) within which the risk likely would fall if the study were repeated numerous times." So a 95% confidence interval indicates that the range of results achieved in the study would be achieved 95% of the time when the study is replicated from the same population. And

¹⁹ IARC, *supra* note 17, at 467.

²⁰ *Id.* at 476 (emphasis added).

²¹ See Federal Judicial Center, FEDERAL REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 573 (3d ed. 2011).

²² See Raphaël Porcher, PhD, Reporting Results of Orthopaedic Research: Confidence Intervals and p Values, 467 Clin. Orthop. Relat. Res. 2737 (2009) (defining confidence intervals as it relates to scientific studies).

indeed, a 95% confidence interval appears to be the standard used by epidemiologists to determine the validity – or confidence level - in the study.²³

Monograph No. 105 also recorded the "relative risk" from each of the studies reported. Relative risk measures the strength of the association between the agent and the effect under examination.²⁴ For example, bladder cancer is quite common in the general population and it therefore is not surprising that some railroad workers have contracted it, as have others in many occupations.²⁵ The job of relative risk is to determine whether diesel fume inhalants contract bladder cancer at a greater or lesser rate than non-inhalants.

A relative risk ratio of 1.0 means the risk of the disease is no greater for those exposed to the agent (in this case diesel exhaust) than those not exposed.²⁶ On the other hand, for example, smoking studies have shown that smokers are ten times

²³ FEDERAL REFERENCE MANUAL at 573. See also Tumlinson v. Advanced Micro Devices, Inc. 2013 WL 7084888, at *6 (Del. Super. Oct. 15, 2013), aff'd, 81 A.3d 1264 (Del. 2013) ("The generally accepted significance level or confidence level in epidemiological studies is 95%, meaning that if the study is repeated many times, the confidence interval indicates the range of relative risk values that would result 95% of the time.")

²⁴ IARC, supra note 17, at 16.

²⁵ National Cancer Institute, Cancer Stat Facts: Bladder Cancer, (last visited April 13, 2020) https://seer.cancer.gov/statfacts/html/urinb.html.

²⁶ Federal Judicial Center, FEDERAL REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 349 (2d ed. 2000).

more likely (a risk ratio of 10.0) than non-smokers to develop lung cancer.²⁷ A number of courts have held that a plaintiff must demonstrate a risk ratio of at least 2.0 to demonstrate a preponderance of evidence that what is sought to be proved is more likely than not true.²⁸

The issue of whether the relative risk must measure greater than 2.0 is a controversial one. In a number of jurisdictions, a risk ratio of below 2.0 is an insufficient demonstration of risk to satisfy a "more probable than not" requirement for expert testimony under state law.²⁹ As one commentary put it: some courts that said RR>2 (Relative Risk greater than 2) is "required" meant that there must be epidemiological evidence showing RR>2.³⁰ Others mean that *if* there is a body of epidemiological data, it must show RR>2.³¹ Still others mean that, if

²⁷ Center for Disease Control, Smoking and Cancer, (last visited April 14, 2020) https://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/pdfs/wynk-cancer.pdf.

²⁸ DeLuca v. Merrell Dow Pharms., Inc., 911 F.2d 941, 958 – 59 (3d Cir.1990) (a RR of 2.0 supports the burden of proof as it relates to causation) accord Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F.3d 1311, 1320 (9th Cir. 1995) and In re W.R. Grace & Co., 355 B.R. 462, 483 (Bankr. D. Del. 2006).

²⁹ See. e.g., Daubert, 43 F.3d at 1321 (A relative risk less than two does not establish legal causation).

³⁰ See Merrell Dow Pharm., Inc. v. Havner, 953 S.W.2d 706, 719 – 30 (Tex. 1997) and Oxendine v. Merrell Dow Pharm. Inc., 506 A.2d 1100 (D.C. 1986)(a relative risk greater than two indicates a strong inference of causation). Accord, DePyper v. Navarro, 1995 WL 788828, at *34 (Mich. Cir. Ct. Nov. 27, 1995), aff'd, 1998 WL 1988927 (Mich. Ct. App. Nov. 6, 1998).

³¹ In re Breast Implant Litig., 11 F. Supp. 2d 1217, 1228 (D. Colo. 1998) ("A lack of epidemiology should not end the inquiry, but rather begin the inquiry into what other types of evidence a plaintiff can present to satisfy the burden of proof.")

epidemiological studies are the *only* causation evidence available, they must show RR>2.³² Finally, some courts have stated that RR<2 *disproves* legal causation.³³

It does not appear that the Delaware Supreme Court has weighed in on the "risk ratio less than two" controversy. In the absence of such a ruling, the Court is not prepared to say that a relative risk of less than 2 is *per se* insufficient to admit expert testimony. While a relative risk of less than two connotes a risk less than the "more likely than not" standard of proof of causation in tort law generally, there may be other evidence demonstrating causation in addition to a relative risk greater than 1 but less than 2.³⁴

Educated by the discussion above, we return to Dr. Harrison's expert report and Monograph No. 105. Dr. Harrison does not define a risk ratio applicable to diesel exhaust, railroad workers and bladder cancer. Indeed, when asked whether

³²Cook v. United States, 545 F. Supp. 306, 315 (N.D. Cal. 1982) (A relative risk less than 2 failed to persuade the court that the results were more probable than not).

³³Daubert, 43 F.3d at 1321 (Epidemiological data will at minimum have to exceed two to show causation). See also Lofgren v. Motorola, 1998 WL 299925, at *14 (Ariz. Super. Ct. Jun. 1, 1998) (relative risk less than 2 tends to disprove causation) and see Russellyn S. Carruth & Bernard D. Goldstein, Relative Risk Greater Than Two in Proof of Causation in Toxic Tort Litigation, 41 Jurimetrics J. 195, 203-04 (2001) (discussing the differences of opinion surrounding the requirement of epidemiological evidence showing RR>2 and its meaning as it relates to causation). ³⁴ See generally Oxendine, 506 A.2d 1100 (D.C. 1986) (epidemiology study with risk ratio between 1.3 and 1.8 with other supporting data sufficient to get to jury on issue of causation). See also Michael D. Green, Expert Witnesses and Sufficiency of Evidence in Toxic Substances Litigation: The Legacy of Agent Orange and Bendectin Litigation, 86 Nw. U. L. Rev. 643, 691 (1992) ("In the absence of a relative risk less than two would be inadequate to support a plaintiff's verdict").

the relative risk was greater than 2.0, he testified that relative risk was a "legal construct, not a medical one."³⁵ While that may be a facile response in a deposition with opposing counsel, it begs the question before the Court and is not, as they say, helpful.

Monograph No. 105 analyzed studies from across multiple occupations, with varied exposures, varied densities and over varied periods. BNSF argues that the only study specific to railroad workers — the *Schenker* study — contained in Monograph No. 105 found that, of 2519 railroad workers with a least 10 years' experience, the risk ratio for bladder cancer was .76 — actually lower than the general population.³⁶ Plaintiff does not direct the Court to any contravening study in the Monograph but rather affirms that "Dr. Harrison also relied on the *Schenker* study papers written by Dr. Paulo Boffetta."³⁷

Even if we expand our field of vision from railroad workers inhaling diesel fumes to other occupations, the Monograph does not provide additional help. Monograph No. 105 refers specifically to three studies concerning diesel fumes and

³⁵ Harrison Deposition, *supra* note 18, at 52.

³⁶ Defendant's Opening Brief, D.I. 64 at 10; Dr. Harrison's Deposition, D.I. 86 Ex. 3, at 77 – 78.

³⁷ Plaintiff's Brief, D.I. 86 at 14. *See also* M.D. Schenker, et. al., *Diesel exposure* and mortality among railway workers: results of a pilot study, 41 Br. J. Ind. Med. 320 – 327 (1987) (evaluating the association of diesel exhaust and cause specific mortality).

bladder cancer. A study by Boffetta & Silverman analyzed bladder cancer data for numerous occupations that had been exposed to diesel exhaust and found an elevated risk ratio of 1.13 to 1.37.³⁸ That study did not, however, include a meta-analysis of railroad workers as their exposure was too varied to be useful as a group.³⁹ A meta-analysis by Manju found a pooled risk among motor vehicle and railroad workers of 1.08.⁴⁰ Finally a meta-analysis by Ruelen, et. al. found "small but significant" increases in relative risk of bladder cancer (generally under 1.3) by exposure to diesel fumes among nine occupational workers, none of them railroad workers.⁴¹

The most that can be said of these studies is what was said by the IARC: there appears to be a positive association, but IARC is unwilling – because the science does not support it – to say that diesel fumes cause bladder cancer. Thus, Dr. Harrison's conclusions are not borne out by the evidence he cites in support.

³⁸ Paolo Boffetta & Debra T. Silverman, *A Meta-Analysis of Bladder Cancer and Diesel Exhaust Exposure*, 12 Epidemiology 125, 128 (2001) https://journals.lww.com/epidem/Fulltext/2001/01000/A_Meta_Analysis_of_Bladd er_Cancer_and_Diesel.21.aspx

³⁹ *Id.* at 125-130.

⁴⁰ Manju L, George Sara Preethi, Mathew Aleyamma, *Urinary bladder Cancer Risk Among Motor Vehicle Drivers: A Meta-Analysis of the Evidence*, 1977–2008, 10 Asian Pac J Cancer Prev. 287, 287–294.

journal.waocp.org/?sid=Entrez:PubMed&id=pmid:19537898&key=2009.10.2.287 ⁴¹ Raoul C. Reulen, Eliane Kellen, Frank Buntinx et al. *A Meta-Analysis on the Association Between Bladder Cancer and Occupation* Scand. J Urol. Nephrol. Suppl. 64–78 (2008).

The Dose/Response Problem

While BNSF criticizes Plaintiff for his failure to propound a viable dose/response relationship to exposure and consequent disease, Plaintiff responds that BNSF did not keep dosage records. Plaintiff then directs us to *Cutlip v. Norfolk S. Corp.*, where the judge wrote "only rarely are humans exposed to chemicals in a manner that permits a quantitative determination of adverse outcomes." This observation may be true, but the lack of any reliable dosage information does nothing to assure the Court that the expert's conclusion is based on scientific principles, regardless of whose "fault" it is that no such records exist.⁴³

Pressed on the lack of dosage data in the literature, Dr. Harrison suggested that a proposed "threshold limit value" based on the known risk for lung cancer was "a reasonable place to start" in assigning one for bladder cancer. 44 Exactly why this

⁴² Plaintiff's Brief, D.I. 86, at 10 quoting *Cutlip v. Norfolk S. Corp.*, 2003 WL 1861015, at *8 (Ohio Ct. App. Apr. 11, 2003) quoting *Westberry v. Gislaved Gummi AB* 178 F.3d 257, 264 (4th Cir. 1999).

⁴³ We pause for a moment here to recognize that Plaintiff's specific dosage of diesel fume inhalation is not the problem for a general causation expert. That would be germane to a specific diagnosis of Plaintiff's condition and appropriately a matter for examination of the testimony of Dr. Perez, Plaintiff's specific causation expert. The dosage problem here is not Plaintiff's specific dosage but rather the general causation expert's opinion that diesel exhaust causes bladder cancer. The lack of any dosage specificity that might cause or even elevate the risk of bladder cancer generally further weakens the reliability of this testimony. *See generally, McGlaughlin v. BNSF Railway,* 2020 WL 641729, at *6 – 7 (D. Neb. Feb. 11, 2020) *See infra* note 45.

⁴⁴ Plaintiff's Brief, D.I. 86, at 18.

is a reasonable place to start is not explained, and the Court does not presume things it knows nothing about. Perhaps a "threshold limit value" to one organ could be toxic to another organ, or completely benign. The Court is certainly not in a position to know without evidence, and none has been either presented or argued.

So the dosage problem here is quite acute: we do not know how much diesel exhaust the Plaintiff inhaled while employed at BNSF, but even if we did, we do not know how much diesel exhaust one would need to inhale to increase the risk of bladder cancer. These difficulties further amplify the Court's concerns that Dr. Harrison's opinions are not well grounded in science.

Differential Diagnosis

Differential diagnosis is the process of eliminating from consideration other known causes of a disease to arrive at the most likely cause. Where the disease is rare, and the causes are few, differential diagnosis is straightforward. But where the disease has a "high background rate" in the general population, the expert must employ a "definitive scientific process" to differentiate among the many potential causes. 46

⁴⁵ See In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 758–59 (3d Cir. 1994) (discussing the technique of differential diagnosis to rule out other known causes of a disease).

⁴⁶ See Scaife v. Astrazeneca LP 2009 WL 1610575, at *16 (Del. Super. Jun. 9, 2009) citing Minner v. American Mortg. & Guar. Co., 791 A.2d 826, 854 (Del. Super. 2000) ("the differential diagnosis process requires the expert employ a definitive

Bladder cancer is a disease with a high background rate. The American Cancer Society estimates about 81,400 new cases this year.⁴⁷ Several of the known causes are present in Plaintiff. Dr. Harrison explained that while tobacco smoking is a known risk factor for bladder cancer, he discounted Plaintiff's history of tobacco smoking because Plaintiff smoked too little and quit too long ago for tobacco use to be a meaningful risk.⁴⁸

Another known risk factor for developing bladder cancer is alcohol consumption. Here, Plaintiff did not consume modestly and quit long ago. Rather, he consumed at least a "six pack a day" for over forty years. At his deposition, Dr. Harrison conceded that Plaintiff's alcohol use was a contributing factor in his bladder cancer. But if alcohol use was a contributing factor in Plaintiff's contracting bladder cancer, what does that do to Dr. Harrison's differential diagnosis? The expert actually *found* a differential diagnosis. A differential diagnosis analysis is only useful to the Plaintiff if it excludes other causes. St

scientific process to rule in and rule out the many potential causes of the disease before reaching a diagnosis.")

⁴⁷ National Cancer Institute, Cancer Stat Facts: Bladder Cancer, (last visited Apr. 13, 2020) https://seer.cancer.gov/statfacts/html/urinb.html.

⁴⁸ Dr. Harrison's Deposition, D.I. 86 Ex. 3, at 26-27.

⁴⁹ *Id.* at 67.

 $^{^{50}}$ *Id.* at 67 - 70.

⁵¹ Like the dose/response problem noted in footnote 35 and surrounding text, the Court understands fully that causation in a FELA case may be predicated on an employer's negligence "however slight." *Rogers v. Missouri Pacific R.R. Co.*, 352 U.S. 500, 567 (1957). But this lower standard of causation in FELA cases does not

A Review of Decisional Law

Despite numerous attempts to litigate the harmful effects of diesel fumes, the courts have been rather stingy in permitting the evidence as against a Daubert challenge. Seaman v. Seacor Marine LLC,⁵² was a case in which a sea captain complained that his bladder cancer was caused by chemicals in diesel exhaust inhaled while aboard the ship. Plaintiff's expert testimony on causation was excluded, the court ruling that 1) studies on the toxicity of the components generally were not relevant to the causation of bladder cancer and 2) the expert had no information concerning plaintiff's level of exposure to the diesel fumes.⁵³

In Knight v. Kirby Inland Marine Inc.,⁵⁴ the plaintiff's general causation expert testimony that diesel exhaust causes bladder cancer was excluded. In affirming the trial court, the Fifth Circuit said the trial court could "reasonably conclude that the analytical gap between the studies on which he relied, and his conclusions was simply too great and that his opinions were thus unreliable."⁵⁵

lower the *Daubert* standard for admissibility of evidence of causation; the two issues are distinctly different and confusing them is another trap for the unwary. *See, e.g., Claar v. Burlington R. Co.* 29 F.3d 499, 503 (9th Cir. 1984); *In re Paoli Railroad Yard PCB Litigation*, 2000 WL 274262, at *2 (E.D. Pa. Mar. 7, 2000).

⁵² 564 F. Supp.2d 598, 603, (E.D. La. 2008), *aff'd*, 326 Fed. Appx. 721 (5th Cir. Apr. 20, 2009).

⁵³ *Id.* at 602.

⁵⁴ 482 F.3d 347 (5th Cir. 2007).

⁵⁵ *Id.* at 353.

McLaughlin v. BNSF Railway Company,⁵⁶ was a case involving a railroad worker who contracted lung cancer and sued under FELA, claiming his lung cancer was caused by diesel exhaust at his worksite. An expert was prepared to testify, consistent with the IARC Monograph No. 105 discussed above, that diesel exhaust causes lung cancer. Even here, however, the court rejected the expert's testimony, saying:

[I]n order to pass muster under *Daubert*, [expert witness] Wilkenfeld must be able to say more than [Plaintiff] was exposed to diesel exhaust; some unknown amount of diesel exhaust can cause cancer; therefore exposure to diesel exhaust caused [Plaintiff's lung cancer]. This is just the type of opinion that is connected to the data only by the *ipse dixit* of the expert and need not be accepted by the Court. And even under FELA, where diesel exhaust need not be a significant cause, but may merely play any part in [Plaintiff's] development of lung cancer, [the expert] has not reliably ruled in [Plaintiff's] exposure.⁵⁷

In *Phlypo v BNSF Railway Co.*⁵⁸ the trial judge excluded expert testimony that benzene in diesel exhaust causes non-Hodgkin's lymphoma. The expert, relying on an IARC study, proffered testimony on an association between benzene and non-Hodgkin's lymphoma. Much as the Court does here, the Texas court ruled that association and causation are different conclusions. While an opinion on cause and effect may ultimately be proven in science, expert testimony in a courtroom cannot

⁵⁶ 2020 WL 641729, at *6 – 7 (D. Neb. Feb. 11, 2020), appeal filed, No. 20-1494 (8th Cir. Mar. 10, 2020).

⁵⁷ *Id.* at *7 (internal citations omitted).

⁵⁸ 2019 WL 2297293 (N.D. Texas, Mar. 27, 2019).

be used to prove what science has not. "In sum, the law cannot wait for future scientific investigation and research. We must resolve cases in our courts on the basis of scientific knowledge that is currently available." ⁵⁹

CONCLUSION

On the basis of the foregoing, the motion of BNSF to exclude the testimony of Plaintiff's general causation expert, Dr. Harrison is **GRANTED**. Plaintiff is thereby without a basis for the jury to find that Defendant caused Plaintiff's injury and Defendant's motion for summary judgment is therefore **GRANTED**.

IT IS SO ORDERED.

Judge Charles E. But

⁵⁹ *Id.* at *8 citing *Moore v. Ashland Chemical Inc.*, 151 F.3d 269, 276 (5th Cir. 1998). Put another way, "[t]he courtroom is not the place for scientific guesswork even of the inspired sort. Law lags science; it does not lead it." *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 319 (7th Cir. 1996).