STATE OF NEW HAMPSHIRE
SUPREME COURT

Docket No. 2019-0092

Sandra Moscicki v. Charles Leno and Heidi Leno

RULE 7 APPEAL FROM ORDER OF THE
GRAFTON COUNTY SUPERIOR COURT
(Justice Lawrence A. MacLeod, Jr.)

BRIEF OF APPELLANT SANDRA MOSCICKI

Gary M. Burt (N.H. Bar No. 5510)
Brendan D. O'Brien (N.H. Bar No. 267995)
PRIMMER PIPER EGGLESTON & CRAMER, PC
900 Elm Street, 19th Floor
P.O. Box 3600
Manchester, NH 03105-3600
(603) 626-3300
gburt@primmer.com
bobrien@primmer.com

Gary M. Burt will present oral argument on behalf of Sandra Moscicki

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page No.

Cases

Statutes

Other Authorities

QUESTION PRESENTED

Whether in a toxic tort case the dose-response relationship for the toxin at issue as recognized in the scientific literature is an inherent or implicit and necessary component of the methodology that an expert witness must consider and/or include in his or her opinion as a condition or prerequisite for admissibility at trial under RSA 516:29-a and if not considered or included must the expert's testimony be excluded where the expert's opinion is otherwise based on reliable data and methodology.

RELEVANT STATUTORY PROVISIONS

N.H. Rev. Stat. Ann. § 516:29-a Testimony of Expert Witnesses

I. A witness shall not be allowed to offer expert testimony unless the court finds:

(a) Such testimony is based upon sufficient facts or data;
(b) Such testimony is the product of reliable principles and methods; and
(c) The witness has applied the principles and methods reliably to the facts of the case.

II. (a) In evaluating the basis for proffered expert testimony, the court shall consider, if appropriate to the circumstances, whether the expert's opinions were supported by theories or techniques that:

(1) Have been or can be tested;
(2) Have been subjected to peer review and publication;
(3) Have a known or potential rate of error; and
(4) Are generally accepted in the appropriate scientific literature.

(b) In making its findings, the court may consider other factors specific to the proffered testimony.

N.H. Rev. Stat. Ann. § 516:29-b Disclosure of Expert Testimony in Civil Cases

I. A party in a civil case shall disclose to other parties the identity of any person who may be used at trial to present evidence under Rules 702, 703, or 705 of the New Hampshire rules of evidence.

II. Except as otherwise stipulated or directed by the court, this disclosure shall, with respect to a witness who is retained or specially employed to provide expert testimony in the case or whose duties as an employee of the party regularly involve giving expert testimony, be accompanied by a written report signed by the witness. The report shall contain a complete statement of:

(a) All opinions to be expressed and the basis and reasons therefor;
(b) The facts or data considered by the witness in forming the opinions;
(c) Any exhibits to be used as a summary of or support for the opinions;
(d) The qualifications of the witness, including a list of all publications authored by the witness within the preceding 10 years;
(e) The compensation to be paid for the study and testimony; and
(f) A listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding 4 years.

III. These disclosures shall be made at the times and in the sequence directed by the court. In the absence of other directions from the court or stipulation by the parties, the disclosures shall be made at least 90 days before the trial date or the date the case is to be ready for trial or, if the evidence is intended solely to contradict or rebut evidence on the same subject matter identified by another party, within 30 days after the disclosure made by the other party. The parties shall supplement these disclosures when required in accordance with the court's rules.

IV. The deposition of any person who has been identified as an expert whose opinions may be presented at trial, and whose testimony has been the subject of a report under this section, shall not be conducted until after such report has been provided.

V. The provisions of this section shall not apply in criminal cases.

STATEMENT OF THE CASE AND STATEMENT OF FACTS

Matthew and Maureen Leno were born on July 8, 2008. *See* Appendix to Brief of Appellant Sandra Moscicki ("App.") at 17. In September 2009, the Leno family moved into Sandra Moscicki's ("Moscicki's") trust's apartment. *See* App. at 18-20. When Matthew was eighteen months old, his mother expressed concerns to his pediatrician regarding his speech and development. *See* App. at 38, (Deposition p. 66:17 – 67:5). Matthew's mother indicated he had "lost stuff" and "was behind" especially as compared to his twin sister. App. at 38, (Deposition p. 66:17 – 67:5). Matthew's father noted that Matthew began exhibiting significant developmental problems in the months before his eighteen-month checkup. *See* App. at 56-57, (Deposition p. 17:1 – 18:18).

During a twenty-four month checkup on July 29, 2010, Matthew's elevated blood lead levels ("EBLLs") measured at 17 micrograms per deciliter ("μg/dl"). App. at 62. Maureen's measured EBLLs were higher, 19 μg/dl. App. at 63.

Maureen's pediatrician and educators generally described her as performing within the expected range. *See* App. at 66. Matthew, however, continued to progress slowly, falling behind his peers. *See* App. at 78-79.

Charles and Heidi Leno (the "Lenos") initiated suit against Moscicki seeking damages for the alleged harm caused by their children's exposure to lead paint. Dr. Peter Isquith ("Dr. Isquith") performed forensic neuropsychological assessments of Matthew and Maureen, and issued reports as required by N.H. Rev. Stat. Ann. § 516:29-b.

To assess Matthew's intellectual level, Dr. Isquith initially administered the Wechsler Intelligence Scale for Children, Fourth Edition ("WISC-IV"). *See* App. at 107, (Deposition p. 79:17 – 80:5). Matthew performed too low on several of the WISC-IV's subtests, invalidating the results. *See* App. at 107, (Deposition p. 79:17 – 80:5). Dr. Isquith therefore administered the Reynolds Intellectual Assessment Scales ("RIAS"). *See* App. at 107, (Deposition p. 79:17 – 80:5). Matthew's performance resulted in a reported full scale IQ score of 40, the lowest score that one could achieve on the RIAS. *See* App. at 107, (Deposition p. 81:9-22). This score is also well below the threshold (a score of 70)

for a diagnosis of intellectual impairment, formerly labeled mental retardation. *See* App. at 205 (Hearing Transcript p. 81:6-19). As Dr. David E. Mandelbaum ("Dr. Mandelbaum"), one of Moscicki's experts, testified, the vast majority of causes for this condition are unknown or idiopathic. *See* App. at 207, (Hearing Transcript p. 88:24 – 89:1); App. at 489-494; *see also* Gregory Stores, *Intellectual Impairment*, Sleep in Children with Neurodevelopmental Disabilities, 263-271 (2019). Matthew's scores were very low in all domains, with overall index of cognitive functioning below the first percentile. App. at 85.

Matthew's extremely low full scale IQ score was consistent with his performance on numerous other tests Dr. Isquith administered that measure related brain behavior function. *See* App. at 85. Matthew's scores on two visuospatial processing tests resulted in scores in the fifth percentile and below the second percentile. App. at 82. With respect to academics, Dr. Isquith stated that Matthew's "skills and ability to apply the skills were very low for his age. When compared to others at his age level, Matthew's standard score was low in reading, writing and math." App. at 83. Dr. Isquith concluded that Matthew had "global developmental delays." App. at 75. Dr. Isquith confirmed that "[g]iven Matthew's ability to participate adequately, and the consistency between these findings, previous findings, and parent and teacher reports, the present findings are likely a reliable and valid indication of current functioning." App. at 85.

Dr. Isquith testified that given Matthew's mother, father, and siblings' full scale IQ scores, he would have expected Matthew's full scale IQ score to be average. *See* App. at 111, (Deposition p. 94:17 – 95:3). In both of his reports, Dr. Isquith specifically noted that the average range for IQ test scores is 90 to 109. *See* App. at 67, 79-80. He also reported that the standard deviation for the tests he administered was 15, confirming that Matthew's full scale IQ score of 40 was four standard deviations below the median average score of 100. *See* App. at 67, 79.

Dr. Isquith admitted that he could not identify any authority supporting that Matthew's EBLLs of 17 µg/dl could cause his global developmental delays. *See* App. at 108, (Deposition p. 82:8-20). Specifically, Dr. Isquith testified:

> Q. Have you seen anything published in the literature that suggests that an elevated lead level of that magnitude, that is 17 micrograms per deciliter as a peak over that period of time, can produce these severe deficits?
>
> A. It would be unusual.
>
> Q. That wasn't my question. Have you seen anything in the literature that would support that conclusion, that, in fact, suggests that? A case study?
>
> A. Not specifically, no.

App. at 111, (Deposition p. 96:12-22). His testimony confirms that the severity of Matthew's deficits is far more extreme than what the published scientific literature concludes is the effect of low EBLLs. His testimony is also consistent with his statements in a 2009 forensic report that the studies on the effect of lead "consistently point to an average loss of 1 to 3 points on IQ tests for each 10 μg/dl of blood lead level elevation." App. at 122. Dr. Isquith reaffirmed this conclusion during his deposition. *See* App. at 105, (Deposition p. 72:18 – 73:13).

As Dr. Isquith and the Lenos' other experts were projecting harm far in excess of what the large body of peer-reviewed, scientific literature reports regarding the toxicological effect of low EBLLs, Moscicki moved to exclude those opinions pursuant to N.H. Rev. Stat. Ann. § 516:29-a and relevant case law. A *Daubert* hearing was then scheduled (the "*Daubert* Hearing").

At the *Daubert* hearing, Dr. Isquith altered his methodology in an attempt to explain how Matthew's global developmental delays could be related to his EBLLs. *See* App. at 9. The trial court concluded that the new methodology of interpretation was not sufficiently reliable, and ruled that any new opinion based on that new methodology was inadmissible. *See* App. at 11.

Despite offering new opinions at the *Daubert* Hearing, Dr. Isquith still admitted that he could not say what Matthew's IQ would have been had he not experienced EBLLs or what effect Matthew's EBLLs had on his IQ:

> Q. And, by the way, you're unable to tell the Court what Matthew's IQ might have been – full-scale IQ – had he not experienced any lead levels, is that true?
>
> A. That is correct
>
> Q. And you're unable to say how much his elevated blood lead levels contributed to his deficits and limited function, is that correct?
>
> A. We can't put a number on it, that's correct.

App. at 154, (Hearing Transcript p. 120:11-18). These admissions, particularly when combined with Dr. Isquith's acknowledgment that "Matthew's deficits are pretty extreme and much more so than we would expect based on the numerous studies about lead," App. at 139, (Hearing Transcript p. 61:22-24), demonstrate that his ultimate opinion that Matthew's EBLLs were a substantial contributing factor to his global developmental delays, App. at 139-140, 141, (Hearing Transcript p. 61:25 – 62:3; 67:6-16), is contrary to the authoritative scientific literature addressing the magnitude of effect of EBLLs.

Dr. Robert Karp ("Dr. Karp"), a pediatrician retained as an expert by the Lenos, confirmed that his opinions were entirely reliant on Dr. Isquith's:

> Q. Well, do you know what Matthew's performance on the testing is outside the range of what you'd expect at lead levels 17 micrograms per deciliter?
>
> A. That's for you and Dr. Isquith to discuss, that's not my expertise, that's not where I have a definite expert. I can't comment more than Dr. Isquith. I will stand by what Dr. Isquith said, I won't argue with him.

App. at 180, (Hearing Transcript p. 222:11-17). This testimony was consistent with Dr. Karp's report on Matthew, where he noted that he relied on the "full psychological evaluation" performed by Dr. Isquith to reach his conclusions regarding Matthew, *see* App.

at 285-286, and Dr. Karp's deposition, where he confirmed that Dr. Isquith's report on Matthew was an "important consideration" for his opinions in this case. App. at 302, (Deposition p. 38:13-18).

On October 4, 2017, the trial court denied Moscicki's motion to exclude the testimony of Dr. Isquith and Dr. Karp. *See* App. at 4-14. Although the court found that Dr. Isquith would be limited to testifying as to the IQ scores documented in his report, it otherwise found that Dr. Isquith and Dr. Karp's testimony was admissible. *See* App. at 11. The court also noted that "[t]he fact that Dr. Isquith may be attempting to establish a greater impact than has been traditionally documented in the literature does not render all of the well-accepted science underlying that conclusion unreliable." App. at 13. Moscicki moved for the court to reconsider the October 4, 2017 Order, but the court denied her motion for reconsideration on January 12, 2018. *See* App. at 15-16. The court did grant, however, a motion for interlocutory appeal, asking whether:

> in a toxic tort case the dose-response relationship for the toxin at issue as recognized in the scientific literature is an inherent or implicit and necessary component of the methodology that an expert witness must consider and/or include in his or her opinion as a condition or prerequisite for admissibility at trial under RSA 516:29-a and if not considered or included must the expert's testimony be excluded where the expert's opinion is otherwise based on reliable data and methodology.

SUMMARY OF THE ARGUMENT

The Court should answer the trial court's question on appeal in the affirmative, and reverse the trial court's decision permitting the Lenos' experts to offer their opinions to the jury, as the experts' opinions ignore the large, consistent, and well-accepted body of scientific literature regarding the effect of low EBLLs. That literature indicates that Matthew's EBLLs of 17 μg/dl could have a small effect on his development, but not the magnitude of effect the Lenos' experts claim. Dr. Isquith has previously reported that the authoritative studies addressing the effect of EBLLs on development "consistently point to an average loss of one to three points on IQ tests for each 10 micrograms per deciliter of blood lead level elevated." Fidelity to the authoritative studies would allow Dr. Isquith to opine that Matthew's EBLLs could have caused a 2 to 6 point drop in his full scale IQ and had similar effect on other areas of function. Dr. Isquith went well beyond what the studies show, opining that Matthew's EBLLs were a "substantial contributing factor" to his global developmental delays and suggesting that the harm caused (including a loss of approximately 60 IQ points or four standard deviations below average) was the result of Matthew's EBLLs.

Dr. Isquith's opinion contradicts not only his prior interpretation of the studies regarding the effect of low EBLLs on development, but also the large body of authoritative scientific studies concerning the dose-response relationship between lead and developmental deficits. The studies and applications of the studies of dose-response relationship is the necessary consideration in any toxic tort case, the absence of which has universally lead to exclusion of the expert witness. Courts considering the issue have unequivocally concluded that to ignore the basic principle of dose response in opining on the effect of a toxin is the hallmark of an unreliable methodology. In allowing Dr. Isquith and Dr. Karp to offer opinions that ignore dose response, the trial court committed an unsustainable abuse of discretion. Science simply does not change to fit the facts of a particular matter, and neither Dr. Isquith nor Dr. Karp can be allowed to offer opinions that are inconsistent with science simply because it is beneficial to the party who retained them.

Invoking the "magical language" that Matthew's EBLLs were a "substantial contributing factor" to his global developmental delays does not transform Dr. Isquith's and Dr. Karp's opinions into reliable science. Dr. Isquith admits that he does not know what Matthew's full scale IQ would have been had he not experienced EBLLs or what effect Matthew's EBLLs had on his full scale IQ. He further admits that he is opining on an effect "far beyond" what the studies would predict. These admissions confirm that Dr. Isquith has no basis for calling Matthew's EBLLs a "substantial contributing factor" to his global developmental delays as Dr. Isquith cannot explain how substantial they were or how much they contributed to those delays.

N.H. Rev. Stat. Ann. § 516:29-a requires that a trial court scrutinize an expert's methodology and the data upon which he relies to ensure that his opinions are based on a reliable methodology. Dr. Isquith's opinions are not. By ignoring, or more accurately, contradicting, the relevant scientific authority, the dose-response relationship, and his prior conclusion regarding the effect of EBLLs on development, Dr. Isquith has not engaged in a reliable methodology, even if parts of his opinion are based upon reliable data that could lead be used as part of a reliable methodology. Contradicting or ignoring the basic building block of toxic torts is not science, and this Court should not allow Dr. Isquith or Dr. Karp to confuse a jury with testimony based on nothing more than their *ipse dixit*.

ARGUMENT

I. An Expert Must Consider And Apply, And May Not Contradict, The Large Body Of Scientific Literature Regarding The Critical Role Of Dose Response As It Pertains To A Specific Toxin For The Expert's Opinion To Be The Product Of A Reliable Methodology In A Toxic Tort Matter.

The short answer to the trial court's question on interlocutory appeal is "yes," the dose-response relationship is a necessary component that the expert must consider, and the failure to do so requires exclusion of the expert's opinion even if the opinion also is based on reliable data. The failure to consider and apply the authoritative literature on the dose-response relationship between the toxin and alleged harm, contradicting that authority, renders an expert's methodology unreliable. *See* David Eaton, *Scientific Judgment and Toxic Torts - A Primer in Toxicology for Judges and Lawyers*, 12 J.L. & Pol'y 1, 11 (2003). An expert who disregards the large, consistent body of well-regarded, peer-reviewed, scientific literature on the dose-response relationship must not be allowed to testify, as the opinion does not meet the rigors of admissibility of N.H. Rev. Stat. Ann. § 516:29-a and relevant case law. *See Baker v. Chevron USA, Inc.*, 680 F. Supp. 2d 865, 887 (S.D. Ohio 2010) (excluding an expert's testimony because none of the studies he relied on supported "an opinion that benzene can cause the illnesses from which Plaintiffs suffer at the extremely low doses or exposures experienced in this case").

The "hallmark of the science of toxic torts" is the dose-response relationship. *McClain v. Metabolife Int'l, Inc.*, 401 F.3d 1233, 1240 (11th Cir. 2005). "[T]he use of dose-response evidence as a 'primary' means of establishing causation generally requires a scientifically reliable showing of a correlation between dosage and disease… ." *In re Abilify (Aripiprazole) Prods. Liab. Litig.,* 299 F. Supp. 3d 1291, 1330 (N.D. Fla. 2018). "The reliability of an expert's methodology is suspect if she avoids or neglects the dose-response relationship." *Benkwith v. Matrixx Initiatives, Inc.*, 467 F. Supp. 2d 1316, 1328 (M.D. Ala. 2006). Indeed, "[d]ose is critical to any evaluation of toxicity of a drug." *In re Accutane Prods. Liab.*, 511 F. Supp. 2d 1288, 1293 (M.D. Fla. 2007). "In toxic tort cases, '[s]cientific knowledge of the harmful level of exposure to a chemical plus knowledge that

plaintiff was exposed to such quantities are minimal facts necessary to sustain the plaintiff's burden... .'" *McClain*, 401 F.3d at 1241 (quoting *Allen v. Pennsylvania Eng'g Corp.*, 102 F.3d 194, 199 (5th Cir. 1996));[1] *see also Macy v. Whirlpool Corp.*, 613 F. App'x 340, 343-44 (5th Cir. 2015) (expert who opined that low level exposure to carbon monoxide can cause serious neurological damage properly excluded where the studies relied upon concerned much higher levels of carbon monoxide exposure over a greater period of time than the plaintiffs' exposure); *Williams v. Mosaic Fertilizer, LLC,* 889 F.3d 1239, 1246 (11th Cir. 2018) ("When analyzing an expert's methodology in toxic tort cases, the court should pay careful attention to the expert's testimony about the dose-response relationship..." as "dose response is the hallmark of basic toxicology." (internal quotation omitted)); *Sherwin-Williams Co. v. Gaines ex rel Pollard*, 75 So. 3d 41, 45-46 (Miss. 2011) (concluding that expert testimony regarding the harmful effect of lead on child should have been excluded and noting that "[a] dose-response ratio is critical to determining the causal connection between a poison and an injury").

In *Scientific Judgment and Toxic Torts - A Primer in Toxicology for Judges and Lawyers*, an article published by the Federal Judicial Center specifically to help judges "deal with *Daubert* issues in toxic tort cases," *McClain*, 401 F.3d at 1242, Dr. David Eaton, a leading toxicologist, explained that "[d]ose is the single most important factor to consider in evaluating whether an alleged exposure caused a specific adverse effect." David Eaton, *Scientific Judgment and Toxic Torts - A Primer in Toxicology for Judges and Lawyers*, 12 J.L. & Pol'y 1, 11 (2003). He also noted that "for most types of dose-response relationships following chronic (repeated) exposure, thresholds exist, such that there is some dose below

[1] Stated another way, in a toxic tort case, a plaintiff must prove "general causation" and "specific causation." *Dunn v. Sandoz Pharms. Corp.*, 275 F. Supp. 2d 672, 676 (M.D.N.C. 2003) (citing Reference Manual on Scientific Evidence 444 (2d ed. 2000)). General causation "'is established by demonstrating... that exposure to a substance can cause a particular disease.'" *Doe v. Ortho-Clinical Diagnostics, Inc.*, 440 F. Supp. 2d 465, 471 (M.D.N.C. 2006) (quoting *Dunn*, 275 F. Supp. 2d at 676). "Specific, 'or individual causation, however[,] is established by demonstrating that a given exposure is the cause' of a particular individual's disease." *Id.*

which even repeated, long-term exposure would not cause an effect in any individual." *Id.* at 16.

A. New Hampshire Law Requires A Trial Court To Exclude An Expert's Opinion That Is The Product Of An Unreliable Methodology.

The trial court, when analyzing the reliability of expert testimony in a particular case, is required to utilize the *Daubert* framework. *Baxter v. Temple*, 157 N.H. 280, 284 (2008); *Baker Valley Lumber v. Ingersoll-Rand*, 148 N.H. 609, 614 (2002). The New Hampshire legislature codified the *Daubert* standard in N.H. Rev. Stat. Ann. § 516:29-a, which provides that "[a] witness shall not be allowed to offer expert testimony unless the court finds:

> (a) Such testimony is based upon **sufficient facts or data**;
> (b) Such testimony is the product of **reliable principles and methods**; and
> (c) The witness has **applied the principles and methods reliably** to the facts of the case."

N.H. Rev. Stat. Ann. § 516:29-a (emphasis added). When "evaluating the basis for proffered expert testimony, the court shall consider, if appropriate to the circumstances, whether the expert's opinions were supported by theories or techniques that:

> (1) Have been or can be tested;
> (2) Have been subjected to peer review and publication;
> (3) Have a known or potential rate of error; and
> (4) Are generally accepted in the appropriate scientific literature."

Id. "In making its findings, the court may consider other factors specific to the proffered testimony." *Id.* Thus, this Court is not limited in its search for a reliable methodology.

This Court has noted that the *Daubert* inquiry focuses on the principles and methodology used by the expert, rather than the conclusions the principles and methodology generate. *See State of New Hampshire v. Dahood*, 148 N.H. 723, 728 (2002) (quoting *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 594-95 (1993)). Although the *Daubert* standard does not require that scientific knowledge be infallible to be admissible, it does require that the information be supported by appropriate validation – *i.e.*, good grounds, based on what is known. *Daubert*, 509 U.S. at 590; *Dahood*, 148 N.H. at 728.

Therefore, at a minimum, knowledge and application of the scientific literature of the dose-response relationship of a toxin is a necessary consideration in any methodology evaluating a specific toxin and its potential effect. *See In re Denture Cream Prods. Liab. Litig.*, 795 F. Supp. 2d 1345, 1352-53 (S.D. Fla. 2011) (precluding a plaintiff's experts from testifying when "there is no dose-response evidence which Plaintiffs' experts may use to reliably infer what type of exposure level to Fixodent is necessary to induce a negative copper balance, to cause a copper deficiency, or to cause a myelopathy"). To conclude otherwise, especially where there exists a substantial, consistent body of well-accepted, peer-reviewed scientific literature on the dose-response relationship between low EBLLs and their effects, would allow experts to depart from the necessary "good grounds" that must support an expert's opinion. *See Daubert*, 509 U.S. at 590.

The trial court's inquiry must also include a determination that "the expert has applied the principles and methods reliably to the facts of the case." *Gray v. Commonwealth Land Title Ins. Co.*, 162 N.H. 71, 77 (2011) (citing N.H. Rev. Stat. Ann. § 516:29-a). Disregarding the substantial body of literature on dose response necessarily fails this requirement. *See Norris v. Baxter Healthcare Corp.*, 397 F.3d 878, 884 (10th Cir. 2005) (affirming the district court's ruling that two experts' "opinions were not reliably grounded in the knowledge and experience of their discipline" where the "experts completely ignored or discounted without explanation the many epidemiological studies which found no medically reliable link between silicone breast implants and systemic disease"). A methodology that ignores or contradicts a vast body of scientific literature on dose response cannot be applying the methods and principles in a reliable way to the facts of the case. *See id.* at 886 ("Plaintiff and her experts have to base their positions on reliable studies and methodology. In failing to properly address the previous and contrary views, Plaintiff's experts made their opinions and testimony unreliable as to the issue of general causation."); *see also In re Bextra and Celebrex Marketing Sales Practices and Prod. Liab. Litig.*, 524 F. Supp. 2d 1166, 1175-76 (N.D. Cal. 2007) (explaining that an expert opinion that ignores or rejects the great weight of scientific evidence contradicting the conclusion does not reflect scientific knowledge nor is it derived from the scientific method); *Rimbert*

v. Eli Lilly and Co., 2009 WL 2208570, at *14 (D.N.M July 21, 2009) (noting that ignoring completely the contradictory evidence contained in scientific studies renders an expert's method unreliable and requires the exclusion of the expert); *In re Rezulin Prods. Liab. Litig.*, 369 F. Supp. 2d 398, 424-25 (S.D.N.Y. 2005) (concluding that an expert who does not consider contradictory studies has not engaged in the degree of intellectual rigor that that should characterize the practice of an expert in the relevant field).

Reviewing the basis of an expert's opinion in light of these factors ensures that proposed expert testimony imparts scientific knowledge rather than educated guesswork. *See Alvarado v. Festival Fun Parks, LLC*, 2012 WL 10067424, at *2 (N.H. Super. Ct. Apr. 26, 2012). This is especially important where the expert has previously embraced that very same body of literature in support of prior opinions. *See Magdaleno v. Burlington N.R.R.*, 5 F. Supp. 2d 899, 904 (D. Colo. 1998). Inconsistency in reliance upon well-respected, peer-reviewed scientific studies is the "red flag" of an unreliable methodology. *See id.* ("In sum, [the expert's] methodology is not consistent with the methodologies described by the authors and experts whom [the expert] identifies as key authorities in his field.").

Dr. Isquith's reported conclusion that Matthew's limitations were caused by his EBLLs is contradicted by Dr. Isquith's own conclusions in earlier cases. During his deposition, Dr. Isquith admitted that he had previously written that studies regarding the effect of EBLLs on IQ "consistently point to an average loss of one to three points on IQ tests for each 10 micrograms per deciliter of blood lead level elevated -- blood lead level elevated." App. at 105, (Deposition p. 72:20 – 73:9); *see* App. at 122; *see also, e.g.*, *Truck Ins. Exch. v. MagneTek, Inc.*, 360 F.3d 1206, 1213 (10th Cir. 2004) ("The district court noted that [the expert's] opinion did not meet the standards . . . [the expert] himself professed he adhered to.").

As *Daubert* itself insists, the witness's testimony must constitute "scientific knowledge" under Rule 702, which means that it "must be derived by the scientific method." 509 U.S. at 590. To be "scientific," the testimony must have the requisite "grounding in the methods and procedures of science." *Id.* As a result, "each step in the scientific analysis" underlying the expert's conclusions must have good grounds

supporting it and "*any* step that renders the analysis unreliable under the *Daubert factors renders the expert testimony inadmissible*." *McClain*, 401 F.3d at 1245 (emphasis in original, quotations omitted). The Lenos' experts' decision to ignore or disregard the many decades of studies on the dose-response relationship required the trial court to exclude their opinions, and its failure to do so must be reversed.

"In toxic tort cases, '[s]cientific knowledge of the harmful level of exposure to a chemical plus knowledge that plaintiff was exposed to such quantities are minimal facts necessary to sustain the plaintiff's burden... .'" *McClain*, 401 F.3d at 1241 (quoting *Allen v. Pennsylvania Eng'g Corp.*, 102 F.3d 194, 199 (5th Cir. 1996)). The Lenos' experts have ignored (1) the dose-response relationship and (2) the scientific literature regarding the effects of low EBLLs to conclude that Matthew's global limitations are related to his EBLLs of 17 µg/dl. Dr. Isquith's conclusions in his report and at deposition illuminate the unreliability of his methodology:

- Given the full scale IQ scores of Matthew's parents and siblings, had Matthew not experienced EBLLs, Dr. Isquith would expect his full scale IQ score to be within the average range. *See* App. at 111, (Deposition p. 94:17 – 95:3).

- The average range for purposes of IQ tests is between 90 and 109. *See* App. at 67, 79-80.

- Matthew achieved a full scale IQ score of 40 on the only IQ test on which his performance was able to generate a full scale IQ score. *See* App. at 107-108, (Deposition p. 81:9 – 82:1).

- Matthew's score of 40 was sixty points, or four standard deviations, below an average score of 100. *See* App. at 108, (Deposition p. 82:5-7).

- All of Matthew's other tests were at or around the first percentile consistent with his measured IQ; Matthew demonstrated global deficits. *See* App. at 85-86.

- Matthew experienced EBLLs of 17 µg/dl. *See* App. at 77.

- Dr. Isquith did not know what Matthew's full scale IQ score would have been had he not experienced EBLLs. *See* App. at 108, (Deposition p. 85:1-4).

- The studies regarding the effect of EBLLs on IQ support that Matthew's EBLLs could have caused a 2 to 6 point decrement in his full scale IQ score, and similar small losses in other areas of function. *See* App. at 105, (Deposition p. 72:18 – 73:9).

- Dr. Isquith was not aware of any scientific authority supporting that Matthew's EBLLs could have caused the harm he measured, including a full scale IQ decrement of four standard deviations. *See* App. at 108, (Deposition p. 82:8-11).

- Matthew's overall performance was well below what you would predict based on the epidemiologic studies on the adverse consequences of EBLLs. *See* App. at 111, (Deposition p. 94:17 – 95:8).

Based on the above, the trial court was required to exclude the testimony as the product of an unreliable methodology. There were simply not sufficient facts or data supporting the conclusion that EBLLs of 17 μg/dl can have the magnitude of effect that the Lenos' experts claim. Ignoring the large body of unrefuted literature on the small effect of low EBLLs violated the requirement that an expert's opinion be based on reliable principles or methods, as no qualified scientist would ignore the basic principles of dose response in opining on the effect of a toxin. *See McClain*, 401 F.3d at 1240. Further, as Dr. Isquith had previously relied upon that same body of literature in the context of a legal matter, the trial court should have recognized that the principles and methods he employed in this case were not being applied reliably. *See Truck Ins. Exch.*, 360 F.3d at 1213.

Analyzing the reliability of purported expert methodology is a critical role of the court, and one that the court cannot simply defer to the power of a jury. *See State v. Cressey*, 137 N.H. 402, 405 (1993) ("The reliability of evidence is of a special concern when offered through expert testimony because such testimony involves the potential risks that a jury may disproportionately defer to the statements of an expert if the subject area is beyond the common knowledge of the average person, and that a jury may attach extra importance to an expert's opinion simply because it is given with the air of authority that commonly accompanies an expert's testimony."). Nor is it sufficient to suggest that the shortcomings of the expert's analysis can be addressed by cross-examination. *Id.* Where the methodology is flawed, the only proper remedy is exclusion. *See In re Gina D.*, 138

N.H. 697, 703 (1994). This special concern is magnified in this case, as the Lenos' experts maintain that a child has been substantially impaired due to EBLLs that are unknown to cause that magnitude of loss. Although EBLLs are associated with impairment of brain function, there is nothing in the scientific studies suggesting the magnitude of harm claimed in this matter. The potential risk of jurors improperly attaching extra importance to an unreliable expert opinion is particularly great in this matter because of the jurors' natural empathy for a child with global developmental delays.

B. The Trial Court Erred By Allowing The Lenos' Experts To Offer Opinions That Ignore The Dose-Response Relationship And Contradict The Large Body Of Well-Respected Literature On The Effect Of EBLLs On Development.

The trial court's statement that "[t]he fact that Dr. Isquith may be attempting to establish a greater impact than has been traditionally documented in the literature..." is no small understatement. App. at 13. There is simply no authority to suggest that EBLLs of 17 μg/dl could possibly cause anything close to a loss in IQ at least four standard deviations below the mean. *See* App. at 108, (Deposition p. 82:8-11). The Lenos will cite none, as there is none.

The litany of studies on low EBLLs dates back at least to the first two meta-analyses reported in 1994. Dr. Joel Schwartz concluded that "[a]n increase in blood lead from 10 to 20 [μg/dl] was associated with a decrease of 2.6 IQ points."[2] App. at 326. Schwartz reached this conclusion after conducting "a meta-analysis of the studies examining the relationship [between blood lead and children's IQ] in school age children." App. at 326. Dr. Isquith and Dr. Karp agreed that the Schwartz Study was authoritative on the effect of EBLLs on IQ. *See* App. at 103, (Deposition p. 64:3 – 65:2); App. at 301, (Deposition p. 34:10 – 35:5).

[2] Although some of the authorities cited herein were not admitted as exhibits during the *Daubert* Hearing, the Court may still consider them to understand fully the science at issue in this case. *See Baxter v. Temple*, 157 N.H. 280, 286, n.1 (2008).

In another seminal study, Dr. Stuart Pocock's 1994 study designed "[t]o quantify the magnitude of the relation between full scale IQ in children aged 5 or more and their body burden of lead," he reached a similar conclusion, determining that "a typical doubling of body lead burden (from 10 to 20 [μg/dl]…) blood lead or from 5 to 10 [μg/dl] tooth lead… is associated with a mean deficit in full scale IQ of around 1-2 IQ points." App. at 340. Pocock conducted "[a] systematic review of 26 epidemiological studies since 1979: prospective studies of birth cohorts, cross sectional studies of blood lead, and cross sectional studies of tooth lead." App. at 340. He ultimately concluded that "[w]hile low level lead exposure may cause a small IQ deficit, other explanations need considering… ." App. at 340. Dr. Isquith and Dr. Karp acknowledged that the Pocock Study was authoritative during their depositions. *See* App. at 103-104, (Deposition p. 65:7 – 66:8); App. at 301, (Deposition p. 33:11 – 34:9).

In a 2003 study, Dr. M. Douglas Ris and his colleagues similarly explained that "an increase in exposure from 10-20 μg/dL would entail a 2-3 point loss in IQ." App. at 358. Ris also noted that "[t]his has been deemed insignificant by some and unworthy of all of the attention that lead effects continue to attract, scientifically and in terms of public policy." App. at 358. Dr. Isquith agreed with the conclusions of the Ris Study. App. at 105, (Deposition p. 70:6 – 71:12).

In 2003, Dr. Richard Canfield and his colleagues, focusing on EBLLs below 10 μg/dl, and found that "each increase of 10 [μg/dl] in the lifetime average blood lead concentration was associated with a 4.6-point decrease in IQ… ." App. at 367. To reach this conclusion, however, the authors "measured blood lead concentrations in 172 children at 6, 12, 18, 24, 36, 48, and 60 months of age and administered the Stanford-Binet Intelligence Scale at the ages of 3 and 5 years." App. at 367. Thus, the Canfield Study looked at a five-year exposure – a duration well beyond Matthew's period of EBLLs. Dr. Isquith acknowledged that he was familiar with this study and its findings. *See* App. at 104, (Deposition p. 66:12 – 67:21).

In 2004, Dr. Bruce Lanphear and his colleagues examined "the association of intelligence test scores and blood level concentration." App. at 377. Lanphear and his

colleagues analyzed "data collected from 1,333 children who participated in seven international population-based longitudinal cohort studies, followed from birth or infancy until 5-10 years of age." App. at 377. Their analysis revealed "a 6.9 IQ point decrement… associated with an increase in concurrent blood lead levels from 2.4 to 30 [μg/dl]." App. at 377. The study also reported that the estimated point decrements associated with an increase in blood lead from 2.4 to 10 μg/dl was 3.9 IQ points, from 10 to 20 μg/dl was 1.9 IQ points, and from 20 to 30 μg/dl was 1.1 IQ points. App. at 377. Dr. Isquith testified that he agreed with the conclusions of the Lanphear Study. *See* App. at 104, (Deposition p. 68:4 – 70:5). Dr. Karp cited the Lanphear Study as authoritative in his report. *See* App. at 280.

Other authorities also establish that EBLLs of 17 μg/dl do not have the magnitude of effect that would cause a child otherwise expected to perform in the average range to fall to the first percentile. The World Health Organization summarized the current scientific consensus regarding the effect of EBLLs on IQ by explaining that "it is estimated that about a quarter to a half of an IQ point is lost for each 1 μg/dl increase in the blood lead level during the preschool years for children who have blood lead levels in the range of 10-20 μg/dl." App. at 408. Using this ratio, Matthew's EBLLs of 17 μg/dl would have resulted in an IQ loss of between 4.25 and 8.5 points, approximately one-third to one-half of a standard deviation. *See* App. at 408.

In a 1993 book edited by Dr. Karp to which he also contributed chapters, Dr. Karp stated that "low lead exposure with a serum lead between 25 and 40 [μg/dl] is associated with a 5-point drop in the mean IQ." App. at 414. Dr. Isquith has also authored forensic reports, specifically stating that EBLLs in the range experienced by Matthew have a very small magnitude of effect. *See* App. at 122. No explanation was ever offered by the Lenos as to why Dr. Isquith departed from that position in this matter.

In addition to studying the effect of low EBLLs on IQ, scientists have also studied how EBLLs affect other behavior. In a 2010 article, Dr. David K. Marcus and his colleagues concluded that "the relation between lead exposure and conduct problems was strikingly similar in magnitude to the relation between lead exposure and decreased IQ."

App. at 422. Marcus reached this conclusion after conducting a meta-analysis examining "the association between conduct problems and lead exposures." App. at 422. His meta-analysis included "[n]ineteen studies on 8,561 children and adolescents." App. at 422. During his deposition, Dr. Isquith acknowledged the conclusion of the Marcus Study and testified that he would be surprised if any literature suggested a dramatically higher magnitude of effect than what Marcus found. *See* App. at 106, (Deposition p. 75:3 – 76:7).

Most recently, a longitudinal study of the Port Pirie cohort found that "the associations between early childhood lead exposure and subsequent development outcomes may persist. *However, as the magnitude of these effects was small*, they are not discernible at the individual level, posing a more of a population health concern." App. at 430 (emphasis added).

Ignoring the overwhelming scientific authority that low EBLLs do not cause severe disabilities, Dr. Isquith noted that "Matthew's elevated blood lead levels are the most prominent risk factor" for his global impairments. App. at 86. He also admitted, consistent with the literature regarding intellectual and developmental disability, that there are many unknown causes of developmental impairments. *See* App. at 103 (Deposition p. 63:4-9); App. at 111 (Deposition p. 95:23 – 96:3). Dr. Isquith could not state what percentage of developmental impairments were the result of unknown causes, however, or if the percentage of unknown causes exceeded the percentage of known causes. *See* App. at 103 (Deposition p. 63:10-17). Dr. Isquith was willing to claim that "[i]t is more likely than not that [Matthew's] lead exposure is a substantial contributing factor to Matthew's deficits" because "[l]ow level lead exposure such as Matthew's is associated with loss of intellectual function and increased risk of other developmental deficits affecting attention, self-regulation, visuospatial function and other domains." App. at 86. Yet when asked how he excluded unknown risk factors as being the cause of Matthew's impairments, Dr. Isquith evaded the question, explaining that he "would leave that to his physician." *See* App. at 111 (Deposition p. 96:4-5). Dr. Karp avoided the question of what risk factors apart from EBLLs adversely affected Matthew, suggesting that it was Moscicki's obligation to determine that. *See* App. at 183, (Hearing Transcript p. 236:24 – 237:17). Dr. Karp offered

an unsupported opinion concerning causation without inquiry into other known and unknown causes. He disregarded the authoritative scientific literature on this issue. Nor did he bring to the attention of the trial court any literature supporting his proposition that EBLLs of 17 µg/dl could cause a child predicted to perform within the average range on neuropsychological assessment to perform at or below the first percentile. In short, he expressed nothing other than a naked opinion, bereft of any scientific inquiry. An expert's opinion that is in reality an *ipse dixit* is insufficient to prevent exclusion. *See Smith v. Jenkins*, 732 F.3d 51, 67 (1st Cir. 2013) (explaining that the *ipse dixit* of an expert "is not enough to bridge the gap" between his conclusion and the evidence); *Manpower, Inc. v. Ins. Co. of Penn.*, 732 F.3d 796, 806 (7th Cir. 2013) ("The critical inquiry is whether there is a connection between the data employed and the opinion offered; it is the opinion connected to existing data only by the *ipse dixit* of the expert, … that is properly excluded under Rule 702." (internal quotations omitted)).

Dr. Isquith admitted he could not estimate how much Matthew's EBLLs affected his IQ. App. at 108, (Deposition p. 85:12-16). He also did not know what Matthew's IQ would have been had he not experienced EBLLs. App. at 108, (Deposition p. 85:1-14). Dr. Isquith did admit, however, that he would be surprised if "any of the literature" suggested that Matthew's EBLLs could cause a drop of "two or three times the standard deviation on test scoring." App. at 106, (Deposition p. 76:4-7). Despite this admission, Dr. Isquith inconsistently claims that Matthew's low EBLLs have caused a drop of at least four standard deviations. *See* App. at 108, (Deposition p. 82:2-7).

Dr. Isquith also acknowledged that the difference in IQ between Matthew and his parents and siblings, who scored in the average range, "is a big drop and a much more substantial drop than the group studies would predict." App. at 111, (Deposition p. 94:17 – 95:8). This admission is telling, as Dr. Isquith is actually admitting that his opinion is not based on the scientific studies regarding the dose-response relationship between low EBLLs and its harmful effects, but is in fact contrary to those studies. Courts have recognized that pursuant to *Daubert* an opinion that contradicts known science is not the product of a reliable methodology. *See Norris*, 397 F.3d at 884-8; *Baker*, 680 F. Supp. 2d

at 887; *see also In re Bextra and Celebrex Marketing Sales Practices and Prod. Liab. Litig.*, 524 F. Supp. 2d at 1175-76; *Rimbert*, 2009 WL 2208570, at *14; *In re Rezulin Prods. Liab. Litig.*, 369 F. Supp. 2d at 424-25.

When asked to identify any scientific support for his conclusion that Matthew's limitations were caused by his EBLLs, Dr. Isquith was unable to do so:

> Q. And we know that his presentation is outside of anything that's ever been reported in the lead literature concerning the adverse effects of lead in this area, correct, the 19 micrograms -- 17 micrograms per deciliter?
>
> A. I don't know that but happy to take a look.
>
> Q. Have you seen anything published in the literature that suggests that an elevated lead level of that magnitude, that is 17 micrograms per deciliter as a peak over that period of time, can produce these severe deficits?
>
> A. It would be unusual.
>
> Q. That wasn't my question. Have you seen anything in the literature that would support that conclusion, that, in fact, suggests that? A case study?
>
> A. Not specifically, no.

App. at 111, (Deposition p. 96:6-22). This admission is fatal to Dr. Isquith's conclusion regarding Matthew because it reveals that it is unsupported by any scientific evidence. *See Nat'l Bank of Commerce v. Dow Chemical Co.*, 965 F. Supp. 1490, 1517 (E.D. Ark. 1996) (precluding experts from testifying because "the published scientific literature and test results simply do not support [the experts'] conclusion at this time."); *see also Summers v. Certainteed Corp.,* 886 A.2d 240, 244 (Pa. Super. 2005) ("Just because an expert makes a legal conclusion [regarding substantial contributing factor] does not mean a trial judge has to adopt it if it is not supported by the record and is devoid of common sense.").

Dr. Karp's conclusions that "the consequences of [Matthew's] lead poisoning are readily apparent" is similarly unsupported by a reliable methodology. App. at 286. Dr. Karp agreed that a "typical doubling of body lead burden (from 10 to 20 micrograms per deciliter) blood lead or from five to ten micrograms tooth lead is associated with a mean deficit in full scale IQ of around one to two IQ points." App. at 301, (Deposition p. 33:24 – 34:9); *see* App. at 340. He also had no dispute with the Schwartz Study, which concluded "[a]n increase in blood lead from 10 to 20 micrograms per deciliter was associated with a decrease of 2.6 IQ points in the meta-analysis," App. at 301, (Deposition p. 34:23 – 35:5), or the Lanphear Study, which he cited in his report, *see* App. at 280, which "found a total of a 6.9 IQ point decrement on blood lead levels running from 2.4 to 30 micrograms per deciliter." App. at 306, (Deposition p. 54:8-15). Nevertheless, Dr. Karp claimed that Matthew's "readily apparent" deficits were a result of his EBLLs, which ranged "from a high of 17 μg/dl at 24 months of age dropping to below 10 μg/dl by 32 months." App. at 85; *see* App. at 286. Dr. Karp could not identify any scientific test or study supporting this position or supporting that Matthew's EBLLs could cause a 60-point drop in IQ. *See* App. at 307, (Deposition p. 57:20 – 58:4). In fact, Dr. Karp could not identify any authority to support his contention that Matthew's "readily apparent" issues are connected to his EBLLs. *See* App. at 307 (Deposition p. 57:20 – 58:17). Just as it was for Dr. Isquith, this failure is fatal to Dr. Karp's proposed testimony.

The Lenos claim that Dr. Isquith's conclusion that "[i]t is more likely than not that [Matthew's] lead exposure is a substantial contributing factor to Matthew's deficits" because "[l]ow level lead exposure such as Matthew's is associated with loss of intellectual function and increased risk of other developmental deficits affecting attention, self-regulation, visuospatial function and other domains" is alone sufficient to support admissibility. *See* App. at 86. Merely invoking "magical language" however has never been sufficient to sustain admissibility. When asked to support this conclusion during his deposition, Dr. Isquith could not identify any authority supporting his claim that Matthew's severe developmental and intellectual disabilities could be caused by his low EBLLs. App. at 108, (Deposition p. 82:8-20). Thus, it is abundantly clear that his opinion is no more

than an *ipse dixit,* contradicted by the literature on the dose-response relationship as it pertains low EBLLs and outcome. Opinions that are no more than an unsupported *ipse dixit* do not meet the requirements of *Daubert. See General Electric Co. v. Joiner*, 522 U.S. 136, 146 (1997) ("[N]othing 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."). Consequently, the trial court erred in not excluding Dr. Isquith's opinion. *See Smith*, 732 F.3d at 67; *Manpower, Inc.*, 732 F.3d at 806.

In sharp contrast to the Lenos' experts, Moscicki's expert, Dr. Mandelbaum, highlighted in his report just how unsupported Dr. Isquith's original conclusion regarding Matthew was by explaining that:

> none of the medical literature on the effects of lead exposure supports the conclusion that that the level of Matthew's lead exposure accounts for his degree of disability. Despite the scientific advances in recent years, especially in genetics, the fact remains that the cause of developmental delay in children remains unknown in the majority of cases. Given that Matthew's twin sister had similar lead exposure with no evidence of sequelae, it is without question that lead exposure was not the cause, and there is a different explanation for Matthew's neurodevelopmental problems.

App. at 480. At the *Daubert* Hearing, Dr. Mandelbaum confirmed that a four standard deviation drop in full scale IQ "is unheard of in the lead literature for [Matthew's] kind of exposure." App. at 234, (Hearing Transcript p. 197:13-19). Dr. Robert McCaffrey ("Dr. McCaffrey") similarly explained that "there are no single case reports in the clinical literature to suggest that a history of an elevated blood lead level of 17.0 μg/dl would result in the degree of Matthew's Intellectual Disability." App. at 487.

C. Decisions From Other Jurisdictions Confirm That An Expert Opinion That Ignores The Dose-Response Relationship And Contradicts The Literature Regarding The Effect Of A Particular Toxin Is Not The Product Of A Reliable Methodology.

In *Sean R. v. BMW of North America, LLC*, the Court of Appeals of New York addressed a situation almost identical to the circumstances in this case. 26 N.Y.3d 801, 805-06 (2016). There, the plaintiff "was born with severe mental and physical disabilities, which he attributed to *in utero* exposure to unleaded gasoline vapor caused by a defective fuel hose in his mother's BMW." *Id.* at 805. To support his claim, the plaintiff offered two expert witnesses to testify that the unleaded gasoline vapor had caused the plaintiff's disabilities. *Id.* at 805-06. These experts "concluded that plaintiff was exposed to a sufficient amount of gasoline vapor to have caused his injuries based on the reports by plaintiff's mother and grandmother that the smell of gasoline occasionally caused them nausea, dizziness, headaches and throat irritation." *Id.* at 809. The trial court, however, found that the experts had "not identified any text, scholarly article or scientific study… that approves of or applies this type of methodology, let alone a 'consensus' as to its reliability." *Id.* Therefore, the trial court precluded the experts from testifying at trial regarding causation. *Id.* The Court of Appeals upheld the trial court's decision, explaining that the experts had failed to identify any authority supporting that their methodology generated reliable scientific results. *Id.* at 810. The Court also emphasized that "we have not dispensed with the requirement that a causation expert in a toxic tort case show, through generally accepted methodologies, that a plaintiff was exposed to a sufficient amount of a toxin to have caused his injuries." *Id.* at 812.

Numerous other courts have excluded similarly unsupported causation opinions in toxic tort cases. *See, e.g.*, *Milward v. Rust-Oleum Corp.*, 820 F.3d 469, 475 (1st Cir. 2016) (precluding an expert from testifying that the plaintiff's development of acute promyelocytic leukemia was caused by exposure to benzene because the expert had failed to explain why she did not address studies that contradicted her position, making "it impossible for the district court to ensure that her opinion was actually based on scientifically reliable evidence"); *Pritchard v. Dow Agro Sciences*, 430 F. App'x 102, 104

(3d Cir. 2011) (excluding an expert's testimony because he had "cited only one specific study in support of his general conclusion that Dursban causes cancer—and in fact, he relied not on the study itself but on his own reinterpretation of the study's findings using a lower confidence interval"); *In re Denture Cream Prods. Liab. Litig.*, 795 F. Supp. 2d at 1352-53 (precluding a plaintiff's experts from testifying when "there is no dose-response evidence which Plaintiffs' experts may use to reliably infer what type of exposure level to Fixodent is necessary to induce a negative copper balance, to cause a copper deficiency, or to cause a myelopathy"); *Baker*, 680 F. Supp. at 887 (excluding an expert's testimony because none of the studies he relied on supported "an opinion that benzene can cause the illnesses from which Plaintiffs suffer at the extremely low doses or exposures experienced in this case"); *Guinn v. AstraZeneca Pharmaceuticals LP*, 598 F. Supp. 2d 1239, 1243 (M.D. Fla. 2009) (excluding an expert who "was unable to articulate any scientific methodology for assessing whether, and to what extent, Seroquel contributed to Guinn's weight gain and diabetes, ultimately forcing her to draw an entirely speculative conclusion about Seroquel's role in Guinn's disease"); *In re Rezulin Prods. Liab. Litig.*, 369 F. Supp. 2d at 437 (explaining that "the plaintiffs have not established the reliability of the silent injury theory. The theory never has been tested or peer-reviewed, has not been published except by Dr. Smith after the commencement of this litigation and only then in speculative terms and suspicious circumstances, and has no acceptance outside this litigation. The plaintiffs' experts have ignored information that appears to call crucial aspects of their theory into question. The theory rests on a series of empirically unbridgeable analytical gaps. Most importantly, the experts have not established a sound basis for concluding that Rezulin-induced apoptosis can occur at clinically significant levels and remain silent.").

Recently, the United States District Court for the District of South Carolina issued two decisions addressing causation opinions regarding the drug Lipitor (collectively, the "Lipitor Decisions"). *See In re: Lipitor (Atorvastatin Calcium) Marketing, Sales Practices and Prods. Liab. Litig.*, 2016 WL 1251828, at *5 (D.S.C. Mar. 30, 2016) ("*Lipitor I*"); *In re Lipitor (Atorvastatin Calcium) Marketing, Sales Practices and Prods. Liab. Litig.*, 2015 WL 6941132, at *6 (D.S.C. Oct. 22, 2015) ("*Lipitor II*"). There, the evidence showed that

Lipitor was "prescribed in four different doses: 10 mg, 20 mg, 40 mg, and 80 mg." *Lipitor I*, at *3. Although literature supported that Lipitor could cause Type 2 diabetes when prescribed at 80 mg, *see id.* at *8, no authority supported that Lipitor could cause Type 2 diabetes when prescribed at lower doses. *See id.* at *9, *11. Applying the *Daubert* factors, the Court excluded any testimony that Lipitor could cause Type 2 diabetes when prescribed at doses below 80 mg as that "opinion is not based on sufficient facts and data." *Id.* at *11.

Dr. Isquith and Dr. Karp have reached a similarly unsupported conclusion: that Matthew's EBLLs of 17 µg/ml caused a sixty-point drop[3] in his IQ and other severe neuropsychological impairments. *See* App. at 75-86. No scientific authority supports this conclusion, and Dr. Isquith has admitted that he cannot identify any study, article, or literature concluding that low EBLLs could cause Matthew's global developmental delays. *See Lipitor II*, at *3 (excluding plaintiff's experts as they "are apparently willing to speculate that studies at high doses apply to all doses or simply fail to consider dosage at all"). In fact, Dr. Isquith acknowledged that the severity of Matthew's deficits was far more extreme than what the authoritative scientific literature regarding the effect of EBLLs supported. *See* App. at 108, (Deposition p. 82:8-11); *see also Bourne ex rel. Bourne v. E.I. Dupont de Nemours and Co., Inc.*, 189 F. Supp. 2d 482, 499-501 (S.D. W.Va. 2002) (excluding experts' opinions where the experts did not employ a reliable methodology, failed to take into account "pertinent published studies," and contradicted studies upon which they purported to rely), *aff'd*, 85 F. App'x 964, 967 (4th Cir. 2004); *In re Ingram Barge Co.*, 187 F.R.D. 262, 266 (M.D. La. 1999) (precluding an expert from testifying where the party who retained the expert had "not shown that there is any support in the medical or scientific literature for [the expert's] opinion that all of the [claimants] alleging exposure have an increased risk of developing cancer").

[3] During his deposition, Dr. Isquith admitted that one would assume that Matthew would have scored in the average range, between 90 and 109, on an IQ test. *See* App. at 111, (Deposition p. 94:17 – 95:3); *see also* App. at 67, 79-80. The midpoint, 100, is 60 points higher than Matthew's reported IQ.

CONCLUSION

For the foregoing reasons, this Court should answer the trial court's question in the affirmative and reverse the October 4, 2017 Order, holding that "the dose-response relationship for the toxin at issue as recognized in the scientific literature is an inherent or implicit and necessary component of the methodology that the expert must consider and/or include in his or her opinion as a prerequisite for admissibility at trial under RSA 516:29-a …[even if] the expert's opinion is otherwise based on reliable data and methodology." Any contrary holding would undermine the requirement that the opinion be based on sufficient fact or data, the product of reliable principles and methods, and the application of those principles and methods was reliably performed.

CERTIFICATION REGARDING THE DECISION BEING APPEALED

The trial court's October 4, 2017 Order and January 12, 2018 Order on Plaintiff's Motions to Reconsider and Clarify are in writing and are appended to this brief.

Respectfully submitted,

SANDRA MOSCICKI,

By Her Attorneys,

PRIMMER PIPER EGGLESTON
& CRAMER PC,

Date: May 2, 2019

By: /s/ Gary M. Burt

Gary M. Burt (N.H. Bar No. 5510)
Brendan D. O'Brien (N.H. Bar No. 267995)
900 Elm Street, 19th Floor
P.O. Box 3600
Manchester, NH 03105-3600
(603) 626-3300
gburt@primmer.com
bobrien@primmer.com

STATEMENT WITH RESPECT TO ORAL ARGUMENT

Sandra Moscicki respectfully requests 15 minutes to present oral argument. Gary M. Burt will represent Sandra Moscicki at oral argument.

Date: May 2, 2019 /s/ Gary M. Burt
Gary M. Burt (N.H. Bar No. 5510)

CERTIFICATION OF WORD LIMIT

I hereby certify that the total words in this Brief do not exceed the maximum of 9,500 words.

Date: May 2, 2019 /s/ Gary M. Burt
Gary M. Burt (N.H. Bar No. 5510)

CERTIFICATION

I hereby certify that on this day a copy of this Brief was served via the Court's electronic filing system on Christopher J. Seufert, Esq.

Date: May 2, 2019 /s/ Gary M. Burt
Gary M. Burt (N.H. Bar No. 5510)

BRIEF ADDENDUM

STATE OF NEW HAMPSHIRE
SUPERIOR COURT

GRAFTON, SS. Docket Nos. 11-CV-111 & 174

Sandra Moscicki

v.

Charles Leno *et al.*

ORDER

The plaintiff, Sandra Moscicki, originally brought this action as a small claims complaint seeking unpaid rent from the defendants subsequent to their having vacated an apartment she had leased to them. The defendants, acting in their capacity as parents, thereafter filed an independent action alleging that their two minor children were exposed to unsafe levels of lead while residing in the plaintiff's apartment, suffering injuries as a result. The cases were consolidated. In support of their claims, the defendants seek to introduce the expert testimony of Peter Isquith, Ph.D., a clinical neuropsychologist, and Robert Karp, M.D., a pediatrician. The plaintiff has moved to exclude the opinions of Drs. Isquith and Karp on the grounds that their testimony fails to meet the requirements of admissibility under New Hampshire law, specifically RSA 516:29-a. The court held a hearing on October 13 and 14, 2016, and February 22, 2017. Voluminous exhibits were submitted by the parties. Thereafter, the parties submitted post-hearing memoranda. Upon consideration of the testimony, the parties' pleadings and exhibits, and the applicable law, the court finds and rules as follows.

The defendants' children, Matthew Leno and Maureen Leno, are fraternal twins born on July 8, 2008. (*See* Pl.'s Post-Hr'g Ex. C.) Matthew was in breach position in

CLERK'S NOTICE DATE
10/11/17
CC: G. Bent; S. Moscicki; C. Seufert

utero, but did not display any immediate neurological issues at birth. (*Id.*) Both children exhibited ordinary development in the first year of their lives.

On September 1, 2009, the defendants moved into the plaintiff's apartment building located at 32 Union Street in Littleton. While living in the apartment, when Matthew was approximately eighteen months old, the defendants observed that he appeared to be experiencing developmental setbacks and his vocabulary began to regress. (Defs.' Hr'g Ex. Y at 2.) Ultimately, Matthew stopped talking altogether. (*Id.*) Both children were tested for lead on October 21, 2009. Matthew had elevated blood lead levels ("EBLLs") of 4.6 μg/dl and Maureen had EBLLs of 3.7 μg/dl. (Pl.'s Post-Hr'g Ex. N.) On July 27, 2010, at their second annual physical examinations, the children were again tested for lead. At this point, Matthew had EBLLs of 17 μg/dl and Maureen had EBLLs of 19 μg/dl. (Pl.'s Post-Hr'g Ex. H, I.) As a result of the foregoing, the defendants moved out of the plaintiff's apartment and the pending lawsuits followed.

The defendants hired Dr. Peter Isquith to perform neuropsychological evaluations on both children to determinate what, if any, ill effects the lead exposure had caused. With respect to Matthew, Dr. Isquith began by attempting to evaluate his IQ by administering the Wechsler Intelligence Scale for Children (WISC-IV). (Isquith Dep. at 79:17–21.) Dr. Isquith was ultimately unable to derive a full scale IQ based upon the WISC-IV as Matthew's scores were too low on three subtests. (*Id.* at 79–81.) Therefore, Dr. Isquith elected to employ the Reynolds Intellectual Assessment Scales (RIAS), which Matthew was able to complete. In his report, Dr. Isquith reported a Verbal Index score of 40, a Nonverbal Index score of 59, and a Composite Index score of 40, all of which are in the "very low" range. (Defs.' Hr'g Ex. Y at 7.)

Dr. Isquith then employed a number of other measures, including the Developmental Neuropsychological Assessment, Second Edition (NEPSY-II). Matthew's scores were almost universally poor. (*Id.* at 8–10.) Citing lead exposure as the most prominent risk factor in Matthew's history, Dr. Isquith concluded that "[l]ow level lead exposure such as Matthew's is associated with a loss of intellectual function and increased risk of other developmental deficits affecting attention, self-regulation, visuospatial functions and other domains. It is more likely than not that the lead exposure is a substantial contributing factor to Matthew's deficits." (*Id.* at 12.)

Dr. Isquith employed many of the same measures to evaluate Maureen. Maureen performed significantly better than her brother on all tests, despite having had a high peak EBLL. Nearly across the board, Maureen's scores were at or above expected levels in cognition. (Defs.' Hr'g Ex. Z at 5–8.) However, Dr. Isquith noted some academic deficits that required some additional support in school. (*Id.* at 10.) Dr. Isquith concluded that "[g]iven the known associations between lead exposure and adverse developmental outcomes and the specifics in this case, it is more likely than not that lead is a substantial contributing factor to Maureen's ongoing attention and self-regulatory vulnerability and her academic performances deficits." (*Id.*)

Dr. Robert Karp also issued a report for the defendants after reviewing the children's records, including Dr. Isquith's reports. (Karp Hr'g Ex. 1.) Dr. Karp concluded that, to a reasonable degree of medical certainty, both children were negatively impacted by their exposure to lead. (*Id.*)

Analysis

The plaintiff has moved to exclude the testimony of Drs. Isquith and Karp with respect to Matthew Leno, arguing their conclusions with respect to the impact of lead

exposure on Matthew's neurological development are unsupported by the prevailing medical literature.

I. Legal Standard

New Hampshire Rule of Evidence 702 provides: "If 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." "[E]xpert testimony must rise to a threshold level of reliability to be admissible." *Baker Valley Lumber, Inc. v. Ingersoll-Rand Co.*, 148 N.H. 609, 614 (2002). In determining the reliability of an expert's testimony, the Court in *Baker Valley* adopted the framework set forth in *Daubert v. Merrel Dow Pharmas., Inc.*, 509 U.S. 579 (1993).

The New Hampshire legislature has since codified this framework at RSA 516:29-a, which provides:

> I. A witness shall not be allowed to offer expert testimony unless the court finds:
> (a) Such testimony is based upon sufficient facts or data;
> (b) Such testimony is the product of reliable principles and methods; and
> (c) The witness has applied the principles and methods reliably to the facts of the case.
> II. (a) In evaluating the basis for proffered expert testimony, the court shall consider, if appropriate to the circumstances, whether the expert's opinions were supported by theories or techniques that:
> (1) Have been or can be tested;
> (2) Have been subjected to peer review and publication;
> (3) Have a known or potential rate of error; and
> (4) Are generally accepted in the appropriate scientific literature.
> (b) In making its findings, the court may consider other factors specific to the proffered testimony.

Under this analysis, "[t]he trial court functions only as a gatekeeper, ensuring a methodology's reliability before permitting the fact-finder to determine the weight and credibility to be afforded an expert's testimony." *Baker Valley*, 148 N.H. at 616.

II. Reliability of the Experts' Opinions Regarding Matthew Leno

In her initial motion in limine, the plaintiff argued Dr. Isquith's opinion was unsupported by the prevailing literature on lead's impact on IQ and executive function. Specifically, the plaintiff argued that the literature indicates that blood lead levels of 17 µg/dl are associated with a loss of approximately five to ten IQ points, whereas Matthew's IQ of 40, as reported by Dr. Isquith, represented a substantially higher decrement of sixty points below the mean IQ of 100. In response, the defendants maintain that Dr. Isquith never claimed that Matthew's IQ was 40, and that the plaintiff is misinterpreting Dr. Isquith's report. Because the issue of Matthew's IQ is central to the plaintiff's critique of Dr. Isquith's opinion, the court will first address Dr. Isquith's testimony regarding the interpretation of the scores in his report.

As Dr. Isquith himself acknowledged, the relationship between lead and IQ is one of the most studied phenomena in the medical literature. (Hr'g Tr. (Day 1) at 112:11–15.) In his report, Dr. Isquith initially attempted to evaluate Matthew's IQ using the WISC-IV but was unable to do so, as Matthew was unable to complete several of the subtests. Therefore, Dr.Isquith utilized the RIAS instead. Though Matthew also struggled on that test, Dr. Isquith was able to generate final scores. Dr. Isquith reported verbal, nonverbal, and composite index scores of 40, 59, and 40 respectively. (Defs.' Hr'g Ex. Y at 7.) At Dr. Isquith's deposition, the following exchange took place:

> Q: Okay. And he [Matthew] was able to complete the RIAS?
> A: . . . He achieved a zero on two subtests, which translates to the lowest possible scores. So he actually couldn't do all of the RIAS.

Q: But it did generate a[n] IQ score, correct?
A: It did.
Q: And what was the IQ score?
A: As low as one possibly can get. A 40.
Q: That's composite index?
A: Yes.

(Isquith Dep. at 81:9–23; 82:1.) Based on the foregoing, the plaintiff understood Dr. Isquith to be claiming that Matthew's IQ was 40, and moved to exclude defendants' experts on that basis.

At the *Daubert* hearing, however, Dr. Isquith testified that because of the nineteen-point discrepancy between Matthew's verbal and nonverbal index scores, he disregarded the low verbal test score. (Hr'g Tr. (Day 1) at 40.) In addition, Dr. Isquith testified that the verbal index score was unreliable because Matthew had a language impairment. (*Id.* at 26–27.) Therefore, Dr. Isquith relied on Matthew's nonverbal score on the RIAS, as well as the composite score of 65 on one of the nonverbal components of the WISC-IV. (*Id.* at 40) He testified that "on the two nonverbal measures, he scored a 65 and a 59 . . . which would reasonably place an estimate of his intellectual ability somewhere between the upper 50s and the lower mid-60s—or upper 60s." (*Id.* at 42.)

The court finds that Dr. Isquith has failed to adequately support his position that the composite index results of the RIAS should be disregarded. First, there is inadequate support in the record for the claim that Matthew suffers from a language impairment. The Handbook of Psychological and Educational Assessment of Children, edited by Dr. Cecil Reynolds, author of the RIAS, defines language impairment as "a disorder of oral language, either expressive and/or receptive, not associated with, or in excess of, an impairment in intellectual capacity." (Pl.'s Post-Hr'g Ex. CC at 609.) At no point in Dr. Isquith's report does he specifically identify Matthew as having a language

impairment or provide a basis for believing his deficits were not related to his overall intellectual disability, whereas the plaintiff's expert Dr. Robert McCaffrey testified that Matthew's verbal deficits *were* part and parcel of his intellectual disability. (Defs.' Hr'g Ex. Y at 11; Hr'g Tr. (Day 3) at 60, 62.). Dr. Isquith did not conduct any specific testing on the issue, but simply noted that Matthew had global deficits and difficulties with language. In addition, the WISC-IV manual explicitly states that "English language learners and children with language impairments or verbal or expressive difficulties should be given the [Wechsler Preschool and Primary Scale of Intelligence–Third Edition] to reduce the confounding effects of language or verbal expression on composite scores." (Pl.'s Post-Hr'g Ex. JJ at 16.) Dr. Isquith did not administer this test.

Furthermore, the defendants provided no support for Dr. Isquith's claim that Matthew's verbal index scores can be completely disregarded simply due to the fact that they are markedly lower than the nonverbal scores. The defendants cite to a chapter in the Handbook on interpreting the index scores on the WISC-III, which states that "[a]s a general rule of thumb, we think that a 20-point Verbal-Performance discrepancy should raise 'red flags' in the examiner's mind." (Pl.'s Post-Hr'g Ex. HH at 127.) However, Matthew's test score discrepancy, while close, did not rise to this level. Moreover, his composite IQ score was generated on the RIAS, not the WISC, and there is no indication that the results of the two separate tests can be interpreted interchangeably. According to the Professional Manual for the RIAS, a discrepancy of nineteen points between the verbal and nonverbal indexes occurs 17.6% of the time. (Pl.'s Post-Hr'g Ex. II.)

Finally, as noted by Dr. McCaffrey, all of the lead literature is based on full scale IQ measurement, as opposed to IQ scores derived solely from verbal or nonverbal

indexes. (Hr'g Tr. (Day 3) at 61–62.) It is thus unclear what applicability Dr. Isquith's proposed IQ for Matthew based solely on the nonverbal test scores would have to the literature.

In light of the foregoing, the court finds that Dr. Isquith's methodology with respect to identifying Matthew's IQ, as articulated at the *Daubert* hearing, is unsupported and unreliable and therefore does not meet the standard set forth in RSA 516:29-a. Therefore, Dr. Isquith shall be limited to testifying as to the scores generated by the RIAS as documented in his report.

Despite this finding, the court concludes that the opinions of Dr. Isquith and Dr. Karp are otherwise admissible. Many significant facts in this case are uncontested. The plaintiff challenges neither the fact that Matthew is intellectually disabled nor that that he had an EBLL of 17 μg/dl. Additionally, the plaintiff does not challenge the fact that the literature unanimously states that lead at the levels Matthew experienced is detrimental to one's health. Finally, the plaintiff does not question Dr. Isquith's methodology with respect to his evaluation of Matthew, the testing performed, and the scores generated by those tests—as set forth in Dr. Isquith's report—as indicated by his heavy reliance on the composite score generated by the RIAS.

Instead, the plaintiff challenges Dr. Isquith's ultimate conclusion that Matthew's exposure to lead was a substantial contributing factor to his current deficits. The plaintiff argues the literature supports, at most, an expected decrement in IQ of five to ten points. The plaintiff thus asserts that, taking Matthew's reported IQ of 40, there is no support for the conclusion that blood lead levels of 17 μg/dl can result in a drop of 60 points off the mean of 100.

As an initial matter, the plaintiff's characterization of Dr. Isquith's conclusion mischaracterizes the evidence. First, it presumes that Dr. Isquith is claiming that lead is the sole cause of Matthew's deficits. Dr. Isquith in fact explicitly testified to the contrary, and his report merely concludes that lead was a substantial contributing factor, not the sole cause. (Hr'g Tr. (Day 1) at 139; Defs.' Hr'g Ex. Y at 12.) Dr. Isquith also testified that he was unable to put an exact number on how much lead contributed to Matthew's deficits, but can estimate based on the literature that Matthew lost approximately 10 IQ points. (Hr'g Tr. (Day 1) at 120–21.) In addition, the plaintiff's argument regarding a 60-point drop in IQ presupposes that Matthew's IQ would have been 100 had he not been exposed to lead. While Dr. Isquith did testify that one would expect an otherwise healthy boy in Matthew's position to be in the average range,[1] the fact remains that his expected IQ is impossible to know. Therefore, while the precise drop in Matthew's IQ was likely significant, it is not as clear cut as the plaintiff would argue.

Moreover, "[i]mportantly, the *Daubert* test does not stand for the proposition that scientific knowledge must be absolute or irrefutable." *State v. Dahood*, 148 N.H. 723, 727 (2002). "[W]hen the *application* of a scientific methodology is challenged as unreliable under *Daubert* and the methodology itself is otherwise sufficiently reliable, outright exclusion of the evidence in question is warranted only if the methodology was so altered by a deficient application as to skew the methodology itself." *State v. Langill*, 157 N.H. 77, 88 (2008); *see also Daubert*, 509 U.S. at 594–95 ("The focus, of course, must be solely on principles and methodology, not on the conclusions that they

[1] As defined by the RIAS, the average range runs from 90 to 109. (Hr'g Tr. (Day 1) at 135–36.) However, Dr. Isquith testified he would expand the range from 85 to 115, or one standard deviation from the mean in either direction, describing it as "broadly average." (Id. at 143–44.) In addition, plaintiff's own expert Dr. Mandelbaum testified that the average range was 85 to 115. (Hr'g Tr. (Day 2) at 104.)

generate."). "Where errors do not rise to the level of negating the basis for the reliability of the principle itself, the adversary process is available to highlight the errors and permit the fact-finder to assess the weight and credibility of the expert's conclusions." *Langill*, 157 N.H at 88 (quotations and citation omitted). "[A]s long as an expert's scientific testimony rests upon good grounds, . . . it should be tested by the adversary process—competing expert testimony and active cross-examination—rather than excluded from jurors' scrutiny for fear that they will not grasp its complexities or satisfactorily weigh its inadequacies." *Id.* (quotations and citation omitted).

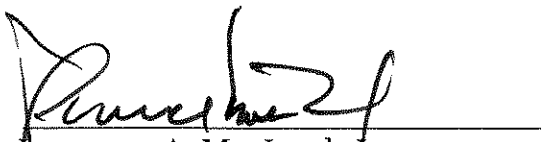
While the precise impact that lead had on Matthew's deficits is up for debate, there appears to be no question that Matthew was exposed to unsafe levels of lead and that such exposure can result in deficits in IQ and executive function. (*See, e.g.*, Pl.'s Post-Hr'g Ex. S–X.) The fact that Dr. Isquith may be attempting to establish a greater impact than has been traditionally documented in the literature does not render all of the well-accepted science underlying that conclusion unreliable. To the extent Dr. Isquith is incorrect in his application of the science to the facts of this case, the flaws in his analysis can be adequately addressed by cross-examination and the presentation of competing expert testimony. Therefore, the court finds the principles and methods underlying Dr. Isquith's conclusion are reliable, and thus his testimony is admissible at trial. Dr. Karp's conclusions, which are based upon the same principles as well as Dr. Isquith's report, is likewise admissible.

Accordingly, for the foregoing reason, defendants' motion in limine to exclude the testimony of Dr. Isquith and Dr. Karp is DENIED.

Finally, the court apologizes to the parties and their lawyers for the delay in issuing this order. The sheer volume of information associated with this task in terms of

pleadings, exhibits, medical records and literature submitted, and testimony, coupled with the other demands on the undersigned justice's time, thwarted efforts to produce this order in a more timely fashion.

SO ORDERED, this 4th day of October 2017.



Lawrence A. MacLeod, Jr.
Presiding Justice

STATE OF NEW HAMPSHIRE
SUPERIOR COURT

GRAFTON, SS.

Sandra Moscicki

v.

Charles Leno and Heidi Leno
Docket Nos. 215-2011-CV-111 & 217-2011-CV-174

ORDER ON PLAINTIFF'S MOTIONS TO RECONSIDER AND CLARIFY

This matter is before the court on the plaintiff's motion to reconsider and motion to clarify. The plaintiff asks the court to reconsider its October 4, 2017 order (Index #58) denying the plaintiff's motion in limine (Index #32) to exclude the testimony of Drs. Isquith and Karp. The plaintiff's motion to reconsider (Index #61), to which the defendant objects (Index #64), contains no issues of fact or law which were not previously considered by the court or which warrant a different result than that determined by the court in its October 4, 2017 order.

In her motion to reconsider, the plaintiff raises a dose-response relationship, relying in part on the *Lipitor* case, in which the court held that the expert could not testify because there was no evidence to support a connection between Lipitor in low doses and Type 2 Diabetes. This case is distinguishable because there *is* a well-established connection between lead exposure and lowered IQ score. The question here is a matter of degree, which is appropriate for cross-examination. As explained in the court's October 4, 2017 order, Dr. Isquith explicitly testified at the hearing and

CLERK'S NOTICE DATE
1/16/18
CC: G. Bent; S. Moscicki; C. Seufert

concluded in his report that lead was a substantial contributing factor, not the sole cause of Matthew's deficits.

In regard to the plaintiff's motion to clarify (Index #59), the court found the opinions of both Dr. Isquith and Dr. Karp admissible but limited Dr. Isquith to testifying as to the scores generated by the Reynolds Intellectual Assessment Scales ("RIAS") because Dr. Isquith failed to adequately support his position at the hearing that the composite index results of the RIAS should be disregarded. There was inadequate support in the record for the claim that Matthew suffers from a language impairment and inadequate support that Matthew's verbal index scores can be completely disregarded simply because they are markedly lower than the nonverbal scores. Dr. Isquith is, therefore, bound by the numbers that he reported from the results of the RIAS. Otherwise, Dr. Isquith's testimony at the hearing was consistent with the science, and therefore, he may testify at trial in a manner consistent with the court's October 4, 2017 order.

For the foregoing reasons, the court DENIES the plaintiff's motion to reconsider.

SO ORDERED, this 12th day of January 2018.

Lawrence A. MacLeod, Jr.
Presiding Justice