

IN THE SUPERIOR COURT OF MORGAN COUNTY

STATE OF GEORGIA

LAURA W. BUTLER, Individually and as
Administratrix of the Estate of WALTER C.
BUTLER, JR.,

Plaintiff,

Civil Action No. 2008CA114

v.

UNION CARBIDE CORPORATION,

Defendant.

**ORDER GRANTING DEFENDANT'S MOTION TO STRIKE CERTAIN
TESTIMONY OF PLAINTIFF'S PATHOLOGIST DR. JOHN MADDOX**

Whether an expert witness's opinion is viewed under the "general acceptance" test set forth in *Frye v. United States*,¹ the Georgia "beyond the ken of the average layperson" test for normal expert opinion in *Smith v. State*,² or the Georgia "reach[ing] a scientific stage of verifiable certainty" test for an expert opinion based on a novel scientific procedure or technique in *Harper v. State*,³ the test first enunciated in the United States Supreme Court decision of

¹*Frye v. United States*, 54 App. D.C. 46 (293 F. 1013) (DC Cir. 1923).

²*Smith v. State*, 247 Ga. 612 (277 S.E.2d 678) (1981). The rule set forth in *Smith v. State* is that expert opinion testimony on relevant issues to be decided by the jury is admissible where the conclusion of the expert is one which jurors would not ordinarily be able to draw for themselves. *Id.* at 619.

³*Harper v. State*, 249 Ga. 519, 524 (292 S.E.2d 389) (1982) (affirmed as the standard for new scientific evidence in Georgia criminal cases in *Vaughn v. State*, 282 Ga. 99 (3) (646 S.E.2d 212) (2007)).

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*Daubert v. Merrell Dow Pharmaceuticals*⁴ in 1993 was a watershed departure.

Twelve years after *Daubert*, the Georgia Legislature in 2005 passed OCGA § 24-9-67.1, which adopted the *Daubert* test for expert opinion testimony in civil actions in Georgia's state courts. This section, in pertinent part, provides:

(a) The provisions of this Code section shall apply in *all civil actions*.⁵ The opinion of a witness qualified as an expert under this Code section may be given on the facts as proved by other witnesses. The *facts or data* in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing or trial. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence in order for the opinion or inference to be admitted. Facts or data that are otherwise inadmissible shall not be disclosed to the jury by the proponent of the opinion or inference unless the court determines that their probative value in assisting the jury to evaluate the expert's opinion substantially outweighs their prejudicial effect.

(b) If *scientific, technical, or other specialized knowledge* will assist the trier of fact in any cause of action to understand the evidence or to determine a fact in issue, a *witness qualified as an expert* by knowledge, skill, experience, training, or education *may testify thereto in the form of an opinion or otherwise, if:*

- (1) The *testimony is based upon sufficient facts or data* which are or will be admitted into evidence at the hearing or trial;
- (2) The *testimony is the product of reliable principles and methods*; and

⁴*Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (113 S. Ct. 2786, 125 L. Ed. 2d 469, 113 S. Ct. 2786) (1993). While the *Daubert* decision maintained that it was interpreting Rules 702, 704 et al. of the Federal Rules of Evidence, the Federal Rules were subsequently significantly revised to correspond to the criteria of *Daubert*. *Daubert* combined the tests for the admissibility of testimony based on established and original scientific methods or techniques.

⁵However, OCGA § 22-1-14 (b) excludes condemnation cases from this code section.

(3) The witness has applied the principles and methods reliably to the facts of the case.

...

(d) Upon motion of a party, the court may hold a *pretrial hearing to determine whether the witness qualifies as an expert and whether the expert's testimony satisfies the requirements of subsections (a) and (b) of this Code section*. Such hearing and ruling shall be completed no later than the final pretrial conference contemplated under Code Section 9-11-16.

...

(f) It is the intent of the legislature that, in all civil cases, the courts of the State of Georgia not be viewed as open to expert evidence that would not be admissible in other states. Therefore, in interpreting and applying this Code section, the courts of this state may draw from the opinions of the United States Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993); *General Electric Co. v. Joiner*, 522 U.S. 136 (1997); *Kumho Tire Co. Ltd. v. Carmichael*, 526 U.S. 137 (1999); and other cases in federal courts applying the standards announced by the United States Supreme Court in these cases.⁶

Actually, the Georgia statute is an incorporation of the Federal Rules of Evidence revised in the light of *Daubert*. The Rules, and therefore our statute, reflect that the basis of an expert's opinion can be based on a wide spectrum of fields that range from highly scientific to non-scientific. While *Daubert* recognized this, it set out a non-exclusive, four-part test for when the opinion of the expert is based on "scientific knowledge,"⁷ as follows:

[1] Ordinarily, a *key question* to be answered in determining *whether a theory or technique is scientific knowledge* that will assist the trier of fact will be *whether it can be (and has been) tested*. "Scientific methodology today is based on generating hypotheses and *testing* them to see if they can be falsified; indeed,

⁶Emphasis added.

⁷As opposed to the *ipse dixit* of the expert. *General Electric Co. v. Joiner*, 522 U.S. 136, 146 (118 S.Ct. 512, 139 L.Ed.2d 508) (1997).

this methodology is what distinguishes science from other fields of human inquiry." Green 645. See also C. Hempel, *Philosophy of Natural Science* 49 (1966) ("*[T]he statements constituting a scientific explanation must be capable of empirical test*"); K. Popper, *Conjectures and Refutations: The Growth of Scientific Knowledge* 37 (5th ed. 1989) ("*[T]he criterion of the scientific status of a theory is its falsifiability, or refutability, or testability*") (emphasis deleted).

[2] Another pertinent consideration is *whether the theory or technique* has been subjected to *peer review and publication*. *Publication* (which is but one element of peer review) is *not a sine qua non of admissibility*; it does *not necessarily correlate with reliability*, see S. Jasanoff, *The Fifth Branch: Science Advisors as Policymakers* 61-76 (1990), and in some instances well-grounded but innovative theories will not have been published, see Horrobin, *The Philosophical Basis of Peer Review and the Suppression of Innovation*, 263 *JAMA* 1438 (1990). Some propositions, moreover, are too particular, too new, or of too limited interest to be published. But submission to the scrutiny of the scientific community is a component of "good science," in part because it increases the likelihood that substantive flaws in methodology will be detected. See J. Ziman, *Reliable Knowledge: An Exploration of the Grounds for Belief in Science* 130-133 (1978); Relman & Angell, *How Good Is Peer Review?*, 321 *New Eng.J.Med.* 827 (1989). The fact of *publication* (or lack thereof) in a peer reviewed journal thus will be a *relevant, though not dispositive, consideration* in assessing the *scientific validity* of a particular technique or methodology on which an opinion is premised.

[3] Additionally, in the case of a particular scientific technique, the court ordinarily should consider the *known or potential rate of error*, see, e.g., *United States v. Smith*, 869 F.2d 348, 353-354 (CA7 1989) (surveying studies of the error rate of spectrographic voice identification technique), and the existence and maintenance of standards controlling the technique's operation, see *United States v. Williams*, 583 F.2d 1194, 1198 (CA2 1978) (noting professional organization's standard governing spectrographic analysis), cert. denied, 439 U.S. 1117, 99 S.Ct. 1025, 59 L.Ed.2d 77 (1979).

[4] Finally, "*general acceptance*" can yet have a bearing on the inquiry. A "*reliability assessment does not require, although it does permit, explicit identification of a relevant scientific community and an express determination of a particular degree of acceptance within that community.*" *United States v. Downing*, 753 F.2d, at 1238. See also 3 Weinstein & Berger ¶ 702[03], pp. 702-41 to 702-42. Widespread acceptance can be an important factor in ruling particular evidence admissible, and "a known technique which has been able to attract only minimal support within the community," *Downing*, 753 F.2d, at 1238,

may properly be viewed with skepticism.⁸

Only (1) whether the theory or technique can be (and has been) tested and (3) the known or potential rate of error of a particular scientific technique “focus on scientific merit directly.”⁹

Two important considerations can be noted from Justice Scalia’s concurrence (with two Justices joining) in *Kumho Tire*, which states:

I join the opinion of the Court, which makes clear that the discretion it endorses — trial-court discretion in choosing the manner of testing expert reliability — is not discretion to abandon the gatekeeping function. I think it worth adding that it is not discretion to perform the function inadequately. Rather, it is discretion to choose among reasonable means of excluding expertise that is *fausse* and science that is junky. *Though, as the Court makes clear today, the Daubert factors are not holy writ, in a particular case the failure to apply one or another of them may be unreasonable, and hence an abuse of discretion.*¹⁰

Concerning this first consideration, the U. S. Supreme Court reminds trial judges on their duty to not balk at performing adequately this gatekeeping function.¹¹ “A trial court . . . abuses its discretion by failing to act as a gatekeeper.”¹² On the second consideration, to counter the

⁸*Daubert*, 509 U.S. at 593-94. Emphasis added.

⁹1 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §1:15 (West 2009-2010 ed.).

¹⁰*Kumho Tire Co. Ltd. v. Carmichael*, 526 U.S. 137, 158-59 (119 S.Ct. 1167, 1179) (1999). Emphasis added.

¹¹However, a Georgia trial judge should be careful not to “enthusiastic[ally] embrace” this duty. *Hamilton-King v. HNTB Ga., Inc.*, 296 Ga. App. 864, 866 (1) (676 S.E.2d 287) (2009) (finding abuse of discretion where trial court excluded expert testimony on traffic control devices on a construction project based on mistaken belief that strict application of the *Daubert* factors for scientific evidence was mandatory for this particular expertise). This would not appear to be a common temptation.

¹²*McClain v. Metabolife Int’l, Inc.*, 401 F.3d 1233, 1238 (11th Cir.2005).

assertion that the four elements of the *Daubert* test are non-exclusive and that the standard is very flexible, “[c]ourts should remember Justice Scalia’s warning in *Kumho Tire* that failure to apply the *Daubert* factors could itself constitute an abuse of discretion and when one or more *Daubert* factors do not apply, courts should say what criteria they relied upon to make their assessment.”¹³

The Plaintiff’s expert Dr. John Maddox based his opinion on differential diagnosis. As the Georgia Supreme Court in *Mason v. Home Depot USA, Inc.*¹⁴ points out:

The [Plaintiffs] argue that since [their doctor expert] used the accepted medical methodology of *differential diagnosis*, the trial court could not properly find [his] methods to lack scientific support. However, “*expert opinions employing differential diagnosis must be based on scientifically valid decisions as to which potential causes should be ‘ruled in’ and ‘ruled out.’* [Cit.]” *Ervin v. Johnson & Johnson, Inc.*, 492 F.3d 901, 904 (7th Cir. 2007). [The doctor’s] testimony did not establish that required basis for supporting the application of a differential diagnosis. The trial court’s findings, based primarily on [the doctor’s] own testimony, support the conclusion that [the doctor’s] testimony regarding causation was not “the product of reliable principles and methods. . . .” OCGA § 24-9-67.1 (b) (2). *Moran v. Kia Motors America, Inc.*, [276 Ga. App. 96, 97 (1) (622 S.E.2d 439) (2005)].¹⁵

Thus, since the doctor expert’s opinion must be based on scientifically valid decisions, the four-element *Daubert* test is appropriate and should be applied.¹⁶

¹³1 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §1:15 (West 2009-2010 ed.).

¹⁴*Mason v. Home Depot USA, Inc.*, 283 Ga. 271, 279 (5) (658 S.E.2d 603) (2008).

¹⁵Emphasis added.

¹⁶The abuse-of-discretion standard on review of a trial court’s decision to admit or exclude expert testimony applies as much to the trial court’s decisions about how to determine reliability as to its ultimate conclusion. Thus, whether *Daubert*’s specific factors are, or are not, reasonable measures of reliability in a particular case is a matter that the law

Both the Plaintiff and the Defendant's pleadings, briefs, and letters made extensive reference to the cases in states that appear to still use the *Frye* test without denoting this. This diverted the Court's attention and energy from the relevant inquiry in the case.¹⁷ Still, the briefs are otherwise ably presented by exemplary counsel in the instant case. After deducting the inapplicable *Frye* jurisdiction citations,¹⁸ the Court finds persuasive the brief of the Defendant and grants its motion. The Court incorporates by reference the arguments made in Defendant's brief and will also make some other observations.

"The burden of laying the proper foundation for the admission of the expert testimony is on the party offering the expert, and admissibility must be shown by a preponderance of the evidence. *Daubert*, 509 U.S. at 592 n. 10, 113 S.Ct. 2786 (citing *Bourjaily v. United States*, 483 U.S. 171, 175-76, 107 S.Ct. 2775, 97 L.Ed.2d 144 (1987))."¹⁹ Therefore, the burden in this *Daubert* motion is on the Plaintiff, and it is a burden that the Plaintiff has not carried.

As Defendant clearly states, the pivotal controversy on this motion is whether the expert

grants the trial judge broad latitude to determine. *General Electric Co. v. Joiner*, supra at 143, 118 S.Ct. 512. Since O.C.G.A. § 24-9-67.1(b) is based on Fed. R. Evid. 702, which in its present form is based on the holdings in *Daubert*, and the many cases applying *Daubert*, a trial court's application of the standards of *Daubert* is proper. *Mason v. Home Depot USA, Inc.*, supra at 279.

¹⁷This was compounded by the Court no longer having a law clerk due to the contraction of the State's judicial budget.

¹⁸Unless they provided cogent authority on a point that was still relevant to resolving the application of the *Daubert* test.

¹⁹*Allison v. McGhan Medical Corporation*, 184 F.3d 1300, 1306 (1999). See also, *McClain v. Metabolife Int'l, Inc.*, supra at 1238.

doctor's opinion properly supports specific causation²⁰ of Mr. Butler's injuries by Defendant's product. A review of the asbestos-related cases show that the great majority either pre-date *Daubert* or involve the application of *Frye* or other tests.²¹ In fact, the Plaintiff has presented grounds for Dr. Maddox's expert opinion that are adjusted to the former "general acceptance" test set forth in *Frye* supplemented by publications or "beyond the ken of the average layperson" test in *Smith v. State*. However, while Dr. Maddox is undoubtedly a qualified doctor, he has not properly utilized the *scientific method* to make *scientifically valid decisions* in reaching his specific causation opinion as required by *Daubert*.

Turning to the first element of the *Daubert* scientific test, Dr. Maddox's opinion squarely, inseparably relies on the theory that "any exposure" to the asbestos of Defendant's product will cause injury, also called "the linear non-threshold model for causation."²² However, Dr. Maddox testified that this "any exposure" or "non-threshold" theory is not practically testable and has not been tested.²³ Therefore, it fails the first, "key" element of the four-part *Daubert* test for scientifically valid knowledge: "whether [the theory or technique] *can be (and has been) tested.*"

²⁰As opposed to general causation. 3 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §21:2, Specific and general causation (West 2009-2010 ed.)

²¹3 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §26:16, (West 2009-2010 ed.)

²²The doctor's opinion would be the product of this theory or method even if it is based on additional data submitted to him by a hypothetical question. Moreover, OCGA § 24-9-67.1 (d) requires the reliability and relevance of the expert opinion be established at this pre-trial hearing.

²³For similar interrelation between these criteria, see *Rink v. Cheminova, Inc.*, 400 F.3d 1286, 1292 (11th Cir. 2005).

In addition to the statements that the *Daubert* Court made showing that this first element of the test is the *crux* of scientific methodology, *Modern Scientific Evidence: The Law and Science of Expert Testimony*²⁴ states, in pertinent part, the following:

[Sir] Karl Popper, cited by the *Daubert* Court, originally posited the testability criterion as a prerequisite to calling a statement “scientific.” *In effect, if a statement could not be tested, then it could never achieve the designation “science.”* Its success as science, however, depended entirely on the results of that testing and the sorts of tests carried out. . . .

Contrary to Popper’s original formulation of falsifiability, the Court selected this factor a one of four possible indices of validity. For Popper, falsifiability was *the* criterion of scientific status.²⁵ In fact, courts will find application of *Daubert* difficult if they treat testability as an optional factor. *The other three factors all presuppose testability; in science, a nontestable hypothesis cannot have an error rate and is exceedingly unlikely to be published in a peer-reviewed journal and achieve general acceptance. Indeed, since Daubert, courts generally appear to treat testability as a prerequisite rather than just another factor.* In practice, therefore, the *Daubert* testability criterion is entirely consistent with Popper’s philosophy.²⁶

“The first of these considerations, which asks whether the theory or methodology has been subjected to the scientific method, is the most weighty.”²⁷ In fact, “scientists whose conviction about the ultimate conclusion of their research is so firm that they are willing to aver under oath that it is correct *prior to performing the necessary validating tests* could be viewed

²⁴1 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §1:16, (West 2009-2010 ed.).

²⁵“Whereas the [*Daubert*] Court stated that testability was ‘a key question,’ Popper would have said that it was ‘the’ key question.” *Id.*, fn. 6.

²⁶Emphasis added.

²⁷*Bradley v. Brown*, 852 F. Supp 690, 698 (N. D. Ind. 1994), decision aff’d, 42 F.3d 434 (7th Cir. 1994).

... as lacking the objectivity that is the hallmark of the scientific method.”²⁸

It is well established that a plaintiff in a toxic tort case must prove that he or she was exposed to and injured by a harmful substance manufactured by the defendant. *Wright v. Willamette Industries, Inc.*, 91 F.3d 1105, 1106 (8th Cir.1996); *Wintz By and Through Wintz v. Northrop Corp.*, 110 F.3d 508, 515 (7th Cir.1997); *Allen v. Pennsylvania Engineering Corp.*, 102 F.3d 194, 199 (5th Cir.1996). *In order to carry this burden, a plaintiff must demonstrate “the levels of exposure that are hazardous to human beings generally as well as the plaintiff’s actual level of exposure to the defendant’s toxic substance before he or she may recover.” Wright*, 91 F.3d at 1106.

[In a *Daubert* motion concerning plaintiff’s expert’s testimony], [w]e believe a plaintiff must prove level of the exposure using *techniques subject to objective, independent validation in the scientific community*. See *Moore v. Ashland Chemical, Inc.*, 151 F.3d 269, 276 (5th Cir.1998) (en banc). At a minimum, the expert testimony should include a description of the method used to arrive at the level of exposure and scientific data supporting the determination. *The expert’s assurance that the methodology and supporting data is reliable will not suffice. Id.* “*Scientific 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 in a toxic tort case.*” *Allen*, 102 F.3d at 199. *Absent supporting scientific data, Mitchell’s estimates and Herron’s conclusions are little more than guesswork. Guesses, even if educated, are insufficient to prove the level of exposure in a toxic tort case. See Daubert*, 509 U.S. at 589, 113 S.Ct. at 2795 (unsupported speculation and subjective belief insufficient to meet Fed.R.Evid. 702’s reliability requirement).

...

Under *Daubert*, proposed expert testimony must be supported by “appropriate validation – ie., ‘good grounds,’ based on what is known.” 509 U.S. at 590, 113 S.Ct. 2786. The plaintiff *need not prove* that the expert is undisputably correct or that the *expert’s theory is “generally accepted” in the scientific community*. *Moore*, 151 F.3d at 276. Instead, the plaintiff *must show* that the *method employed* by the expert in reaching the conclusion is *scientifically sound* and that the opinion is based on facts which sufficiently satisfy Rule 702’s reliability requirements. E.g., *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 744 (3d Cir.1994).

²⁸*Claar v. Burlington Northern R. Co.*, 29 F.3d 499, 503 (9th Cir. 1994). Emphasis added.

...

Under *Daubert*, “any step that renders the analysis unreliable ... renders the expert’s testimony inadmissible. This is true whether the step completely changes a reliable methodology or merely misapplies that methodology.” *In re Paoli R.R. Yard PCB Litigation*, 35 F.3d 717, 745 (3d Cir.1994).²⁹

“It is improper for an expert to presume that the plaintiff ‘must have somehow been exposed to a high enough dose to exceed the threshold [necessary to cause the illness], thereby justifying his initial diagnosis.’ This is *circular reasoning*.”³⁰

The claim that there is no known safe level of exposure does not mean that none exists; it simply means science today has not or cannot, with current scientific expertise or relying on existing studies, determine what that level of exposure is.³¹ Dr. Maddox admitted that everybody has breathed some asbestos fibers. In the older members of our society, there is hardly any one who has not had even more exposure to asbestos since its use was prevalent in manufactured products, insulation, etc., for many years. Yet, the admitted extreme rarity of mesothelioma demonstrates that logically there is a threshold exposure for harm. Otherwise, the huge exposed population of people receiving low or even moderate doses would more frequently have this terrible disease. The dose-response relationship with its threshold just has not been established

²⁹*Mitchell v. Gencorp*, 165 F.3d 778, 781 (10th Cir.1999), (quoting *Wright v. Willamette Indus., Inc.*, 91 F.3d 1105, 1106 (8th Cir.1996)). Emphasis added. See also *Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 278 (5th Cir.1998) (excluding expert testimony which “offered no *scientific* support for his general theory that exposure to toluene solution at any level would cause RADS.”)

³⁰*Mancuso v. Consolidated Edison Company of New York*, 967 F. Supp. 1437, 1450 (S.D. N.Y. 1997). Emphasis added.

³¹Although Washington state is apparently a *Frye* jurisdiction, this Court agrees with the Washington trial court that said this in *Free v. Ametek*.

by adequate testing as of this date. Also, Dr. Maddox stated that there are idiopathic causes of mesothelioma. Without quantification of the dose-response and its threshold for asbestos when does one *scientifically* rule out this as a cause and not asbestos?³²

Daubert does not permit experts to speculate about what they concede is not known by use of the scientific method. “[T]he courtroom is not the place for scientific guesswork, even of the inspired sort. *Law lags science; it does not lead it.*”³³

In an attempt to validate Dr. Maddox’s practically untestable and admitted untested “any exposure” theory,³⁴ Dr. Maddox has relied heavily upon standards promulgated by regulatory agencies.

The *regulatory and civil litigation arenas* have *different goals* that generate different questions about toxicological findings. Within the regulatory arenas the critical question is whether there might be a harmful effect in humans even though the toxicological research has uncovered little by way of adverse effects in animals or other biological systems. In private litigation the crucial issue is whether the known effect in a test animal is probative of causation in humans. *As some courts have noted, the regulatory threshold is therefore considerably lower than required in tort claims.*³⁵

Considering this difference, *Mitchell v. Gencorp Inc.*³⁶ stated:

The methodology employed by a governmental agency “results from the *preventive perspective* that the agencies adopt in order to reduce public exposure

³²Especially asbestos from a particular product by a specific defendant.

³³*Rosen v. Ciba Geigy Corp.*, 78 F.3d 316, 319 (7th Cir. 1996). Emphasis added.

³⁴Also called the linear non-threshold model for causation.

³⁵3 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §22:1 (West 2009-2010 ed.) Emphasis added.

³⁶*Mitchell v. Gencorp Inc.*, 165 F.3d 778, 783 n.3 (10th Cir. 1999). Emphasis added.

to harmful substances. *The agencies' threshold of proof is reasonably lower than that appropriate in tort law, which traditionally makes more particularized inquiries into cause and effect and requires a plaintiff to prove that it is more likely than not that another individual has caused him or her harm.*"

Apparently, even a *Frye* jurisdiction, New York, has held, "[S]tandards promulgated by regulatory agencies as protective measures are *inadequate to demonstrated legal causation.*"³⁷

Closer to home on this issue, the 11th Circuit in *McClain v. Metabolife Int'l, Inc.*,³⁸ states:

O'Donnell's³⁹ use of FDA data and recommendations raises a more subtle methodological issue in a toxic tort case. The issue involves identifying and contrasting the type of risk assessment that a government agency follows for establishing public health guidelines versus an expert analysis of toxicity and causation in a toxic tort case.

The Reference Manual on Scientific Evidence explains that

[p]roof of risk and proof of causation entail somewhat different questions because risk assessment frequently calls for a cost-benefit analysis. The agency assessing risk may decide to bar a substance or product if the potential benefits are outweighed by the possibility of risks that are largely unquantifiable because of presently unknown contingencies. Consequently, risk assessors may pay heed to any evidence that points to a need for caution, rather than assess the likelihood that a *causal relationship* in a *specific case* is more likely than not.

Margaret A. Berger, *The Supreme Court's Trilogy on the Admissibility of Expert Testimony*, in Reference Manual on Scientific Evidence, 33 (Federal Judicial Center, 2d. ed.2000). *Obviously, in a toxic tort case the court must focus on assessing causation, not on a cost-benefit analysis for restricting the sale and use of a drug.*

³⁷*Parker v. Mobil Oil Corp.*, 7 N.Y.3d 434, 449 (857 N.E.2d 1114) (2006). Emphasis added.

³⁸*McClain v. Metabolife Int'l, Inc.*, supra at 1249 (11th Cir. 2005). Emphasis added.

³⁹Mr. O'Donnell was one of two expert witnesses Plaintiffs offered to prove causation.

The Plaintiff counted heavily on the Helsinki Criteria,⁴⁰ which was developed in Finland. This trial court does not think that the Plaintiff has properly fulfilled the Helsinki Criteria.⁴¹ Moreover, the Helsinki Criteria were not formulated with compliance with the *Daubert* test in mind nor does it supplant it. The Helsinki Criteria seems more appropriate as authority to consider on the “general acceptance” test of *Frye*.⁴²

Besides the federal court cases cited in Defendant’s brief that rejected the “any exposure” or “non-threshold” theory upon which Dr. Maddox depends,⁴³ *Wills v. Amerada Hess Corp.*⁴⁴ and *McClain v. Metabolife Int’l, Inc.*,⁴⁵ do so. “Occasionally, plaintiffs have attempted to sidestep difficulties involved in establishing dosage by arguing a “no-threshold” theory, i.e., that any exposure to the substance in question is capable of causing plaintiff’s ailment. Courts have been reluctant to absolve plaintiffs of the burden of showing dosage on the basis of this theory.

⁴⁰See Asbestos, asbestosis, and cancer: the Helsinki criteria for diagnosis and attribution, *Scandinavian Journal of Work, Environment and Health*, 1997.

⁴¹Especially on the compilation of data that should be the basis for the attribution of cause. For instance, Mr. Butler’s deposition testimony was inherently under the partisan pressures of litigation in which he was a litigant. Yet, Dr. Maddox takes the highly questionable position that Mr. Butler’s work history as found in this deposition was just as objective and reliable as such obtained by trained interviewers using the structured questionnaires and checklists described by the Helsinki Criteria as the means of obtaining this. This appears as a prime example of the *ipse dixit* of an expert as recognized by *General Electric Co. v. Joiner*, 522 U.S. 136, 146 (1997).

⁴²Which, of course, is also the fourth, only corroborative element of the superseding *Daubert* test.

⁴³Defendant’s supplemental memorandum, page 33 et seq.

⁴⁴*Wills v. Amerada Hess Corp.*, 379 F.3d 32, 49 (2nd Cir. 2004).

⁴⁵*McClain v. Metabolife Int’l, Inc.*, supra at 1240. The ruling here is a complex one based on several factors.

[Cit.]”⁴⁶

In summary on the first, crucial element of *Daubert’s* scientific knowledge test, Dr. Maddox’s “any exposure” theory is, at most, scientifically-grounded speculation: an untested and potentially untestable hypothesis.⁴⁷ Therefore, Dr. Maddox’s opinion testimony fails this overarching element of the test.

Since Dr. Maddox’s “any exposure” theory has not been tested, the Court will jump to the third element of the *Daubert* test, since it is the only other element of the test to “focus on scientific merit directly.”⁴⁸ “[I]n science, a nontestable hypothesis [such as Dr. Maddox’s theory] cannot have an error rate.”⁴⁹ Moreover, error rate deals with the practical application of a tested theory so one litigation advantage of an untested hypothesis is that it has no error rate for its proponent to confront; it is just based on the “imaginings” of its proponent expert. But, “[c]ourts after all, operate in the real world” and need valid applications of the scientific method to provide the scientific knowledge to be used in the opinions of experts who will provide

⁴⁶3 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §22:5, (West 2009-2010 ed.).

⁴⁷*Golod v. La Roche*, 964 F. Supp. 841, 848 (S.D. N.Y. 1997).

⁴⁸1 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §1:15 (West 2009-2010 ed.)

⁴⁹1 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §1:16, (West 2009-2010 ed.) Emphasis added. See also *In re Rezulin Products Liability Litigation*, 369 F. Supp. 2d 398, 423 (S.D. N.Y. 2005); and *Wills v. Amerada Hess Corp.*, 379 F.3d 32, 39 (2nd Cir. 2004).

essential testimony to juries.⁵⁰

On the second element of the *Daubert* test, peer review and publication, Dr. Maddox cited some in support of his opinion. The *Daubert* Court itself said, “Publication (which is but one element of peer review) is *not a sine qua non of admissibility; it does not necessarily correlate with reliability* . . . The fact of publication (or lack thereof) in a peer reviewed journal thus will be a *relevant, though not dispositive*, consideration in assessing the *scientific validity* of a particular technique or methodology on which an opinion is premised.”⁵¹

The *Daubert* Court . . . concluded that peer review and publication is a factor to be considered in assessing admissibility, but is not a prerequisite.

The limitations of peer review and publication are akin to those of using general acceptance, discussed below, as a factor. Both criteria are mere proxies for the determinative factor. The value of peer review depends on the quality of those reviewers. If scientist publish in journals with lax standards, the criterion is not likely to lead to the exclusion of bad science. . . . Judges would be well-advised to return to the [other] two factors the Court identified, falsifiability and error rate. These two criteria clearly indicate the Court’s choice of conventional (“scientific realist”) view of the scientific method.

...

*In short, “peer review and publication” do not themselves establish the “reliability” of the proffered knowledge.*⁵²

The instant Court follows this suggested path in weighing much more heavily the testable and tested element and the error rate element of the *Daubert* test.

⁵⁰See 1 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §1:20 et seq. (West 2009-2010 ed.)

⁵¹*Daubert*, 509 U.S. at 593-94. Emphasis added.

⁵²1 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §1:23, (West 2009-2010 ed.) Emphasis added.

Finally, this Court looks at the fourth element of the *Daubert* scientific test: general acceptance. Dr. Maddox's opinion relies heavily on this factor. Of course, as the instant Court pointed out earlier, the Plaintiff's expert, in its estimation, used the *Frye* test bolstered by publications to support his position.⁵³ As the *Daubert* Court itself said on this element, "*A reliability assessment does not require, although it does permit, explicit identification of a relevant scientific community and an express determination of a particular degree of acceptance within that community.*"⁵⁴

Like peer review and publication, general acceptance is only as good as the field that is surveyed. Under *Frye*, of course, general acceptance was the standard by which expert testimony was judged. But general acceptance operates differently under *Daubert*, where it is used in *conjunction with other factors* and is *no longer a necessary or sufficient condition for admission*.

...

The first question *Daubert* requires judges to ask is, "where are the data?" and failure to produce them should result in exclusion of the expert opinion.⁵⁵

Of course, in the instant case, a tested threshold is part of the missing data, just as the missing testing is part of the unreliable method.

⁵³Nothing the Court says in ruling on this motion should be taken to disparage the advocacy of the Plaintiff's attorneys. They are truly excellent attorneys who have presented their case and conducted themselves professionally. Their presentations were done with great skill and technical prowess. You just have to play the ball where it lies – or, at least, that's the case in this trial court's opinion.

⁵⁴*Daubert*, 509 U.S. at 594. Emphasis added.

⁵⁵1 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §1:24, (West 2009-2010 ed.). Emphasis added.

Actually, Georgia in 1982⁵⁶ had rejected the *Frye* “general acceptance” test long before the *Daubert* case in 1993.

In the instant case, the Court finds that any general acceptance shown for the Plaintiff’s expert opinion is far outweighed by its lack of scientific validity. “Courts have been surprised at *Daubert*’s tendency to lead toward exclusion of evidence when applied to fields that for too long rested on uncritical consensus rather than uncompromising empirical investigation”⁵⁷

In addition to the factors enunciated by the Supreme Court, subsequent courts have recognized the so-called “fifth factor,”⁵⁸ namely, “whether experts are proposing to testify about matters growing naturally and directly out of research they have conducted independent of litigation, or whether they have developed their opinions expressly for purposes of testifying.”⁵⁹

As pointed out by the federal Middle District of Georgia case of *Bowers v. Norfolk Southern Corporation*,⁶⁰ “The Sixth Circuit has suggested that ‘if a proposed expert is a “quintessential expert for hire,” then it seems well within a trial judge’s discretion to apply the *Daubert* factors with greater rigor.’ *Johnson v. Manitowoc Boom Trucks, Inc.*, 484 F.3d 426, 435

⁵⁶See *Harper v. State*, supra at 524 (1982).

⁵⁷1 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §1:15, (West 2009-2010 ed.)

⁵⁸*Smelser v. Norfolk S. Ry. Co.*, 105 F.3d 299, 303 (6th Cir.1997). This factor is the first of five additional factors in determining reliability from The Advisory Committee Notes to Rule 702.

⁵⁹*Daubert v. Merrell Dow Pharms., Inc.*, 43 F.3d 1311, 1317 (9th Cir.1995).

⁶⁰*Bowers v. Norfolk Southern Corporation*, 537 F.Supp.2d 1343, 1354 n. 8 (M.D. Ga. 2007).

(6th Cir.2007).”⁶¹ For the reasons stated in Defendant’s brief, the Court finds that Dr. Maddox easily qualifies as such a “quintessential expert for hire” not only for the length, frequency, and the apparent lucrativeness but also the litigation orientation he exhibited in attempting to add a proper empirical basis for his opinion *after* he had originally stated his sworn opinion and the Court first found that it was inadmissible. This transgressed the scientific rule that the empirical data should lead to the theory, not vice versa.⁶² Although no person probably enjoys seeing their testimony discounted, during his live testimony at the hearing on this motion Dr. Maddox’s behavior seemed much more consistent with an advocate than a dispassionate scientist/witness.

Of course, the admissibility of Plaintiff’s expert doctor’s opinion on specific causation of Defendant’s product in this civil litigation is the subject of the instant motion. Applying the *Daubert* test on this expert opinion is a very different inquiry than what is done on reviewing causation on a motion for summary judgment in Georgia; however, this was relied upon by the Plaintiff. The Defendant rebutted this well in its brief, but it should be additionally pointed out that the case⁶³ on which Plaintiff relied predates the passage of the *Daubert* statute in Georgia.

⁶¹Similarly, “[b]ecause Metabolife’s experts formulated their opinions for purposes of litigation, the Court must scrutinize closely the stated bases of those opinions.” *Metabolife International, Inc. v. Wornick*, 72 F. Supp. 2d 1160, 1168-69, aff’d in part, rev’d in part on other grounds, 264 F.3d 832 (9th Cir. 2001). See also 3 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* §§ 21:12, 23:22, (West 2009-2010 ed.).

⁶²This “horse after the cart” was much too extensively performed to justify it as just providing an affidavit to respond to Defendant’s motion for summary judgment. The qualitative and and quantitative nature of this supplementation was a clear attempt at rationalization of an opinion after the opinion had been made. This may be common to litigation, but it is poor science.

⁶³*John Crane, Inc. v. Jones*, 278 Ga. 747 (604 S.E.2d 822) (2004).

On determining the proper methodology that applies in the instant case, it should be noted that *Shiver v. Georgia & Florida Railnet, Inc.*,⁶⁴ said, “The trial court correctly identified *two methods* by which the plaintiff in a *chemical exposure case* may show specific causation in a manner that satisfies the *Daubert* standard: (1) ‘dose/response relationship’ or ‘threshold phenomenon’; and (2) ‘differential diagnosis.’”⁶⁵ However, the authority cited for these two methods is *Hardyman v. Norfolk & Western R. Co.*⁶⁶ which is a *carpal tunnel syndrome* case that says dose-response is not the applicable method to determine specific causation for this kind of injury whereas differential diagnosis does apply. This humble trial court submits that this is a different proposition than giving two methods for specific causation for a chemical exposure case. As previously discussed, it appears that dose-response with an established threshold for when dose starts to cause harm would be necessary for a proper differential diagnosis to be done. Otherwise, the doctor does not have a scientific basis for ruling in a specific asbestos-containing product as a possible cause before he begins the process of ruling out possible causes. A proper dose-response methodology and differential diagnosis would appear not to be two mutually exclusive or alternative methods of specific causation but all part of the same overall method of specific causation in a chemical exposure case.

⁶⁴*Shiver v. Georgia & Florida Railnet, Inc.*, 287 Ga. App. 828, 829 (1) (652 S.E.2d 819) (2007).

⁶⁵Emphasis added.

⁶⁶*Hardyman v. Norfolk & Western R. Co.*, 243 F.3d 255, 260-265 (II) (B) (6th Cir. 2001).


In conclusion, Dr. Maddox's opinion testimony fails the *Daubert* test for scientific knowledge and therefore is *not* "the product of reliable principles and methods" under OCGA § 24-9-67.1 (b) (2).

THE COURT THEREFORE ORDERS THAT:

(a) The Defendant Union Carbide Corporation's Motion to Strike Certain Testimony of Plaintiff's Pathologist Dr. John Maddox is granted; and

(b) Dr. Maddox's opinion testimony to which the Defendant objects is inadmissible in the instant case pursuant to OCGA § 24-9-67.1 (b).

SO ORDERED, this 29th day of June, 2010.



John Lee Parrott
Judge of Superior Courts
Ocmulgee Judicial Circuit

CERTIFICATE OF SERVICE

I, Joy D. Cable Honeycutt, Secretary to Judge John Lee Parrott, do hereby certify that I have this day served the within order upon the individuals listed below by mailing a true copy of said order to them by U. S. Mail in envelopes having sufficient postage thereon to insure delivery and addressed as follows:


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This 29th day of June, 2010.


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