UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANA

	:	**MDL NO. 1657**
IN RE: VIOXX	:	
PRODUCTS LIABILITY LITIGATION	:	**SECTION: L**
	:	
	:	**JUDGE FALLON**
	:	**MAG. JUDGE KNOWLES**
	:	

THIS DOCUMENT RELATES TO
Plunkett v. Merck & Co., Inc., 05-4046

ORDER & REASONS

Pending before the Court is the Motion of Merck & Co., Inc. to Exclude Testimony of Robert H. Fletcher, M.D., M.Sc. (Rec. Doc. 2858); the Motion of Merck & Co., Inc. to Exclude the Testimony of Michael Alan Graham, M.D. (Rec. Doc. 2981); and the Motion of Merck & Co., Inc. to Exclude the Testimony of Wayne A. Ray, Ph.D. (Rec. Doc. 1117) including its Supplemental Brief in Support of its Motion (Rec. Doc. 2857) . For the following reasons, Merck's motion to exclude the testimony of Dr. Fletcher is GRANTED; Merck's motion to exclude the testimony of Dr. Graham is GRANTED IN PART AND DENIED IN PART; and Merck's motion to exclude the testimony of Dr. Ray is DENIED.

I. Background

Vioxx (known generically as rofecoxib) belongs to a general class of pain relievers

known as non-steroidal anti-inflammatory drugs ("NSAIDs"). This class of drugs contains well-known medications sold either over the counter—such as Advil (ibuprofen) and Aleve (naproxen)—or by prescription—such as Daypro (oxaprozin) and Voltaren (diclofenac). NSAIDs work by inhibiting cyclooxygenase (COX), an enzyme that stimulates synthesis of prostaglandins, which are chemicals produced in the body that promote certain effects.

Traditional NSAIDs have been a longstanding treatment option for patients needing relief from chronic or acute inflammation and pain associated with osteoarthritis. rheumatoid arthritis, and other musculoskeletal conditions. This relief, however, comes with significant adverse side effects. Specifically, traditional NSAIDs greatly increase the risk of gastrointestinal perforations, ulcers, and bleeds ("PUBs"). This risk is increased when high doses are ingested, which is often necessary to remedy chronic or acute inflammation and pain. Scientists estimated that traditional NSAID-induced PUBs caused a significant number of deaths and hospitalizations each year in the United States.

In the early 1990s, scientists discovered that the COX enzyme had two forms—COX-1 and COX-2—each of which appeared to have several distinct functions. Scientists believed that COX-1 affected the synthesis or production of prostaglandins responsible for protection of the stomach lining, whereas COX-2 mediated the synthesis or production of prostaglandins responsible for pain and inflammation. This belief led scientists to hypothesize that "selective" NSAIDs designed to inhibit COX-2, but not COX-1, could offer the same pain relief as traditional NSAIDs with the reduced risk of fatal or debilitating PUBs. In addition, scientists believed that such drugs might be able to prove beneficial for the prevention or treatment of other conditions, such as Alzheimer's disease and certain cancers, where evidence suggested that

inflammation may play a causative role.

In light of these scientific developments, Merck & Co., Inc. ("Merck") and several other pharmaceutical companies began the development of such drugs, which became known as "COX-2 inhibitors" or "coxibs." Vioxx is a COX-2 inhibitor.

On May 20, 1999, the Food and Drug Administration ("FDA") approved Vioxx for sale in the United States. From its initial approval, Vioxx gained widespread acceptance among physicians treating patients with arthritis and other conditions causing chronic or acute pain.

Before and after its initial approval, Vioxx was subjected to a number of studies and tests, including, but not limited to, VIGOR, APPROVe, ViP, VICTOR, ADVANTAGE, the Alzheimer's studies, Professor Kronmal's reanalysis of Merck's clinical data, the Solomon study, the Juni study, the Ray study, the Graham study, the Kimmel study, the Levesque study, the Mamdani study, the Ingenix study, the Johnsen study, the Nussmeier study, and the Fitzgerald hypothesis. In addition, a large amount of scientific literature was written on the effects of Vioxx and other COX-2 inhibitors.

On September 30, 2004, Merck withdrew Vioxx from the market when interim unblinded data from a long-term, blinded, randomized placebo-controlled clinical trial, known as APPROVe, seeking to assess whether Vioxx could help prevent the recurrence of precancerous colon polyps, indicated that the use of Vioxx increased the risk of cardiovascular thrombotic events such as myocardial infarctions and ischemic stroke.

Thousands of lawsuits followed in both state and federal court. On February 16, 2005, as a result of the sheer mass of these lawsuits and the potential for many more, the Judicial Panel on Multidistrict Litigation ordered that the Vioxx litigation be centralized, designated as an MDL,

and assigned to this Court.

One of this Court's first tasks was to set cases for early federal court trial. With the consent of both the Plaintiff and Merck, this case was set for trial in late November in New Orleans, Louisiana. Due to Hurricane Katrina, the location of the trial was moved with the consent of the parties to Houston, Texas, but the timing of the trial remained the same. The trial commenced as scheduled, but resulted in a mistrial due to the jury's inability to reach a unanimous verdict. As such, this trial has been rescheduled for February 6, 2006, in New Orleans.

This case involves the death of Richard Irvin, Jr. Mr. Irvin was a 53-year-old man with severe lower back and hip pain. He weighed approximately 230 lbs. and stood 6' tall. On April 9, 2001, he asked his son-in-law, Dr. Christopher Schirmer, an emergency room physician, to give him something for pain. Dr. Schirmer gave Mr. Irvin a prescription for Vicoprofen 7.5/200 mg and Methocarbrnol 750 mg each to be taken once every six hours. Mr. Irvin was unable to tolerate this medication because it produced severe nausea and vomiting. In addition, it provided no significant pain relief.

Subsequently, Mr. Irvin received some samples of Vioxx 25 mg from a friend. He was able to tolerate the Vioxx, and it also reduced his pain. On April 15, 2001, he again contacted Dr. Schirmer and, this time, requested a prescription for Vioxx. Dr. Schirmer sent Mr. Irvin a prescription for 30 tablets of Vioxx 25 mg to be taken once daily. This prescription was filled on April 22, 2001.

On May 15, 2001, while at work, Mr. Irvin suffered a heart attack. Extensive resuscitative efforts were then carried out by the Fire Department Emergency Medical

Technicians and later by emergency room personnel at Flagler Hospital in St. Augustine, Florida, where Mr. Irvin had been taken. These efforts were unsuccessful, and Mr. Irvin was pronounced dead at 9:02 a.m. on May 15, 2001. An autopsy revealed an unattached coronary thrombus, or clot, in the left anterior descending coronary artery.

Mr. Irvin's surviving spouse, Evelyn Irvin Plunkett, has brought this suit against Merck on behalf of herself, Mr. Irvin's two minor children, and the Estate of Richard Irvin, Jr. She alleges that Vioxx was a defective product, Merck knew Vioxx was defective, and Merck failed to adequately warn Mr. Irvin of Vioxx's defective nature. As such, she asserts that Merck is liable for Mr. Irvin's death.

In particular, the Plaintiff asserts that the scientific tests conducted on and the scientific literature written on Vioxx revealed that Vioxx increases the risk of cardiovascular thrombotic events. To put it simply, the Plaintiff contends that Vioxx creates an imbalance between thromboxane and prostacyclin. Thromboxane promotes platelet aggregation, vessel constriction, and proliferation of smooth muscle cells. Prostacyclin, however, opposes the action of thromboxane inhibiting platelet aggregation, facilitating vasodilation, and preventing proliferation of smooth muscle cells. COX-2 is the dominant source of prostacyclin; therefore, the Plaintiff claims that the inhibition of COX-2 favors thrombogenesis, hypertension, and the promotion of atherosclerosis. Specifically, the Plaintiff claims that this mechanism ultimately led to the formation of the thrombus in Mr. Irvin's left anterior descending coronary artery and caused his death.

Merck asserts that none of the tests specifically revealed that Vioxx 25 mg ingested for less than a month can increase the risk of adverse cardiovascular events or create a prothrombotic

state.

A central issue in this litigation is the use of expert testimony. On November 18, 2005, prior to the first trial of this matter, the Court ruled on sixteen *Daubert* motions. The parties have re-urged all of their prior *Daubert* motions. In addition, Merck has filed two new *Daubert* motions pertaining to the testimony of Dr. Robert H. Fletcher and Dr. Michael Alan Graham. Furthermore, Merck has filed supplemental briefing pertaining to its previous motion to exclude the testimony of Dr. Wayne A. Ray.

II. Law and Analysis

Rule 702 of the Federal Rules of Evidence governs the admissibility of expert testimony. Rule 702 is in effect a codification of the United States Supreme Court's opinion in *Daubert v. Merrel Dow Pharmaceuticals*, 509 U.S. 579 (1993). In *Daubert*, the Supreme Court held that trial courts should serve as the gatekeeeper for expert testimony and should not admit such testimony without first determining that the testimony is both "reliable" and "relevant." *Id.* at 589.

Scientific testimony is reliable only if "the reasoning or methodology underlying the testimony is scientifically valid," meaning that such testimony is based on recognized methodology and supported by appropriate validation based on what is known. *Id.* at 592-93. In *Daubert*, the Supreme Court set forth a non-exclusive list of factors to consider in determining the scientific reliability of expert testimony. *Id.* at 593-95. These factors are: (1) whether the theory has been tested; (2) whether the theory has been subject to peer review and publication; (3) the known or potential rate of error; (4) whether standards and controls exist and have been maintained with respect to the technique; and (5) the general acceptance of the methodology in

the scientific community. *Id.* Whether some or all these factors apply in a particular case depends on the facts, the expert's particular expertise, and the subject of his testimony. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 138 (1999).

In addition to the five factors laid out in *Daubert*, a trial court may consider additional factors in assessing the scientific reliability of expert testimony. *Black v. Food Lion, Inc.*, 171 F.3d 308, 312 (5th Cir. 1999). Some of these factors may include: (1) whether the expert's opinion is based on incomplete or inaccurate dosage or duration data; (2) whether the expert has identified the specific mechanism by which the drug supposedly causes the alleged disease; (3) whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion; (4) whether the expert has adequately accounted for alternative explanations; and (5) whether the expert proposes to testify about matters growing directly out of research he or she has conducted independent of the litigation. *See, e.g.*, *id.* at 313; *Moore v. Ashland Chem., Inc.*, 151 F.3d 269, 278-79 (5th Cir. 1998); *Christophersen v. Allied-Signal Corp.*, 939 F.2d 1106, 1114 (5th Cir. 1991); *Newton v. Roche Labs., Inc.*, 243 F. Supp. 2d 672, 678 (W.D. Tex. 2002).

Scientific testimony is relevant only if the expert's reasoning or methodology can be properly applied to the facts in issue, meaning that there is an appropriate fit between the scientific testimony and the specific facts of the case. *Daubert*, 509 U.S. at 593. Scientific evidence is irrelevant, however, when there is too great an analytical gap between the data and the opinion proffered. *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

The party seeking to introduce the expert testimony bears the burden of demonstrating that the testimony is both relevant and reliable. *Moore*, 151 F.3d at 275-76. The focus is not on the result or conclusion, but on the methodology. *Id.* The proponent need not prove that the

expert's testimony is correct, but must prove by a preponderance of the evidence that the methodology used by the expert was proper. *Id.*

The trial court is the gatekeeper of scientific evidence. *Daubert*, 509 U.S. at 596. It has a special obligation to ensure that any and all expert testimony meets these standards. *Id.* Accordingly, it must make a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and whether the reasoning or methodology can be properly applied to the facts in issue. *Id.* at 592-93. In making this assessment, the trial court need not take the expert's word for it. *Joiner*, 522 U.S. at 147. Instead, when expert testimony is demonstrated to be speculative and lacking in scientific validity, trial courts are encouraged to exclude it. *Moore*, 151 F.3d at 279.

In reaching its decision, the Court throughly reviewed the expert reports and deposition testimony of both experts.

III. Present Motions

A. Dr. Robert H. Fletcher

The Plaintiff has offered Dr. Fletcher as an expert in the field of medical publications and the peer review process, with a particular focus on two articles that appeared in the New England Journal of Medicine: a November 23, 2000 article by Bombardier et al on the VIGOR study,[1] and a March 17, 2005 article by Bresalier et al. on the APPROVe study.[2]

In opposition, Merck contends that Dr. Flecther is not qualified to render his opinions and

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[1] Claire Bombardier, et al, *Comparison of Upper Gastrointestinal Toxicity of Rofecoxib and Naproxen in Patients with Rheumatoid Arthritis*, 343 New Engl. J. Med. 1520 (2000).

[2] Robert S. Bresalier, et al, *Cardiovascular Events Associated with Rofecoxib in a Colorectal Adenoma Chemoprevention Trial*, 352 New Engl. J. Med. 1092 (2005).

that his opinions are based on unreliable methodology. In response to Merck's opposition, the Plaintiff withdrew Dr. Fletcher's testimony as to APPROVe. Thus, Dr. Flecther's testimony as to VIGOR is the only issue remaining.

Before the Court can embark on analysis of an expert's qualifications and the methodology used, the Court must first make a threshold determination under Rule 702 that the proffered expert testimony "will assist the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702. Under Rule 702, an expert must "bring to the jury more than the lawyers can offer in argument." *Eymard v. Pan American World Airways*, 795 F.2d 1230, 1233 (5th Cir. 1986).

In regards to the VIGOR article, Dr. Fletcher will testify that Merck failed to report certain additional adverse events to the New England Journal of Medicine. Furthermore, based on these facts, Dr. Fletcher will opine that the editors of the New England Journal of Medicine would have wanted to see the additional adverse events and that this information might have made a difference in whether the article would have been published as is or at all.

As an important side issue, on November 21, 2005, Dr. Gregory Curfman testified by deposition in this matter. Dr. Curfman is the Executive Editor of the New England Journal of Medicine. In his deposition, as is frequently quoted by Dr. Fletcher in his expert report, Dr. Curfman testified to the same effect as Dr. Fletcher intends to testify. In addition, the New England Journal of Medicine published an "Expression of Concern" in regards to the VIGOR article where it also stated the substance of Dr. Fletcher's testimony. In this case, Dr. Fletcher's testimony will not assist the jury to understand the evidence or to determine a fact in issue.

Furthermore, Dr. Fletcher's testimony reiterates the deposition testimony of Dr. Curfman

and the exact message of the New England Journal of Medicine's "Expression of Concern." In addition to not assisting the trier of fact, Dr. Fletcher is merely validating Dr. Curfman's testimony and the "Expression of Concern." Validating or adding credibility to another witness' testimony is not the proper realm for an expert. Cheerleading the testimony of another editor or a medical publication does not constitute expert testimony. The Plaintiff's attorneys can argue for Dr. Curfman and the New England Journal of Medicine just as well as Dr. Fletcher.

B. Dr. Michael Alan Graham

The Plaintiff has offered Dr. Graham as an expert to opine that Vioxx 25 mg taken for less than 30 days can cause thrombotic cardiovascular events. Dr. Graham is prepared to testify that Vioxx can cause the formation of a thrombus and that Vioxx did cause a Mr. Irvin's thrombus, which led to his death. Essentially, Dr. Graham will testify that Vioxx caused Mr. Irvin's death.

In its opposition, Merck asserts that Dr. Graham is not qualified to opine as to whether Vioxx can generally cause thrombotic cardiovascular events or specifically caused Mr. Irvin's myocardial infarction.

Dr. Graham is not qualified to opine on either general causation or specific causation. Furthermore, his methodology is not scientifically reliable Throughout his deposition testimony, Dr. Graham makes a litany of critical admissions. By self-admission, Dr. Graham has no training in pharmacology; is not qualified to explain how Vioxx could lead to thrombosis; has never done any research on NSAIDs or COX-2 inhibitors prior to becoming an expert for the Plaintiff; is not qualified to analyze and interpret clinical and epidemiological data concerning Vioxx; has never prescribed Vioxx or any other COX-2 inhibitors to a patient; has never

determined that Vioxx was a contributing cause of a death; and has never written an article on sudden cardiac death related to plaque rupture. To compensate for his lack of education, experience, and training, Dr. Graham spent approximately eight hours reviewing sixty-seven scientific medical articles, nine depositions, four expert reports, and three days' worth of trial transcripts—far less than this Court or any attorney in this case has spent reviewing Vioxx related materials. In fact, most of these eight hours were spent reviewing Dr. Wayne Ray's expert report. While the Court could further explain Dr. Graham's lack of qualifications or his lack of a reliable scientific basis, it is enough to say that he is not qualified to render an opinion as to whether Vioxx can cause a thrombotic cardiovascular event or whether Vioxx did cause Mr. Irvin's death.

Notwithstanding Dr. Graham's lack of qualifications as to causation, Dr. Graham is qualified to testify as to the existence of a thrombus and its role in Mr. Irvin's death. He just is not qualified to testify that Vioxx can cause a thrombus and did cause Mr. Irvin's thrombus.

C. Dr. Wayne A. Ray

Despite the arguments asserted in Merck's supplemental brief, the Court finds that Dr. Ray is still qualified to testify as an expert and did rely on proper methodology in forming his opinions.

IV. CONCLUSION

For the foregoing reasons, Merck's motion to exclude the testimony of Dr. Fletcher is GRANTED. Additionally, Merck's motion to exclude the testimony of Dr. Graham is GRANTED IN PART AND DENIED IN PART. Lastly, Merck's motion to exclude the testimony of Dr. Ray is DENIED.

New Orleans, Louisiana, this 2nd of February, 2006.

UNITED STATES DISTRICT JUDGE