UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

WENDY B. DOLIN, Individually and as Independent Executor of the ESTATE OF STEWART DOLIN, Deceased,

Plaintiff,

No. 12 C 6403 Judge James B. Zagel

v.

SMITHKLINE BEECHAM CORPORATION D/B/A GLAXOSMITHKLINE, a Pennsylvania Corporation,

Defendant.

MEMORANDUM OPINION AND ORDER

Plaintiff Wendy Dolin brings this action against Defendant SmithKline Beecham Corp. d/b/a GlaxoSmithKline ("GSK"). Plaintiff's husband, Stewart Dolin ("Mr. Dolin"), was fiftyseven years old when he committed suicide in July 2010 after being prescribed Paxil—GSK's trade name for paroxetine hydrochloride ("paroxetine")—and ingesting a generic form of the drug. Plaintiff alleges that Paxil's label failed to adequately warn of the purported risk of adult suicidality.

Currently before me are four motions filed by GSK to exclude Plaintiff's experts Dr. David Healy, Dr. David Ross, Dr. Joseph Glenmullen, and Dr. Roger Grimson pursuant to *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) and Rules 104, 702, and 703 of the Federal Rules of Evidence. For the following reasons, I am denying all four of GSK's motions.

DISCUSSION

GSK argues that Plaintiff's four regulation and causation expert witnesses do not meet the reliability requirements of Rules 702 and 703 of the Federal Rules of Evidence, as described by the Supreme Court in *Daubert*. Rule 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, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

In *Daubert*, the Supreme Court recognized the potentially powerful influence upon untrained jurors of expert testimony about complex disciplines and thus directed that such testimony should be scrutinized with care. *Daubert*, 509 U.S. at 595. Accordingly, when faced with a proffer of opinion testimony directed to scientific, technical, or other matters beyond the knowledge of lay jurors, the court must assume the responsibility of "gatekeeper" to ensure that the opinion testimony is both relevant to the issue at hand and reliable, as judged by the standards of the discipline. Id. at 597. To be sufficiently "reliable," proposed testimony "must be supported by appropriate validation -i.e., 'good grounds,' based on what is known." *Id.* at 590. Likewise, for testimony to be relevant, it must "assist the trier of fact to understand the evidence or to determine a fact in issue." Id. at 591 (quoting FED. R. EVID. 702). Only after the district court is satisfied that the proffered testimony meets both criteria can it be admitted into evidence and presented to the trier of fact. Id. at 589; see Ervin v. Johnson & Johnson, Inc., 492 F.3d 901, 904 (7th Cir. 2007) ("The admissibility of expert testimony is governed by Federal Rule of Evidence 702 and Daubert. Under this framework, courts determine whether the expert testimony is both relevant and reliable.").

The *Daubert* Court identified four factors that might be considered to determine the reliability of a scientific expert's opinion: (1) whether the opinion can be tested or falsified, (2) whether the opinion has been subjected to peer review and publication, (3) any known rate of error of the methodology employed, and (4) the degree of general acceptance of the opinion or its methodology within the relevant field. *Daubert*, 509 U.S. at 593-94. Although they are helpful, these factors are not definitive and strict adherence to them is unnecessary. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 151-52 (1999). Rather, "the *Daubert* framework is a flexible one that must be adapted to the particular circumstances of the case and the type of testimony being proffered." *Mihailovich v. Laatsch*, 359 F.3d 892, 919 (7th Cir. 2004). "At the end of the day, the only absolute requirements imposed on expert testimony are reliability and relevance." *Tucker v. SmithKline Beecham Corp.*, 701 F. Supp. 2d 1040, 1055-56 (S.D. Ind. 2010).

I. Dr. Healy

Dr. David Healy is a professor of psychiatry at Bangor University in the United Kingdom and operates a clinical practice treating patients at the Hergest Mental Health Inpatient Unit in North Wales. He is both a medical doctor and neuropsychopharmacologist. He received his doctorate by studying and writing a thesis specifically on the subject of the serotonin reuptake system (the system upon which Paxil works). He has written numerous peer-reviewed medical journal articles concerning Selective Serotonin Reuptake Inhibitors ("SSRIs"), including Paxil, and about their ability to induce suicidality in some patients.

Dr. Healy has authored or co-authored 22 books in the field of mental health and psychiatric drugs, more than 250 peer-reviewed medical journal publications, and over 200 nonpeer-reviewed articles. Many of Dr. Healy's peer-reviewed medical journal articles concern or otherwise discuss the association between SSRIs and suicidality as well as his opinions

concerning clinical trials, drug efficacy, hidden studies, marketing, and medical journal articles ghostwritten by companies for the signature of "key opinion leaders" for marketing purposes.

Dr. Healy opines that "Paxil can make some individuals more likely to experience suicidality while on a course of treatment with Paxil than if they had not taken the drug, and that some of these people will go on to commit suicide as a result." To support this opinion, Healy explains that "[t]here are a number of mechanisms by which this can be brought about that have been discussed in the scientific literature. One is by the generation of akathisia. This is most likely to play a part early in the course of treatment. The second is by producing an emotional dysregulation. A third is by precipitating a psychotic decompensation."

Dr. Healy prepared and submitted a 50-page report, which is divided into six sections. In the first section, Dr. Healy reviews GSK's early healthy volunteer studies. In the second section, Dr. Healy reviews clinical studies and randomized clinical trials involving SSRIs generally and Paxil specifically, with specific reference to data related to suicidality. Dr. Healy examines all available data related to Paxil, and also conducts a reanalysis of Paxil suicide data from the original New Drug Application submitted to the FDA in 1989, where Dr. Healy opines that GSK manipulated the original data to downplay and obscure the suicide risks observed in the initial trials and then continued to manipulate the data through 2004.

In the third section, Dr. Healy discusses his research and evaluation of the various mechanisms by which Paxil and other SSRIs can induce suicidal behavior and, ultimately, suicide. In the fourth section, Dr. Healy opines that drug companies, such as GSK, have cultivated a "false scientific consensus" by engaging in selective publication of clinical trials, i.e., only the good stuff, and by writing medical journals and paying prestigious academics to put their names on the prewritten articles—a phenomenon known as ghostwriting. In the fifth

section, Dr. Healy considers antidepressant use and national suicide rates. In the sixth and final section, Dr. Healy briefly discusses GSK's Study 329, which was GSK's lead study of Paxil in the treatment of adolescent depression.

Dr. Healy's report concludes that GSK's 2006 meta-analysis shows a 6.7-fold increased risk (Odds Ratio or "OR") of suicidal behavior patients with major depressive disorder. From the FDA's 2006 Analysis, Dr. Healy concludes that the data shows a statistically significant 2.76 relative risk among Paxil users pertaining to suicidal behavior. From his reanalysis of GSK's NDA suicide data from 1991, Dr. Healy finds a statistically significant 8fold increased risk.

This is not the first time Dr. Healy's opinions regarding Paxil and suicide have been subjected to a *Daubert* challenge. In *Tucker v. SmithKline Beecham Corp.*, 701 F. Supp. 2d 1040 (S.D. Ind. 2010), Dr. Healy submitted a nearly identical expert report that was subjected to an extensive and thorough *Daubert* review. Although I am not required to follow Judge Hamilton's decision in *Tucker* regarding Dr. Healy's expert testimony, I choose to do so because I find its reasoning to be persuasive.

In considering GSK's *Daubert* challenges, Judge Hamilton considered four arguments that mirror the arguments presented by GSK in its current motion: (1) it is improper for Dr. Healy to rely on non-Paxil data; (2) Dr. Healy's thesis, that Paxil can induce suicidality among adults, has been repeatedly tested and rejected by regulatory agencies and researchers; (3) Dr. Healy himself acknowledged that there is no published, peer-reviewed, placebo-controlled study in the worldwide scientific literature that demonstrates a statistically significant increased incidence in suicide or suicidal events with Paxil; and (4) Dr. Healy's opinion regarding general causation was developed exclusively for purposes of litigation, and prior to becoming a paid

expert, Dr. Healy ignored the conclusions he has since drawn.

To dissuade me from following *Tucker*, GSK argues that the "*Tucker* court did not consider Dr. Healy's radical advocacy and extreme bias against GSK, which has become apparent in Dr. Healy's writings on his blog over the past few years." As the Plaintiff points out, however, bias is not relevant to a *Daubert* analysis. *See Cage v. City of Chicago*, 979 F. Supp. 2d 787, 827 (N.D. Ill. 2013) (citing *DiCarlo v. Keller Ladders, Inc.*, 211 F.3d 465, 468 (8th Cir. 2000) and *In re Unisys Savings Plan Litigation*, 173 F.3d 145, 166, n.11 (3d Cir. 1999)); *Ameritox, Ltd. v. Millennium Health, LLC*, No. 13-CV-832-WMC, 2015 WL 1520821, at *11 (W.D. Wis. Apr. 3, 2015). Under *Daubert*, I am tasked with reviewing Dr. Healy's methods, not his credibility.

GSK also challenges Dr. Healy's ability to testify as an expert on the grounds that one of Plaintiff's counsel is a shareholder in Dr. Healy's company, Data Based Medicine Global Ltd. ("DBMG"). Dr. Healy uses this company to maintain his blog along with other websites that generate publicity about the purported side effects of SSRIs and other drugs. Although it would be problematic if Dr. Healy had a financial stake in plaintiff's law firm, the relationship between Dr. Healy and plaintiff's counsel as it currently stands is, similar to Dr. Healy's blog posts, nothing more than a topic for cross-examination. Accordingly, I am denying Defendant's motion to exclude Dr. Healy's expert opinion.

II. Dr. Ross

Dr. Ross is currently the Director of HIV, Hepatitis, and Public Health Pathogens Programs for the United States Department of Veteran Affairs ("VA") and has held this position since 2006. In this capacity, Dr. Ross supervises the VA's National Human Immunodeficiency Virus program and National Viral Hepatitis program. Additionally, Dr. Ross is frequently called

upon to provide guidance on policy programs and products related to the treatment of patients within the VA.

Before the VA, Dr. Ross worked at the FDA, where he served in the Office of Oncology Drug Products, in the Office of Drug Evaluation VI, and in the Office of New Drugs. Dr. Ross also served within the Division of Anti-Infective Drug Products at the FDA's Center for Drug Evaluation and Research. At the FDA, Dr. Ross was responsible for reviewing New Drug Applications ("NDAs"), Biological Licensing Applications, and Investigational New Drug Applications for many pharmaceutical products across a broad range of therapeutic areas. Dr. Ross also determined the safety of proposed clinical trials, provided scientific comments, reviewed safety and efficacy data presented in NDAs, and made specific recommendations about the approvability of an application and a sponsor's proposed labeling. As part of this work, Dr. Ross was also tasked with reviewing post-marketing data for already-approved NDAs and making recommendations about regulatory action, including labeling changes. This work included preparing and delivering presentations and briefing packages to multiple FDA Advisory Committees. While at the FDA, as part of this work within the agency, Dr. Ross completed numerous FDA-sponsored regulatory training courses, specifically designed to teach the methods and procedures of the FDA review process. Dr. Ross has lectured, written, and presented extensively regarding the approval of new drugs, regulatory issues related to safety, clinical trials, risk/benefit analysis, and has specifically testified before Congress on these important issues.

Dr. Ross is also a board-certified internist, having been certified in internal medicine by the New York State Board for Medicine, the State of Connecticut Department of Health Services, and the State of Maryland Board of Physician Quality Assurance. Dr. Ross is currently

licensed in internal medicine and infectious diseases by the State of Maryland. Dr. Ross maintains a regular clinical practice, and has done so since graduating from medical school. Currently, Dr. Ross is a staff physician in Washington D.C. at the Veterans Affairs Medical Center, where he treats veterans for a myriad of conditions. Dr. Ross received a bachelor of science in molecular biophysics and biochemistry from Yale University. Dr. Ross then attended New York University, where he received a master of science and Ph.D. in Biochemistry.

Dr. Ross seeks to offer opinions regarding Paxil and suicidality, including that "the label in use for Paxil in 2010 did not carry adequate warnings or information about this risk [suicidal behavior] for patients aged 25 and older or providers treating such patients." Dr. Ross also claims that data from GSK's original 1989 New Drug Application submitted to FDA and GSK's 1991 submission of its analyses of suicidality data to FDA showed "a significantly increased risk of suicide attempts or worse" in patients treated with Paxil and that this information was not described in Paxil's labeling at the time.

Dr. Ross claims that the 2010 labeling for Paxil should have included the information that GSK had previously submitted to FDA in 2006 concerning "a statistically significant increase in the frequency of suicidal behavior in patients treated with paroxetine compared to placebo (11/3,455 [0.32%] versus 1/1,978 [0.05%]" in adults with Major Depressive Disorder (all ages) as well the 2.76 odds ratio found in FDA's 2006 analyses for Paxil.

Dr. Ross approached his review of the data and regulatory materials for this case using the same methods and procedures he used when he worked at the FDA. Those methods included "analysis of data from randomly controlled trials and application of generally accepted statistical procedures" and "reliance on regulatory requirements, relevant implementing regulations, applicable FDA guidance, and regulatory precedent." Additionally, Dr. Ross relied on his

extensive experience reviewing safety data and regulatory submissions during his tenure with the FDA.

To form his opinions, Dr. Ross reviewed the Paxil regulatory submissions and correspondence with GSK regarding Paxil and suicidality, internal GSK documents and analyses related to Paxil and suicidality, FDA studies and analysis concerning antidepressants and suicidality, all the various iterations of the Paxil labeling, the depositions of key GSK and FDA personnel, and a host of published medical literature relating to antidepressant suicidality, with specific emphasis on Paxil.

GSK argues that Dr. Ross's testimony should be excluded because (1) Dr. Ross lacks the necessary qualifications and expertise to opine on the adequacy of Paxil's labeling on the issue of suicidality, (2) his opinions are based an unreliable methodology, and (3) his references to pediatric Paxil suicide data are not relevant. All of these arguments fail.

Dr. Ross clearly has the necessary qualifications and expertise to testify as an expert. Dr. Ross is a medical doctor who holds a Ph.D. in Biochemistry. He worked extensively at the FDA reviewing NDAs, safety data, and proposed labeling associated with pharmaceutical products. Dr. Ross has extensive experience reviewing safety data, applying FDA regulations to that data, and reviewing the sufficiency of drug labeling. For all these reasons, Dr. Ross is qualified to offer opinions about drug labeling and regulatory compliance. Dr. Ross is fully qualified to review a drug company's regulatory submissions, the relevant safety data, and draw conclusions about the adequacy of a proposed label, whether that data is related to an antidepressant or some other drug.

At the heart of GSK's attack on Dr. Ross's qualifications is the idea that antidepressants and suicidality occupy a special field in medicine or at the FDA, and that only

psychiatrists can render opinions about antidepressants and suicide. GSK, however, offers no evidence for this categorical assertion. Paxil is generally prescribed by non-psychiatrists—in fact, Mr. Dolin was prescribed Paxil by an internist, the same type of doctor as Dr. Ross. Medical doctors of all specialties are required to review, understand, and interpret the meaning of a drug label in their clinical practice, whether it is for an antidepressant or other drug. And, in the context of the FDA, the regulations governing antidepressants are the same as those governing all prescription drugs.

GSK's second challenge, which attacks Dr. Ross's use of reliable methodology, also falls short. GSK argues that Dr. Ross relied upon uncontrolled data (trials with no placebo group). The only time, however, that Dr. Ross relies upon uncontrolled clinical trials occurs when Dr. Ross considers data that was possessed by GSK in 1989 and concludes that, from this data, GSK was aware that Paxil is associated with an increased risk of suicidal behavior in adults. In arriving at this opinion concerning what GSK knew in 1989, Dr. Ross used the methods and approach that GSK (and the FDA) used in 1989, which at that time, included use of non-placebo controlled data. GSK, however, uses Dr. Ross's discussion of the uncontrolled data that GSK and the FDA considered in 1989 as a platform to attack all of Dr. Ross's opinions, even though Dr. Ross's remaining opinions are based on completely different data, a 2006 analysis by GSK and the FDA's independent review of adult suicidality in 2007, both of which are placebo controlled.

In their third and final challenge, GSK argues that Dr. Ross's references to pediatric Paxil suicide data are not relevant. Although this is GSK's strongest argument, it nonetheless fails because Dr. Ross's opinion on this issue provides important context with regards to Paxil's 2010 label and its reference to patients under 24.

For purposes of GSK's *Daubert* motion, I am tasked with determining reliability, not absolute truths. Accordingly, GSK's motion to exclude the testimony of Dr. Ross is denied.

III. Dr. Glenmullen

Dr. Glenmullen is a board certified psychiatrist and a clinical instructor in psychiatry at Harvard Medical School, his alma mater. Dr. Glenmullen has been in private clinical practice since 1986, and he also served as a psychiatrist for staff, students and faculty at the Harvard Law School Health Services for 20 years. Dr. Glenmullen has also taught and supervised medical students, social work interns, psychology fellows, and psychiatry residents at Cambridge Hospital/Harvard Medical School since 1988. He is a member and on the Board of Directors of the New England Division of the American Foundation for Suicide Prevention and a member of the American Association of Suicidology. Dr. Glenmullen has also written two books on the side effects of antidepressants.

Plaintiff has submitted three expert reports from Dr. Glenmullen, two on the issues of general causation (*i.e.*, whether paroxetine can cause suicide in adults or pediatric patients) and one on specific causation (*i.e.*, whether paroxetine caused Stewart Dolin to commit suicide). With respect to GSK's 2006 analysis, Dr. Glenmullen found a statistically significant 6.7 suicidal behavior risk in adults of all ages. With respect to the FDA's 2006 analysis, Dr. Glenmullen found a statistically significant 2.76 suicidal behavior risk in adults.

Dr. Glenmullen's opinions are based on his education, training and clinical experience; his review and interpretation of the medical literature; his review and analysis of GSK's clinical trials of Paxil; his review and analysis of clinical trial data concerning Paxil maintained by governmental agencies; and his review of all of the documents collected in this case, including all of the depositions taken.

GSK argues that Dr. Glenmullen's testimony should be excluded because his opinions are not based on reliable methodology. According to GSK, Dr. Glenmullen's opinion fails to show the first step in demonstrating a causal relationship—the existence of a statistically significant association, or correlation—between suicide and paroxetine because he considered both suicidal behavior and suicide data, not just suicide completions on their own. This exact issue, however, has already been considered and allowed by numerous courts.

All of the Paxil studies considered by Dr. Glenmullen in this case were specifically designed to test the drug's efficacy, not detect suicidality. *See Giles v. Wyeth*, 500 F. Supp. 2d 1048, 1051 (S.D. Ill. June 18, 2007). If experts were to design a study for the purpose of researching a drug's effect on suicide, they would have used a larger sample size because of how infrequently suicide occurs. *See Tucker v. SmithKline Beecham* 701 F. Supp. 2d 1040, 1060-61 (S.D. Ind. 2010). "[S]tudying [suicide] for purposes of causation requires a huge number of participants" which would require "more than 300,000 to detect a twofold difference in risk of suicide death or serious suicide attempts." *Giles* at 1058. To account for the shortcomings of the available studies, Dr. Glenmullen considers whether a statistically significant elevated risk of *suicidal behavior* has been demonstrated. The difference between suicidal behavior and suicide completions is a topic for GSK's cross-examination, not a valid basis for excluding Dr. Glenmullen's opinion under *Daubert*.

GSK also argues that the issue of multiple comparisons is particularly relevant here because the two statistically significant outcomes cited by Dr. Glenmullen emanate from 2006 GSK and FDA analyses that contain numerous comparisons of numerous outcomes in numerous subpopulations. According to GSK, Dr. Glenmullen's conclusions are inflated because he failed to adjust for multiple comparisons. However, GSK's own epidemiologist expert, Dr. Robert

Gibbons, testified that, "in drug safety, we rarely use adjustments for multiplicity because we don't want to miss anything. We don't want to miss a potential signal that could be a safety signal that could actually be harmful to human life or the quality of life." This is another topic for Dr. Glenmullen's cross-examination, not a basis for exclusion under *Daubert*.

GSK also challenges Dr. Glenmullen's "re-analysis" of paroxetine clinical trial data from GSK's 1989 NDA. GSK argues that Dr. Glenmullen incorrectly removed placebo run-in events because they did not occur during a randomized trial phase, but left numerous paroxetine events that similarly occurred during non-randomized phases of clinical trials. The run-in period is a one or two-week period prior to randomization when patients are typically taken off other drugs and given placebo pills. However, several of GSK's own experts, including Drs. Blumhardt, Dunbar, and Steiner, conceded in their depositions that it was incorrect to have included run-in events in tabulations of post-baseline suicidal behavior events and risk rates.

According to GSK, Dr. Glenmullen also gives short shrift to the fact that Mr. Dolin had previously taken paroxetine on several occasions, at least one of those times for over a year, without any suicidality or any other complaints to his medical providers. In his expert report, Dr. Glenmullen addresses this issue by stating that in 2010 Mr. Dolin "may have been more sensitive due to the aging process or other changes in his physiology." Similar to GSK's other arguments about what Dr. Glenmullen *failed* to consider in writing his report, this is a topic for Dr. Glenmullen's cross-examination at trial.

GSK is aware that a *Daubert* motion to exclude Dr. Glenmullen's testimony in another case alleging Paxil-induced suicide was denied in *Tucker v. Smithkline Beecham Corp*, 701 F. Supp. 2d 1040 (S.D. Ind. 2010). GSK argues that *Tucker* should not be considered as persuasive authority, and I disagree for the previously discussed reasons. Accordingly, I am denying GSK's

motion to exclude Dr. Glenmullen's expert testimony.

IV. Dr. Grimson

Dr. Grimson is a mathematician, biostatistician and epidemiologist. Dr. Grimson received his Ph.D. in mathematics from Duke University. He completed a postdoctoral program in biostatistics and epidemiology at the school of Public Health at the University of North Carolina at Chapel Hill. In his career, he has specialized in research and applications in the areas of biostatistics, probability, environmental risk, disease clusters, rare events, adverse events, blood products, small samples, combinatorics and epidemiology. He has published over 120 professional peer reviewed journal papers in the areas of biostatistics, epidemiology and applied mathematics. He has taught several graduate level courses at UNC, Chapel Hill and at SUNY at Stony Brook: matrix theory in linear models for biostatistics students, basic statistics for public health students, a seminar on epidemiology for medical students and combinatorial statistics for applied mathematics students. Relative to Paxil suicidal behavior litigation, Dr. Grimson has written several expert reports rendering opinions based on voluminous documents and numerous depositions. The references listed in his report in this case demonstrate the large volume of material he has reviewed regarding Paxil suicidal behavior data in order to render and support his opinions.

Dr. Grimson describes his report as "a critical examination of statistical analysis and design issues arising in [GSK] studies of suicidal behavior and suicidality in adult and pediatric Paxil trials." In his report, Dr. Grimson re-analyzed GSK's Paxil suicidal behavior risk analyses to show the outcome of risk-equations when data GSK now admits was false or improper, is excluded. Dr. Grimson correlated those corrected elevated risk ratios to GSK's and the FDA's analyses of placebo controlled trials performed in 2006, which also showed a statistically

significant, over 2.5 times greater risk of suicidal behavior among patients administered Paxil compared to patients administered placebos.

GSK argues that Dr. Grimson's report should be excluded because it mirrors the reports that he submitted in two other cases against GSK where he testified as an expert witness on behalf of the plaintiff. This argument is completely without merit. Consistency is not a valid ground for exclusion. Consistency, if anything, strengthens an expert's testimony.

The rest of GSK's challenges to Dr. Grimson's expert report mirror the ones attacking Dr. Glenmullen and have already been discussed. Accordingly, I am denying GSK's motion to exclude Dr. Grimson's testimony.

CONCLUSION

I am denying all four of GSK's motions to exclude. The *Daubert* criteria are satisfied when a well-credentialed expert provides well-supported opinions that are relevant and reliable. My decision does not, however, mean that the reliable opinions of all four of these expert witnesses are correct—reliability is a measure of consistency of opinions, not necessarily a measure of correctness. Such a determination will be the job of a fact-finder at trial.

ENTER:

umes B. Zagel

James B. Zagel United States District Judge

DATE: November 20, 2015