IN THE COURT OF APPEALS OF THE STATE OF MISSISSIPPI

NO. 2012-CA-01449-COA

RICKEY KING, INDIVIDUALLY AND AS EXECUTOR OF THE ESTATE OF ELIZABETH **CAROL KING**

APPELLANT

v.

SINGING RIVER HEALTH SYSTEM, DR. LAWRENCE LEAKE, DR. MARILYN O. MORA AND EMERGENCY ROOM GROUP, LTD.

APPELLEES

DATE OF JUDGMENT: 07/31/2012

TRIAL JUDGE: HON. ROBERT P. KREBS

COURT FROM WHICH APPEALED: JACKSON COUNTY CIRCUIT COURT

ATTORNEYS FOR APPELLANT: LAWRENCE CARY GUNN JR.

WILLIAM T. REED

ATTORNEYS FOR APPELLEES: JOHN A. BANAHAN

JESSICA B. MCNEEL

BETTY CAROLINE CASTIGLIOLA

BRETT K. WILLIAMS

JOSHUA WESLEY DANOS

NATURE OF THE CASE: CIVIL - MEDICAL MALPRACTICE TRIAL COURT DISPOSITION: SUMMARY JUDGMENT GRANTED IN

FAVOR OF DEFENDANTS

DISPOSITION: AFFIRMED - 05/27/2014

MOTION FOR REHEARING FILED:

MANDATE ISSUED:

EN BANC.

BARNES, J., FOR THE COURT:

In this medical-malpractice action, we must determine whether the trial court erred ¶1. in excluding the testimony of an expert witness. The trial court granted summary judgment for the defendants because the plaintiff's expert was not qualified to testify to the standard of care of the defendant-doctors, and the expert's opinion that the plaintiff had more than a fifty percent chance of a better recovery lacked support in the medical literature. The plaintiff now appeals. Finding no reversible error, we affirm.

PROCEDURAL HISTORY

- ¶2. Elizabeth Carol King suffered a stroke and was taken to the emergency room (ER) at Ocean Springs Hospital (the Hospital) in Ocean Springs, Mississippi. King was incapacitated as a result of the stroke. King filed two complaints in the Jackson County Circuit Court the first against the Hospital and Dr. Marilyn Mora, an internist; the second against Dr. Lawrence Leake, the ER physician, and Emergency Room Group Ltd. King alleged the physicians failed to diagnose and treat the stroke properly. The actions were consolidated.
- ¶3. All defendants filed motions to exclude the testimony of King's experts: Dr. James E. Gebel, a neurologist; and Dr. Bryan P. Barrileaux Sr., an internist. The defendants also filed motions for summary judgment based on the premise that Dr. Gebel's testimony would be excluded. After hearing arguments, the trial court granted the defendants' motions to exclude Dr. Gebel's testimony. The trial court determined Dr. Gebel was not sufficiently familiar with the standard of care applicable to an ER doctor or an internist. The trial court further found Dr. Gebel's opinions were not based on reliable data. The trial court found Dr. Gebel was unable to cite to any medical literature to support his opinion that King would have had greater than a fifty percent chance of improvement if her stroke had been treated as she claims it should have been. Since King had no other proof to support her claim, the trial court granted the defendants' motions for summary judgment.

¶4. King¹ now appeals, asserting the trial court erred in excluding Dr. Gebel's testimony.

STATEMENT OF FACTS

- ¶5. On September 7, 2009, King was at her parents' home when she fell backward onto the couch and subsequently lost consciousness. King made a comment prior to falling that she thought she was having a stroke. King was transported by ambulance to the Hospital's ER, where she was examined by Dr. Leake.
- ¶6. According to Dr. Leake's affidavit, King had "altered sensorium with a depressed level of consciousness." Dr. Leake noted King's history included a new Xanax prescription. At least six pills were missing from the prescription bottle. King was unable to communicate but did move in response to stimuli. Dr. Leake ordered lab work and a computerized-tomography (CT) scan, which was negative for any abnormalities. The lab work showed the presence of benzodiazepines, which was consistent with her Xanax prescription. Dr. Leake stated that King remained stable while in the ER. Dr. Leake diagnosed King with "acute encephalopathy [of unclear etiology] with depressed mental status" and "a history of and evidence of benzodiazepine overdose." King's symptoms were not lateralized on one side of her body, as is common with normal stroke victims. Dr. Leake later learned that King had suffered a stroke, which he described as "a highly unusual stroke, most likely due to a rare anatomic variant." Dr. Leake stated King never presented with certain symptoms that are

¹ King died after perfecting her appeal. The Mississippi Supreme Court granted an order on June 19, 2013, allowing Rickey King, King's husband, and Chad Pevey, King's son, to be substituted as parties.

usually present when a stroke has occurred.

- ¶7. King was admitted to the intensive-care unit (ICU) of the Hospital under the care of Dr. Mora. After examining King and the pertinent lab and test results, Dr. Mora concluded King suffered from "acute Xanax overdose causing altered mental status."
- ¶8. The next day an MRI was conducted on King, which revealed a rare ischemic stroke, most likely due to a rare anatomic variant known as the artery of Percheron at the base of the brain. The record also refers to this type of stroke as a "basilar artery occlusion" (BAO).
- ¶9. There is a medicine known as tissue plasminogen activator (tPA) that dissolves blood clots that cause stokes. The Hospital touted this type of treatment on its informational website:

It is important to get to the hospital as soon as possible if you suspect a stroke. Many large hospitals are now treating strokes caused by blood clots with clot dissolving medicines. These medicines can cause the symptoms to stop very quickly. They can prevent long-term disability or death. This treatment works only if the medicines are given within the first 3 to 6 hours after the stroke began.

- ¶10. There are also mechanical devices that can be placed into an artery to physically remove blood clots. There was testimony that hospitals in New Orleans, Louisiana (within a helicopter's ride of the Hospital), employed such devices.
- ¶11. The stroke left King severely incapacitated. On the modified Rankin Scale of zero to five, with zero representing minimal impairment and five representing total disability, King had a score of five and was unable to walk, talk, eat, or control her bodily functions. She died a little over three years after the stroke.

STANDARD OF REVIEW

- ¶12. Summary judgment is proper "if the pleadings, depositions, answers to interrogatories and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." M.R.C.P. 56(c). Under Rule 56(c), the movant bears the burden of proving that no genuine issue of material fact exists. *Buckel v. Chaney*, 47 So. 3d 148, 153 (¶10) (Miss. 2010). "[S]ummary judgment is appropriate when the non-moving party has failed to make a showing sufficient to establish the existence of an element essential to the party's case, and on which that party will bear the burden of proof at trial." *Id.* (citation and internal quotation marks omitted).
- ¶13. The appellate court reviews the trial court's grant of summary judgment de novo. Kilhullen v. Kan. City S. Ry., 8 So. 3d 168, 174 (¶14) (Miss. 2009). The evidence will be "viewed in the light most favorable to the party against whom the motion has been made." Id. at 174-75 (¶14) (quoting Daniels v. GNB Inc., 629 So. 2d 595, 599 (Miss. 1993)); See also Hubbard v. Wansley, 954 So. 2d 951, 956 (¶9) (Miss. 2007) (rulings on summary-judgment motions are reviewed taking the evidence in the nonmoving party's favor).
- ¶14. According to Mississippi Rule of Evidence 702, a witness may testify as an expert if the witness is "qualified as an expert by knowledge, skill, experience, training, or education," and "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."

- ¶15. Trial court judges have a gate-keeping responsibility to assure a proposed expert's opinion has "a reliable basis in the knowledge and experience of the relevant discipline." Worthy v. McNair, 37 So. 3d 609, 614 n.3 (Miss. 2010) (quoting Kumho Tire Co. v. Carmichael, 526 U.S. 137, 158 (1999)). See also Daubert v. Merrell Dow Pharm. Inc., 509 U.S. 579, 589 (1993).
- ¶16. We review a trial court's determination as to the qualifications of an expert witness under our familiar abuse-of-discretion standard, *Hubbard*, 954 So. 2d at 956 (¶11), which has been referred to in medical-expert cases as having "the widest possible discretion." *Univ.* of Miss. Med. Ctr. v. Pounders, 970 So. 2d 141, 146 (¶16) (Miss. 2007).

DISCUSSION

¶17. King argues Dr. Gebel should have been allowed to testify. Specifically, King contends the trial court erred in excluding Dr. Gebel based upon his lack of qualifications to testify as to the standard of care of the defendant-doctors and in finding Dr. Gebel's opinion was not based upon reliable data.

I. Standard of Care

¶18. The trial court ruled:

Dr. Gebel's curriculum vitae is replete with extensive training and experience in neurology and stroke evaluation and treatment; however, it does not indicate that he has ever been intimately connected with the field of emergency medicine. The Court finds that Dr. Gebel is not sufficiently familiar with the specialty of the defendant-doctors as required by Rule 702 of the Mississippi Rules of Evidence to render an opinion regarding the applicable standard of care.

¶19. We first note that the fact that Dr. Gebel is not certified as an ER doctor or a

hospitalist is not dispositive. "There is no requirement that an expert in a medical-malpractice case be a specialist in the same area as the doctor about whom the expert is testifying in regard to the standard of care." *McDaniel v. Pidikiti*, 39 So. 3d 952, 956 (¶10) (Miss. Ct. App. 2009) (citation omitted); *see also Caldwell v. Warren*, 2 So. 3d 751, 757 (¶¶24-25) (Miss. Ct. App. 2009) (One need not be board certified in a specialty to testify concerning the standard of care if the doctor is sufficiently familiar with that area of practice.). However, "[s]atisfactory familiarity with the specialty of the defendant doctor is . . . required in order for an expert to testify as to the standard of care owed to the plaintiff patient." *Hubbard*, 954 So. 2d at 957 (¶13).

- ¶20. The record indicates Dr. Gebel is an experienced and knowledgeable neurologist and has extensive experience treating strokes. However, we must determine whether Dr. Gebel is familiar with the standard of care required of an internist or an ER doctor in treating patients.
- ¶21. Dr. Gebel's affidavit claims that he is familiar with the standard of care of ER doctors and hospitalists because he interacts with them practically on a daily basis in the diagnosis and treatment of stokes. He claims that he consults with them and has "extensive experience in observing the evaluations and thought processes of emergency medicine physicians and internal medicine hospitalists in assessing acutely unresponsive patients like Mrs. King." He points out that he has extensive experience in the community-hospital setting, such as in the Ocean Springs, Mississippi Hospital, and that he has "lectured to emergency medicine physicians and internal medicine physicians on many occasions regarding appropriate care

and the standard of care for acute stroke evaluation "

- ¶22. Dr. Gebel opines that King's case is "so straightforward" that "any competent physician, regardless of specialty, should have been able" to diagnose King as suffering from a stroke. Dr. Gebel says that the proper diagnosis was obvious to him. The defendants, however, presented evidence that the stroke was a rare type that affected both sides of the body, rather than just one side, and that it would not be easily apparent that the patient was suffering from a stroke.² The problem with Dr. Gebel's opinion concerning the standard of care is that he is examining the symptoms through eyes much more highly trained in regard to rare types of stroke than those of ER physicians and hospitalists.
- ¶23. We owe some deference to the trial court's ruling concerning the expert's qualification to testify as to the standard of care, and this is a close question. Ultimately, our decision to affirm the trial court's exclusion of Dr. Gebel's opinion for lack of a reliable basis makes a decision on the trial court's standard-of-care ruling unnecessary.

II. Reliable Basis for the Opinion

- ¶24. The plaintiff establishes a prima facie case for medical malpractice by showing:
 - (1) the defendant had a duty to conform to a specific standard of conduct for the protection of others against an unreasonable risk of injury; (2) the defendant failed to conform to that required standard; (3) the defendant's breach of duty was a proximate cause of the plaintiff's injury, and; (4) the plaintiff was injured as a result.

² The Helsinki 2011 study noted that approximately twenty percent of strokes are in the posterior region, and that only a "small portion of these" are the BAO type suffered by King.

McGee v. River Region Med. Ctr., 59 So. 3d 575, 578 (¶9) (Miss. 2011) (quoting Delta Reg'l Med. Ctr. v. Venton, 964 So. 2d 500, 504 (¶8) (Miss. 2007)). "Liability turns on a failure to provide the required level of care." Hall v. Hilbun, 466 So. 2d 856, 869 (Miss. 1985) (superceded by statute on other grounds). Thus, "[t]he success of a plaintiff in establishing a case of medical malpractice rests heavily on the shoulders of the plaintiff's selected medical expert. The expert must articulate an objective standard of care." McGee, 59 So. 3d at 578 (¶9) (quoting Estate of Northrop v. Hutto, 9 So. 3d 381, 384 (¶10) (Miss. 2009)). "Not only must an expert identify and articulate the requisite standard that was not complied with, the expert must also establish that the failure was the proximate cause, or proximate contributing cause, of the alleged injuries." Id. (quoting McDonald v. Mem'l Hosp., 8 So. 3d 175, 180 (¶12) (Miss. 2009)).

- ¶25. "Before a qualified expert's opinion may be received, it must rise above mere speculation." *Williams v. State*, 35 So. 3d 480, 486 (¶19) (Miss. 2010) (quoting *Goforth v. City of Ridgeland*, 603 So. 2d 323, 329 (Miss. 1992)). "Only opinions formed by medical experts upon the basis of credible evidence in the case and which can be stated with reasonable medical certainty have probative value." *Id.* (quoting *Catchings v. State*, 684 So. 2d 591, 596 (Miss. 1996)).
- ¶26. On the critical causation question, "[r]ecovery is allowed only when the failure of the physician to render the required level of care results in the loss of a reasonable probability of substantial improvement of the plaintiff's condition." *Ladner v. Campbell*, 515 So. 2d 882, 888 (Miss. 1987) (quoting *Clayton v. Thompson*, 475 So. 2d 439, 445 (Miss. 1985)).

There must be proof of "a greater than fifty (50) percent chance of a better result than was in fact obtained." *Id.* at 889 (citation omitted). This "greater than fifty percent" opinion must be backed up by specific facts. *Hubbard*, 954 So. 2d at 965-66 (¶48).

¶27. In this case, King specifically claims that she would have had a substantially better outcome if she had received either tPA or a mechanical device (Merci Retrieval system or Penumbra system), or a combination of the two. We begin with the trial court's reasons for excluding Dr. Gebel's opinion and then consider whether that opinion is reliably supported by the medical literature.³

A. The Trial Court's Ruling

¶28. The trial court ruled that Dr. Gebel's opinion lacked a reliable basis because it lacked

Perttu J. Lindsberg et al., *Long-term Outcome After IntravenousThrombolysis of Basilar Artery Occlusion*, 292 JAMA 1862 (2004) (Helsinki) (studied fifty patients with basilar artery occlusions).

Tiina Sairanen et al., *IntravenousThrombolysis of Basilar Artery Occlusion: Predictors of Recanalization and Outcome*, 42 Stroke 2175 (2011) (Helsinki) (studied 116 patients with basilar artery occlusions).

National Institute of Neurological Disorders and Stroke rt-PA Stroke Study Group, *Tissue Plasminogen Activator for Acute Ischemic Stroke*, 333 New Eng. J. Med. 1581 (1995) (NINDS) (studied 624 patients with all types of strokes). There was a follow-up study in 1999 that expanded the 1995 findings: Thomas G. Kwiatkowski et al., *Effects of Tissue Plasminogen Activator for Acute Ischemic Stroke at One Year*, 340 New Eng. J. Med. 1781 (1999).

Werner Hacke et al., *Thrombolysis with Altephase 3 to 4.5 Hours After Acute Ischemic Stroke*, 359 New Eng. J. Med. 1317 (2008) (ECASS-III) (studied 821 patients with all types of strokes).

³ The parties rely on four main studies:

support in the relevant medical literature. The court noted that Dr. Gebel's opinion was not supported by two major studies: the NINDS study (finding only a twelve percent to fourteen percent chance of improvement with the administration of tPA) and the ECASS III study (finding only a seven percent chance of improvement with the administration of tPA).

¶29. The trial court further found that the 2011 Helsinki report could not be considered because it was published well after King's 2009 stroke. In this respect, the trial court was in error. Dr. Gebel testified that he did not rely upon the 2011 Helsinki paper for standard of care but only on the issue of causation. While the report could not be considered for the standard of care, it was relevant to the question of whether the administration of tPA could have produced a greater than fifty percent chance of a better recovery for King.⁴ However, even considering both Helsinki reports, we find that neither supports Dr. Gebel's opinion.

B. Dr. Gebel's Opinion

¶30. Dr. Gebel acknowledged that King was in a grave condition when she arrived at the Hospital. He noted that persons with a symptomatic BAO, such as King suffered, stand an eighty-five to ninety-five percent chance of death. Recanalization is the reopening of an artery and is associated with a "greatly improved outcome." Dr. Gebel's opinion was that a distal basil artery clot stands 4.8 times greater odds of recanalization than other types of stroke.

⁴ As the trial court noted, evidence concerning the 2011 Helsinki article, even if relied upon only to corroborate causation, however, may properly be excluded if the issues of causation and standard of care are so intertwined that admission of the evidence may confuse the jury. *See Dunn v. Yager*, 58 So. 3d 1171, 1203 (¶78) (Miss. 2011).

¶31. Dr. Gebel stated that with tPA, King had a seventy percent chance of a better outcome. According to Dr. Gebel, if King had gotten tPA, she would have had "a very high degree of probability that she would have recanalized her vessel," leading to an eighty percent chance of a good outcome and only a twenty percent chance of becoming severely disabled or dying. He stated that in his experience, for persons with symptomatic BAOs, "the overwhelming majority are not left with death or a permanent very severe disability like Miss King . . . if they get treated with either [intravenous] tPA, the mechanical procedures or the combination of both."

C. The Basis for Dr. Gebel's Opinion

- ¶32. Dr. Gebel testified that his opinion was based in part on his personal experience, having administered tPA "hundreds of times" in his career and "two, three dozen times," specifically to people with BAOs. Dr. Gebel admitted that the only published studies that he claimed supported his seventy percent better-recovery opinion are the 2004 and 2011 Helsinki papers. Dr. Gebel's opinion that use of the Merci Retrieval or Penumbra devices would have significantly improved King's outcome was based upon his personal experience, and not on any published studies.
- ¶33. In *Poole v. Avara*, 908 So. 2d 716 (Miss. 2005), the supreme court held that support for an expert opinion in the scientific literature was only one factor to be considered and not an absolute requirement. *Id.* at 724 (¶17) (citing *Kumho Tire Co.*, 526 U.S. at 151; *Daubert*, 509 U.S. at 596). Where there is study of the expert's theory in the expert community, however, support for the theory is important. In *Hill v. Mills*, 26 So. 3d 322 (Miss. 2010),

the supreme court upheld the exclusion of a medical expert's opinion that had been challenged because it was not supported by the medical literature. The court noted:

In contrast to *Poole*, the subject matter of the expert opinion in the case before us today has been extensively explored and documented, and one hundred percent of documentation presented to the trial judge contradicts [the medical expert's] opinion. Thus, we cannot say that the trial judge abused his discretion in finding that, under Rule 702, [the medical expert's] opinions . . . were unreliable and inadmissible.

We restate for emphasis that, when the reliability of an expert's opinion is attacked with credible evidence that the opinion is not accepted within the scientific community, the proponent of the opinion under attack should provide at least a minimal defense supporting the reliability of the opinion. The proponent of the expert cannot sit on the side lines and assume the trial court will ignore the unrebutted evidence and find the expert's opinion reliable. Were we automatically to allow introduction of expert opinions which are based upon nothing more than personal experience in cases where those opinions are contradicted in the scientific literature, we would effectively render Rule 702 and *Daubert* a nullity.

Id. at 332-33 (\P 40-41) (internal citations omitted).

¶34. Hill was cited with approval in Patterson v. Tibbs, 60 So. 3d 742 (Miss. 2011). There, a medical expert's opinion was contradicted by the medical literature, and the expert cited no medical studies supporting his opinion. The supreme court held:

Patterson is correct in her assertion that lack of consensus among sources does not automatically render an expert opinion inadmissible. An offered opinion that has been contradicted by published and peer-reviewed data, however, must be supported by some evidence of support and acceptance in the scientific community. Patterson has failed to meet this standard. Accordingly, the trial court did not abuse its discretion in excluding the expert witnesses' testimony

Id. at 751 (¶31); see also Sherwin-Williams Co. v. Gaines ex rel. Pollard, 75 So. 3d 41, 46(¶16) (Miss. 2011) (upholding the exclusion of medical experts' opinions, in part because

they "did not present any scientific authority" for their conclusions).

- ¶35. On the question of whether Dr. Gebel's opinion may be based upon his personal experience without supporting medical studies, King cites to *Bass v. Bobo*, 980 So. 2d 944, 949 (¶¶8-9) (Miss. Ct. App. 2007), for the argument that an expert testifying at odds with the medical literature can sufficiently overcome the conflict by reference to his own experience. *Bass* does not stand for this proposition, however. In *Bass*, the defense expert testified consistently with the medical literature. The expert used the plaintiff's medical literature to show that no treatment standards were listed for the procedure at issue and that, in the absence of such standards, each physician should rely upon his or her own experience, training, and personal beliefs. This Court's statement that Bass "sufficiently overcame the alleged conflict" was not a statement that an expert's personal experience can suffice in the absence of any supporting medical literature. *Id*.
- ¶36. We conclude that where a theory has been studied in the medical literature and an expert's opinion is challenged for being contrary to the medical literature, there must be some support in the medical literature for a medical expert's opinion or some basis for believing that the medical literature is wrong. Reliance on a doctor's personal experience alone is insufficient. We therefore examine whether Dr. Gebel's opinion was supported by the medical literature.

D. The Defense's Attack on the Basis of Dr. Gebel's Opinion

¶37. The four studies cited by the parties are the 1995 NINDS study, the 2008 ECASS-III study, the 2004 Helsinki study, and the 2011 Helsinki study.

¶38. The NINDS study has been described as the "gold standard" for measuring the efficacy of tPA for stroke patients. In *Smith v. Bubak*, No. CIV 08-44023, 2010 WL 605269, at *3 (D.S.D. Feb. 18, 2010), the South Dakota district court noted, "The parties agree that the 1995 National Institute of Neurological and Communicative Disorders and Stroke study ('1995 NINDS study') represents the gold standard for questions regarding the effectiveness of tPA therapy for patients suffering an acute ischemic stroke." In *Samaan v. St. Joseph Hospital*, 755 F. Supp. 2d 236, 239 (D. Me. 2010), the Maine district court stated: "The experts agree that the NINDS Study is the gold standard for assessing the effectiveness of the administration of tPA within three hours of the onset of stroke symptoms."

¶39. The defendants argue that the 1995 NINDS trial is superior to the Helsinki trials because it involved a larger study group (624 versus 50 and 116), and it was a controlled study with a placebo administered to half of the study group.⁵ Its results showed that there is only an approximately twelve percent benefit of taking tPA.⁶ The study also quantified

⁵ Studies using placebos typically give half the study group the treatment being studied, and half the group get a harmless substitute. Such studies are "controlled" in the sense that patients who would have gotten better even without receiving the treatment being studied can be excluded from the results so that only improvement caused by the study treatment is measured. Dr. Gebel testified that the benefits of tPA are so apparent that it would be "grossly unethical" to conduct a controlled study with patients only receiving a placebo.

Or. Gebel conceded in his deposition that the NINDS report showed an approximately twelve percent improvement caused by tPA. This is consistent with the exclusion of placebo-receiving patients who improved despite not receiving tPA. The NINDS report contains the statement: "As compared with patients given placebo, patients treated with tPA were at least 30 percent more likely to have minimal or no disability at three months, as measured by the outcome scales (absolute increase in favorable outcome, eleven

the increased risk that tPA would lead to fatal brain hemorrhage as a 5.8 percent absolute increase in the risk of death.⁷

- ¶40. The defendants also argue that the 2008 ECASS-III study is superior to the Helsinki trials because it involved a larger study group (821 versus 50 and 116), and it was also a controlled study with a placebo administered to half of the study group. Its results showed that there is only a 7.2% benefit of taking tPA.⁸
- ¶41. The defendants argue that the 2004 Helsinki study involved too small a study group (fifty) and was not a controlled study. Further, it involved the joint use of heparin (an anticoagulant) and tPA, so the effects of tPA without heparin were not measured. The combination of tPA and heparin is not a treatment style adopted in the United States. The study shows only a thirty percent long-term chance of a "good outcome." Only twenty-six of fifty patients (fifty-two percent) "recanalized" with tPA. Almost half (forty-six percent)

to twelve percent)." Although the statement "[a]s compared with patients given placebo" suggests that the thirty percent figure takes into account the patients whose improvement was independent of the application of tPA, the "eleven to twelve percent" "absolute" figure matches this exclusion and appears to be the proper percentage for measuring improvement caused by the administration of tPA. In any event, both the eleven to twelve percent figure and the thirty percent figure fall far short of the "greater than 50 percent" better outcome required by Mississippi law.

⁷ This increase in the risk of death was a factor leading the major governing bodies for emergency medicine in the United States to state that it is not the standard of care to administer tPA for most strokes.

⁸ Dr. Gebel testified that the NINDS and ECASS-III percentages cannot be compared to his interpretation of the Helsinki studies because they measured only for an almost "perfect recovery." Dr. Gebel believed that, for King, even a "relatively poor outcome" would have been an improvement upon her total disability.

of the patients died within three months. The study itself noted that a randomized clinical study (using a placebo) was needed before advising to administer tPA.

¶42. The defendants argue that the 2011 Helsinki study also involved too small a study group (116) and was still not a controlled study. Only thirty-three percent of patients showed a "good outcome" with tPA. While the sixty-five percent recanalization rate exceeded the fifty-two percent of the 2004 Helsinki study, the overall survival rate was not higher than with conventional treatment. Even for patients who recanalized, a good outcome was not assured. The study noted that recanalization supported only a "trend" toward a better outcome.

¶43. The defendants point out that Dr. Gebel's "70% better-outcome" opinion is based upon a 100% recanalization outcome, which is disproved by the fifty to sixty-five percent recanalization outcome obtained in the 2011 and 2004 Helsinki studies. Further, they argue that the "100% recanalization" theory ignores the half of the patients who died despite receiving tPA. They contend that ignoring the half of patients who died, and a further thirty-

⁹ Dr. Gebel testified that the Helsinki studies are more reliable because they focused on the specific type of stroke King suffered (BAO), as opposed to all ischemic strokes studied by the NINDS and ECASS-III studies. Due to the precise location of King's occlusion (BAO), Dr. Gebel believed she was more likely to recanalize. He felt that if the Helsinki percentages in the thirty percent range were adjusted to conform with his theory of almost 100% recanalization, they would support his seventy percent better-outcome conclusion.

The study noted: "Hence, aiming at recanalization with intravenous thrombolysis did not lead to excessive mortality, but it is unclear why 65% recanalization rate was not accompanied with higher survival rate than with conventional treatment."

five percent to fifty percent who failed to recanalize, distorts Dr. Gebel's statistical conclusion. The defendants point out that Dr. Gebel's opinion that almost all BAO patients recanalize with tPA is not supported by the Helsinki studies or any other published studies.

¶44. Dr. Gebel claims to have excellent success when he administers tPA to his patients. This claim must be assumed true at the summary-judgment stage. However, the law requires more before a jury in a medical-malpractice case can hear an expert's opinion. There must be some support for the expert's opinion in the medical literature. Careful analysis of Dr. Gebel's basis for his opinion shows that he makes assumptions about the rate of recanalization, a critical component of his ultimate opinion, that are not supported and, in fact, are contradicted by the only medical literature that he claims supports his opinion, the two Helsinki studies.

CONCLUSION

¶45. The trial court was correct in finding Dr. Gebel's opinion that King stood a seventy percent better chance of a better outcome if tPA had been administered was not based upon reliable principles and methods. Dr. Gebel produced no medical literature supporting a more than fifty percent chance of a better outcome from the use of mechanical retrieval systems, either alone or in combination with the use of tPA. As a consequence, the trial court was correct in excluding this opinion under *Daubert*. As King lacked sufficient proof going forward absent Dr. Gebel's opinion, the grant of summary judgment for the defendants was also correct.

¶46. THE JUDGMENT OF THE CIRCUIT COURT OF JACKSON COUNTY IS

AFFIRMED. ALL COSTS OF THIS APPEAL ARE ASSESSED TO THE APPELLANT.

GRIFFIS, P.J., ISHEE, ROBERTS, CARLTON, MAXWELL AND FAIR, JJ., CONCUR. LEE, C.J., DISSENTS WITH SEPARATE WRITTEN OPINION, JOINED BY IRVING, P.J., AND JAMES, J.

LEE, C.J., DISSENTING:

- ¶47. With respect for the majority, I nevertheless am compelled to dissent. The trial judge granted the defendants' motion to exclude the testimony of the plaintiff's expert, Dr. James Gebel, then granted summary judgment on the ground that the plaintiff lacked any evidence of causation.
- ¶48. On September 7, 2009, Carol King was helping her elderly parents tidy up their home when she suddenly fell back on a sofa; said, "I think I am having a stroke"; and lost consciousness. When King collapsed, her father called an ambulance, which transported her to Ocean Springs Hospital, a satellite of Singing River Hospital. At the direction of the ambulance attendant, King's husband carried her prescription medications to the emergency room.
- ¶49. At the emergency room, King was misdiagnosed as a drug addict suffering from an overdose. King was in effect rendered no treatment and left to "sleep it off." The next morning, King was examined by a neurologist and correctly diagnosed as a stroke victim, much too late to administer any form of treatment to temper or lessen the effects of the stroke. It had done its damage.
- ¶50. King was correctly diagnosed by the neurologist as having suffered a bad hemorrhagic

stroke, a basilar artery occlusion, which left her totally incapacitated and unable to walk, talk, eat, or control her bodily functions. King died January 23, 2013.

¶51. On its website, Ocean Springs Hospital advertises as follows:

It is important to get to the hospital as soon as possible if you suspect a stroke. Many large hospitals are now treating strokes caused by blood clots with clot dissolving medicines. These medicines can cause the symptoms to stop very quickly. They can prevent long-term disability or death. This treatment works only if the medicines are given within the first 3 to 6 hours after the stroke began.

- ¶52. Despite advertising itself as the place to go for stroke victims, Ocean Springs Hospital failed to properly recognize King as having suffered a stroke, instead labeling her a drug addict and leaving her to "sleep it off." Through its neglect, delay, and misdiagnosis, Ocean Springs Hospital hindered King from receiving the treatment that may have substantially improved her condition.
- ¶53. In an effort to fully and competently analyze and diagnose King's condition and the treatment she received, King's attorney sought the most qualified expert on strokes available, who in all respects was familiar with and practiced medicine similar to the same standards and treatment offered by Ocean Springs Hospital. That expert was Dr. Gebel, a board-certified neurologist from Akron, Ohio, who has extensive experience treating stroke victims like King.
- ¶54. The trial court denied Dr. Gebel the right to testify, citing *Ladner v. Campbell*, 515 So. 2d 882, 889 (Miss. 1987), for the proposition that there must be proof of "a greater than fifty (50) percent chance of a better result than was in fact obtained." However, Dr. Gebel

stated in his affidavit: "It is my opinion that Mrs. King would have achieved recanalization[11] with intravenous tPA to a high degree of medical probability, certainly more than a 51% chance." This is the exact same treatment Ocean Springs Hospital advocates on its website for being the place to go for stroke victims.

¶55. Under Mississippi law, an expert witness in a medical-malpractice case must be familiar with and have knowledge of the treatment and standard of care afforded the patient, and also must possess similar education, training, and skills. Dr. Gebel met all of these requirements. If he had not discussed recanalization with intravenous tPA, then he would have been disqualified from testifying because he did not use the same standard of care as did Ocean Springs Hospital. Whether this approach to treatment meets the necessary "greater than fifty percent" requirement as enunciated in *Ladner* should not be a preclusion to Dr. Gebel testifying. The standard should be what Ocean Springs Hospital would have normally done in its treatment of stroke victims.

¶56. Dr. Gebel is imminently qualified through education, training, and experience to testify. There is a need for judges to serve as gatekeepers under *Daubert*¹² and to exclude testimony that is unrelated. It is also within the jury's province to give what weight it deems proper to expert testimony.¹³ There is also a greater need for justice. If Dr. Gebel is not qualified to testify, then pray tell, who is?

¹¹ Recanalization is the removal of the obstructing blood clot that causes a stroke.

¹² Daubert v. Merrell Dow Pharms. Inc., 509 U.S. 579, 589 (1993).

¹³ Flight Line Inc. v. Tanksley, 608 So. 2d 1149, 1166 (Miss. 1992).

¶57. In this case, an imminently qualified expert was denied the right to testify. I respectfully dissent and would reverse the grant of summary judgment.

IRVING, P.J., AND JAMES, J., JOIN THIS OPINION.