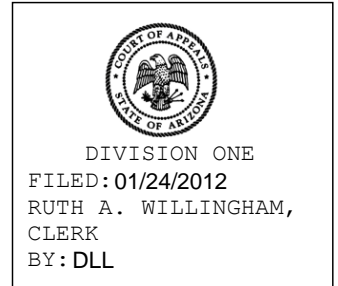


IN THE COURT OF APPEALS
STATE OF ARIZONA
DIVISION ONE

ALLEN BENKENDORF, surviving) No. 1 CA-CV 09-0697
spouse of JUDITH BENKENDORF,)
deceased,) DEPARTMENT B
)
Plaintiff/Appellant,) O P I N I O N
)
v.)
)
ADVANCED CARDIAC SPECIALISTS)
CHARTERED, an Arizona)
corporation,)
)
Defendant/Appellee.)
_____)



Appeal from the Superior Court in Maricopa County

Cause No. CV 2004-013558

The Honorable Edward O. Burke, Judge (Retired)

AFFIRMED

Law Office of Glynn W. Gilcrease, Jr., P.C. By Glynn W. Gilcrease, Jr. Co-Counsel for Plaintiff/Appellant	Tempe
Law Offices of David L. Abney, Esq. By David L. Abney Co-Counsel for Plaintiff/Appellant	Phoenix
Jardine, Baker, Hickman & Houston, P.L.L.C. By Neil C. Alden and Curtis M. Bergen Co-Counsel for Defendant/Appellee	Phoenix
Jennings, Strouss & Salmon, P.L.C. By John J. Egbert Co-Counsel for Defendant/Appellee	Phoenix

B R O W N, Judge

¶1 In this medical malpractice action, Allen Benkendorf appeals from a judgment entered following a jury verdict in favor of Advanced Cardiac Specialists Chartered ("ACSC"). The sole question we address in this opinion is whether the trial court should have prohibited ACSC from presenting expert testimony opining as to *possible* causes of an injury that led to a patient's death.¹ For the following reasons, we hold that the court did not abuse its discretion in allowing such testimony.

BACKGROUND

¶2 Benkendorf's wife, Judy, underwent surgery in January 2003 to remove her cancerous left kidney. After the surgery, she developed a blood clot that went to her lung. Her doctor prescribed Coumadin, an anticoagulant medication that a patient takes orally.² Thereafter, Judy began regular visits to ACSC's Coumadin Clinic, where her blood was tested and Coumadin dosage

¹ Pursuant to Arizona Rule of Civil Appellate Procedure 28(g), we address other issues raised on appeal by Benkendorf in a separate memorandum decision filed herewith.

² As reflected by expert testimony presented at trial, a person taking Coumadin to treat a blood clot must be monitored to ensure the level of medication in the blood remains within an acceptable therapeutic range. The goal is to thin the patient's blood so that the Coumadin is effective in treating the blood clot, but without creating an excessive risk of bleeding. The therapeutic range is commonly measured by the International Normalized Ratio ("INR"), which is a methodology of standardizing anti-coagulation levels.

changed if necessary to maintain her therapeutic level. Early in the morning of June 16, 2003, Judy suffered an intracranial hemorrhage while at her home and died two days later.

¶13 Benkendorf sued ACSC, alleging it caused Judy's death by negligently monitoring and adjusting her Coumadin dosages. Before trial, Benkendorf filed a motion in limine, seeking to preclude testimony from ACSC's causation expert, Dr. Kurt Schroeder, regarding various possible causes of Judy's death. Benkendorf asserted that Schroeder's "possibility" testimony was inadmissible because "experts can only testify about causation to a reasonable degree of medical probability." After Schroeder's second deposition confirmed that his opinions included possible causes of Judy's death, Benkendorf filed a supplemental motion in limine, reiterating that a causation expert in a medical malpractice case must testify about probabilities, not possibilities. The trial court denied Benkendorf's motion.

¶14 At trial, Benkendorf presented expert testimony that ACSC fell below the standard of care by failing to (1) withhold one Coumadin dose immediately after a test had revealed high INR levels; (2) lower Judy's dosage in light of such information; and (3) check her INR levels again within the ensuing two or three days. Benkendorf's causation expert testified that ACSC's failure to "bring [Judy's] INR level back into a therapeutic

range [was] the cause of her bleeding and death." ACSC countered in part by presenting Schroeder's videotaped deposition testimony. In that testimony, Schroeder opined that Coumadin did not cause Judy's hemorrhage, although he acknowledged that it exacerbated the bleeding once the hemorrhage began. Schroeder further testified that even if Judy's INR level had been within the therapeutic range when she suffered the hemorrhage, the "outcome" would "[p]robably" have been the same. Schroeder also testified that any number of other factors could have caused Judy's brain hemorrhage, including most notably her age, her hypertension, her removed kidney tumor, or her possible history of a stroke.³

¶15 The jury returned a general verdict in favor of ACSC. After Benkendorf unsuccessfully moved for a new trial, the court entered judgment. This timely appeal followed.

DISCUSSION

¶16 Benkendorf asserts the trial court erred when it denied his motion in limine, because "Dr. Schroeder's 'possibility' testimony exceeded allowable trial testimony on probability." He argues that expert testimony in medical malpractice cases must be carefully restricted and that experts

³ Schroeder also referenced aneurysms, cavernomas, head trauma, brain tumors, microaneurysms, venous angiomas, bruises in the brain, amyloid angiopathy, arteriovenous malformations, and malformations of brain blood vessels as possible factors.

must "testify about the *probable* causes of a medical injury—not about causes that are merely *possible*." According to Benkendorf, without such a restriction, testimony about possible causes "is as unhelpful as saying 'anything is possible.'"

¶17 We review the trial court's order denying Benkendorf's motion in limine for an abuse of discretion. *Baroldy v. Ortho Pharm. Corp.*, 157 Ariz. 574, 588, 760 P.2d 574, 588 (App. 1988) (stating the decision to admit expert testimony lies within trial court's discretion); see *Crackel v. Allstate Ins. Co.*, 208 Ariz. 252, 267, ¶ 59, 92 P.3d 882, 897 (App. 2004) ("A trial court has broad discretion in the admission of evidence, and we will not disturb its decision absent an abuse of that discretion and resulting prejudice."). "An 'abuse of discretion' is discretion manifestly unreasonable, or exercised on untenable grounds, or for untenable reasons." *Torres v. N. Am. Van Lines*, 135 Ariz. 35, 40, 658 P.2d 835, 840 (App. 1982).

¶18 "Ordinarily, a plaintiff in a medical malpractice lawsuit must prove the causal connection between an act or omission and the ultimate injury through expert medical testimony, unless the connection is readily apparent to the trier of fact." *Barrett v. Harris*, 207 Ariz. 374, 378, ¶ 12, 86 P.3d 954, 958 (App. 2004). To establish the requisite causal connection, the plaintiff's expert is generally required to testify as to *probable* causes of the plaintiff's injury. See,

e.g., *Robertson v. Sixpence Inns of Am., Inc.*, 163 Ariz. 539, 549, 789 P.2d 1040, 1047 (1990) (recognizing that plaintiff satisfies burden by presenting facts from which causal relationship may be inferred, but cannot leave causation to jury's speculation); *Kreisman v. Thomas*, 12 Ariz. App. 215, 218, 469 P.2d 107, 110 (1970) (noting that "causation must be shown to be *Probable* and not merely *Possible*, and generally medical expert testimony that a subsequent illness or disease 'could' or 'may' have been the cause of the injury is insufficient") (emphasis added).⁴

¶19 The rationale behind the requirement that a plaintiff must generally offer expert testimony about *probable* causation stems from the basic principle that a plaintiff has the burden of proving his or her injuries were caused by defendant's conduct. See *Seisinger v. Siebel*, 220 Ariz. 85, 93, ¶ 38, 203

⁴ Under some circumstances, a plaintiff's expert may opine as to possible causes of an injury if other evidence supports a causal connection. See *Butler v. Wong*, 117 Ariz. 395, 396, 573 P.2d 86, 87 (App. 1977) (medical testimony establishing only the possibility that an act or omission caused injury, *without more*, is insufficient to establish causation); *Kreisman*, 12 Ariz. App. at 218, 469 P.2d at 110 (citing Arizona decisions "which have relaxed" the general rule concerning expert medical testimony and "have sustained verdicts based upon expert testimony as to the Possible cause, when there is sufficient additional evidence indicating the specific causal relationship"); *Coca-Cola Bottling Co. of Tucson v. Fitzgerald*, 3 Ariz. App. 303, 306, 413 P.2d 869, 872 (1966) (explaining that medical testimony based on the possibility of a causal connection is insufficient, but such testimony combined with other evidence or circumstances can be sufficient to sustain "the finding that the accident caused the injury").

P.3d 483, 491 (2009) (recognizing requirement that expert testimony in a medical malpractice action is a substantive component of the common law reflecting "a policy decision . . . that the plaintiff's substantive burden of production could only be met by a particular kind of evidence"); *Robertson*, 163 Ariz. at 546, 789 P.2d at 1047 (stating that "plaintiff bears the burden of proof on the issue of proximate cause"); see also *Grain Dealers Mut. Ins. Co. v. Porterfield*, 695 S.W.2d 833, 836 (Ark. 1985) (concluding that because plaintiff has the burden of proof on causation, plaintiff's experts must provide probability testimony); *Miyamoto v. Lum*, 84 P.3d 509, 523 (Haw. 2004) (recognizing that plaintiff must provide probability testimony on causation because it "is well-settled that, in any negligence action, the plaintiff—not the defendant—has the burden of proving the requisite elements, including legal causation").

¶10 In contrast, as recognized by courts in several jurisdictions, a defendant has no such burden and may choose merely to rebut plaintiff's evidence. See, e.g., *Allen v. Brown Clinic, P.L.L.P.*, 531 F.3d 568, 575 (8th Cir. 2008) (requiring defense experts to testify to probabilities would "impermissibly shift the burden of proof and require a defendant to 'disprove' a plaintiff's theory by a preponderance of the evidence"); *Roy v. St. Luke's Med. Ctr.*, 741 N.W.2d 256, 264, ¶ 20 (Wis. Ct. App. 2007) ("Although the party with the burden of proof must

produce testimony based upon reasonable medical probabilities, the opposing party is not restricted to this requirement and may attempt to weaken the claim for injuries with medical proof couched in terms of possibilities." (quoting *Peil v. Kohnke*, 184 N.W.2d 433, 441 (1971)); *Sakler v. Anesthesiology Assocs., P.S.C.*, 50 S.W.3d 210, 213 (Ky. Ct. App. 2001) ("[D]efendants in medical malpractice actions may introduce expert witness testimony . . . couched only in terms of 'possibility'" because the burden of proof rests on the plaintiff).

¶11 The significance of the burden a plaintiff carries was addressed in *Wilder v. Eberhart*, 977 F.2d 673 (1st Cir. 1992), *cert. denied*, 508 U.S. 930 (1993). In that case, the trial court precluded a defense expert from testifying as to possible causes of the plaintiff's injury in a medical malpractice action. *Id.* at 676. On appeal, the First Circuit Court of Appeals reversed, finding a "clear error of law in excluding defendants' rebuttal testimony." *Id.* The court explained that the burden of proof on causation "rests and remains with the plaintiff" because the plaintiff has "the burden of producing evidence to prove that it is more likely than not that [an] injury was caused by the defendant's negligence." *Id.* (citations and quotations omitted). In contrast, "the defendant need not disprove causation" or "prove another cause₁;" he only has to convince the trier of fact that the alleged negligence

was not the legal cause of the injury." *Id.* The court reasoned that to require a defendant to do more would "unduly tie a defendant's hands in rebutting a plaintiff's case," particularly where "plaintiff's expert testifies that no other cause could have caused plaintiff's injury." *Id.* Thus, the court in *Wilder* concluded that defense experts in medical malpractice cases may testify to possible causes of plaintiffs' injuries to rebut expert testimony, and that such causes "need not be proved with certainty or more probably than not." *Id.*

¶12 Benkendorf asserts nonetheless that because the court in *Wilder* was concerned with burden shifting, that case applies only when the burden of proof has shifted from the plaintiff to the defendant. He argues that because a defense expert only has to "rebut the cause that the victim's medical expert has provided," and does "not have to produce an alternate cause," forbidding a defense causation expert from testifying about possibilities would not improperly shift the burden of proof to the defendant. We disagree.

¶13 Requiring defense experts to testify based only on reasonable medical probabilities would effectively prevent defendants in many cases from presenting testimony regarding causation unless their experts could declare that a particular alternate cause more probably than not was the cause of the plaintiff's injury. Consistent with the court's observation in

Wilder, "inequities would abound" if we were to accept Benkendorf's argument that ACSC could not rebut his prima facie malpractice case by introducing evidence regarding other possible causes of the injury. See *id.* at 677 (precluding testimony of possible causes would impermissibly shift the burden to defendant of proving a different specific cause of the injury); *Allen*, 531 F.3d at 574 (declining to "require a defendant to 'disprove' a plaintiff's theory by a preponderance of the evidence"); *Davis v. Chism*, 513 P.2d 475, 484-85 (Alaska 1973) (holding that a defense expert may defeat a plaintiff's case by offering medical testimony that some other disorder may have caused the result in question); *Tzimas v. Coiffures by Michael*, 606 A.2d 1082, 1084 (N.H. 1992) (concluding that burden of persuasion did not shift to defendants to prove plaintiff's injury "was probably caused by a specific non-work trauma"); *Neal by Neal v. Lu*, 530 A.2d 103, 109 (Pa. Super. Ct. 1987) (recognizing that a defendant ordinarily is not required to prove, "with certainty or otherwise, that he or she is innocent of the alleged wrongdoing"); *Roy*, 741 N.W.2d at 264 (noting a defendant "may attempt to weaken the [plaintiff's] claim for injuries with medical proof couched in terms of possibilities" (quoting *Peil*, 184 N.W.2d at 441)).

¶14 Although not cited by Benkendorf, we recognize that courts in a few jurisdictions have precluded testimony by

defense experts about possible causes. See, e.g., *Iowa Power & Light Co. v. Stortenbecker*, 334 N.W.2d 326, 331 (Iowa Ct. App. 1983) (concluding that defense expert's testimony on causation was insufficient because "[a]n opinion as to mere possibility, as opposed to probability, is insufficient"); *Moriscato v. Sav-On Drug Stores, Inc.*, 111 P.3d 1112, 1116 (Nev. 2005) (finding defense expert's testimony on causation speculative and therefore insufficient because "medical expert testimony regarding . . . causation must be stated to a reasonable degree of medical probability"); *Hunter v. Ura*, 163 S.W.3d 686, 704 (Tenn. 2005) (allowing defense experts to testify to possibilities would violate the rules of evidence because such testimony is speculative and would not "substantially assist the trier of fact"). We do not find those cases persuasive. The court in *Stortenbecker* concluded the trial court should have precluded the defense expert from offering testimony as to possibilities because the specific testimony at issue was highly speculative. 334 N.W.2d at 328-31. The defense expert testified that leukemia and multiple sclerosis are possible human health hazards created by electric transmission lines on the basis of a single laboratory study of small animals that failed to support his point, and his theory had been routinely discredited. *Id.* The courts in *Moriscato* and *Hunter* decided as a matter of policy to preclude defense experts from

testifying as to possibilities. 111 P.3d at 1116; 163 S.W.3d at 703-04. However, in our view, neither court gave meaningful recognition to the principle that a plaintiff carries the burden of proof on causation.

¶15 Based on our review of these authorities, we agree with the majority of jurisdictions that have addressed the issue and hold that an expert witness called by the defense to testify about causation in a medical malpractice case may testify about "possible" causes of the plaintiff's injury.⁵ A defendant in such a case need not prove another cause for plaintiff's injury, but may, as ACSC did here, testify as to alternative causes tending to undercut the plaintiff's contention that the defendant's alleged negligence more probably than not caused the injury. See *Wilder*, 977 F.2d at 676-77. In doing so, the defendant is not limited to offering expert evidence of other "probable" causes, but may present expert evidence of other possible causes of the injury.⁶ See *id.*

¶16 Of course, the requirements of the Arizona Rules of Evidence governing the admission of expert testimony, and our

⁵ Consistent with the cases cited in n.4, *supra*, it would make little sense for us to conclude that a defendant's expert witness must always testify to probable causes, but a plaintiff's expert could, under certain circumstances, testify as to possibilities.

⁶ Nothing in this opinion should be construed as addressing an affirmative defense, counterclaim, or other situation where the defendant has the burden of proof.

cases interpreting those rules, must still be satisfied. “[T]he evidence must be relevant, the witness must be qualified, and the evidence must be the kind that will assist the jury.” *Logerquist v. McVey*, 196 Ariz. 470, 489, ¶ 57, 1 P.3d 113, 132 (2000). Nor will trial judges be deprived of their broad discretion in determining whether defense testimony is speculative or based on conjecture. *Cf. Hunter*, 163 S.W.3d at 704 (noting that “expert testimony that a trial court determines is speculative would not ‘substantially assist’ the trier of fact”). Additionally, the traditional methods of attacking evidence—“vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof”—will remain available to a plaintiff to challenge a defense expert’s testimony as to possible causes of an injury. *See Logerquist*, 196 Ariz. at 489-90, ¶ 58, 1 P.3d at 132-33 (noting that the rules of evidence and procedural safeguards within our court system are the “appropriate means of attacking shaky but admissible evidence”) (citation omitted).

¶17 We therefore conclude that the trial court did not abuse its discretion when it denied Benkendorf’s motion in limine. Schroeder testified that the Coumadin dosage did not cause Judy’s brain hemorrhage and that any one or more of a number of factors he described could have caused the hemorrhage. We presume that the court determined Schroeder was qualified to

testify, his testimony was relevant, and it would assist the jury in determining causation.⁷ *Cf. Patterson v. Chenoweth*, 89 Ariz. 183, 186, 360 P.2d 202, 204 (1961) (rejecting argument that expert witness's opinion "was based merely upon a guess or conjecture"). Accordingly, the court properly acted within its discretion in allowing ACSC to present evidence rebutting Benkendorf's claim that excessive Coumadin levels caused Judy's death.

CONCLUSION

¶18 For the foregoing reasons, we conclude that ACSC's expert could properly testify to the possible causes of Judy's brain hemorrhage. We therefore affirm the trial court's denial of Benkendorf's motion in limine.

/s/

MICHAEL J. BROWN, Judge

CONCURRING:

/s/

DIANE M. JOHNSEN, Presiding Judge

/s/

JOHN C. GEMMILL, Judge

⁷ Benkendorf's position relating to the admissibility of Schroeder's testimony is based on the argument that defense experts cannot opine as to possibilities. The record does not reflect, nor does Benkendorf argue on appeal, that he objected to Schroeder's testimony on any other grounds.