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UNITED STATES COURT OF APPEALS

FOR THE SIXTH CIRCUIT

CORA MITCHELL,

Plaintiff-Appellant,

v.

CITY OF WARREN, et al.,

Defendants,

TASER INTERNATIONAL, INC.,

Defendant-Appellee.

No. 14-2075

Appeal from the United States District Court
for the Eastern District of Michigan at Ann Arbor.
No. 5:09-cv-11480—John Corbett O'Meara, District Judge.

Argued: April 30, 2015

Decided and Filed: August 21, 2015

Before: NORRIS, SUTTON, and DONALD, Circuit Judges.

COUNSEL

ARGUED: John Burton, THE LAW OFFICES OF JOHN BURTON, Pasadena, California, for Appellant. Pamela B. Petersen, TASER INTERNATIONAL, INC., Scottsdale, Arizona, for Appellee. **ON BRIEF:** John Burton, THE LAW OFFICES OF JOHN BURTON, Pasadena, California, William H. Goodman, Julie H. Hurwitz, Kathryn Bruner James, GOODMAN & HURWITZ, P.C., Detroit, Michigan, Byron H. Pitts, CORNELIUS PITTS & ASSOCIATES, Detroit, Michigan, for Appellant. Pamela B. Petersen, TASER INTERNATIONAL, INC., Scottsdale, Arizona, for Appellee.

SUTTON, J., delivered the opinion of the court in which NORRIS, J., joined, and DONALD, J., joined in part. DONALD, J. (pp 18–28), delivered a separate opinion concurring in part and dissenting in part.

OPINION

SUTTON, Circuit Judge. After Robert Mitchell resisted arrest by the police, an officer shot two taser darts into his chest. Robert experienced cardiac arrest and died shortly after. His mother filed this lawsuit in response. It proceeded in two phases—first against the individual police officers and the City of Warren, then against the weapon's manufacturer, Taser International, Inc. The parties settled the claims against the police officers and the City. The other claims are the subject of this appeal. Below, the district court granted summary judgment to Taser, rejecting the plaintiff's failure-to-warn and negligence claims as a matter of law. We affirm.

I.

On the morning of April 10, 2009, Jesse Lapham, an officer with the City of Warren Police Department, responded to a call for backup at an abandoned house near Eight Mile Road. As explained by the radio dispatcher, one of Lapham's fellow Warren police officers had stopped a car with expired tags when one of the passengers—16-year-old Robert Mitchell—ran from the car, broke into an abandoned house, and hid upstairs. Lapham arrived at the house to the sound of the pursuing officer coaxing Robert to come down without a fight.

Robert complied, and an officer began to arrest him once he arrived downstairs. At that point, for reasons that the record does not disclose, Robert tried to evade the officer's grasp, and a struggle ensued. Lapham de-holstered his taser and shot Robert with it. One metal dart hit just inches above Robert's heart, the other just inches below. Mitchell fell to the ground. When paramedics arrived on the scene, they detected "v-fib": ventricular fibrillation, "a highly disorganized heart rhythm . . . at rates of 400–600 [beats] per minute" that results in cardiac arrest if uncorrected. R. 236-46 at 18; *see* R. 236-22 at 1–2. The medical team tried to resuscitate him but could not.

The Warren Police Department purchased this X26 taser in August 2006. In mid-September 2006, several Warren officers attended a taser-training school run by an instructor

hired by Taser. The Warren officers learned to aim the X26 at "center mass" because that presents "the best spot to stop a person" from advancing and a head shot poses undue risks to the individual. R. 236-41 at 3; *see* R. 236-16 at 14. They were told that officers should, "if practicable, deploy [the] X26 at [a] suspect's back," as opposed to the front, but that, even when the taser's darts land on the chest, the weapon is safe. R. 236-18 at 179. Lapham learned to use a taser from a Warren training officer. The same basic training materials were in place when he joined the Warren Police Department in August 2007.

After Robert died in April 2009, his mother Cora filed this lawsuit. She first proceeded against the City of Warren, Officer Lapham, and several other Warren police officers. She sought recovery for Robert's death on several grounds: use of excessive force, racial discrimination, inadequate officer training, interference with familial relations, and wrongful death. The officers moved for summary judgment, which the district court granted in part and denied in part. At that point, Mitchell settled all outstanding claims against the officers and the City.

Meanwhile, she amended her complaint to add claims against Taser. Through the amendment, she sought additional liability on two grounds: that the company negligently failed to warn end-users about the risk of cardiac arrest from an X26 discharge to the chest, and that the company's training program negligently assured end-users that the device was safe when aimed at the chest. The district court granted summary judgment for Taser. It ruled that (1) the company had no duty to warn the Warren Police Department about any cardiac risks at the time of sale in August 2006, (2) Michigan law precluded any post-sale duty to warn, (3) Taser had not assumed a duty to warn by virtue of its training regimen, and (4) Mitchell could not prove that Lapham would have ever seen a warning even if Taser had issued one.

II.

Mitchell first challenges the district court's duty-to-warn ruling. In doing so, she does not claim that the safety costs of using a taser exceed its benefits—that the company was negligent in making the product for law-enforcement purposes. Nor does she claim that Taser was negligent in recommending that officers aim the darts at the torso of a criminal suspect. What she claims is that the company should have warned police departments about the health

risks of shooting the darts into the upper part of the front torso—the chest. In addressing this claim, we look to a state statute, not the common law. The Michigan legislature has codified a product manufacturer's duty to warn end-users about dangers associated with a product's use. The relevant statute provides:

> In a product liability action brought against a manufacturer or seller for harm allegedly caused by a failure to provide adequate warnings or instructions, a manufacturer or seller is not liable unless the plaintiff proves that the manufacturer knew or should have known about the risk of harm based on the scientific, technical, or medical information reasonably available at the time the specific unit of the product left the control of the manufacturer.

Mich. Comp. Laws § 600.2948(3). Any liability for failure to warn in this case thus would require a showing that Taser "knew or should have known" about the risk of cardiac arrest from an X26 chest shot based on the information available "at the time" of sale—here August 17, 2006. A reasonable jury could not make such a finding for several reasons.

Field use of tasers. Tasers first became available to officers in 1994. The trademarked acronym has a longer heritage. It stands for "Tom A. Swift electrical rifle," named after the young-adult novel that later inspired the weapon. *See* Victor Appleton, *Tom Swift and His Electric Rifle* (1911). When discharged, a taser fires two darts, connected to the main unit by wire, that puncture the victim's skin and send a 0.0021-amp electrical current into the body for five seconds. (A wall outlet, by comparison, delivers 16 amps; a single Christmas-tree light bulb delivers one.) The stunning effect of the five-second discharge permits police to reduce the risks of injury to individuals and officers that arise in law-enforcement encounters from time to time. Tasers permit officers to avoid using physical force in face-to-face contact to control suspects who resist arrest and permit officers to avoid using guns (and bullets) to disable or stop a dangerous and resistant suspect. In the words of one officer: "The whole point is for police to have more options to end a confrontation without further injury to the officer or the suspect." R. 236-24 at 3. By and large, tasers have done just that. As police forces integrated tasers into their non-lethal-force policies, they saw reductions in officer injuries, suspect injuries, uses of lethal force, and complaints of excessive force. At the same time, tasers caused fewer injuries than hand-to-hand restraint, chemical sprays, or batons.

Through August 2006, the use of tasers in the field confirmed that they lessened many of the occupational hazards associated with police work and many of the risks associated with suspects who refuse to follow police orders. By the end of 2005, over 8,700 law-enforcement agencies had purchased tasers. *See* Taser Int'l, Inc., Annual Report 6 (Form 10-K) (Mar. 16, 2006). And by then field discharges of them had reached the hundreds of thousands. *See* Mark W. Kroll & Jeffrey D. Ho, *TASER Conducted Electrical Weapons: Physiology, Pathology, and Law* 283 (2009) (estimating 606,395 field uses of tasers between 2001 and 2008); Kroll et al., *TASER Safety*, Canadian Med. Ass'n J. (Sep. 23, 2008), http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2535727/ (estimating that tasers "ha[d] been applied to over 1.3 million people" by 2008); *see also Statistics and Facts*, Taser Int'l, Inc. (Mar. 25, 2015), https://www.taser.com/press/stats (estimating 2.82 million applications through July 2015).

Noncompliant suspects have not been the only people exposed to tasers. Taser's training program allots time for *officers* to experience a taser discharge if they so choose. Taser's volunteer-exposure guidelines suggest, as the company advises for all discharges, that "[p]robe hits to the back are safer" and to "avoid the face, throat, [and] groin." R. 236-18 at 81. In the heat of law enforcement encounters, officers of course do not always have that choice when trying to stop or control a suspect.

Through it all, just two potential cardiac-arrest problems arising from taser use—both mentioned by Mitchell's expert witness, Dr. Douglas Zipes—had been made public before Taser shipped the Warren Police Department's X26s. Neither one showed that the company should have warned officers not to shoot a taser in the top half of the front torso—the chest. In one, an officer stunned—using the drive stun, as opposed to the dart, feature of a taser—an epileptic man suffering from "paranoid delusions" and "frothing at the mouth" five consecutive times in the chest while the man was strapped in a chair, held down by nine officers, and placed in a choke hold. *See* Notice of Removal with Complaint, Ex. 1 at 9, 28, 32–34, *Williams v. Taser Int'l, Inc.*, 1:06-cv-00051 (N.D. Ga. Jan. 9, 2006); *see also* Consent Motion, *Williams*, 1:06-cv-00051 (N.D. Ga. Apr. 21, 2009) (settling claims against Taser). The incident does not show that ventricular fibrillation occurred, as the cause of the victim's "cardiorespiratory arrest" was "undetermined."

Global Appendix, Ex. 32 at 13–14, *Williams*, 1:06-cv-00051 (N.D. Ga. July 25, 2008). The other incident is more opaque. What we know about it comes from a two-paragraph letter to the editor of the *New England Journal of Medicine* in September 2005, saying that an unnamed adolescent collapsed after being tased and experienced ventricular fibrillation "within two minutes." The letter does not say whether the taser darts hit the suspect's chest or for that matter the front or the back of the suspect. The record does not contain any autopsy or any other medical data about the incident. Based on the field use of tasers through August 2006, nothing showed that Taser was negligent in the warnings issued with its product.

The medical literature. The relevant medical literature before August 2006 supported the safety of tasers as a law-enforcement option and more to the point did not establish a risk of cardiac arrest from instructing officers to aim the darts at the torsos of non-compliant suspects. The Human Effects Center for Excellence published a comprehensive review of taser safety in June 2005. It surveyed the results of five controlled animal studies—conducted by M. Nerheim, R.A. Stratbucker, and W. McDaniel, Dr. Stratbucker by himself, and O.Z. Roy and A.S. Podgorski—all of which suggested that the X26's standard charge was too weak to cause cardiac arrest. One study indicated that only a current 16 times stronger than the X26's could induce ventricular fibrillation. Another found that ventricular fibrillation did not result even after stimulating the surface of the heart directly with X26-level output. The Center concluded that, "for large children and adults, even those who might be sensitive responders, the risk of inducing [ventricular fibrillation] is very small, since a large margin of safety exists." R. 197-37 at 12.

A January 2005 peer-reviewed article in the *Journal of Pacing and Clinical Electrophysiology* supported these findings. It found that cardiac safety depended on the target's weight and that animal studies underestimated the safety margin for people. It added that the safety margin for pigs, the typical animal used in taser studies, was large: Ventricular fibrillation occurred in a 66-pound pig only with a taser stun 15 times greater than the standard charge. R. 197-39 at 4–5.

Two August 2006 studies—formally released a week before the City of Warren received its delivery of X26s but informally conveyed to Taser several months earlier—qualified these findings but did not alter Taser's duty to warn. The *Journal of the American College of*

Cardiology published both studies, with Dr. Patrick Tchou and his mentee Dr. Dhanunjaya Lakkireddy leading one and Dr. Kumaraswamy Nanthakumar leading the other. Taser provided a research grant to Tchou and Lakkireddy, while Nanthakumar received independent funding. Both studies, like many of the earlier studies, used sedated pigs as test subjects. Both implanted an electrode inside the pigs' hearts for close monitoring of cardiac activity. Both placed the X26's darts on the pigs' chests—one directly above the heart and one directly below. And both found that, when shot at the chest, the X26 could "capture" a pig's heartbeat. R. 236-10 at 3; R. 236-12 at 6. Cardiac capture occurs when "[t]he heart's natural [] rhythm . . . [is] taken over by an external electrical source." R. 236-46 at 18. That speeds up the heart rate, and given enough time a sufficiently rapid heartbeat will devolve into ventricular fibrillation—an erratic rhythm that may lead to cardiac arrest.

The studies, however, showed little risk that the standard charge could create cardiac arrest—the source of Mitchell's death. Tchou and Lakkireddy found that ventricular fibrillation, which if left uncorrected is likely to cause cardiac arrest, occurred only after modifying the X26 to generate a charge between 5 and 10 times more powerful than the norm. In the researchers' words: "[The] study showed that [ventricular fibrillation] could not be induced using the standard 5-[second] [t]aser discharge applied to a pig's body surface even at the most sensitive area tested." R. 236-10 at 5. They thus concluded that a "discharge at the standard 5-[second] interval is unlikely to cause life-threatening arrhythmias, at least in the normal human heart." *Id.* Nanthakumar managed to induce ventricular fibrillation with a standard X26 charge, but only once out of 150 tries and only after artificially increasing the pig's resting heart rate with adrenaline to simulate a stressful encounter. He concluded that "there exists the possibility of serious [alteration of the heart's rhythm] during [taser] discharges in structurally normal hearts during intense . . . stress," but that "[i]t is unknown whether darts positioned across the chest in humans would . . . result[] in the same voltages" as in a pig. R. 236-12 at 6. None of the studies established to a reasonable level of certainty that an X26 poses a risk of cardiac arrest in humans. The single time one study induced ventricular fibrillation in a pig does not replace the multiple studies indicating that an X26 has no untoward cardiac effects. Neither Tchou and Lakkireddy nor Nanthakumar in the end could do more than speculate that there is a theoretical possibility of an X26 inducing cardiac arrest in a human through cardiac capture. Mitchell admits as much:

"The probability of triggering a cardiac arrest from X26-induced capture cannot be quantified." Reply Br. 13.

As of the date of the August 2006 sale, and even after accounting for two 2006 studies released soon before the date of sale, the sum total of evidence that an X26 could induce cardiac arrest was: one instance of ventricular fibrillation occurring in one pig in one study of 150 taser discharges. That does not show that Taser should have known whether a chest shot from an X26 posed a risk of cardiac arrest in humans. The extant scientific information available to Taser indicated that the X26 at its standard charge would not induce ventricular fibrillation or cardiac arrest.

Taken together, the field use of tasers and the medical literature before August 2006 fail to create a triable issue of fact about Taser's duty to warn. Before such a duty arises, the plaintiff must show that a manufacturer knew or should have known its product posed the *particular* risk at issue in the case. *See, e.g.*, *Rodriguez v. Stryker Corp.*, 680 F.3d 568, 571–73 (6th Cir. 2012); *Meyerhoff v. Michelin Tire Corp.*, 70 F.3d 1175, 1181 (10th Cir. 1995); *Grover v. Eli Lilly & Co.*, 591 N.E.2d 696, 699–700 (Ohio 1999); *Lamb v. Manitowoc Co.*, 570 N.W.2d 65, 69–70 (Iowa 1997). A manufacturer's knowledge that a drug causes blurred vision, to take one example, does not prove that it should have known the drug caused retinal damage. *See Basko v. Sterling Drug, Inc.*, 416 F.2d 417, 421 (2d Cir. 1969). A manufacturer's knowledge that exposure to a chemical damages the liver, to take another example, does not prove that it should have known exposure causes cancer. *See Taylor v. Am. Chemistry Council*, 576 F.3d 16, 27–28 (1st Cir. 2009). And so on. *See, e.g.*, *Anguiano v. E.I. Du Pont de Nemours & Co.*, 44 F.3d 806, 812 (9th Cir. 1995) (knowledge of danger in teflon-based hip replacements does not prove knowledge of danger in teflon-based jaw replacements); *Perlmutter v. U.S. Gypsum Co.*, 4 F.3d 864, 869–70 (10th Cir. 1993) (knowledge that some varieties of asbestos cause lung damage does not prove knowledge that all varieties did).

All that the relevant medical literature in this case showed was that a chest shot from a taser created a material risk of cardiac capture. It did not show any more than a possibility, however, that cardiac capture might cause ventricular fibrillation that could cause cardiac arrest. Robert Mitchell died from cardiac arrest. A jury may not speculate that a manufacturer should

have known about one risk because a separately known risk revealed the mere possibility of the first. We have refused to allow a jury to infer, for example, that injecting one type of fluid into a joint can cause harm from the mere fact that injecting other fluids can cause harm. *See Rodriguez*, 680 F.3d at 571–73. If the manufacturer knows that one fluid can cause harm, it of course knows that a similar problem arising from other fluid is *possible*. But that does not suffice. A jury needs some evidence showing that the product in question causes the harm at issue. *See id*. at 573. Courts do not demand scientific certainty. *See Moran v. Johns-Manville Sales Corp.*, 691 F.2d 811, 814 (6th Cir. 1982). "[A]rguably, there are no certainties in science." *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 590 (1993). But speculative risk does not equal known risk. *See Carlin v. Superior Court*, 920 P.2d 1347, 1353 (Cal. 1996).

This problem of speculative leaps about product dangers also surfaces in the context of proving causation. We have refused to rely on studies establishing that a product can *possibly* cause an injury to prove a product *probably* caused the injury. *See, e.g.*, *Conde v. Velsicol Chem. Corp.*, 24 F.3d 809, 814 (6th Cir. 1994); *Turpin v. Merrell Dow Pharm., Inc.*, 959 F.2d 1349, 1352 (6th Cir. 1992); *Siegel v. Dynamic Cooking Sys., Inc.*, 501 F. App'x 397, 405 (6th Cir. 2012); *see also Tamraz v. Lincoln Elec. Co.*, 620 F.3d 665, 670 (6th Cir. 2010) (stating that speculation does not amount to "scientific knowledge" under Evidence Rule 702); *Kalamazoo River Study Grp. v. Rockwell Int'l Corp.*, 171 F.3d 1065, 1073 (6th Cir. 1999) (refusing to allow jury to "speculate" based on expert testimony to fill a "gap" in the evidence). Mere possibility, in other words, cannot establish a fact to the degree of certainty necessary to justify reliance on that fact. That is why the federal courts will not qualify an expert to testify about the safety of a product when "there is simply too great an analytical gap between the data and the opinion proffered." *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

This all makes good sense when applied to the duty to warn. A company does not have a duty to warn of *all* theoretically possible dangers. "[A]n obligation to warn against all injuries that conceivably might result from the use or misuse of a product" would make it "practically impossible" for manufacturers "to market their goods." *Glittenberg v. Doughboy Recreational Indus.*, 491 N.W.2d 208, 212 (Mich. 1992). Warnings cannot serve their purpose, another Michigan court recognized, unless they "call the consumer's attention to a danger that has a real

probability of occurring and whose impact will be significant. One must warn with discrimination since the consumer is being asked to discriminate and to react accordingly," *Dunn v. Lederele Labs.*, 328 N.W.2d 576, 581 (Mich. Ct. App. 1982), a point that is particularly salient when it comes to the kinds of law-enforcement encounters that require tasers.

The Tchou/Lakkireddy and Nanthakumar studies both demonstrate that an X26 may in some circumstances capture a target's heartbeat if its electric current vectors across the heart. No one disputes that. But Mitchell seeks not a warning about cardiac capture but a warning focused on "cardiac arrest and sudden death." Appellant's Br. 2. And cardiac capture, in the words of Mitchell's expert Dr. Zipes, does "[n]ot necessarily" lead to ventricular fibrillation, cardiac arrest, or "lethal cardiac consequences." R. 197-20 at 5. Knowing that an X26 causes cardiac capture raises only the possibility that it can induce cardiac arrest. To reach a jury, Mitchell needs more. She must show that Taser knew or should have known that the X26's standard charge poses a *realistic* threat of cardiac arrest. But neither study goes that far. They speculate only that cardiac arrest is *possible*. True, Dr. Nanthakumar induced ventricular fibrillation in a pig, but he did so just once out of 150 tries and as a result concluded only that the X26 "*may* have cardiac risks that require further study." R. 236-12 at 7 (emphasis added). Taser could not have been relatively confident that the X26 posed a risk of cardiac arrest in humans based on a study showing only that such a risk cannot be ruled out. At most, the studies indicate the need for more studies. A reasonable jury therefore could not find the company had a duty to warn.

Mitchell offers several responses, each unpersuasive. She first suggests that we are missing the import of the Tchou/Lakkireddy and Nanthakumar studies. It matters not, she says, that the studies did not prove the X26 could cause ventricular fibrillation that could cause cardiac arrest. They revealed that cardiac capture could happen. And, as Dr. Zipes says, cardiac capture alone "can be life threatening, as any interference with the heart's natural rhythm can trigger an arrhythmia." R. 236-46 at 19. But that is not what the two studies reveal. Capture occurred regularly in both studies, but deadly cardiac consequences did not. Nothing in the record establishes that Taser should have known a standard taser charge could speed up a human's heart fast enough to induce cardiac arrest. And nothing in the record indicates that Taser should have known that any capture at all can be life-threatening. All Dr. Zipes could say is that cardiac

capture creates heightened risks if it occurs during a "vulnerable period" of the heart's natural rhythm, which can "cause an extraneous beat," which can cause ventricular fibrillation, which can cause cardiac arrest. *Id.* at 48. But Dr. Zipes concedes that his "vulnerable period" theory "has not been reported so far in the animal studies." *Id*.

Maybe so, Mitchell responds. But several months before the two relevant studies came out, she says, Dr. Tchou informed Taser "that despite the fact that [he] did not induce ventricular fibrillation in any of the pigs," his research indicated "there is some possibility that [a standard X26 discharge] could induce ventricular arrhythmias in people." R. 236-43 at 16. True enough. But the inferences Mitchell draws from this do not follow. To start, the warning she demands focuses on cardiac arrest, not arrhythmias in general. Scientists we are not, meaning we need evidence connecting the dots. No record evidence shows that the kind of arrhythmias an X26 could induce creates a risk of cardiac arrest. Dr. Tchou at any rate spoke only in terms of possibilities—the kind of information that at most demands more study, not the kind of information that shows Taser knew or should have known that an X26 charge could cause fatal arrhythmias in humans.

Mitchell adds that we should not discount the pig studies because they are not human studies. Yes, of course. No one is demanding a human study, least of all the individual who would be the subject of it. What is fair is to require that the study show a reasonable degree of danger after accounting for the weight and other differences between humans and pigs. Otherwise, the analogy is not helpful. No such reasonable degree of danger was shown by August 2006 when the lessons from the pig studies are extrapolated to account for human hearts and body sizes.

What about the other federal court cases, Mitchell asks, permitting failure-to-warn claims against Taser to reach a jury based on the Tchou/Lakkireddy and Nanthakumar studies? *Fontenot v. Taser International, Inc.*, 736 F.3d 318 (4th Cir. 2013), to start, says no such thing. That case dealt with three issues unrelated to this duty: contributory negligence, proximate cause, and excessive damages. *See id.* at 326. More, *Fontenot* involved North Carolina law, which does not limit the information the court could consider to studies published before the date of sale; indeed, it affirmatively permits such information in assessing the duty to warn. *See* N.C.

Gen Stat. § 99B-5(a)(2). The 2–1 decision in *Fontenot* also appears to be an outlier: Efforts to hold Taser liable for deaths caused by its products have not fared well in other federal courts of appeals. *See, e.g.*, *Bachtel v. Taser Int'l, Inc.*, 747 F.3d 965, 972 (8th Cir. 2014) (holding that, under Missouri law, the plaintiff could not prove the relevant officer would have followed the allegedly necessary product warnings); *Williams v. City of Cleveland*, 736 F.3d 684, 687 (5th Cir. 2013) (holding that, under Mississippi law, Taser's warnings adequately conveyed the risk of serious injury or death); *Marquez v. City of Phoenix*, 693 F.3d 1167, 1173 (9th Cir. 2012) (holding that, under Arizona law, Taser provided adequate warnings of its product's risks); *Rosa v. Taser Int'l, Inc.*, 684 F.3d 941, 947–48 (9th Cir. 2012) (holding that, under California law, the plaintiff did not prove that Taser should have known the use of its product on suspects undergoing metabolic acidosis could result in death); *Mann v. Taser Int'l, Inc.*, 588 F.3d 1291, 1304 (11th Cir. 2009) (holding that, under Georgia law, the plaintiff could not prove use of a taser caused the suspect's death). Nor does *Piskura v. Taser Int'l, Inc.*, No. 1:10-cv-248, 2013 WL 1329704 (S.D. Ohio Mar. 29, 2013), conflict with our decision. That court determined that a jury could infer that an X26 caused the relevant injury based on scientific data released up to 2012, not limited to before August 2006. *See id.* at *6, *adopting report and recommendation*, 2012 WL 5378805, at *14 (Oct. 29, 2012).

One district court, it is true, has permitted a jury to infer knowledge of a material risk based on the Tchou/Lakkireddy and Nanthakumar studies alone. *See Rich v. Taser Int'l, Inc.*, No. 2:09-cv-02450, 2012 WL 1080281 (D. Nev. Mar. 30, 2012). It appeared to conclude that, because the studies found any possibility of cardiac capture from the X26, a jury could infer sufficient knowledge to require it to add new warnings. But the opinion neglects to mention that many prior studies, to say nothing of the many safe uses of tasers in the field, indicated the X26 would not cause cardiac problems. We for our part do not see how Taser "knew or should have known about the risk" of cardiac arrest, to quote the relevant language of the Michigan statute, based on the possible risks identified in these two studies. Mich. Comp. Laws § 600.2948(3).

What of the reality that it would have taken little for Taser to reduce any possibility (however small or unknown) of cardiac arrest by warning officers not to aim at center mass? *See* Dissent at 24. Michigan law does not impose failure-to-warn liability if a company does not

instruct users to employ the safest possible alternative. It requires warnings only when a product's manufacturer "knew or should have known about the risk of harm" the plaintiff alleges. Mich. Comp. Laws § 600.2948(3). That means Mitchell must offer proof that the risk of cardiac arrest actually, not possibly, exists, and she has not done so. Perhaps Michigan's failure-to-warn regime is not the one we would have designed, but that is not for us to decide. *See Erie R.R. Co. v. Tompkins*, 304 U.S. 64, 78 (1938).

The dissent's recitation of the facts, drawn from Mitchell's complaint, raises the question why these six police officers used a Taser at all against this 16-year-old boy. That is a fair point. It is one that explains the district court's partial denial of summary judgment. And it is one that explains the decision of the officer defendants to settle. But it does not speak to the liability of the other defendant—Taser.

Mitchell in the end has not shown that a reasonable jury could find that Taser knew or should have known that a chest shot from an X26 posed a risk of cardiac arrest before it shipped its product to the Warren Police Department. Taser thus had no duty to warn about such a risk under Michigan law.

III.

Mitchell argues in the alternative that Taser had a post-sale duty to warn based on "subsequent studies and information that came to light after August 2006." R. 253 at 6. Yet § 600.2948(3) offers no opening for this argument and indeed forecloses it. The statute limits the "scientific, technical, or medical information" relevant to failure-to-warn claims to information "reasonably available at the time the specific unit of the product left the control of the manufacturer." If Taser had no such duty to warn based on the pre-sale information available, it could not be liable if later studies suggested safer ways to design and market its products. Mitchell's post-sale duty-to-warn claim cannot succeed.

Mitchell claims that *Comstock v. General Motors Corp.*, 99 N.W.2d 627 (Mich. 1959), together with Michigan Compiled Laws § 600.2948(4), sidesteps this rule and allows her to bolster her negligence claim with later studies. We think not.

Comstock pre-dates the 1995 statute and is not to the contrary at any rate. It dealt with General Motors' discovery in the 1950s that it had improperly manufactured hydraulic braking systems in its Buick line of cars. Despite learning of the problem shortly after the cars hit the market, General Motors did not tell its customers about the problem and how to fix it. One of the defective cars soon injured a mechanic, who sued for failure to warn of the problem. The Michigan Supreme Court held that a "duty to give prompt warning exists when a latent defect which makes the product hazardous to life becomes known to the manufacturer shortly after the product has been put on the market." *Id.* at 634. That duty, Mitchell claims, applies here. The latent defect in this case, she adds, is Taser's initial failure to warn in August 2006. *See* Appellant's Br. 36–37 & n.7. Mitchell seeks to fortify this argument by pointing to Michigan Compiled Laws § 600.2948(4), which provides: "This section does not limit a manufacturer's or seller's duty to use reasonable care in relation to a product after the product has left the manufacturer's or seller's control." As she reads the provision, the *Comstock* duty to warn of latent defects survived the passage of § 600.2948 and is codified in subsection 4 of the 1995 law.

Even if we assume that *Comstock* remains good law, it could not apply as Mitchell proposes here. Her interpretation would give § 600.2948(3) no meaningful role to play. Consider a manufacturer who had no duty to warn based on the information available at the point of sale. A year later, a scientific study comes out showing that the product was more dangerous than the manufacturer thought. If *Comstock* applies and if the manufacturer is now liable for a failure to warn for all sales during the first year, that liability would be based on scientific information *not* "reasonably available" at the point of sale. That conflicts with § 600.2948(3), which thwarts liability in just such a situation. In a battle between *Comstock* (a case) and subsection 3 (a statute), the statute wins. *See Smith v. Martin*, 82 N.W. 662, 662–63 (Mich. 1900).

What about Mitchell's concern that our understanding of *Comstock* creates the opposite problem by reading *subsection 4* out of the statute? Two responses. One: It does no such thing. A manufacturer might still have a "duty to use reasonable care in relation to a product" after the point of sale if, for example, it assumed a duty to repair or service the product. *See Gregory v. Cincinnati Inc.*, 538 N.W.2d 325, 335 (Mich. 1995). It also might still have a duty to warn of

manufacturing defects discovered after it sold the product. *See id.* at 332–33. Subsection 4 thus does not lose all meaning if *Comstock* does not apply when the underlying defect is a failure to warn. Two: Subsection 4 does not mention *Comstock*, making it highly speculative to assume that it meant to codify *Comstock*. And to the extent any ambiguity in § 600.2948 would lead Michigan courts to consider legislative history, *Lansing Mayor v. Mich. Pub. Serv. Comm'n*, 680 N.W.2d 840, 847 (Mich. 2004), the only mention of *Comstock*'s post-sale duty to warn there suggests that the statute overrules the duty. *See* Mich. Senate Fiscal Agency, *S.B. 344 & H.B. 4508: Revised Enrolled Analysis* 16 (1996). Subsection 3 governs this case and defeats this aspect of Mitchell's claim.

Even if we ignored the statute and even if *Comstock* remained good law, Mitchell's argument fails on its own terms. As *Gregory* explains, *Comstock* creates a duty to warn when the product in question was defective at the time of sale. *See* 538 N.W.2d at 331–33. But Mitchell cannot show Officer Lapham's X26 was defective when sold under any theory of products liability recognized by Michigan law. She does not argue that Lapham's taser suffered from a manufacturing defect—that "something [went] wrong in the manufacture process" such that Lapham's taser was "not in its intended condition." *Prentis v. Yale Mfg. Co.*, 365 N.W.2d 176, 182 (Mich. 1984). Nor does she argue that Taser defectively designed its line of X26s. *See id.* at 184. That leaves her only with a claim of defect based on lack of necessary warnings. As just shown, that claim fails. *Comstock* thus does not help Mitchell even on its own terms.

IV.

Mitchell also argues that the district court improperly dismissed her negligence claim. This claim has been a moving target from the beginning. The complaint suggests that Taser committed negligence by "continu[ing] to manufacture, market and distribute" the X26 after it knew or should have known of the risks the device posed. R. 75 at 31. In response to Taser's summary judgment motion, however, Mitchell tucked the negligence claim into a section discussing Taser's duty to warn. There she argued that Taser assumed a duty of care through its training program and thus owed its customers a duty to warn of dangers revealed through new studies that came to light after the point of sale. The district court considered and rejected that argument. On appeal, the target has moved once again: Mitchell now claims that Taser is liable

"*independent* of products [] liability" because it kept telling its customers to aim at center mass and kept marketing the X26 as safe after it knew or should have known better. Appellant's Br. 44.

No matter how Mitchell pitches this claim, it cannot succeed. Start with the negligent-training angle. This theory asserts not a failure to warn but that some other affirmative aspect of the training was negligent. The Warren Police Department went through training with one of Taser's independent contractors in September 2006, about one month after the company shipped the X26s to Warren. Even assuming that Taser could be vicariously liable, *see Brinker v. Koenig Coal & Supply Co.*, 20 N.W.2d 301, 303 (Mich. 1945), it owed no duty of care to Mitchell's son Robert at that time. Under Michigan law, a person has a duty to guard only against foreseeable injuries. *See Valcaniant v. Detroit Edison Co.*, 679 N.W.2d 689, 692 (Mich. 2004). And the known risk of cardiac arrest was no less tentative and speculative in September 2006 than it was a month earlier at the point of sale. Taser thus had no responsibility to prevent the harm Robert suffered by refraining from instructing its customers to aim at center mass.

What about later documents where Taser continued to instruct X26 users to aim at center mass? The key failing there is causation. Absent from the record is evidence that the Warren Police Department would have altered its training policies or Officer Lapham would have aimed any differently had Taser silently removed its "aim at center of mass" language from its subsequent training documents. Indeed, Mitchell does not even argue the point on appeal.

Now consider Mitchell's theory before the district court—that Taser assumed a continuing duty to warn the Warren Police Department by virtue of its continued updating of its training materials. The Michigan Supreme Court has never held that such a duty exists. In *Gregory* it assumed that a continuing duty to warn can arise if "a unique or controlling relationship" develops between the manufacturer and end user. 538 N.W.2d at 336. But *Gregory* also said that no such relationship exists solely by dint of the manufacturer mailing occasional, even numerous, product updates. *Id.* And as far as we can tell, that was the only connection Taser had with the Warren Police Department after the initial training session. Recall, moreover, that it was not Taser who taught Warren's training officers. That job fell to one of the company's independent distributors. All in all, no sufficiently "unique or controlling

relationship" existed to justify imposing on Taser a perpetual duty to warn Warren about all X26 dangers that surfaced after purchase.

In light of these conclusions, we need not resolve the other defenses presented by this case: (1) whether Mitchell failed to prove proximate cause because Lapham never saw the product warnings that Taser did provide; (2) whether Lapham misused the product by failing to follow Taser's express warnings; or (3) whether Lapham's violation of the Constitution and the Warren Police Department's use-of-force policies constituted a superseding cause of Robert's death.

For these reasons, we affirm.

CONCURRING IN PART AND DISSENTING IN PART

BERNICE BOUIE DONALD, concurring in part and dissenting in part. I concur in the majority's decision to affirm the district court's dismissal of Mitchell's post-sale duty-to-warn and negligence claims. I dissent with respect to the majority's finding that Mitchell's pre-sale duty-to-warn claim fails as a matter of law.

I.

At the outset, the majority informs us that Robert Mitchell "resisted arrest" by "r[unning] from the car, t[aking] off on foot, b[reaking] into an abandoned house, and hid[ing] upstairs." Maj. Op. at 2. Florid language aside, these facts are all technically true. The majority's presentation of the facts, however, does not view the evidence in the light most favorable to Mitchell as the non-moving party—as we must at the summary-judgment stage. *Shreve v. Franklin Cnty., Ohio*, 743 F.3d 126, 132 (6th Cir. 2014).

Taser does not dispute the following facts. On April 10, 2009, two Warren Police Department ("WPD") officers initiated a traffic stop of a motor vehicle with an expired license plate. The stop occurred on a stretch of road between Warren, MI and Detroit, MI. Robert, who was 16 years old, was a passenger in that vehicle. Robert, "frightened" and "panicked," jumped out of the passenger seat of the stopped car and ran from the scene. Robert's reasons for fleeing remain unknown. Neither he nor the other occupants of the vehicle had committed any crime, nor were they wanted for any crime. No evidence of any crime was ever recovered.

Robert ran into a nearby abandoned house and up a flight of stairs. Six police officers soon cornered Robert, ordering him to come downstairs. Robert immediately complied, and came downstairs with his hands extended and outstretched in front of him. He was "obviously unarmed." Robert, an asthmatic, was "sweating profusely and breathing very heavily[,] . . . out of breath and panting." Robert—at just 5'2" and 128 pounds—was substantially smaller than and clearly outnumbered by the six officers who surrounded him. He did not resist or attempt to flee again. At this point, the events in question were no longer tense, uncertain, or rapidly

evolving. No use of force beyond the officers' hand-holds was necessary to bring the incident to a peaceful close. Nonetheless, without any verbal warning or opportunity for Robert to respond, Officer Jesse Lapham instructed two other officers to step aside and deployed his Model X26 taser at the left side of Robert's chest. The two electronically charged darts that were shot from the X26 penetrated the left side of Robert's chest—five and one quarter (5 ¼) inches apart—"creating a lethal trans cardiac vector." Robert fell to the floor and officers handcuffed him. Thereafter, WPD officers noticed Robert was unresponsive, not breathing, and had no pulse. Resuscitation efforts failed and Robert was later pronounced dead. An autopsy listed Robert's cause of death as "arrhythmogenic right ventricular cardiomyopathy (dysplasia) with use of a conducted energy device being a contributory factor."

The differences between *this* presentation of the facts and the majority's presentation of the facts may, at times, appear minor. But the language employed by the majority shifts the narrative—*i.e.*, our perception of Robert and the events leading to his death—in subtle but powerful ways. It is fair to question the majority's inclination, however unintentional, to brand Robert as a miscreant—running from cars, taking officers on a foot chase, "breaking into" abandoned houses, and then hiding upstairs. What factual support does the majority have for the notion that Robert "tried to evade the officer's grasp, and a struggle ensued," thus prompting Officer Lapham to deploy his taser? Maj. Op. at 2. Nothing more than the deposition testimony of Officer Lapham himself. Again—with five other officers on the scene and deposition testimony from every single one of them—one questions the majority's need to cite with approval the testimony of the one individual with the most to gain from painting the sixteen year old in the most negative light possible.

II.

The majority's legal conclusions are also flawed. The majority correctly frames the issue presented: "Any liability for failure to warn in this case . . . require[s] a showing that Taser 'knew or should have known' about the risk of cardiac arrest from an X26 chest shot based on the information available 'at the time' of sale—here August 17, 2006." Maj. Op. at 4 (quoting Mich. Comp. Laws § 600.2948). But the majority, like the district court before it, exaggerates

the question of whether Mitchell can prove actual knowledge and deemphasizes the equally material question of whether Mitchell can prove what Taser "should have known."

A.

Taser contends that as of August 17, 2006, "no medical examiner, peer-reviewed literature[,] or plaintiff-retained expert report had EVER concluded that an X26 [conducted electrical weapon] directly induced VF or any fatal cardiac arrhythmia in any human." The district court agreed, finding that the only evidence Mitchell proffered regarding whether Taser "knew of the risk of chest shots" were two studies published in the July 2006 volume of the *Journal of the American College of Cardiology*. *Mitchell v. Taser Int'l, Inc.*, No. 09-11480, 2014 WL 3611632, at *1 (E.D. Mich. July 23, 2014). These two studies—conducted on sedated pigs—were referred to by the district court as the "Lakkireddy/Tchou study" and the "Nanthakumar study."[1] *Id.* The district court summarized the studies as follows:

> Both studies tested the effect of an X26 on cardiac rhythm in sedated pigs. In the Nanthakumar study, they analyzed 150 discharges, finding that discharges to the chest area of the pigs often resulted in "myocardial [heart muscle] stimulation and capture [pacing]." After administering epineprhine [sic] to simulate stress, they induced ventricular fibrillation ("VF") once in one pig.
>
> The Nanthakumar study's authors concluded that "[w]hen the discharge was vectored across the chest, electrical and mechanical capture [pacing] of the heart ensued." "We also found that discharges away from the chest did not stimulate the heart or trigger arrhythmias." Among other study limitations, the authors noted that "[t]he threshold for induction of VF in pigs may be lower than in humans, and the structural variation in the chest wall anatomy is another limitation with regard to extrapolating our model to humans." . . . **The authors concluded that "[t]his study *suggests* that NIDs [neuromuscular incapacitating devices] *may* have cardiac risks that require further investigation in humans**."
>
> In response to criticisms of the study, Nanthakumar stated: "The main point of our study was to demonstrate that electrical capture of the myocardium, under specific circumstances, can occur after neuromuscular incapacitating device (NID) discharge. . . . We agree that it is not possible to directly extrapolate our results to NID use in humans. . . . We did not state that NIDs cause ventricular fibrillation in humans, and we agree that we cannot conclude from our study that NID discharges cause arrhythmias in typical use. **We hope that readers agree that our study does suggest the possibility that NIDs may, in some**

[1]For ease and consistency, this dissent will refer to these studies in the same way.

> **circumstances, cause cardiac capture, and that this possibility should at least be considered in future research in humans**."
>
> The Lakkireddy/Tchou study considered "cocaine's effects on Taser-induced ventricular fibrillation (VF) threshold in a pig model." It concluded that "the presence of cocaine decreases the likelihood of NMI-induced VF." . . . They noted, however, that "[o]ur study is the first to describe capture of ventricular myocardium during application of NMI pulses." This data "suggest the potential for induction of ventricular tachycardia [abnormal rapid heartbeat] in subjects with substrate for ventricular tachycardia . . . ." and that "avoidance" of discharges near the heart "would greatly reduce any concern for induction of ventricular arrhythmias." However, "[o]ur study showed that VF could not be induced using the standard 5–s Taser discharge applied to a pig's body surface even at the most sensitive area tested." . . . "The results of our study and the few prior animal studies would suggest that NMI discharge at the standard 5–s application is unlikely to cause life-threatening arrhythmias, at least in the normal heart."

Id. at *1-2 (emphasis added) (citations omitted).

The district court concluded that neither study was sufficient to "establish TASER's knowledge regarding the risk of VF or cardiac arrest in humans as a result of X26 shots to the chest." *Id.* at *2. The court found that the Nanthakumar study merely "*suggests* that NIDs [neuromuscular incapacitating devices] *may* have cardiac risks that require *further investigation* in humans." *Id.* (alteration in original) (internal quotation marks omitted). Likewise, the Lakkireddy/Tchou study found that a standard X26 discharge is "*unlikely* to cause life-threatening arrhythmias, at least in the normal heart." *Id.* (internal quotation marks omitted). Further, Tchou testified that "because of our capture data, I would caution them [TASER] that there is *some possibility* that this *could* induce ventricular arrhythmias in people." *Id.* (internal quotation marks omitted). The district court concluded that, at most, these studies only suggested "a theoretical risk as of August 2006, when TASER shipped the X26s to the Warren Police Department," but this theoretical risk was "not sufficient to trigger a duty to warn under Michigan law." *Id.* (internal citations omitted).

I believe the district court erred in framing its inquiry as whether Mitchell could establish that "TASER knew of the risk of chest shots." *Id.* at *1. The question is not whether Mitchell had established actual knowledge. The question is whether there are any genuine issues of material fact regarding what Taser knew *or should have known* regarding the risk of VF from the

X26. Mich. Comp. Laws § 600.2948(3). In other words, the query should have been what Taser knew, when Taser knew it, what Taser should have known, and when Taser shown have known it. In mischaracterizing Mitchell's burden, the district court improperly held Mitchell to a higher burden of proof than that permitted by the summary-judgment standard. The district court then failed to draw all reasonable inferences in Mitchell's favor as the non-moving party. *Henderson v. Walled Lake Consol. Sch.*, 469 F.3d 479, 487 (6th Cir. 2006).

B.

The majority would argue that, because our review of the district court's summary judgment order is de novo, *id.* at 486, we may affirm the judgment of the district court on different grounds. This is, of course, correct. But the majority's analysis, while distinct, fares no better than the district court's analysis.

1.

The majority begins with a discourse on the historical and contemporary "field use of tasers." This discussion draws primarily on reports, training, promotional, and testimonial materials *from Taser International*. It is hardly surprising that a company that manufactures and sells tasers would tout the virtues of the product it manufactures and sells. What *is* surprising—and improper at summary judgment—is that majority relies on these materials as one of "several reasons" no reasonable jury could find that Taser "knew or should have known of the risk of cardiac arrest from a X26 chest shot on August 17, 2006." Maj. Op. at 4. Nowhere in her efforts to demonstrate a pre-sale duty to warn has Mitchell argued that the field use of tasers contributed to Taser's actual or constructive knowledge of the risk of cardiac arrest from the X26 in August 2006, thus giving rise to pre-sale duty to warn. Nor has Mitchell argued that the complaint filed in *Williams v. Taser International, Inc.* in January 2006 or the letter to the editor printed in the *New England Journal of Medicine* in September 2005 contributed to Taser's actual or constructive knowledge. The majority's discourse on this subject—an argument of the majority's own creation, based largely on Taser's propaganda materials and partly on independent research —serves no purpose other than to draw impermissible inferences in favor of Taser and stack the deck against Mitchell.

2.

Mitchell *has* argued that the two aforementioned studies gave Taser *reason to know* of the risk of cardiac arrest from an X26 chest shot. Both studies were published in the same August 2006 issue of the *Journal of the American College of Cardiology*. As the majority notes, the studies were "formally released a week before the City of Warren received its delivery of X26s but informally conveyed to Taser several months earlier." Maj. Op. at 6. Also as the majority notes, Taser funded the Lakkireddy/Tchou study. Nonetheless, the majority concludes that the studies only found that although the X26 could "capture" a pig's heartbeat, the studies "showed little risk that the standard charge could create cardiac arrest"—the cause of death in 16-year-old Robert Mitchell.

The majority neglects to mention that, in late 2005 or early 2006—at least six months before the X26 sale to the WPD and more than three years before Robert's death—Dr. Tchou and Dr. Lakkireddy met with Taser's management, including CEO Patrick "Rick" Smith, to discuss the study's progress. The two electrophysiologists told TASER that it is "possible" for VF to occur when at least one taser dart lands "[i]n the region of the chest close to the heart." Conversely, "it would be highly unlikely to have any directly induced arrhythmias from a TASER dart to . . . parts of the body other than near the heart." Dr. Tchou testified, moreover, that he informed Smith and other Taser representatives that "despite the fact that we did not induce ventricular fibrillation in any of the pigs, . . . because of our capture data, I would caution them that there is some possibility that this could induce ventricular arrhythmias in people," and it is "very clear from our data" that "the safety margin would increase if the dart locations were further away from the chest or the heart."

Thus, although the majority is correct that the Lakkireddy/Tchou study "showed that [ventricular fibrillation] could not be induced using the standard 5-[second] [t]aser discharge applied to a pig's body surface even at the most sensitive area tested," Maj. Op. at 7, Taser was arguably aware—well in advance of the August 17, 2006, ship date—of the preliminary findings and recommendations of the study's authors. These recommendations were later codified in the published study. But the majority, like the district court before it, selectively quotes the passages of the Lakkireddy/Tchou study that are favorable to Taser while ignoring the passages that are

favorable to Mitchell. For instance, the Lakkireddy/Tchou study also noted, "Our data regarding myocardial capture, however, suggest the potential for induction of ventricular tachycardia," and "[a]voidance of [darts near the heart] would greatly reduce any concern for induction of ventricular arrhythmias." Likewise, the Nanthakumar study stated: "These findings suggest that there exists the possibility of serious ventricular arrhythmia during [X26] discharges in structurally normal hearts," and "[o]ur findings of rapid ventricular stimulation with X26 discharge across the chest suggest a particular risk in individuals with pre-existing . . . structural heart disease."

The majority tells us, however, that "[n]one of these studies established to a reasonable level of certainty that an X26 poses a risk of cardiac arrest in humans," and that "more than . . . a theoretical possibility" of cardiac arrest is required. Maj. Op. at 7. In reaching this conclusion, the majority improperly inserts itself into the role of the fact finder, an impermissible action at the summary-judgment stage. The Michigan statute "imposes a duty to warn that extends only to material risks not obvious to a reasonably prudent product user." *Greene v. A.P. Products, Ltd.*, 717 N.W.2d 855, 857 (2006). A "material risk" is one that presents "an important or significant exposure to the chance of injury or loss." *Id.* at 860. The question, therefore, is whether the risk of cardiac arrest for an X26 chest shot is one that presents "an important or significant exposure to the chance of injury or loss"—not whether the risk is quantifiable or reaches some amorphous "reasonable level of certainty" satisfactory to the majority. Simply because a particular risk does not boast medical *certainty* does not automatically render the risk "speculative" or "theoretical."[2] Maj. Op. at 9. Drawing all reasonable inferences in favor of Mitchell, it is clear that there is medical *consensus*—as stated by Dr. Tchou, Dr. Nanthakumar, and Dr. Zipes, Mitchell's technical expert—that hitting the chest area with X26 darts creates a risk of cardiac arrest, while aiming away from the chest eliminates that risk altogether. Given the extreme consequences of cardiac arrest, and the relative ease with which that risk can be eliminated, a jury could find the cardiac capture risk documented by Dr. Tchou and Dr. Nanthakumar both "important" and "significant." To

[2]The majority concedes as much in averring that "[c]ourts do not demand scientific certainty" and "there are no certainties in science." Maj. Op. at 9 (citations omitted). The majority's zero-sum analysis, however, suggests that because the risk of cardiac arrest from a X26 chest shot is not certain, that necessarily leads to the conclusion that the risk is speculative.

conclude that the available evidence does not establish a genuine issue as to any material fact is disingenuous, as the majority in fact proceeds to resolve these issues in favor of Taser.

3.

The majority next charges that the arguments raised by Mitchell in support of reversal are "unpersuasive." Maj. Op. at 10. For instance, the majority claims that Mitchell asserts that "we should not discount the pig studies because they are not human studies." *Id.* at 11. Mitchell raises no such argument. *Taser* argues that "animal studies alone are insufficient to prove human causation under Michigan law." For obvious ethical and safety reasons, Taser's contention that a human study is obligatory before the company can reasonably be on notice of the risk of cardiac arrest from the X26 is simply absurd. More importantly, Taser's demand for human testing is nothing more than an obvious attempt to undermine the findings of the Lakkireddy/Tchou and Nanthakumar studies—one of which Taser funded. Ultimately, Taser's contention that the effect of an X26 on a pig does not exactly replicate the effect of an X26 on a human at most establishes that there are factual questions surrounding the studies. It does not establish, as a matter of law, that Taser had no knowledge of the potential risk to humans, and beliefs the conclusions of the study funded by and presented to Taser.

The majority next disregards Mitchell's reliance on the Fourth Circuit's decision in *Fontenot v. Taser International, Inc.*, 736 F.3d 318 (4th Cir. 2013). I agree with Mitchell's contention that *Fontenot* illustrates how reasonable minds could disagree with the district court's conclusions regarding the Lakkireddy/Tchou and Nanthakumar studies.

The facts underlying *Fontenot* are similar to those in this case. In *Fontenot*, 17-year-old Darryl Turner died from cardiac arrest after a confrontation with police in which an X26 taser manufactured by Taser struck him in the chest. *Id.* at 321. The police officer who discharged the taser aimed the device at Turner's chest based on training provided by the Charlotte Mecklenburg Police Department, which used instructional materials supplied by Taser. *Id.*

Tammy Lou Fontenot, Turner's mother and the administrator of his estate, initiated a products-liability action against Taser in a North Carolina state court. *Id.* 321-22. In the complaint, Fontenot alleged that Taser negligently failed to warn users of the risk posed by the

X26 taser and, in particular, to warn them to avoid applying the taser's electrical current near a subject's heart. *Id.* at 322. Fontenot further alleged that Taser's negligence was the proximate cause of Turner's death. *Id.* A jury found in Fontenot's favor, awarding her $10 million in compensatory damages, which amount the district court remitted to about $6.15 million before deducting certain offset amounts received by Fontenot, resulting in a final award of about $5.5 million. *Id.*

Taser appealed. The Fourth Circuit noted that the X26 "had been the subject of several academic studies," and that Taser "knew about these studies, in which researchers had concluded that the device posed a risk of ventricular fibrillation, a cause of cardiac arrest, especially when the electrical current from the taser was applied near the subject's heart." *Id.* In light of the studies' findings, the Fourth Circuit found that Taser had "failed to warn taser users to avoid deploying the taser's electrical current in proximity to the heart." *Id.* The Fourth Circuit held:

> Shortly after [Taser] issued the June 2005 Training Bulletin, [Taser] received the results of a [Taser]-funded study conducted by Dr. Dhanunjaya Lakkireddy concerning additional testing of the X26 taser. This study, which was published in the Journal of the American College of Cardiology, showed that the taser's electrical pulses can "capture" cardiac rhythms, potentially leading to ventricular fibrillation. The study further noted that if users avoided striking the subject's chest area with the taser's darts, the risk of ventricular fibrillation would be reduced significantly.
>
> [Taser] received the results of another study in 2006, which was conducted by Dr. Kumaraswamy Nanthakumar and was published in the same medical journal. Dr. Nanthakumar's study likewise showed a risk of ventricular fibrillation in test animals when darts fired from the X26 taser lodged near the subject animal's chest. Notably, the study showed that when the darts struck the animal in areas away from the chest, such as in the abdomen, the taser did not capture heart rhythms and, thus, using the taser in this manner avoided the risk of causing ventricular fibrillation.
>
> These conclusions reached by Dr. Lakkireddy and Dr. Nanthakumar conflicted with [Taser]'s representations in its training materials that the X26 taser could not capture heart rhythms and was safe even when applied directly to a person's chest. Nevertheless, as confirmed by [Taser]'s chief executive officer and the company's vice president of training, [Taser] did not alter its training materials to warn users of the X26 taser that shots to a person's chest could result in ventricular fibrillation, or that use of the taser near a person's heart should be avoided based on that risk. Accordingly, up until the time of Turner's death, Captain Campagna and Officer Dawson continued to think that electrical current

> emitted by the X26 taser, even when applied near a person's heart, did not affect heart rhythms or entail risks of cardiac arrest.

Id. 324-25.

The underlying events in *Fontenot* took place on March 20, 2008—more than a year before Robert's death. But the district court did not consider, or even discuss, the *Fontenot* decision—even though Mitchell's cross-motion for partial summary judgment was premised on her assertion that *Fontenot* had an issue-preclusive effect on this case. This was error. Even if the district court rejected the notion that issue preclusion applied, at the very least *Fontenot* is persuasive authority as to whether Taser may be held liable for harmful risks associated with chest shots from its X26 device under state-law theories of products liability and negligence.

The majority essentially finds that *Fontenot* is immaterial to the instant case because *Fontenot* was brought under North Carolina tort law and not Michigan tort law.[3] This much is obvious. But *Fontenot* need not be legally on all fours with this case in order hold persuasive value. That is to say, the elements of a failure-to-warn claim under North Carolina law need not be precisely the same as the elements of a failure-to-warn claim under Michigan law in order for the North Carolina jury's verdict to be relevant to whether genuine issues of material fact exist. In holding Taser liable on the facts of that case, the jury clearly would have had to make adverse factual determinations against Taser regarding what it knew and when it knew it. That adverse determination is directly relevant to the question of whether, in the present case, Mitchell has established genuine issues of material fact regarding Taser's knowledge as of August 17, 2006. The fact that *Fontenot* proceeded all the way to trial—and that the Lakkireddy/Tchou and Nanthakumar studies factored forcefully in proving Fontenot's claims at that trial—strongly suggests that Mitchell has satisfied her burden at the summary-judgment stage.

Taser also argues that *Fontenot* is "ill-informed" because, in the Fourth Circuit case, Taser only appealed the damages award and did not contest the jury's finding of liability. As an

[3]The relevance of the majority's observation that North Carolina law "does not limit the information the court could consider to studies published before the date of sale," Maj. Op. at 11, is unclear. North Carolina law simply widens the window of information its courts may consider. Michigan law clearly creates a much smaller window. No one is suggesting, however, that this Court or that the district court should have considered information after the August 17, 2006, sale date that governs our inquiry. Accordingly, the majority's observation is merely a distinction without a difference.

initial matter, it is difficult to comprehend how this argument does not undermine Taser's case here. If Taser only appealed as to damages, by definition Taser did not challenge the sufficiency of the evidence supporting the jury's finding of liability against the company.

The majority, however, dismisses *Fontenot* as a "2-1 decision" and "an outlier." Maj. Op. at 12. The majority's first point is ill-chosen. *This* case has also a 2-1 decision. I somehow doubt the majority finds its decision any less valuable because it resulted in a split decision. Finally, with respect to the majority's contention that this case is an "outlier" as compared to decisions reached by the Fifth, Eighth, Ninth, and Eleventh Circuits, I would simply note that the majority makes no attempt to meaningfully discuss how these cases are legally and factually similar to the issue presented in this case. The majority's failure to meaningfully discuss these cases is all the more glaring because the majority first seeks to distinguish *Fontenot* because it "involved North Carolina law," and then cites with approval cases arising under Missouri, Mississippi, Arizona, California, and Georgia law. *Id.* Apparently, while the majority is permitted to find support for its position outside the state of Michigan, Mitchell cannot.

III.

For the foregoing reasons, I disagree with the majority's finding that Mitchell's pre-sale duty-to-warn claim fails as a matter of law. Genuine issues of material fact abound with respect to this claim. In deciding otherwise, the majority improperly usurps the role of the fact finder.

I respectfully dissent.