

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

JOSHUA J. BELOW, by his guardian, DEBRA BELOW, CHARLIE ELIZABETH BELOW, a minor by her Guardian ad Litem, DANIEL A. ROTTIER, and PATRICK JOSHUA BELOW, a minor by his Guardian ad Litem, DANIEL A. ROTTIER,

Plaintiffs,

OPINION AND ORDER

15-cv-529-wmc

and

DEAN HEALTH PLAN, INC.,

Involuntary Plaintiff,

and

STAR BLUE BELOW-KOPF, by her Guardian ad Litem, TERESA K. KOBELT,

Intervening Plaintiff,

v.

YOKOHAMA TIRE CORPORATION, *et al.*,

Defendants.

This matter is scheduled for trial to begin on March 6, 2017. In advance of the parties' final pretrial conference, which will take place on February 24, 2017, at 1:00 p.m, this order addresses defendants' motion *in limine* to exclude testimony from plaintiffs' expert, Gary Derian. (Dkt. #69.)

A. Standard

The admissibility of expert testimony in federal courts is governed principally by Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). Rule 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

(b) the testimony is based on sufficient facts or data;

(c) the testimony is the product of reliable principles and methods; and

(d) the expert has reliably applied the principles and methods to the facts of the case.

A district court functions as a "gatekeeper," determining whether proffered expert testimony is relevant and reliable. *Daubert*, 509 U.S. at 589; *see also United States v. Johnsted*, 30 F. Supp. 3d 814, 816 (W.D. Wis. 2013) (expert testimony must be "not only relevant, but reliable"). Although expert testimony is "liberally admissible under the Federal Rules of Evidence," *Lyman v. St. Jude Medical S.C., Inc.*, 580 F. Supp. 2d 719, 723 (E.D. Wis. 2008), the Seventh Circuit has held that expert testimony must satisfy the following three-part test under Rule 702 as informed by *Daubert*:

(1) the witness must be qualified "as an expert by knowledge, skill, experience, training, or education," Fed. R. Evid. 702;

(2) the expert's reasoning or methodology underlying the testimony must be scientifically reliable, *Daubert*, 509 U.S. at 592-93; and

(3) the testimony must assist the trier of fact to understand the evidence or to determine a fact in issue. Fed. R. Evid. 702.

Ervin v. Johnson & Johnson, Inc., 492 F.3d 901, 904 (7th Cir. 2007). “Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert*, 509 U.S. at 596.

B. Defendants’ Motion to Exclude Testimony of Gary Derian (dkt. #69)

In this case, plaintiffs’ expert, Gary A. Derian, P.E., opines that a Yokohama tire on plaintiff Joshua Below’s vehicle was defective with respect to design, manufacture and warning, and those defects caused the accident that injured him. Defendants move *in limine* to exclude Derian’s opinions that: (1) the tire failure caused Below’s accident; (2) the tire was defectively designed because it lacked a “nylon cap ply,” which would have held the failed tire together long enough for Below to navigate his vehicle to a safe stop; (3) the failed tire exhibited a manufacturing defect; and (4) the tire was defective because defendants’ warnings were inadequate. The court addresses each of Derian’s opinions in turn.

1. Cause of Loss of Vehicle Control

Defendants’ motion to exclude Derian’s opinion on the cause of Below’s accident has the least merit. In his expert report, Derian opined that Below’s vehicle crashed when the tread separated from the Yokohama tire and caused the tire to deflate suddenly, which pulled his truck to the right. (Derian Report (dkt. #83) at 7.)

According to Derian, when Below made a steering correction to the left in response, his truck began to “yaw,” causing a sudden loss of control. (*Id.* at 8.)

Although Derian has training in accident reconstruction, defendants nevertheless argue that he lacks sufficient knowledge to opine on vehicle stability and control. (Defs.’ Br. Supp. (dkt. #71) at 11.) Specifically, defendants assert that Derian only gained relevant experience in vehicle dynamics through his racing of cars. To the contrary, plaintiffs point out that his CV reflects experience in applying vehicle dynamics to vehicle crash reconstruction and vehicle engineering, something he plausibly gained given both his education in mechanical engineering and his employment as an engineer with BF Goodrich and Avanti Automotive Company. Since the Seventh Circuit has previously emphasized that a proposed expert’s practical experience should be considered, along with his formal training, in determining whether he is qualified to offer an opinion in a certain area, *see United States v. Parra*, 402 F.3d 752, 758 (7th Cir. 2005), the court agrees with plaintiffs that Derian satisfies the first prong of the Rule 702 test with respect to his opinion that Below’s truck “yawed.” Of course, defendants are free to cross-examine Derian as to the weight the jury should give any of his opinions that may involve vehicle dynamics.

Defendants also argue that Derian’s opinion that the tire failure caused a loss of control should be excluded because he failed to “follow an established methodology” in reaching that opinion. (Defs.’ Br. Supp. (dkt. #71) at 12.) In particular, defendants fault Derian for concluding that Below’s truck became unstable simply because it went into a “yaw,” without having made a “scientific analysis of the vehicle, the environment,

or the driver” by, among other things, personally evaluating the truck and accident scene or calculating the truck’s speed and steering inputs. (*See id.* at 12-13.) Defendants also argue that Derian’s reliance on a study on driver reactions to tread separations performed for the National Highway Traffic Safety Administration (“NHTSA”) in support of his loss of control conclusion is misplaced, because that study did not involve a vehicle with characteristics sufficiently analogous to Below’s truck.

The court again agrees with plaintiffs that defendants demand more than Rule 702 requires with respect to Derian’s testimony that the tire failure caused Below to lose control of his vehicle. First, Rule 703 does not require the expert to have personally observed all of the facts on which he relies, so long as he generally relies on similar information in forming expert opinions in his field. Fed. R. Evid. 703 (“An expert may base an opinion on facts or data in the case that the expert has been made aware of or personally observed. If experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted.”). Here, Derian made his findings as to yaw based on his analysis of the tread marks in pictures of the accident scene. As plaintiffs point out, defendants’ accident reconstruction expert, Dennis Skogan, also relied on similar findings as to the truck’s yaw and speed. Both experts’ opinions will be subject to cross-examination at trial.

Second, Derian’s opinion that Below’s truck crashed because of oversteering was based on his knowledge of the handling characteristics of pickup trucks, as well as the typical response to tread separations explored in the NHTSA study, which he cited for

that limited proposition alone. Although defendants are free to highlight perceived weaknesses in Derian's analysis on cross-examination, any arguable shortcomings go to weight, not the admissibility of his analysis under Rule 702 and *Daubert*.

This brings us to a third and decisive problem with defendants' criticism. Derian's opinion on the movement of Below's truck following a sudden, complete loss of a rear wheel involves fairly straightforward accident reconstruction techniques and basic physics. Indeed, it is not clear that Derian was using the term "yaw" in a more technical sense than an ordinary dictionary definition -- that is, "to swing back and forth across its course, as a ship pushed by high waves." (Webster's New World Collegiate Dictionary (2001).) While defendants are certainly free to criticize his opinions as to the cause of the accident, Derian is well qualified to express them.

2. Design Defect

Next, defendants move to exclude Derian's opinion that the tire was defective because Yokohama failed to adopt the reasonable alternative design of using a nylon cap ply over the tire's steel belts, which would have been sufficiently strong to keep the tire intact long enough for Below to safely bring his vehicle to a stop. Defendants argue that Derian is not qualified to offer his opinion that the tire was defectively designed, but again frame the relevant knowledge required by Rule 702 too narrowly. The fact that Derian lacks personal experience designing or evaluating LT285/75R16 tires may affect the weight a jury will assign his design defect opinion, but he is certainly qualified to offer expert testimony about the design of tires for passenger vehicles generally given his professional work as a tire engineer with BF Goodrich, his consulting work with Dunlop

and his practical experience conducting forensic analyses of failed tires. The idea that an expert must have been involved in the design of the specific product at issue, or at least in its evaluation, would practically preclude experts from criticizing a design, since only those most vested in that product's success would be qualified to do so.

On the other hand, defendants argue much more persuasively that (1) Derian did not use a reliable methodology in reaching his design defect opinion, *and* (2) failed to offer an adequate basis for his reasonable alternative design. Under Wisconsin law, to succeed on a defective design claim based on a strict liability theory, a plaintiff must show that there were “foreseeable risks of harm posed by the product [that] could have been reduced or avoided by the adoption of a reasonable alternative design by the manufacturer and [that] the omission of the alternative design renders the product not reasonably safe.” Wis. Stat. § 895.047(1)(a).

The Wisconsin statutes do not require plaintiffs to make the same showing with respect to a negligent design defect claim, but the two theories are similar “[i]n the negligence context, [because] the reasonableness of a product's design ‘turns essentially on whether the seller could have come up with a less dangerous design.’” *Nationwide Agribusiness Ins. Co. v. Meller Poultry Equip., Inc.*, No. 12-C-1227, 2015 WL 998331, at *3 (E.D. Wis. Mar. 5, 2015) (quoting *Komanekin v. Inland Truck Parts*, 819 F. Supp. 802, 808 (E.D. Wis. 1993)); *see also Morden v. Cont'l AG*, 2000 WI 51, ¶ 56, 235 Wis.2d 325, 611 N.W.2d 659 (“[T]he state of the art (what the industry feasibly could have done) at the time of the design or manufacture is relevant to the jury's determination of negligence. Given evidence of industry practices, the jury can make the determination

whether the manufacturer reasonably and economically could have chosen an alternative course of conduct.”) (internal quotation marks and citation omitted).

Here, plaintiffs’ strict liability and negligent design and manufacturing claims overlap, because expert testimony is almost certainly necessary to support either claim given the complexities of tire technologies.¹ Compare *Smoot v. Mazda Motors of Am., Inc.*, 469 F.3d 675, 681-82 (7th Cir. 2006) (“The district judge was correct, however, to reject the plaintiffs’ attempt to invoke the *res ipsa loquitur* doctrine in this case, or, to state the point more practically, was correct to rule that the plaintiff could not prove a product defect [allegedly causing an airbag to deploy prematurely] without expert testimony.”), with *Nationwide Agribusiness*, 2015 WL 998331, at *3 (postulating that the plaintiffs likely would not need expert testimony to prove a defect because “a catwalk should not collapse under the weight of one man”) (collecting cases).

At his deposition, Derian confirmed that he is not offering an opinion that the inner liner of the tire caused it to fail. (Dep. of Gary Derian (dkt. #78) at 148:20-149:1.) Instead, as set forth in his expert report, Derian’s sole design defect opinion is that “[t]he failed tire did not contain nylon cap plies over the steel belts that were sufficiently strong to hold the tire together long enough for Below to recognize the tire failure and get off the highway safely.” (Derian Report (dkt. #83) at 12.) In support, Derian generally asserts in his expert report that “[t]he use of circumferential nylon plies over the top of steel belts is a mature technology that has been known and

¹ As the court explained in the summary judgment opinion, plaintiffs’ failure to warn claim based on the sticker theory arguably does not need to be supported by expert testimony, but the court will further explore whether plaintiffs preserved that theory at the telephonic conference on February 21. (2/13/17 Op. & Order (dkt. #198) at 9.)

used since the 1960s.” (*Id.* at 4.) Derian further states in his report that “Yokohama is aware of the benefits of a full width ply and uses them in their own high speed tires.” *Id.* Although acknowledging that “[Below’s] light truck tire is not a high speed tire,” Derian goes on to assert “the heavy belt ply creates a high centrifugal force similar to a passenger tire operating at high speeds.” (*Id.*) Therefore, Derian concludes the tire was defectively designed and should have incorporated nylon cap plies. (*Id.* at 4.)

Pointing to his lack of experience designing this type of light truck tire, defendants argue that Derian’s design defect opinion is unreliable because: (1) he has not tested it; and (2) he identified no published study or other evidence demonstrating that his theory is generally accepted in the tire engineering community. *See Daubert*, 509 U.S. at 592-93 (setting forth a non-exhaustive list of factors for courts to consider in determining reliability of scientific expert opinion); *see also Kuhmo Tire Co. v. Carmichael*, 526 U.S. 137, 148-49 (1999) (holding that *Daubert*’s general principles of evidentiary reliability apply to expert opinion based on “technical” or “other specialized” knowledge, as well as “scientific” knowledge). Put differently, defendants move for Derian’s design defect opinion to be excluded as a “bare assertion,” unsupported by reliable methodology. *See Clark v. Takata Corp.*, 192 F.3d 750, 758-59 (7th Cir. 1999).

In response, plaintiffs argue that Rule 702 and Wis. Stat. § 894.047 do not require Derian to actually design an alternative tire. So even though Derian “did not propose a full nylon cap ply of any particular thickness,” it is sufficient that he “defined the required performance characteristics: it must be strong enough to hold the tire together for up to 30 seconds, in order to permit a driver to safely pull over.” (Pls.’

Opp'n Br. (dkt. #168) at 19.) In further support of Derian's design defect opinion, plaintiffs cite to his deposition testimony that he designed nylon cap plies for that purpose when he was a tire engineer at BF Goodrich, as well as his testimony that nylon cap plies have been and still are the current state of the art. (Dep. of Gary Derian (dkt. #78) at 151:10-152:6, 173:19-20.)

Plaintiffs also cite to the deposition testimony of Gerhard Veldman, Yokohama's 30(b)(6) representative, who gave seemingly evasive answers, but at least implicitly admitted that Yokohama manufactured certain tires for similar applications with a full nylon cap ply in 2006. (Dep. of Gerhard Veldman (dkt. #146) at 23:22-24:11.) Veldman also acknowledged that one of the purposes of a nylon cap is to counteract centrifugal forces that can separate a tire's belts. (*Id.* at 79:19-80:5.) As a result, plaintiffs argue, "the feasibility of [Derian's] alternative design is demonstrated by the fact that defendants actually manufactured such tires, for light trucks, in 2006, and such tires have been in use since the 1960s." (Pls. Opp'n Br. (dkt. #168) at 20.)

Contrary to plaintiffs' assertion, the court cannot determine whether Derian's design defect opinion satisfies the reliability requirements set forth by Rule 702 and *Daubert* on this record. In particular, Derian offers no experience or knowledge regarding designing tires with nylon cap plies with sufficient detail to demonstrate the reliability of his opinion as to an alternative design; he offers no detail as to the viability of the design, other than that cap plies have been successfully designed for "high speed" uses like racing by Yokohama; and he offers no basic schematic of the tire, no feasibility study and no average cost. Furthermore, the exhibits on which Derian purportedly relied in support of

his opinion, as well as the various documents to which he vaguely alluded at his deposition do not appear anywhere in the docket. (*See* Dep. of Gary Derian (dkt. #78) at 152:7-21.) Finally, Derian provides no underlying scientific support for his opinion that the tire at issue here is comparable to a high speed racing tire, or otherwise subject to risks of belt separation.

Given the lack of detail in Derian's report, and the lack of any deposition testimony by Derian *or* Yokohama engineer Veldman regarding applications of the nylon cap ply design in tires similar to the Yokohama tire at issue in this case, the court cannot resolve whether plaintiffs have sufficient evidence to prove that the tire was defectively designed. *Compare Cruz v. Bridgestone/Firestone N.A. Tire, LLC*, 368 F. App'x 803, **3 (10th Cir. 2010) (affirming district court's exclusion of tire expert's opinion that a light truck tire was defectively designed because it lacked a nylon cap ply, which "would have prevented the failure from occurring before the tire was worn out," since the expert "conducted no testing pertaining to his nylon cap ply theory, he offered no peer-reviewed studies supporting his opinion, he offered no empirical data, and he conceded that no tire standard called for use of nylon cap plies in tires"), *with Mascarenas v. Cooper Tire & Rubber Co.*, 643 F. Supp. 2d 1363, 1369 (S.D. Ga. 2009) (permitting expert testimony that a tire was defectively designed because it lacked a full nylon cap because he "considered, and Plaintiffs have submitted, evidence that the wedge and nylon cap features were reasonable design alternatives widely used in the tire industry"), *and Morden*, 235 Wis.2d at 360 (jury could have reasonably inferred that defendant should have used an alternate tire design with a "double wrap cap splice" based on evidence of

“what feasibly could have been done at the time of the tire’s manufacture,” in the form of a patent stating that single wrap cap splices were “known in the art” and tire expert’s testimony that “double wrap technology designed to eliminate belt separation had been known and generally used in the tire industry since the 1960s and 1970s”).

Plaintiffs shall proffer evidence in support of their design defect claim at the final pretrial conference at 1:00 p.m. on February 24, 2017.

3. Manufacturing Defect

Defendants also move to exclude Derian’s opinion that the tire was defectively manufactured. In his expert report, Derian offered his opinion that “[t]he tear patterns visible between the first belt ply and the belt edge cushion strip indicate a defective rubber to rubber bond in the tire.” (Derian Report (dkt. #83) at 12.) More specifically, Derian opined that a manufacturing defect in the tire that failed on Below’s vehicle caused contamination and, consequently, poor adhesion in the rubber layers of the tire, which was demonstrated by the lack of distinct tear marks in the failed tire. (*Id.* at 6.)

Defendants argue that Derian’s manufacturing defect opinion is unreliable because: (1) the only basis for his opinion is his visual examination of the tearing pattern of the tire; (2) he does not identify other authority or experts who employed the same methodology in determining a tire manufacturing defect; and (3) he fails to account for other potential causes for the tire failure, particularly that it was mounted on too narrow a rim. The court agrees with plaintiffs that defendants’ first and third arguments are not enough to exclude Derian’s manufacturing opinion, but is troubled by the second.

As a general proposition, “[t]he law suggests that nondestructive visual and tactile examination of a failed tire is accepted in the field of tire forensics.” *McCloud ex rel. Hall v. Goodyear Dunlop Tires N.A., Ltd.*, 479 F. Supp. 2d 882, 890-91 (C.D. Ill. 2007) (citing *Kuhmo*, 526 U.S. at 156). Indeed, as plaintiffs point out, defendant’s expert Joseph Grant testified at his deposition that his further x-ray inspection of the failed tire revealed little of significance. (Dep. of Joseph Grant (dkt. #114) at 111:15-19.) With respect to the third argument, Derian provides an adequate basis to rule out other potential causes for the tire failure in his expert report. (*See* Derian Report (dkt. #83) at 9-11.)

As for defendants’ second argument, however, Derian’s manufacturing defect opinion suffers from the same problem as his design defect opinion. Even assuming that Derian’s manufacturing defect opinion is within the realm of his specialized knowledge, the record lacks any scientific authority, studies or analysis that would support Derian’s manufacturing defect opinion, other than his generalized experience. *See Hauck v. Michelin N.A., Inc.*, 343 F. Supp. 2d 976, 984-86 (D. Colo. 2004) (despite tire expert naming several kinds of manufacturing defects that could cause poor adhesion, his opinion did not satisfy the *Daubert* reliability standard because, among other reasons, “he never attempted to identify the manufacturing defect that he postulates to have existed”); *Westfield Ins. Co. v. Bridgestone Ams. Tire Operations, LLC*, Civil Action No. 1:14CV55, 2014 WL 8108464 (N.D. W. Va. Dec. 18, 2014) (denying *Daubert* motion to exclude Mr. Derian’s expert opinion that a tire had a manufacturing defect because he “discussed peer-reviewed literature stating that a visual inspection of tear patterns in

rubber surfaces can provide valuable information about the cause of failure” and “state[d] that he followed the methodology described in the literature to visually observe the surface of the failed tire, which he then compared to the surface of a ‘normal’ product appearance”).

Thus, the court will reserve on the exclusion of this opinion until a full proffer at the final pretrial conference on February 24.

4. Warning

Finally, defendants move to exclude Derian’s opinion that Yokohama’s warnings were inadequate. In light of the court’s discussion in the opinion on defendants’ motion for partial summary judgment, the court will hear argument regarding plaintiffs’ failure to warn claim at the February 21 hearing. (*See* 2/13/17 Op. & Order (dkt. #198) at 8-11.)

ORDER

IT IS ORDERED that defendants’ motion *in limine* (dkt. #69) is RESERVED pending factual proffers and argument at the final pretrial conference on February 24, 2017, at 1:00 p.m.

Entered this 21st day of February, 2017.

BY THE COURT:

/s/

WILLIAM M. CONLEY
District Judge