No. 2020-AP-1052

In the Wisconsin Court of Appeals

DISTRICT II

EDWARD A. VANDERVENTER, JR. AND SUSAN J. VANDERVENTER, *Plaintiffs-Respondents*,

v.

HYUNDAI MOTOR AMERICA AND HYUNDAI MOTOR COMPANY, *Defendants-Appellants,*

KAYLA M. SCHWARTZ AND COMMON GROUND HEALTHCARE COOPERATIVE, *Defendants.*

On Appeal from the Racine County Circuit Court,
The Honorable Eugene Gasiorkiewicz, Presiding
Case No. 16-CV-1096

CORRECTED OPENING BRIEF OF DEFENDANTS-APPELLANTS HYUNDAI MOTOR AMERICA AND HYUNDAI MOTOR COMPANY

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INTRODUCTION

The circuit court allowed a tsunami of expert junk science and improper, inflammatory fact evidence to flood this automobile product liability case, which seriously prejudiced Hyundai. The predictable result? An eye-popping $38 million verdict that cannot stand.

For starters, the circuit court failed to fulfill its critical gatekeeping function under *Daubert*. The experts for Plaintiffs Edward and Susan Vanderventer concocted a first-of-its-kind theory on how two prongs in the headrest of the driver's seat of Plaintiffs' Hyundai Elantra caused Mr. Vanderventer's broken spine. That prong design is common in the industry, with no history of problems and with extensive crash testing to prove its safety. Plaintiffs' seat-design expert offered no testing of the same type of seat, no real-world accident history, no scientific literature, nor any other indicia of reliability to support his novel opinion that the Elantra was defective and negligently designed due to the alleged problem with the prongs. The court also allowed a treating physician to opine that the prongs caused Mr. Vanderventer's injury, even though the physician did not know how Mr. Vanderventer's body moved during the accident, could

not quantify the physical forces or distances at play, and had no supporting testing or scientific studies.

Beyond failing to perform its gatekeeping role to exclude unreliable expert testimony, the circuit court also misinterpreted and misapplied multiple Wisconsin evidentiary statutes. These failures allowed Plaintiffs to bolster their unprecedented and unfounded design-defect theory by (1) portraying Hyundai as a dangerous manufacturer based on evidence that Hyundai and another manufacturer had issued 85 product recalls over 30 years, even though none of those recalls related to the Elantra's driver's seat, (2) characterizing the design of the driver's seat as a dangerous outlier based on impermissible evidence of a purported subsequent remedial measure, and (3) presenting expert opinions that Hyundai heard for the first time at trial.

Had the circuit court properly excluded unreliable expert opinion testimony, Plaintiffs' claims would have failed for lack of proof on essential elements. In light of this evidentiary insufficiency, this Court should reverse and order that the jury's answers be changed. But even if those *Daubert* errors had not occurred, there would have to be a new trial due to the other evidentiary errors.

ISSUES PRESENTED

1. Did Plaintiffs fail to offer sufficient expert evidence on the issues of defective product/negligent design and/or specific causation because the expert testimony on those issues failed to satisfy Wis. Stat. § 907.02's *Daubert* standard?

The circuit court gave a "No" answer to this question.

2. Did the circuit court err in failing to order a new trial due to the erroneous admission of the following evidence, all of which seriously prejudiced Hyundai:

a. Evidence of 85 recalls not involving the product at issue, purportedly to rebut the presumption in Wis. Stat. § 895.047(3)(b) that a product that complies with federal safety standards is not defective?

b. Evidence of a purported subsequent remedial measure, based upon the circuit court's view that such evidence could be admitted (i) under Wis. Stat. § 904.07 to impeach Hyundai's general defense of the case; and (ii) under Wis. Stat. § 895.047(4) as evidence of a reasonable alternative design that existed at the time the product at issue was

sold, even though there was no evidence that such a design existed at that time?

c. Critical expert opinions that had not been disclosed to Hyundai before trial, notwithstanding the requirement in Wis. Stat. § 804.01 entitling a party to "discover facts known and opinions held by an expert[?]"

The circuit court gave a "No" answer to this question and each of its subparts.

ORAL ARGUMENT AND PUBLICATION

Hyundai respectfully requests oral argument and publication of the Court's opinion. This appeal raises significant questions about (a) the standard for assessing reliability of scientific expert testimony under Wis. Stat. § 907.02; (b) the type of evidence that is relevant to rebut the rebuttable presumption under Wis. Stat. § 895.047(3)(b) that a product that complies with federal safety standards is not defective; (c) the scope of the impeachment exception to the prohibition on admission of subsequent-remedial-measures evidence in negligence cases contained in Wis. Stat. § 904.07; and (d) the meaning of the term "reasonable alternative design" in the exception to the prohibition on admission of subsequent-remedial-

measures evidence in strict liability cases contained in Wis. Stat. § 895.047(4). These are substantial issues. The Court will benefit from oral argument concerning them, and the Bar will benefit from a published opinion analyzing them.

STANDARD OF REVIEW

In determining whether the circuit court properly exercised its gatekeeping function under *Daubert*, the Court "examine[s] the circuit court's rulings both independently as a question of law and also under the erroneous exercise of discretion standard." *Seifert v. Balink*, 2017 WI 2, ¶ 88, 372 Wis. 2d 525, 888 N.W.2d 816. The Court "decides whether the circuit court applied the proper legal standard under Wis. Stat. § 907.02(1) in the first instance independently of the circuit court … but benefiting from [its] analys[i]s." *Id*., ¶ 89. (citations omitted). "Once satisfied that the circuit court applied the appropriate legal framework, an appellate court reviews whether the circuit court property exercised its discretion in determining which factors should be considered in assessing reliability, and in applying the reliability standard to determine whether to admit or exclude evidence under Wis. Stat. § 907.02(1)." *Id.*, ¶ 90.

While an abuse-of-discretion standard typically applies to evidentiary issues, "not all evidentiary rulings … are discretionary." *Deutsche Bank Nat'l Tr. Co. v. Olson*, 2016 WI App 14, ¶ 20, 366 Wis. 2d 720, 875 N.W.2d 649. "Rather, 'if an evidentiary issue requires construction or application of a statute to a set of facts, a question of law is presented' and [an appellate court] review[s] that question of law de novo." *Id.* (citation omitted). In admitting evidence of unrelated product recalls and subsequent remedial measures, the circuit court misinterpreted the relevant statutes, so the *de novo* standard applies to those issues.

This Court orders a new trial if an "error 'affected the substantial rights of the party'"—*i.e.*, where there is a "reasonable possibility that the error contributed to the outcome of the action." *Weborg v. Jenny*, 2012 WI 67, ¶ 68 341 Wis. 2d 688, 816 N.W.2d 191. The prevailing party, "as the beneficiary of the error," must show that the error was harmless beyond a reasonable doubt. *Jones v. State*, 226 Wis. 2d 565, ¶ 63, 594 N.W.2d 738 (1999).

STATEMENT OF THE CASE

A. Nature of the case

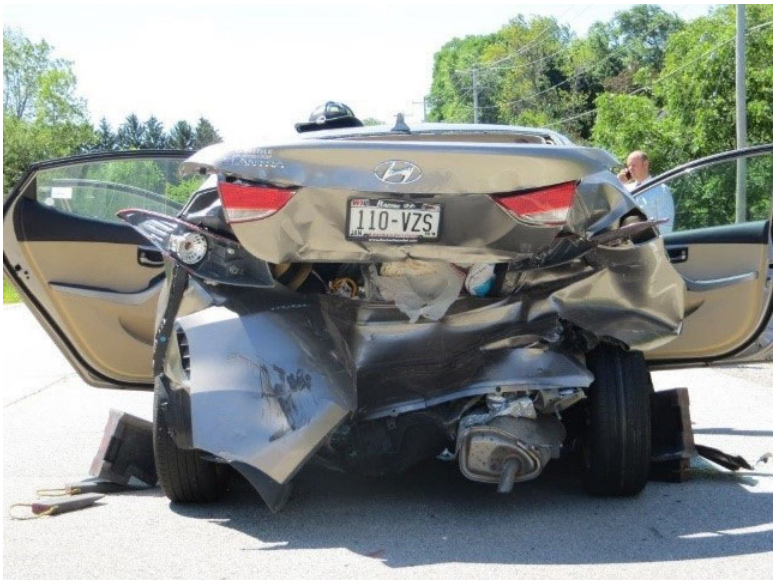
This is an appeal from a judgment against Hyundai Motor America and Hyundai Motor Company (collectively, "Hyundai") on Plaintiffs' strict-liability and negligent-design claims. R.1589;R.1599; A-App.799-803.

B. Statement of the facts

1. The accident

On July 31, 2015, Plaintiffs were slowing to make a left turn in their 2013 Hyundai Elantra (the "Elantra") when Defendant Kayla Schwartz, a teenage driver, crashed into the Elantra from behind at about 40 mph. R.1771:23;R.1767:129; A-App.1681,2303. The entire crash lasted .13-.16 seconds. R.1763:145;R.1767:119; A-App.3612,1671.

Post-accident pictures of the Elantra show that the rear section deformed as intended, allowing the passenger compartment to remain virtually intact:



R.653:3; A-App.68.

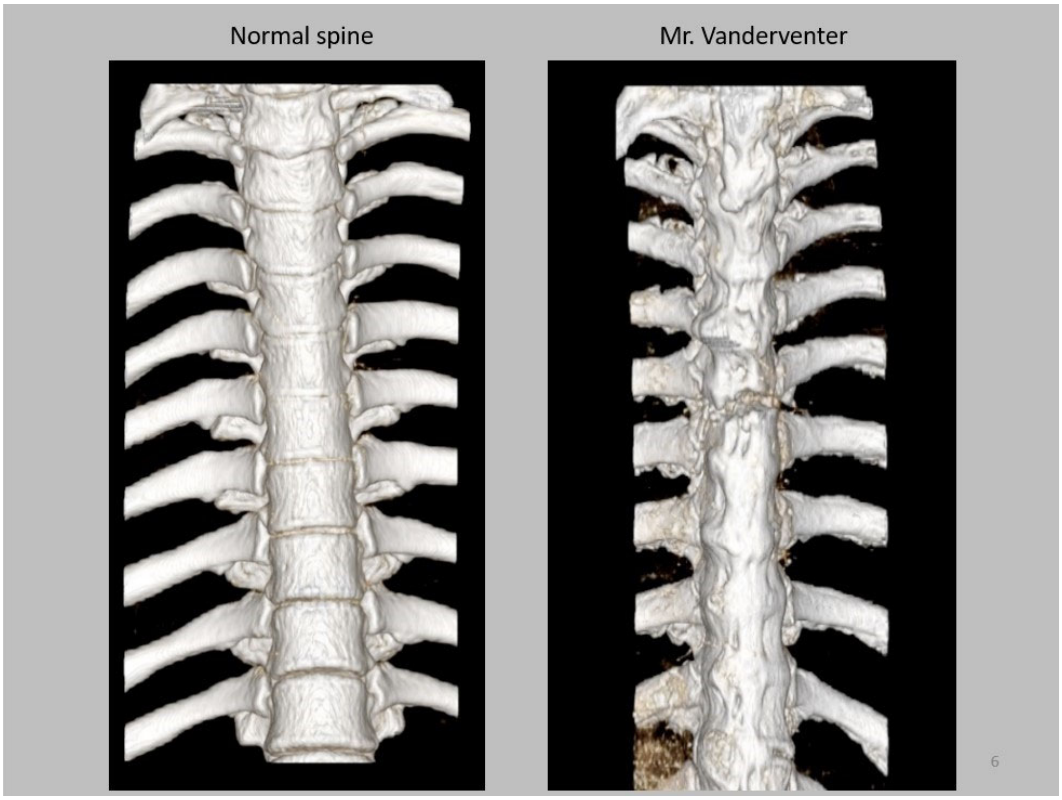
R.653:8; A-App.73.

Mr. Vanderventer was driving the Elantra. The three passengers walked away from the crash uninjured or with only minor injuries.

R.1787:185; A-App.3378. As a result of the crash, Mr. Vanderventer suffered a broken spine, which resulted in paraplegia. R.1763:56-57;R.1787:185; A-App.3523-24,3219.

2. Mr. Vanderventer's degenerative spine disease

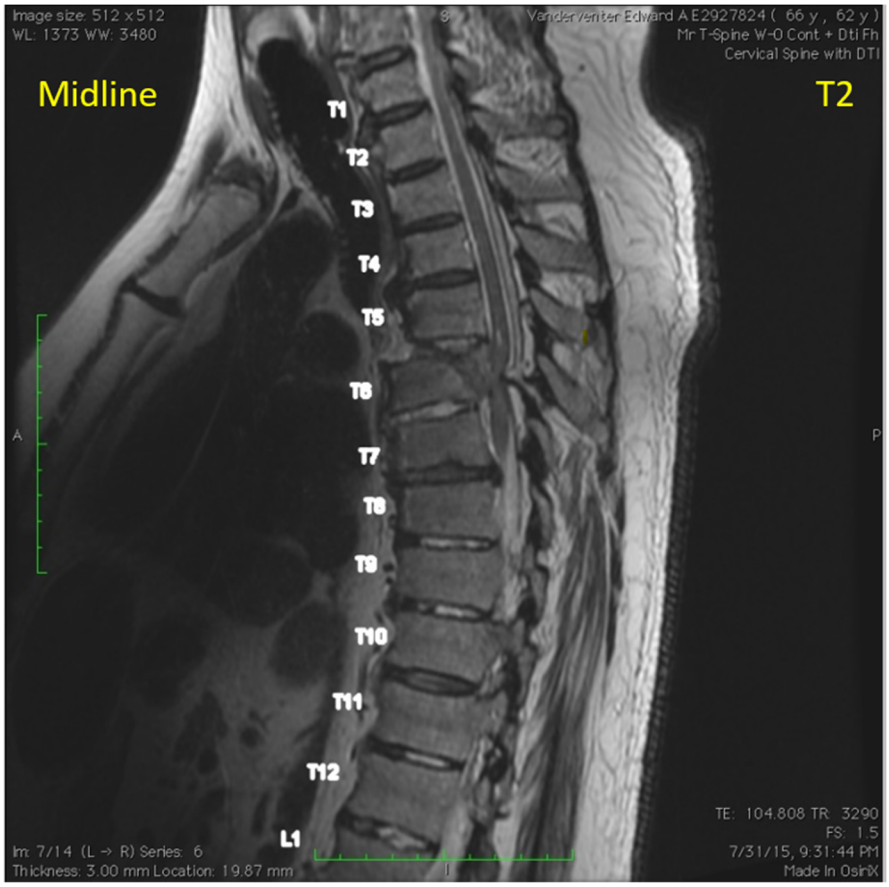
Unlike the three passengers, Mr. Vanderventer had an undiagnosed degenerative spine disease, known as diffuse idiopathic skeletal hyperostosis ("DISH"). R.1770:147,150,160-62; A-App.2183,2186,2196-98. As a result of DISH, 21 of the 24 vertebrae in Mr. Vanderventer's back had been "fused," "bridged," or "cemented" together by "bony calcifications." R.1770:150-57;R.1773:58-59; A-App.2186-93,2597-98. Below on the right is a photograph of a 3-D printed model of his spine generated from post-accident scans:



R.1438:6; A-App.324.

DISH makes the spine "brittle" and "susceptible to fracture in unusual locations" and in "more places than a person without DISH." R.1787:103-106; A-App.3296-98.

In the accident, Mr. Vanderventer sustained a fracture to the T5-T6 vertebrae. R.1770:179; A-App.2215.



R.1439:5; A-App.335.

3. The Elantra's seat and its compliance with federal safety standards

From approximately 2007-2010, Hyundai engineers worked on a project to improve vehicle-seat safety, which resulted in a prototype structure known as the "common seat frame." R.1768:48,73-79;R.1338; A-App.1745,1770-76,313-18.

Hyundai incorporated elements of that common seat frame into the Elantra's seat design, including the headrest.[1] R.1768:78-79; A-App.1775-76. The development of this version of the Elantra took more than four years and involved thousands of crash- and sled-tests.[2] R.1768:14-18,32-33; A-App.1711-15,1729-30.

The Elantra complied with all applicable federal motor vehicle safety standards. R.1769:145-50; A-App.1998-2003.

4. Plaintiffs' novel design-defect theory

This case involves a first-of-its-kind design-defect theory. R.1763:204,213-17;R.1771:183-84;R.1773:207; A-App.3671,3680-84,2463-64,2746.

Almost universally, vehicle-seat litigation concerning rear collisions involves allegations that the seat collapsed because it was too weak. Dr. Saczalski, Plaintiffs' seat-design expert, acknowledged that he has offered

[1] Hyundai has manufactured cars called Elantras since 1990, although there have been several completely different designs or "platforms." R.1761:104-05; A-App.1078-79. Hyundai manufactured the Elantra at issue here—*i.e.*, the "UD platform"—from 2011 to 2016. R.1761:82-83; A-App.1056-57.

[2] A crash-test involves a simulated crash of a full car to test safety, while a sled-test involves a simulated crash of a partial car that is situated on a "sled" to test the safety of certain component parts. R.1768:28-29;R.1769:165; A-App.1725-26,2018.

testimony for decades in many such cases, opining about alleged defects ranging from weakness with a seat's recliner mechanism to problems with the tracks that attach a seat to the floor. R.1763:197-201;R.1765:129-34; A-App.3664-68,1474-80. But the theory here was entirely novel.

These pictures of Mr. Vanderventer's actual seat provide a helpful start to understanding this first-of-its-kind theory:

R.1784;R.1785.

Plaintiffs asserted that the bottom ends of the prongs in the driver's seat headrest caused the spinal fracture. R.1761:26; A-App.1000. According to Saczalski, the force of Mr. Vanderventer's head caused the headrest to push and rotate rearward, pivoting around the horizontal crossbar near the top of the seatback. R.1787:185-194;R.1763:191; A-App.3658,3378-87. Attached to that crossbar are the two cylindrical tubes

into which the headrest prongs are inserted, and which allow the headrest to slide up and down. R.1787:239-40; A-App.3432-33. Under Saczalski's theory, as the headrest pivoted rearward (pushed by Mr. Vanderventer's head), a supposed weakness in the crossbar permitted the prongs to pivot forward, fracturing his spine. R.1763:22;R.1787:259; A-App.3489,3452. Finally, Saczalski alleged that the force of Mr. Vanderventer's back against the bottom of the prongs caused the headrest to eject out of the cylindrical housing into the backseat. R.1761:29-30;R.1787:240-241; A-App.1003-04,3433-34. Although post-accident measurements of the tubes showed that the prongs had moved forward only slightly (merely 4 degrees from directly even with the seat), Plaintiffs' expert contends that the tubes temporarily moved much farther forward during the accident, which enabled the prongs to cause the injury. R.1765:103-11; A-App.1448-56.

This was the theory notwithstanding the following: there was no bruising or soft-tissue injury where the prongs supposedly pressed into Mr. Vanderventer's back (R.1770:175-77;R.1773:86-89; R.1787:141-43; A-App.2211-13,2625-28,3334-36); the prongs were 5 inches apart from one another and did not line up with his spine (R.1773:86-89;R.1787:124-25,127-28; A-App.2625-28,3317-18,3320-21); there were approximately 2

inches of foam padding in the seat between the prongs and his back (R.1765:113;R.1787:64; A-App.1458,3257); and there was about 2 inches of fat in his back between his spine and the seat (R.1765:113; A-App.1458).

Plaintiffs relied principally on testimony from two experts: Drs. Saczalski (the seat-design expert) and Kurpad, who was Mr. Vanderventer's post-accident treating physician. R.1763:196-99;R.1787:26; A-App.3663-66,3219. Saczalski opined that the driver's seat was defective and negligently designed. R.1763:22-23,34-36;R.1787:184-94,262; A-App.3489-90,3501-03,3377-87,3455. Kurpad and Saczalski both opined that the prongs caused the injury. R.1763:35,134;R.1787:134; A-App.3502,3601,3327.

On the other hand, Hyundai's experts opined that the alleged injury mechanism was impossible given the undisputed kinematics of vehicle occupants. R.1770:171-73,178-180;R.1771:176-85;R.1773:117-21; A-App.2207-09,2214-16,2456-65,2656-60. Given the infinitesimal time involved in a car crash, and the reality that the back of the head is the last part of an occupant's body to contact the seat (and the first to rebound from the seat), Hyundai's experts concluded that Mr. Vanderventer's head could

not have impacted the headrest with sufficient force and in sufficient time for the prongs to pivot forward and cause the fracture. R.1770:171-73,178-180;R.1771:160-65,176-81;R.1773:113-15; A-App.2207-09,2214-16,2440-45,2456-61,2652-54. And Hyundai's engineers testified that in thousands of crash- and sled-tests of the subject seat design, they had never seen this alleged injury mechanism occur. R.1769:59-62; A-App.1912-15.

Hyundai's experts explained that in a rear-impact crash sequence, a healthy spine, which is normally S-shaped, straightens out as the forces from the crash affect the spine, thereby avoiding serious injury. R.1773:52-61,80-81; A-App.2591-600,2619-20. Mr. Vanderventer suffered his fracture because his DISH made it impossible for his spine to straighten in the normal manner. R.1770:179-80;R.1773:118-21; A-App.2215-17,2657-60.

5. The Elantra's safety record, and cars with other similar seat designs

There is no evidence of any other incident or injury anywhere in the world involving the Elantra's headrest prongs. R.1763:204,214-17;R.1769:59-62; A-App.3671,3681-84,1912-15.

Other cars use similar seat designs. R.1771:175-76; A-App.2455-56. Saczalski testified at trial that such designs were "popular."

R.1763:210; A-App.3677. Indeed, the jury saw evidence that Honda and Nissan used similar designs in their small vehicles:

2013 Nissan Sentra

2013 Honda Civic

Vanderventer's seat

R.1785;R.1786. There is no evidence of any similar incident or injury involving those cars either. R.1763:204,214-17;R.1771:183-84;R.1773:207; A-App.3671,3681-84,2463-64,2746.

C. Procedural history

The Vanderventers sued in April 2016. R.1. They later settled with Ms. Schwartz and her insurer for $1.4 million. R.319:161-62; A-App.1-2. While Ms. Schwartz remained a defendant in the case pursuant to a *Pierrenger* release, she did not put on a defense at trial. *Id*.

The trial against Hyundai occurred in early 2020 on the Vanderventers' strict-liability and negligent-design claims.

Before and during trial, Hyundai challenged the admissibility of Kurpad's and Saczalski's opinions under the *Daubert* standard. R.323:13-14;R.329;R.922;R.1757:156-60;R.1767:3-5;R.1765:144-45;R.1767:3-5; A-App.15-16,26-38,84-97,959-63;1489-90,1555-57. The circuit court denied those motions. R.533;R.1757:160;R.1765:147-50;R.1767:6-15; A-App.47-60,963,1492-95,1558-67.

Hyundai also moved in limine to exclude as irrelevant and unfairly prejudicial evidence of product recalls that did not pertain to the Elantra's driver's seat. R.325;R.1757:142-45; A-App.21-25,945-48. The circuit court denied that motion. R.533:9;R.1757:147-51; A-App.56,950-54. When the court took judicial notice during trial of 85 such unrelated recalls, the court overruled Hyundai's objection. R.1766:4-11;R.1767:19-20,65,84-85; A-App.1541-48,1571-72,1617,1636-37.

After Plaintiffs' counsel discussed at length in his opening statement the seat design in a later Elantra model, Hyundai moved to exclude such subsequent-remedial-measure evidence under Wis. Stat. § 904.07 and Wis. Stat. § 895.047(4). R.640;R.1787:155-68; A-App.61-65,3348-61. The court denied that motion and granted Hyundai a continuing objection. R.1787:168-70; A-App.3361-63.

Hyundai also challenged the sufficiency of the evidence. In a motion to dismiss at the close of Plaintiffs' case (R.1043; A-App.98-108), and for a directed verdict at the close of all evidence (R.1450; A-App.339-66), Hyundai argued that Plaintiffs had not supported their claims with admissible expert evidence. The court denied those motions. R.1775:2-37; A-App.2856-91.

In its verdict, the jury attributed 84% of Plaintiffs' damages to the "enhanced injury" purportedly caused by a defect related to the headrest "prongs," and 16% to Ms. Schwartz's negligence in causing the accident. R.1485; A-App.367-69. The jury found Hyundai liable to Plaintiffs for more than $32 million in compensatory damages. *Id*.

Hyundai timely filed post-trial motions, including a motion to change the jury's answers based on the inadmissibility of the expert evidence. R.1489:9-43;R.1491; A-App.378-412,495-96. Hyundai also moved for a new trial, arguing that the circuit court made several legal errors that prejudiced Hyundai—including the court's rulings on unrelated product recalls, subsequent-remedial-measure evidence, and undisclosed expert opinions. R.1489:35-39,60-76;R.1491; A-App.404-09,429-45,495-96. The court denied each of Hyundai's motions. R.1588; A-App.796-98.

The circuit court entered judgment on May 13, 2020 (R.1589; A-App.799-800), and Hyundai timely noticed this appeal on June 17, 2020 (R.1599; A-App.801-03).

SUMMARY OF THE ARGUMENT

This Court should reverse and order a change in the jury's answers based on Plaintiffs' failure to present legally sufficient expert evidence on the issues of defective product/negligent design and specific causation.

The circuit court failed to properly exercise its gatekeeping function under *Daubert* by allowing Saczalski to testify about his novel theory concerning the Elantra's headrest prongs. The court erred as a matter of law by undertaking only a cursory analysis of the reliability of Saczalski's opinion. Furthermore, the court could not have reasonably concluded that the opinion was reliable. Given the novelty of the opinion—which finds no support in either real-world experience or scientific literature—the need for testing was of paramount importance. But Saczalski performed no test on the seat at issue, even though he acknowledged that would have been his customary practice. Nor did he offer any other relevant test or other basis from which the court could have deemed his opinion reliable.

The circuit court made a similar *Daubert* error in allowing Kurpad and Saczalski to testify that the prongs caused Mr. Vanderventer's injury. Kurpad may have been able to offer some other opinions based on his treatment of Mr. Vanderventer and his general experience as a neurosurgeon. But Kurpad strayed into the distinct field of biomechanics to opine that the prongs caused the injury. The court erred as a matter of law in failing to apply the proper legal framework to determine whether Kurpad could reliably offer that opinion. Furthermore, the court could not have reasonably found the opinion to be reliable. The record shows that Kurpad employed no reliable methodology in reaching the opinion.

To make matters worse, the circuit court permitted Saczalski to offer a specific causation opinion even he admitted he was unqualified to give. And he did so in the absence of any indicia of reliability.

Because the defect/negligence and specific causation opinions should not have been admitted and were the only evidence supporting those elements of the claims, Plaintiffs had a failure of proof.

In the alternative, there are multiple reasons why a new trial should be ordered. The circuit court repeatedly misinterpreted and misapplied

Wisconsin's evidentiary statutes, allowing the jury to hear improper and highly prejudicial evidence.

First, the circuit court allowed evidence of 85 recalls *completely unrelated* to the Elantra's driver's seat. The court misinterpreted the Wisconsin statute about presumptions in holding that the unrelated recalls were relevant to rebut the presumption under Wisconsin law that the Elantra's driver's seat is not defective because it complies with federal safety standards. But even if the recalls were relevant, the prejudicial effect of the evidence far outweighed its probative value. Plaintiffs' counsel repeatedly highlighted those unrelated recalls, which severely prejudiced Hyundai.

Second, although there are limited exceptions to the statutory prohibition on subsequent-remedial-measures evidence, the circuit court erred in finding that two of those exceptions applied here. Such evidence can be admitted in a negligence case for impeachment purposes. But the court misinterpreted the statute to allow subsequent-remedial-measures evidence to impeach Hyundai's "defense of the case," not a specific Hyundai witness. If the circuit court's interpretation of the impeachment exception were correct, then the exception would swallow the rule.

Subsequent-remedial-measures evidence can also be admitted for a strict-liability claim to show that a reasonable alternative design existed at the time that the product at issue was sold. But the court incorrectly interpreted the statute as not requiring proof that the alternative design actually existed at the relevant time. This improper evidence prejudiced Hyundai, particularly because Plaintiffs' counsel emphasized it repeatedly.

Third, Wisconsin law requires disclosure of expert opinions before trial. Despite that requirement, the circuit court allowed Saczalski to offer key opinions that Hyundai heard for the first time at trial. That resulted in unfair and prejudicial surprise to Hyundai.

Each of those three grounds provides a separate basis for a new trial.

ARGUMENT

I. This Court should reverse because Plaintiffs failed to offer admissible expert evidence on required elements of their claims.

The circuit court failed to exercise its critical gatekeeping function to prevent the jury from hearing unreliable expert testimony. The court should have excluded testimony from Plaintiffs' experts on product defect/negligent design and specific causation.

Wisconsin law requires expert testimony to support strict liability and negligence claims in a product liability case where the issues "involve[]

technical, scientific or medical matters which are beyond the common knowledge or experience of jurors." *Ollman v. Wis. Health Care Liab. Ins. Plan*, 178 Wis. 2d 648, 667, 505 N.W.2d 399 (Ct. App. 1993) (citation omitted). Due to Plaintiffs' separate and independent failures to present admissible expert evidence on the defective product/negligent design and specific causation issues, this Court should reverse the judgment and order that the jury's answers be changed. *See Morden v. Cont'l AG*, 2000 WI 51, ¶ 40, 235 Wis. 2d 325, 611 N.W.2d 659 (reversal required when there is a "complete failure of proof" one or more elements of a claim (citation omitted)).

"Wisconsin Stat. § 907.02(1), governing the admissibility of expert testimony, adopts the federal 'reliability' standard developed in *Daubert* and its progeny and codified by Federal Rule of Evidence 702." *State v. Hogan*, 2021 WI App 24, ¶ 18, 397 Wis. 171, 959 N.W.2d 658 (citations omitted); *see generally Daubert v. Merrill Dow Pharms., Inc.*, 509 U.S. 579 (1993).[3] In addition to the requirements that an expert be qualified and his testimony be relevant, Section 907.02(1) imposes an additional threshold

[3] Because Wisconsin modeled its statute after the federal rule, Wisconsin courts will look to the federal interpretation of that rule for guidance and assistance. *Seifert*, 2017 WI 2, ¶ 55 n.14.

requirement: "the witness's testimony must be *reliable*." *Hogan*, 2021 WI App 24, ¶ 19. The circuit court must make the "determination whether the evidence is reliable enough to go to the fact finder." *In re Commitment of Jones*, 2018 WI 44, ¶ 32, 381 Wis. 2d 284, 911 N.W.2d 97. The statutory criteria that the circuit court must use in making that determination are whether "the testimony is based upon sufficient facts or data, the testimony is the product of reliable principles and methods, and the witness has applied the principles and methods reliably to the facts of the case." *Hogan*, 2021 WI App 24, ¶ 19 (quoting Wis. Stat. § 907.02(1)).

To determine whether expert testimony meets the reliability requirement, "courts typically, although not exclusively, consider

- whether the evidence can be (and has been) tested;
- whether the theory or technique has been subjected to peer review and publication;
- the known or potential error rate;
- the existence and maintenance of standards controlling the technique's operation; and
- the degree of acceptance within the relevant scientific community."

Jones, 2018 WI 44, ¶ 33.

The purpose of the circuit court's gatekeeping role is "to ensure that the courtroom door remains closed to junk science." *Id.* "A supremely qualified expert cannot waltz into the courtroom and render opinions unless those opinions are based upon some recognized scientific method and are reliable and relevant under the test set forth by the Supreme Court in *Daubert*." *Seifert*, 2017 WI 2, ¶ 75 n.26 (citation omitted). Simply put, "[a]n expert cannot establish that a fact is generally accepted merely by saying so." *Id.*, ¶ 75.

The circuit court's admission of expert testimony will be overturned if it "failed to consider the relevant facts, failed to apply the proper standard, or failed to articulate a reasonable basis for its decision." *Jones*, 2018 WI 44, ¶ 33.

A. Plaintiffs failed to present admissible expert evidence of a product defect/negligent design.

The circuit court erred in admitting Saczalski's novel expert opinion concerning a defective product/negligent design. Saczalski's testimony amounted to classic junk science.

Saczalski opined as follows: (1) the driver's seat headrest was either in the lowest or second-lowest position; (2) Vanderventer's head

pushed against the headrest during the crash; (3) that resulted in the headrest pivoting around the horizontal crossbar near the top of the seat; (4) a weakness in the crossbar allowed the housing tubes in which the headrest prongs sit to pivot forward; (5) the bottom of the prongs pressed against his back around (but not directly on) the T5-T6 vertebrae; (6) the prongs formed a fulcrum that impacted his back as the seat moved forward; and (7) the force of his back against the bottom of the prongs caused the headrest to eject out of the housing tubes into the backseat. R.1763:21-22,191,237;R.1787:186-194,239-45,258-61; A-App.3488-89,3658,3704,3379-87,3432-38,3451-54. Saczalski conceded that his theory is entirely novel:

> Q. And in fact, in your vast experience as far as you know, and the history of the automotive literature during the time that you've been a consultant, NHTSA rule making and automotive litigation, you have never ever seen or heard of an occupant receiving a thoracic spinal fracture in a rear-end crash as a result of posts or poles of the head restraint, true?
>
> A. Correct. I believe that's my testimony. That's what I said yes.

R.1763:217; A-App.3684.

The circuit court erred as a matter of law when it only undertook a conclusory reliability analysis of Saczalski's first-of-its-kind opinion. The

court never articulated how Saczalski's opinion was "the product of reliable principles and methods" or how Saczalski had "applied the principles and methods reliably to the facts of the case." Wis. Stat. § 907.02(1). Instead, the totality of the court's reliability analysis is as follows:

> Whether the testimony is based upon sufficient facts. The Court is satisfied from this testimony that it has been in the facts of this case. There's the I might add here, there's an assertion that the finite data analysis was not given to the jury. There's no requirement by Wisconsin law that there is a condition to precedent to the admissibility of any expert testimony that they divulge the totality of the underpinnings of their study that they reviewed. Those facts are in evidence. They've been admitted. I believe, without objection in this case, and they were—they could fully have been explored on cross examination. They chose not to. That doesn't undercut the reliability of his or admissibility of his testimony or findings on that regard. Whether the testimony is a product of reliable principles and methods. The Court listened to his mathematical analysis, his experience and training regarding that. That goes to weight, not admissibility. Whether he applied principles and methods reliably to the facts of the case. I will say [Hyundai's counsel] did a very admirable job respecting and indicating what his test did not show, what factors were not exhibited by certain factors that he reviewed in this matter. But again, that doesn't say that his opinion is not based on the scientific or facts of this case.

R.1765:148-49; A-App.1493-94. Paying lip service to *Daubert*'s reliability standard—without careful analysis of the evidence supporting the expert's opinion—does not satisfy the circuit court's gatekeeping obligation. *See Knight v. Kirby Inland Marine Inc.*, 482 F.3d 347, 355 (5th Cir. 2007) (trial

courts "must carefully analyze the studies on which experts rely for their opinions before admitting their testimony"); *Sardis v. Overhead Door Corp.*, 10 F.4th 268, 282-83 (4th Cir. 2021) (trial court must "carefully and meticulously review[] the proffered evidence" and make explicit findings on *Daubert* reliability).

The only specific item mentioned by the court in its reliability discussion proves the lack of a careful *Daubert* analysis. The "finite data analysis" (also described by the court as the "mathematical analysis") is a modeling tool that looked at one part of the seat (*i.e.*, the horizontal crossbar) in isolation to assess whether that part could be made stronger. R.1765:61,91-94,107-10;R.1787:262-63; A-App.1406,1436-39,1452-55,3455-56. The analysis did not assess how that crossbar performed as part of the integrated whole of the seat's safety system, nor were the calculations based on the force experienced in the accident. *Id*. As a result, that analysis says nothing about whether Saczalski's prong-deformation theory was possible—much less reliable. And "[i]t is boilerplate law that, merely because a product or an operation is not as safe as possible, because there are better methods of manufacture or performing an operation does not lead to the conclusion that the method employed was undertaken with a

lack of ordinary care or the product was defective." *Burton v. E.I. du Pont de Nemours & Co., Inc.*, 994 F.3d 791, 818 (7th Cir. 2021) (quoting *Gretein v. LaDow*, 70 Wis. 2d 589, 602, 235 N.W.2d 677 (1975) (controlling op. of Heffernan, J.)).

Notably, the circuit court did not discuss any of five non-exclusive factors from *Jones* that are typically evaluated in a reliability analysis, nor did the court identify any other similar factors it considered in making the reliability determination. The court's failure to identify any indicia of reliability is a legal error that alone compels reversal.

In any event, the court could not possibly have reasonably concluded that Saczalski's opinion was reliable. For Saczalski's novel opinion to be admissible, he had to have a reliable basis to support his assertion that the headrest prongs deformed to a sufficient degree to press against Mr. Vanderventer's back. The obvious way to do that would be to test the same seat in conditions similar to the accident and show that the prongs deformed in the manner contended. Indeed, when an expert presents a novel theory such as Saczalski's, the need for testing to establish reliability is paramount. Testing "is particularly important when a proposed expert relies on novel theories or where the basis for the expert's opinion is

subject to debate." *Heer v. Costco Wholesale Corp.*, 589 F. App'x 854, 862 (10th Cir. 2014) (citation omitted). Such testing is "crucial to ensure that the theory [i]s even a possibility" when an expert offers a "novel" theory that is "unsupported by any article, text, study, scientific literature or scientific data produced by others in [the] field." *Mich. Millers Mut. Ins. Co. v. Hamilton Beach/Proctor Silex, Inc.*, 2006 WL 897790, at *2 (E.D. Wis. Apr. 6, 2006) (citation omitted). But in this case, Saczalski conducted no test on the seat at issue.

Saczalski himself acknowledged that his standard practice is to run dynamic tests (*i.e.*, crash or sled tests) to provide verification for his theories:

> Q. Now you . . . typically like to do testing to verify your theories, is that correct?
>
> A. I run repeat tests, yes.
>
> Q. And you've run many, many tests in your career, correct?
>
> A. Correct.
>
> Q. And you do that because that's one way that you can verify your theories cause otherwise it's speculation, correct?
>
> A. You do as much as verification as you can, that's correct.

> Q. And you do testing in order to compare seat designs also, different seat designs?
>
> A. I like to do side by side of an alternate design with a seat that has a potential problem.
>
> Q. And you like to instrument dummies in order to get the loads and accelerations on different parts of the body during such testing, true?
>
> A. Most of the time, yes. Not always, but most of the time.

R.1765:66; A-App.1411. Yet, even though his theory here was novel, Saczalski acknowledged that he did not follow his typical approach:

> Q. We're concerned with the Elantra and the seat in the Elantra, you don't have any tests, correct?
>
> A. Other than the test with the HD [*i.e.*, an earlier model of the Elantra], but not the UD [*i.e.*, the model driven by Mr. Vanderventer].
>
> . . .
>
> Q. My question is didn't you want to do a sled test of the UD and compare it to the HD?
>
> A. I'm not sure if I did. I may have recommended that, but we didn't do it.
>
> . . .
>
> Q. That's typically what you do to compare seats, correct?
>
> A. We usually run a crash test, we put the two seats side by side in the vehicle, we smash the vehicle, and we watch the two dummies on the same side and then we see what the kinematics are and the kinetics.

Q. And you didn't do that in this case?

A. No, I did not.

R.1763:241; A-App.3708.

Under *Daubert*, courts routinely exclude opinion testimony that is not based on testing. For example, in *Bielskis v. Louisville Ladder, Inc.*, the Seventh Circuit affirmed the exclusion of the expert's testimony—despite his "engineering background and experience"—where he "made no attempt to test his hypothesis," even though it was "certainly capable of being tested." 663 F.3d 887, 894-95 (7th Cir. 2011); *accord, e.g.*, *Gopalratnam v. Hewlett-Packard Co.*, 877 F.3d 771, 786 (7th Cir. 2017) (faulting expert who "did not conduct his own independent testing despite acknowledging the feasibility of doing so"); *Nease v. Ford Motor Co.*, 848 F.3d 219, 232 (4th Cir. 2017) (holding that court erred in admitting engineer's expert testimony because the "failure to test his hypothesis renders his opinions on the cause of [the] accident unreliable").

Because Saczalski failed to perform the tests that he and other experts in the field would customarily run, it can hardly be said that he "employ[ed] … the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Hogan*, 2021 WI App 24, ¶ 22;

accord Am. Honda Motor Co. v. Allen, 600 F.3d 813, 818 (7th Cir. 2010) (concluding that plaintiffs' expert's testimony was unreliable when he conducted only a single test and "was not being as thorough as he might otherwise be").

Rather than conduct a dynamic test involving the actual seat at issue, the only dynamic test performed—which was undertaken by Plaintiffs' counsel and not even attended by Saczalski—used a different model seat with a different headrest, with the headrest placed in a different position than Mr. Vanderventer's headrest at the time of the accident. Specifically, the record shows:

- Saczalski did not conduct any crash or sled test using the seat at issue (the UD seat). R.1763:241;R.1765:87; A-App.3708,1432.
- The only dynamic test Plaintiffs' counsel ran (a sled test) used a previous generation Elantra—which had a different seat (the HD seat) and a different headrest mechanism. R.1765:86; A-App.1431.
- In that sled test, the headrest was positioned at maximum height, which was different from Vanderventer's headrest at the time of the crash. R.1765:84; A-App.1429.

- Saczalski was not present for that test, he did not know how the dummy would be set up, and his recommendations on how to conduct that test were not followed. R.1765:81; A-App.1426.
- Saczalski requested that Plaintiffs' counsel use an instrumented dummy in the sled test to measure loads on the body—he testified that testing without an instrumented dummy is a waste of time—but they did not. R.1765:77-79; A-App.1422-24.
- The dummy used in the sled test was not the same height as Vanderventer, and although the testing company attempted to add ballast to match his weight, they failed to account for the undisputed fact that the head of a larger person (like him) would weigh more than the head of a person at the 50th percentile (like the dummy). R.1765:70,74-75; A-App.1415,1419-20.
- They could have run the test with a 95th percentile dummy (much closer to Vanderventer). R.1765:86; A-App.1431.
- As a result, Plaintiffs had no dynamic tests to show how far the headrest prongs would move in conditions similar to the accident. R.1765:92; A-App.1437.

- Instead of presenting the jury with an actual test showing that the prongs deformed in the manner Saczalski claims, Saczalski showed the jury a made-for-litigation mockup seat in which the prongs had been manually bent and re-welded to match his theory (even though he did not disclose the magnitude of the alleged deformation before trial). R.1763:147-48;R.1765:103-05; A-App.3614-15,1448-50.

Thus, neither Plaintiffs' counsel nor Plaintiffs' expert conducted a single dynamic test to verify their hypothesis that the headrest prongs in Mr. Vanderventer's seat would—or even could—move in the manner and to the extent alleged. A test involving a different product cannot establish reliability under *Daubert*. *See, e.g.*, *Solheim Farms, Inc. v. CNH Am., LLC*, 503 F. Supp. 2d 1146, 1150 (D. Minn. 2007). Plaintiffs' admitted failure to conduct relevant testing on the supposedly defective product underscores their complete failure to offer reliable evidence in support of their central theory.

Four other items referenced by Saczalski provide no basis to establish the reliability of his novel theory. First, as discussed above, far from assessing the performance of the seat as a whole in the specific circumstances of the crash, his finite-element analysis established only that

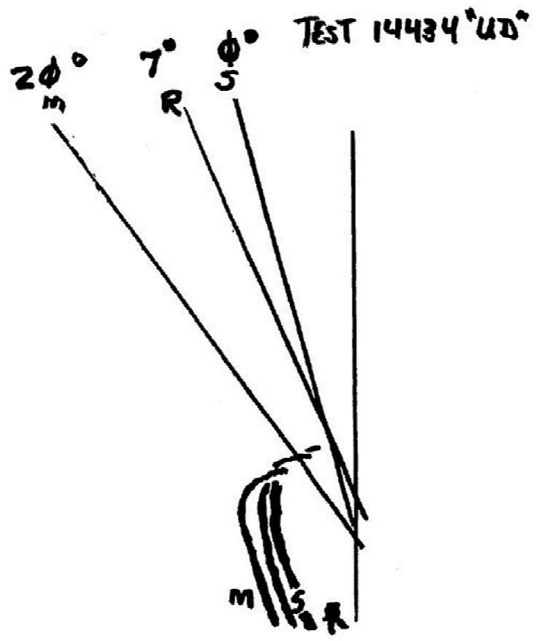
one part of the seat frame could be made stronger. R.1765:61,91-94;R.1787:262-63; A-App.1406,1436-39,3455-56. That does not establish the reliability of his opinion because it has no bearing on the issues in the case.

Second, Saczalski testified to his "eyeball" observation that the design of Vanderventer's seat looked "weak" and not "robust" or "beefy." That, however, hardly followed the scientific method, nor does it rest on a reliable methodology. R.1763:20-24,34-36,212;R.1787:260-61; A-App.3487-91,3501-03,3679,3453-54. Under *Daubert*, "[a]n expert's opinion must be reasoned and founded on data," and "must also utilize the methods of the relevant discipline—in this case, engineering." *Bielskis*, 663 F.3d at 894. "[P]ersonal observation" is not enough "to establish a methodology based in scientific fact." *Deimer v. Cincinnati Sub-Zero Prods., Inc.*, 58 F.3d 341, 345 (7th Cir. 1995). To the contrary, "performing detailed studies and tests represents the 'touchstone of what an engineering expert in a design defect case should do.'" *Lara v. Delta Int'l Mach. Corp.*, 174 F. Supp. 3d 719, 737 (E.D.N.Y. 2016) (citation omitted).

Third, Saczalski referenced a constant-volume-strength test

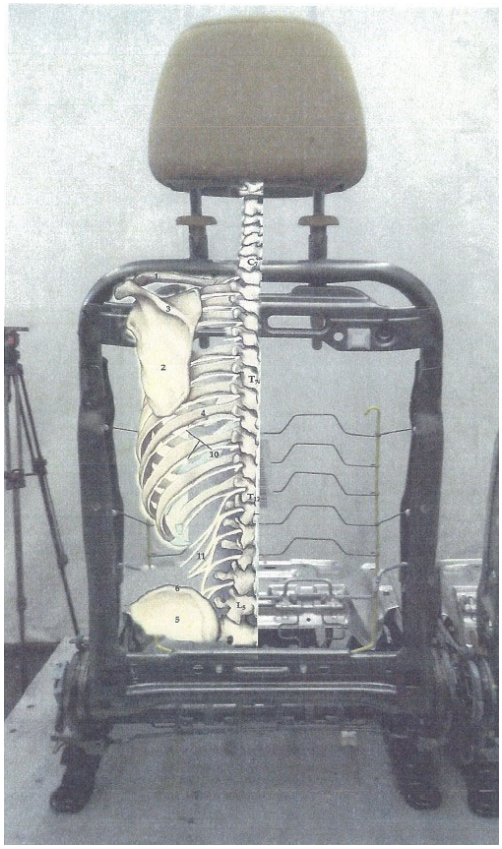
performed by Hyundai, but that test cannot establish reliability.[4] In that test, force is applied to evaluate the headrest's strength, but it does not mimic temporary deformation occurring from the application of sudden force in an accident. R.1761:39;R.1765:108-10;R.1771:131-33; A-App.1013,1453-55,2411-13. Nor does the test utilize a dummy to assess the effect of the seat occupant's height and weight on the headrest. R.1765:108;R.1771:133-34; A-App.1453,2413-14. The developmental-component test here also was performed on a seat with a different headrest positioned differently than Mr. Vanderventer's. R.1763:142-143;R.1765:106-07; A-App.3609-10,1451-52. Saczalski merely sketched on transparency paper what he thought the degree of deformation was on the seat in the test and extrapolated it to the different seat at issue here. R.1763:142-144;A-App.3609-11. Below is his analysis:

[4] As discussed *infra* at 62-65, Saczalski did not disclose before trial his reliance on this test or how he utilized it in his analysis, so the circuit court erred in allowing testimony about it.



R.855; A-App.83. Saczalski's back-of-the-envelope extrapolation to find a conclusion consistent with Plaintiffs' theory is nothing more than speculation. It cannot establish the reliability of Saczalski's opinions.

Fourth and finally, Saczalski pointed to a generic skeletal overlay of a spine on an image of the Elantra's driver's seat. R.1763:226-27; A-App.3693-94. This is the image:



R.661:6; A-App.81. But critically, there was no testimony that the skeleton was sufficiently similar to Mr. Vanderventer's for the overlay to show reliability. R.1763:226-27; A-App.3693-94.

In sum, based on the record, the circuit court could not have reasonably concluded that Saczalski's testimony met the *Daubert* reliability standard. His testimony should have been excluded. Without that testimony, Plaintiffs failed to present sufficient evidence of defective product/negligent design.

B. Plaintiffs failed to present admissible expert evidence of specific causation.

1. Kurpad's biomechanical causation opinion should not have been admitted.

The circuit court also erred as a matter of law in admitting specific causation testimony from Kurpad without making the required statutory reliability determinations as to that opinion.

A doctor qualified to testify to a diagnosis and similar matters is not necessarily qualified to offer scientific testimony about causation. *See Gass v. Marriott Hotel Servs., Inc.*, 558 F.3d 419, 426 (6th Cir. 2009) ("the ability to diagnose medical conditions is not remotely the same ... as the ability to deduce, delineate, and describe, in a scientifically reliable manner, the causes of those medical conditions" (citation and quotation marks omitted)). As this Court recently noted, the Wisconsin Supreme Court outlined "how to assess reliability outside the scientific context" in *Seifert*. *Hogan*, 2021 WI App 24, ¶ 24. "Expert medical evidence based on experience alone or experience in connection with other knowledge, skill, training or education may constitute a reliable basis." *Seifert*, 2017 WI 2, ¶ 77 (citation omitted). Thus, the circuit court might have been able to allow Kurpad to explain what he saw in his treatment of Mr. Vanderventer

and opine, based on his experience, that his injury arose from a force from the rear affecting his spine. (Hyundai never disputed that such a force from the rear was the source of his injury.)

But Kurpad did not stop there; instead, he extended his opinion into the separate scientific field of biomechanical engineering. Even though he admitted that he is "not an engineer," (R.1787:51; A-App.3244), Kurpad opined that "the deformed guides [*i.e.*, prongs] provided a fulcrum, and . . . that provided the impact to Mr. Vanderventer's back." R.1787:80-81; A-App.3273-74. He then doubled down on that: "I think the end of the prongs provided a plane, a fulcrum that ended up being the—that snapped his spine back. That's what I think happened." R.1787:134; A-App.3327. He said he based that opinion on his personal inspection of Mr. Vanderventer's seat, which he said allowed him to "see what was being suggested as the anatomy, as the structure of the seat and location with respect to his body build and relative position." R.1787:50-51; A-App.3243-44. He said this "satisf[ied] [him] as a mechanism of [Vanderventer's] injury." *Id*. That testimony should not have been allowed.

The circuit court erred as a matter of law because it did not apply the correct legal framework—the court did not make the statutorily-required

reliability determinations before admitting Kurpad's causation opinion. *Jones*, 2018 WI 44, ¶ 29 (those determinations are mandatory). The court never explained how Kurpad's specific biomechanical testimony was "the product of reliable principles and methods" or how Kurpad "had applied the principles and methods reliably to the facts of the case," as the judge is required to do under Wisconsin law. Wis. Stat. § 907.02(1).

Instead, the circuit court undertook a global assessment of the reliability of Kurpad's testimony, not carefully distinguishing between his testimony related to his treatment of Mr. Vanderventer and his experience as a physician on the one hand versus testimony relating to the mechanics of how the prongs caused the injury on the other. R.1767:6-15; A-App.1558-67. The law, however, requires the *Daubert* analysis to be applied to each opinion separately. "[A] witness eminently capable on one subject may not be sufficiently qualified to give helpful testimony on another, albeit related, issue in the case." *Martindale v. Ripp*, 2001 WI 113, ¶ 52, 246 Wis. 2d 67, 629 N.W.2d 698 (quoting 7 Daniel D. Blinka, *Wisconsin Practice: Evidence* § 702.4 (2d ed. 2001)).

In ruling that Kurpad's opinion testimony about the prongs would be allowed under *Daubert*, the circuit court never conducted the requisite

analysis; instead, the court only discussed whether Kurpad could rely on another expert's opinion:

> Factors provided by way of history regarding intrusion of the prongs into the driver's seat back causing the fulcrum. Received those from the biomechanical expert here, Saczalski. Scientific community, especially M.D.s can rely on hearsay regarding facts of the case, and can render opinions regarding causation based on provided facts.

R.1767:13; A-App.1565 Even that insufficient analysis was wrong. Kurpad did not merely rely on Saczalski's opinion about the prongs. To the contrary, Kurpad said he made his own inspection and drew his own conclusion about the prongs creating the fulcrum. R.1787:50-51,65,86,124-34; A-App.3243-44,3258,3279,3317-27. In other words, he offered his own opinion that the prongs caused Mr. Vanderventer's injury.

While the circuit court engaged in a general discussion of the five nonexclusive reliability factors from *Jones* (R.1767:9-15; A-App.1561-67), the court never explained how Kurpad applied any legitimate principles and methods reliably to this case to conclude that the prongs created the causative fulcrum. Even though a circuit court has substantial leeway to decide what criteria it deems appropriate to assess reliability (*Hogan*, 2021 WI App 24, ¶ 26), a circuit court nonetheless has an obligation to explain how the specific opinion in question is reliable. *Jones*, 381 Wis. 2d 284,

¶ 33.

A global conclusory statement about reliability is insufficient. Here the court said:

> With respect to reliability of Kurpad's opinion, this Court is satisfied that based on Kurpad's experience, including spinal cord injuries and repair surgeries, his intraoperative observations of Mr. Vanderventer, training and specialized concentration in spinal cord injuries, he has determined causation on such injuries, and his methodology expressed here has met the *Daubert* and *In re Commitment of Jones* standard.

R.1767:9-10; A-App.1561-62. While that might have been enough for some of Kurpad's treatment-based opinions, it plainly does not suffice for the different opinion that the prongs created a causative fulcrum. The court did not explain how either Kurpad's specific treatment of Mr. Vanderventer or his general experience in treating spinal cord injuries provided him any reliable basis to offer that specific opinion.

Furthermore, even if the court had undertaken the required reliability analysis, it could not have reasonably concluded that Kurpad's causation opinion was reliable. Kurpad himself never explained how his experience as a surgeon, let alone any methodology, led to the conclusion that the prongs caused the injury. According to Kurpad, one fact—"a paralyzed patient"—was all that he needed to know. R.1787:133; A-App.3326.

Indeed, Kurpad's trial testimony confirms that he did not reliably apply any methodology to the facts here, as Section 907.02 requires, to reach his opinion that the prongs caused the injury:

- Kurpad conceded that he didn't "know anything about the occupant kinematics" involved in the accident (R.1787:139; A-App.3332), which means that he knew nothing about how Mr. Vanderventer's body moved during the crash. R.1773:37; A-App.2576.
- Kurpad did not analyze the force necessary for the prongs to cause the injury, but he nevertheless assumed that, "whatever the force was, it was enough." R.1787:140; A-App.3333.
- Kurpad did not test his analysis about the prongs because he said his "surgical impression" "overrule[d] the biomechanics." R.1774:52-53; A-App.2821-22.
- Kurpad conceded that he did not know how the prongs would have moved at all, but still asserted that they "move[d] front sufficiently." R.1787:138-39; A-App.3331-32.
- With respect to how "far" and "deep" the prongs or "posts" "would have had to move ... to cause a fracture," Kurpad testified

only that they moved "far enough and deep enough." R.1787:133; A-App.3326.

- Kurpad testified that the "fulcrum" supposedly created by the prongs was "close enough" to the fracture, even though he had not taken "any pictures" or "any measurements." R.1787:123-24; A-App.3316-17.
- Kurpad testified that the prongs "roughly" "line[d] up" with the fracture, that it wasn't "exact," but that "it doesn't need to be exact." R.1787:128-29; A-App.3321-22.
- Kurpad testified that he did not know how the headrest was adjusted when the injury occurred. R.1787:92; A-App.3285.
- Kurpad admitted that he had never operated on another patient whose spinal fracture was caused by headrest prongs impacting his back. R.1787:118; A-App.3311.
- Kurpad could not identify any literature concerning thoracic injures caused by headrest prongs. R.1787:119; A-App.3312.
- Kurpad testified that he reached his opinions based solely on his treatment of Mr. Vanderventer, and three hours of expert work before his deposition. R.1787:86; A-App.3279.

If the circuit court's admission of Kurpad's testimony that the prongs caused the injury is affirmed on this record, then the reliability analysis is essentially meaningless. Under *Daubert*, the circuit court's "gatekeeping function ... requires more than simply taking the expert's word for it." *Seifert*, 2017 WI 2, ¶ 67 (citation and quotation marks omitted). As the Seventh Circuit has explained, when "asked to admit scientific evidence," the court "must determine whether the evidence is genuinely scientific," and not "unscientific speculation offered by a genuine scientist." *Rosen v. Ciba-Energy Corp.*, 78 F.3d 316, 318 (7th Cir. 1996). By failing to focus on the reliability of Kurpad's specific biomechanical opinion about the prongs, the circuit court clearly erred. That opinion should never have been allowed into evidence.

2. Saczalski's specific causation testimony should not have been admitted.

Cursory causation testimony offered by Saczalski cannot save Plaintiffs from their failure of proof on specific causation. R.1763:35-36; A-App.3502-03. Saczalski's specific causation testimony was plainly inadmissible.

Saczalski is not "qualified as an expert by knowledge, skill, experience, training, or education," to opine on causation specific to Mr.

Vanderventer. Wis. Stat. § 907.02(1). Just the opposite—he conceded that medical opinions were not part of his expert background. *See supra*.[5] And Saczalski testified that he is "not a medical doctor," and was "not here to give medical opinions." R.1763:205; A-App.3672. He also confirmed that he "do[es]n't testify about the medical parts of it," because he "do[es]n't really consider that as part of [his] mechanical structural background or analysis tools." R.1763:204; A-App.3671. Yet the circuit court inexplicably ruled that Saczalski "ha[d] the underpinning" to offer specific causation testimony. R.1757:136;R.533:10; A-App.56,939. That was wrong.

Consistent with Saczalski's admitted lack of expertise, courts generally prohibit biomechanical engineering experts from rendering "medical opinions regarding the precise cause of a specific injury." *Smelser v. Norfolk S. Ry. Co.*, 105 F.3d 299, 305 (6th Cir. 1997), *abrogated on other grounds*, *Morales v. Am. Honda Motor Co.*, 151 F.3d 500, 515 (6th Cir. 1998). That prohibition arises because "biomechanical engineers lack the medical training necessary to identify the different tolerance levels

[5] In addition, Saczalski premised his causation opinion on his defect/negligence opinions, which were unreliable and inadmissible. *See supra*.

and preexisting medical conditions of individuals," both of which "'could have an effect on what injuries resulted from an accident.'" *Kern v. Purina Animal Nutrition, LLC*, 2018 WL 8193884, at *2 (M.D. Pa. May 14, 2018) (citation omitted). Put simply, Saczalski could not opine as to the specific cause of Mr. Vanderventer's injury.

Despite Saczalski's conceded lack of expertise, and over Hyundai's objection, the circuit court erred as a matter of law in allowing Saczalski at least two times to offer a conclusory opinion about the specific cause of Mr. Vanderventer's injury:

> Q. And from a biomechanical standpoint, do you believe that the hollow tube was responsible for creating the fulcrum that ultimately caused Mr. Vanderventer's paralysis?
>
> A. Yes.

R.1763:35; A-App.3502.

> Q. And you believe it was the max deformation of the guides that caused Mr. Vanderventer's paralysis?
>
> A. Correct, at the time when the maximum occurred.

R.1763:134; A-App.3601. The court committed legal error by failing to make any determination that Saczalski's specific causation testimony met

the statutory *Daubert* requirements. Nor could the court have reasonably concluded that Saczalski was either qualified to give the opinion or that it was reliable. Not only did Saczalski concede that he was unqualified, but he also never provided any basis, principles, methodology, training, or experience that could have led him to conclude that the prongs caused Vanderventer's specific injury. R.1763:35,134,204-05; A-App.3502,3601,3671-72.

* * *

In sum, Plaintiffs presented no expert evidence of product defect/negligent design or specific causation that met the *Daubert* standard. Based on this failure of proof, this Court should reverse the judgment due to an insufficiency of proof and direct that the jury's answers be changed.[6]

[6] At a minimum, this Court should order a new trial because the erroneous admission of these opinions affected Hyundai's substantial rights. *See Weborg*, 2012 WI 67, ¶ 41-48. Those errors prejudiced Hyundai because the opinions were at the center of Plaintiffs' case. Plaintiffs' counsel repeatedly focused the jury on that "expert" testimony in his opening statement and closing argument. R.1761:36-48,67-68;R.1776:21-23,34,57-58, 63-66; A-App.1010-22,1041-42,2999-3002,3013,3036-37,3042-45. Because there is much more than a "reasonable possibility" that this unreliable testimony contributed to the jury's verdict (*see Weborg*, 2012 WI 67, ¶ 68), this Court should order a new trial.

II. In the alternative, this Court should order a new trial because the circuit court repeatedly allowed inadmissible and highly prejudicial evidence to be heard by the jury.

There are also multiple separate and independent bases for ordering a new trial. The circuit court repeatedly misinterpreted or misapplied Wisconsin statutes in allowing the jury to hear improper and highly prejudicial evidence.

A. The court erred by admitting irrelevant and highly prejudicial evidence of 85 unrelated product recalls.

The circuit court erred in admitting evidence of 85 product recalls over 30 years that did not pertain to the Elantra seat at issue. Even if the evidence had any probative value (and it does not), that probative value would be heavily outweighed by its prejudicial effect.

1. The recall evidence does not rebut the statutory presumption that the Elantra's seat is not defective.

The circuit court erred as a matter of law by admitting the unrelated recall evidence based on its mistaken view that it rebutted the statutory presumption in Section 895.047(3)(b). That section establishes a "rebuttable presumption" that the product at issue "is not defective" if the product complies with relevant federal safety standards. *Id*. Here, the Elantra's seat complied in all respects with the applicable federal safety standards. R.1769:145-50; A-App.1998-2003.

Purportedly as rebuttal to that presumption, the circuit court admitted evidence of 85 voluntary product recalls over 30 years unrelated to the Elantra's driver's seat. R.1757:142-51;R.1766:9-11;R.1767:15-22,65,84; R.1174;R.1175; A-App.109-312,945-54,1546-48,1567-74,1617,1636. That evidence included recalls related to components such as car doors, brakes, and air bags, among others. R.1174;R.1175; A-App.109-312. And that recall evidence even included cars manufactured by Kia, Hyundai's sister company, which was not even a defendant. R.1770:114-116,120-22; A-App.2150-52,2156-58.

The circuit court ruled that such unrelated recall evidence was "fair game" to "rebut the presumption," calling it "part of that statute." R.1757:150-51; A-App.953-54.

Here, the "presumed fact"—*i.e.*, that the Elantra's driver's seat is not defective—is critical because Wisconsin law is clear: To rebut an evidentiary presumption, a party must present evidence that contradicts that presumed fact. Under Section 903.01, a party seeking to overcome a presumption must "prov[e]" that the "nonexistence of the presumed fact is more probable than its existence."

Evidence that Hyundai recalled other cars or components is irrelevant to "proving" that the "nonexistence of the presumed fact" (the Elantra's driver's seat is defective) is "more probable" than the "presumed fact" (the Elantra's seat is not defective).

Wisconsin case law confirms that overcoming an evidentiary presumption requires evidence that contradicts the presumed fact. For example, in *State ex rel. Flores v. State*, the Supreme Court held that a party could rebut the presumption that a certain "letter was delivered and received" with "credible evidence of non-receipt." 183 Wis. 2d 587, 612-13, 516 N.W.2d 362 (1994) (citation omitted). Rebutting the presumption that a given product "is not defective" with evidence that some other product was recalled would be like rebutting the presumption that a given letter was received with evidence that some other letter was not received.

The circuit court misinterpreted the interplay between Sections 895.047(3)(b) and 903.01. The court's overbroad understanding of what is relevant to rebut the presumption would render the presumption meaningless in every case. Another court applying Section 895.047(3)(b)'s presumption correctly found evidence relevant to rebut that "presumed fact" where the evidence was probative on the question whether the specific

product at issue was defective. *See Kilty v. Weyerhaeuser Co.*, 2018 WL 2464470, at *3-4 (W.D. Wis. June 1, 2018).[7] Only such product-specific rebuttal evidence makes the allegation that a given product is defective more probable.

Here, evidence that would have been admissible to rebut the presumption under Section 895.047(3)(b) is evidence that shows that the Elantra's driver's seat—not some other Hyundai car or component—is defective. As Hyundai explained below, evidence of a product recall is irrelevant where the product at issue was not the product that was recalled. R.1489:65-69; A-App.434-38. And, in response, Plaintiffs repeatedly acknowledged that such unrelated recall evidence was not probative on the question whether the Elantra's driver's seat is defective. R.459:4;R.1504:107; A-App.42,701. Especially given that concession, the circuit court's admission of the recall evidence to rebut the presumption cannot stand.

The circuit court also stated that the recall evidence disclosed "the

[7] *See also Lewy v. Remington Arms Co*., 836 F.2d 1104, 1109 (8th Cir. 1988) (recall evidence inadmissible where product at issue and recalled product were different models); *Bizzle v. McKesson Corp.*, 961 F.2d 719, 721 (8th Cir. 1992) (recall evidence had "minimal probative value" if product at issue was not recalled).

general corporate knowledge base" of violation of federal safety standards. R.1757:151; A-App.954. But general knowledge of unrelated safety issues has no relevance to any element of Plaintiffs' claims.

In sum, the unrelated recall evidence is irrelevant. But even if it had any probative value, its prejudicial effect far outweighs any such probative value.

2. The recall evidence prejudiced Hyundai.

The unrelated recall evidence played a prominent role at trial. Plaintiffs' counsel repeatedly invoked the unrelated recalls, including with witnesses. R.1768:151-52;R.1770:85-86;R.1771:215;R.1776:26,50; A-App.1848-49,2121-22,2495,3005,3029. Not only did it distract the jury from the alleged defect at issue, but it encouraged the jury to decide this case based on issues not before them and on supposed bad corporate conduct.

Plaintiffs' closing argument underscores the prejudice. Counsel directed the jury to the 85 recalls and told them that "8.4 million cars ... had defects, safety defects." R.1776:26; A-App.3005. Counsel argued also that there were "86 recalls that affected over 8.4 million cars. 8.4 million cars on the roadway carrying moms and dads and kids and grandmas and

grandpas and aunts and uncles." *Id*.

In light of the breadth of the unrelated recall evidence adduced at trial and the gross impropriety of Plaintiffs' counsel's closing argument, there is more than a "reasonable possibility" that the jury's verdict may have been different had the court properly excluded that evidence.

B. The court erred by admitting evidence about a subsequent remedial measure.

The circuit court misinterpreted Wis. Stat. §§ 904.07 and 895.047 when admitting evidence about a purported subsequent remedial measure—the seat design in the next-generation 2017 model of the Elantra (known as the AD model).

1. The court erred in admitting subsequent-remedial-measure evidence to impeach the "defense theories."

Under Section 904.07, "[w]hen, after an event, measures are taken which, if taken previously, would have made the event less likely to occur, evidence of the subsequent measures is not admissible to prove negligence or culpable conduct in connection with the event." But Section 904.07 permits a court to admit such evidence for "[]other purpose[s]," including for "impeachment."

Here, the circuit court permitted Plaintiffs to introduce evidence

about the 2017 seat to "impeach" Hyundai's "defense theories" and "themes," and Hyundai's "general defense of the case." R.1787:168-70,181-82; A-App.3361-63,3374-75.

Section 904.07 does not provide for such a broad view of the impeachment exception. *See D.L. by Friederichs v. Huebner*, 110 Wis. 2d 581, 607-08, 329 N.W.2d 890 (1983); *Ansani v. Cascade Mountain, Inc.*, 223 Wis. 2d 39, 55-56, 588 N.W.2d 321 (Ct. App. 1998). The Supreme Court has explained that such a misunderstanding of Section 904.07 would mean that "any time a defendant controverted an allegation of negligence," a plaintiff "could bring in evidence of subsequent remedial measures to prove prior negligence or culpable conduct" under the "guise of impeachment." *Huebner* 110 Wis. 2d at 601-02. As this Court has held, "post-event remedial measures" are inadmissible where the "thrust" of the evidence is to "show that the defendant was negligent." *Ansani*, 223 Wis. 2d at 56. For such evidence to be proper under the impeachment exception, it must "reflect on the [impeached] witness's testimony." *Huebner*, 110 Wis. 2d at 608.

The circuit court's interpretation of the impeachment exception would swallow the rule of exclusion. Subsequent-remedial-measures

evidence would be admissible in every case—just because the defendant puts on a defense.

2. The court erred in admitting subsequent-remedial-measure evidence to prove a reasonable alternative design.

The circuit court also erroneously suggested that evidence about the 2017 seat might be admissible to show a reasonable alternative design. R.1787:169; A-App.3362. Under Wis. Stat. § 895.047(4), on a strict-liability claim, "evidence of remedial measures taken subsequent to the sale of the product is not admissible" to show "a defect in the design of the product," but can be used "to show a reasonable alternative design that existed at the time when the product was sold."

Words in a statute must be interpreted based on their plain and ordinary meaning. *State ex rel. Kalal v. Cir. Ct. for Dane Cty.*, 2004 WI 58, ¶ 45, 271 Wis. 2d 633, 681 N.W.2d 110. Here, the circuit court ignored that directive by interpreting "a reasonable alternative design that existed at the time when the product was sold" to mean "not that it was on the books or on a blueprint; just that the theory relative to that design was in existence." R.1787:169; A-App.3362. That construction of "design" does not reflect the word's plain and ordinary meaning—the word does not mean

a mere intangible theory or hypothetical abstraction. Instead, in this context, "design" means "a preliminary sketch or outline showing the main features of something to be executed." Merriam-Webster.com Dictionary, https://www.merriam-webster.com/dictionary/design (last visited Nov. 6, 2021).

Based on that correct interpretation, the evidence of the 2017 seat should not have been admitted under Section 895.047(4). Plaintiffs introduced no evidence that the 2017 seat design existed when the 2013 Elantra was sold. Instead, Plaintiffs introduced testimony that the 2017 seat's design was not a "technological breakthrough." R.1763:23; A-App.3490. But that it was technologically feasible does not mean that the design existed.[8]

3. The subsequent-remedial-measure evidence prejudiced Hyundai.

The evidence regarding the subsequent 2017 seat pervaded the trial. R.1761:31,42,64;R.1776:67-68; A-App.1005,1016,1038,3046-47. In his

[8] Perhaps recognizing the circuit court's legal errors, Plaintiffs suggested—for the first time in their post-trial brief—that the "subsequent remedial measures were introduced to show the feasibility of the alternative design." R.1504:103; A-App.697. But Hyundai never has controverted feasibility (R.640:3; A-App.63), which is required to admit such evidence for that purpose under Section 904.07.

opening statement, Plaintiffs' counsel stated that "[t]he AD seat ... would have prevented" Vanderventer's injury. R.1761:64; A-App.1038. Counsel presented to the jury side-by-side physical exemplars of the Elantra's seat and the AD-platform seat (R.1761:31; A-App.1005), and told the jury that Hyundai "could have gone to the design that was ultimately used in the AD [platform]," suggesting that the AD platform was safer. R.1761:76; A-App.1050. Plus, Plaintiffs' counsel kept the 2017 seat placed in front of the jury for almost the entire trial. And counsel used the 2017 seat repeatedly with Plaintiffs' witnesses, including Saczalski. R.1763:23-24; A-App.3490-91.

Then, in his closing argument, Plaintiffs' counsel criticized the Elantra seat at issue as compared to the 2017 seat: In "2017, they had the new design, the AD with the strong, robust, upper seat structure." R.1776:54; A-App.3033. "Hyundai knew the head restraints could come out, and that's why in the AD, the 2017, the improved version, they put locks on both of the posts for the head restraint so it can't happen." R.1776:177-78; A-App.3256-57. Counsel also argued that "th[e] hollow tube" in the Elantra seat at issue "was a new design," "[i]t was the first time," and—when compared to a later model, the AD platform—"it was the

last time." R.1776:205; A-App.3184.

In light of Plaintiffs' counsel's repeated and unrestricted references to the 2017 seat, there is much more than a "reasonable possibility" that the jury's verdict may have been different had the court not improperly admitted the evidence.

C. The court should not have allowed Saczalski to testify concerning undisclosed opinions.

The circuit court abused its discretion by admitting key opinions from Saczalski not disclosed during discovery. Section 804.01(2)(d) provides that each party is entitled to pretrial discovery of "facts known or opinions held by experts."

Notwithstanding that requirement, Saczalski opined for the first time at trial that the maximum "elastic" deformation of the prongs in the Elantra's driver's seat headrest (during the relevant accident) was 16 degrees of additional rotation beyond the point of their permanent "plastic" deformation (after the accident).[9] R.1765:103-05;R.1763:140-48; A-App.3607-15,1448-50. This was no small oversight—Saczalski focused on

[9] "Elastic" deformation refers to the temporary deformation of a component part that occurs during an accident, and that self-reverses to some degree. "Plastic" deformation refers to permanent deformation of a component part after the accident. R.1763:140-41; A-App.3607-08.

this elastic deformation as the heart of his defect/negligence theory. R.1763:140-48; A-App.3607-15. But, when asked at his deposition if he had determined the "maximum intrusion" of the prongs, Saczalski answered, "No," explaining only that the prongs "probably move once you get beyond the elastic and you get into plastic deformation, the additional loads on the spine of the torso could cause that to move back." R.1493:79; A-App.532.

Saczalski also testified for the first time at trial that he based his new elastic-deformation opinion on a Hyundai developmental-component test known as the constant-volume-strength test. R.1765:62-63; A-App.1407-08. Saczalski conceded at trial that he had the constant-volume-strength test before his deposition, but said that he just had not determined the maximum intrusion of prongs at that time. R.1765:62-64,105; A-App.1406-07-08,1450.

The circuit court also permitted Saczalski to offer an undisclosed opinion about how Mr. Vanderventer's headrest supposedly had ejected into the backseat. R.1763:235-39; A-App.3702-06. Saczalski testified that the elastic deformation of the upper seat frame allowed the plastic "guides" on the top of the seat (into which the headrest prongs are inserted, and

which allow the headrest to slide up and down) to rotate inward, which then allowed the locking mechanism to slip out of the notches on the "prongs." *Id*. But, again, Saczalski at his deposition said nothing about "inward rotation" or the "locking mechanisms" "slipping" from the "prongs." R.1493:44-101; A-App.499-554. This detail was critically important because it explained how he contends the ejection took place.

Importantly, when asked at his deposition if he had provided all of his opinions, he answered, "I believe you do [have all of my opinions]." R.1493:100; A-App.553. In response to Hyundai's counsel's follow-up questioning, Plaintiffs' counsel insisted that Hyundai "had a good handle on [Saczalski's] opinions and his basis," and said that Saczalski reserved only the right to "draw upon [his] experience, if [he] can show that it is relevant to [his] opinions." *Id*.

When Hyundai heard each of these undisclosed opinions for the first time during Plaintiffs' opening statement (R.1761:29-30,38-41,46-48;R.1787:171-73; A-App.1003-04,1012-15,1020-22,3364-66), Hyundai moved to exclude them. R.1787:171-78; A-App.3364-71. The circuit court denied that motion but granted Hyundai a continuing objection. R.1787:179, 181; A-App.3372,3374. The court based its ruling on

Plaintiffs' contention that Saczalski had disclosed the new opinions on his deposition errata sheet. R.1787:179; A-App.3372. But the court was mistaken—Saczalski said nothing about the maximum elastic deformation of the prongs or how the headrest had supposedly "ejected" on his errata sheet. R.1787:175; A-App.3368.

Consistent with Section 804.01, pretrial discovery is intended to avoid surprise at trial, and courts should exclude witness testimony where such "surprise is coupled with the danger of prejudice." *Magyar v. Wis. Health Care Liab. Ins. Plan*, 211 Wis. 2d 296, 303, 564 N.W.2d 766 (1997).

Hyundai was surprised and prejudiced by Saczalski's undisclosed opinions. Saczalski testified at length about these opinions, but Hyundai had no pretrial opportunity to prepare a response. R.1763:141-47,235-39;R.1765:61-63,103-05; A-App.3608-14,3702-06,1406-08,1448-50. The court even permitted Plaintiffs to introduce a modified "mockup" exemplar of the Elantra seat—with the prongs deformed an additional 16 degrees forward—to demonstrate Saczalski's undisclosed opinion regarding the maximum intrusion of the "prongs." R.1763:15,147; A-App.3482,3614.

Saczalski's opinion on these points should have been excluded even

if they met the threshold standard of reliability (which they did not). Because the court erred in applying Section 804.01, thereby prejudicing Hyundai, this Court should order a new trial.

D. A new trial should be ordered on liability and damages.

If this Court orders a new trial, then each of the circuit court's errors compels a new trial on both liability *and* damages. Wisconsin law is well settled: A partial new trial is proper only if it "clearly appear[s] that the effect of the error[s] did not extend to all the issues tried." *Kenwood Equip., Inc. v. Aetna Ins. Co.*, 48 Wis. 2d 472, 486, 180 N.W.2d 750 (1970) (citation omitted). "[W]here it appears that the error may have affected all the issues, the conclusion of law follows that there must be a complete new trial," and, "where an error, while ostensibly relating to one issue only, is of such a character as to have a prejudicial effect on the others, a full retrial should be had." *Id.*; *accord, e.g.*, *Anderson v. Saunders*, 16 Wis. 2d 55, 60, 113 N.W.2d 831 (1962).

Each error identified above prejudiced Hyundai on all issues, including damages—particularly in light of Plaintiffs' counsel's closing argument. Because it does not "clearly appear that the effect of the error[s] did not extend to all the issues tried," any new trial should address both

liability and damages. *Kenwood*, 48 Wis. 2d at 486.

CONCLUSION

For the aforementioned reasons, this Court should reverse and order that the jury's answers be changed or, alternatively, order a new trial on liability and damages.

Dated this 6th day of January, 2022.

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CERTIFICATION

I hereby certify that this brief conforms to the rules contained in Wis. Stat. § 809.19(8)(b), (bm), (c) for a brief produced with a proportional serif font. The length of this brief is 10,982 words.

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APPENDIX CERTIFICATION

I hereby certify that filed with this brief, either as a separate document or as a part of this brief, is an appendix that complies with Wis. Stat. § 809.19(2)(a) and that contains, at a minimum: (1) a table of contents; (2) the findings or opinion of the circuit court; (3) a copy of any unpublished opinion cited under Wis. Stat. § 809.23(3)(a) or (b); and (4) portions of the record essential to an understanding of the issues raised, including oral or written rulings or decisions showing the circuit court's reasoning regarding those issues.

I further certify that if this appeal is taken from a circuit court order or judgment entered in a judicial review of an administrative decision, the appendix contains the findings of fact and conclusions of law, if any, and final decision of the administrative agency.

I further certify that if the record is required by law to be confidential, the portions of the record included in the appendix are reproduced using one or more initials or other appropriate pseudonym or designation instead of full names of persons, specifically including juveniles and parents of juveniles, with a notation that the portions of the record have been so reproduced to preserve confidentiality and with appropriate references to the record.

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