

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

_____)	
CHRISTINE ZEOLLA, individually and as)	
administrator of the estate of Mario Zeolla,)	
)	
Plaintiff,)	Civil Action No.
)	09-40106-FDS
v.)	
)	
FORD MOTOR COMPANY,)	
)	
Defendant.)	
_____)	

**MEMORANDUM AND ORDER ON
CROSS-MOTIONS TO EXCLUDE EXPERT TESTIMONY**

SAYLOR, J.

This is a product liability claim arising out of a fatal automobile accident. Plaintiff Christine Zeolla, individually and as administrator of the estate of her husband, Mario Zeolla, has brought suit against the Ford Motor Company, alleging various design defects in the automobile in which he was killed. Jurisdiction is based on diversity of citizenship.

Both parties have retained expert witnesses to testify at trial as to how the accident occurred. Both have moved *in limine* to exclude the other’s expert testimony under Fed. R. Evid. 702 and the principles of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). Plaintiff has also moved to strike an affidavit prepared by one of defendant’s experts.

For the reasons set forth below, the Court will deny the motions in limine and the motion to strike.

I. Factual Background

On the morning of June 2, 2007, Mario Zeolla and five of his friends were returning to

Albany, New York, after attending a game between the Boston Red Sox and New York Yankees at Fenway Park. They all rode in a 2004 Ford Expedition owned and driven by Brendon O’Hara.

The accident occurred at approximately 9:10 a.m. The vehicle was traveling westbound on Route 90, the Massachusetts Turnpike. The speed limit was 65 miles per hour; the vehicle was traveling at least that fast.

Foolishly, four of the men were not wearing seat belts. The Expedition had three rows of seats. The seating positions and seat belt use of the occupants were as follows:

FRONT OF CAR

Brendon O’Hara (belted)	Jason Southworth (belted)
Larry Frederick (unbelted)	Joe Harrigan (unbelted)
Mario Zeolla (unbelted)	Noah Sorensen (unbelted)

While O’Hara was driving in the left lane, he saw a deer coming across the eastbound lanes. He swerved to the right to avoid the deer, steering the vehicle all the way to the right side of the highway. He then attempted to correct course and veered back to the left. At some point, the vehicle began to rotate, or yaw, counter-clockwise, until it was facing back towards the east. The right front corner of the vehicle then struck the Jersey barrier that divides the eastbound and westbound traffic lanes. The vehicle continued to yaw, and its right rear corner struck the barrier. The vehicle then began to lift and roll over. It rolled three-quarters of a turn—first onto the driver’s side, then the roof, then the passenger side—and came to rest on the passenger side.

The driver and front-seat passenger, both of whom were wearing seat belts, were retained inside the vehicle with no injuries. The middle-row passengers were also retained inside the

vehicle with no injuries. Although they were not wearing seat belts, the vehicle was equipped with side canopy airbags that deployed as it began to roll over.

Both third-row passengers, Zeolla and Sorensen, were not wearing seat belts. Both were wholly or partially ejected from the vehicle and killed. As set forth below, the parties dispute whether Zeolla was ejected from the right side of the vehicle as it hit the barrier, or the left side of the vehicle as it rolled over.

II. Plaintiff's Claims

Plaintiff alleges that Ford tortiously failed to protect occupants of the third row from the possibility of a rollover resulting in full or partial ejection of an occupant. The complaint cites three particular features of the Expedition that plaintiff alleges were faulty. First, the Expedition did not have electronic stability control. Second, the third-row side windows were not fixed to the vehicle's frame, but were instead designed as hinged windows that could be opened or closed by a driver-controlled switch. Third, the Expedition was equipped with rollover canopy airbags only in the first and second rows, and not the third.

Whether Zeolla was ejected at the initial impact with the Jersey barrier, or during the subsequent rollover, has a material effect on plaintiff's claims. Among other things, the parties agree that side canopy airbags are designed to deploy as a vehicle starts to roll over, not upon impact; accordingly, if Zeolla was ejected before the rollover began, the presence of such airbags would not have saved his life.

III. Analysis

A. Rule 702

Both parties have, in substance, cross-moved to exclude the other side's expert testimony

on the subject of how and when Zeolla was ejected from the vehicle. Whether that testimony may be admitted is governed principally by Rule 702 of the Federal Rules of Civil Evidence.¹ The adoption of Rule 702 in its present form codified the standard of admissibility for expert testimony that was set forth in *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). See *United States v. Diaz*, 300 F.3d 66, 73 (1st Cir. 2002).

Under Rule 702, district courts considering the admissibility of scientific testimony must “act as gatekeepers, ensuring that an expert’s proffered testimony ‘both rests on a reliable foundation and is relevant to the task at hand.’” *Samaan v. St. Joseph Hosp.*, 670 F.3d 21, 31 (1st Cir. 2012) (quoting *Daubert*, 509 U.S. at 597). This gatekeeping function requires that the Court consider three issues: (1) whether the proposed expert is qualified by knowledge, skill, experience, training or education; (2) whether the subject matter of the proposed testimony properly concerns scientific, technical, or other specialized knowledge; and (3) “whether the testimony [will be] helpful to the trier of fact, i.e., whether it rests on a reliable foundation and is relevant to the facts of the case.” *Bogosian v. Mercedes-Benz of N. Am., Inc.*, 104 F.3d 472, 476 (1st Cir. 1996). The motions at issue in this case all relate to the third issue—the reliability of

¹ Rule 702 provides as follows:

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.

Fed. R. Evid. 702.

the experts' proffered testimony.

The requirement that an expert's testimony must be based on a reliable scientific foundation is often the "central focus of a *Daubert* inquiry." *Ruiz-Troche v. Pepsi Cola of P.R. Bottling Co.*, 161 F.3d 77, 81 (1st Cir. 1998). This requirement ensures that "the reasoning or methodology underlying the testimony is scientifically valid and . . . that [the] reasoning or methodology properly can be applied to the facts in issue." *Daubert*, 509 U.S. at 592-93. In other words, Rule 702 requires the court to "ensure that there is an adequate fit between the expert's methods and his conclusions." *Samaan*, 670 F.3d at 32 (citing *Daubert*, 509 U.S. at 591). Significant analytical gaps between the data and the opinion proffered by an expert may undermine the reliability of an expert's testimony. *See General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997). A court may choose to exclude an expert's opinion when it is "based on conjecture or speculation from an insufficient evidentiary foundation," *Damon v. Sun Co.* 87 F.3d 1467, 1474 (1st Cir. 1996) (internal quotations omitted), or when it is "connected to existing data only by the *ipse dixit* of the expert." *General Elec. Co.*, 522 U.S. at 146.

The focus of the Rule 702 inquiry is on the principles and methodology employed by the expert, not the ultimate conclusions. *Daubert*, 509 U.S. at 595. The court may not subvert the role of the fact-finder in assessing credibility or in weighing conflicting expert opinions. Rather, "[v]igorous 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." *Id.* at 596. *See also Ruiz-Troche*, 161 F.3d at 85 (admitting testimony notwithstanding a lack of peer-reviewed publications because the opinion rested upon good grounds generally and should be tested by the "adversarial process").

B. Motions In Limine

This dispute concerns the admissibility of testimony by four proposed expert witnesses, two each for plaintiff and defendant.

As noted, the challenged testimony implicates the timing and manner of Zeolla's ejection from the vehicle, which relate principally to plaintiff's claims concerning the absence of side canopy airbags in the third row of the vehicle. Side canopy airbags are a protective feature designed to deploy when a vehicle begins to roll. As the vehicle starts to lift, sensors detect a potential rollover and deploy the airbags. The airbags can both cushion impacts and prevent unbelted passengers from being ejected from the vehicle during a rollover.

Plaintiff contends that if the Expedition had been fitted with side canopy airbags in the third row, Zeolla would have been retained in the vehicle, and would have survived the crash. That contention is consistent with plaintiff's theory that Zeolla was not ejected until the rollover was well underway. Plaintiff intends to call two experts—Steven Batzer and Martha Bidez—to testify that Zeolla struck and fractured the third-row, driver-side window during the rollover. They contend that Zeolla began to be ejected during the rollover, so that his head was positioned between the vehicle and the ground. Bidez also expects to testify that Zeolla was fully ejected from the vehicle later in the rollover.

In contrast, defendant contends that Zeolla was ejected at the moment of the vehicle's initial contact with the Jersey barrier. Because the rollover had not yet begun at that point in the accident—and the side canopy airbags had therefore not yet been triggered—defendant contends that third-row airbags would not have prevented his death. Defendant intends to call an expert, Elizabeth Raphael, to testify that Zeolla was ejected through the third-row passenger-side

window when the vehicle first hit the barrier. Raphael will testify that Zeolla's body struck the barrier, then bounced off and came to a rest on the pavement, and that ultimately the vehicle rolled over him. Another defense expert, Michael Carhart, will base his testimony in part on Raphael's opinions.

Both parties have filed motions *in limine* to exclude the testimony of the other party's experts.

1. Plaintiff's Expert Steven Batzer

Defendant has moved to exclude testimony of plaintiff's expert Steven Batzer. At trial, Batzer will offer opinions about the third-row window glass on both the driver and passenger sides in the Expedition. Batzer will testify that Zeolla was ejected out of the third-row, driver-side window, and that the mounting of that window was defective because the design weakened its strength, causing it to break when struck by Zeolla's head. Defendant contends that plaintiff should be precluded from offering that testimony at trial because (1) Batzer's opinions and conclusions are not based upon sufficient facts, and (2) his methodology is unreliable because he chose to ignore contrary evidence.

Defendant essentially objects to Batzer's anticipated testimony on the grounds that he did not consider all the evidence available to him when reaching his conclusions. Defendant suggests that the opinion is based on an incomplete selection of facts that support plaintiff's theory, and ignores data that would undermine that theory. Defendant points to specific data that it contends Batzer ignored. The Court will briefly summarize that data.

a. Physics of Occupant Motion

Defendant contends that Batzer ignored the physics that govern the movement of an

unbelted passenger in a vehicle in motion. Because Zeolla was not wearing his seatbelt, basic laws of physics suggest that his body would tend to continue to move in the direction it had previously been moving, as the vehicle began to yaw. As a result, defendant contends that he would have been moving toward the passenger side at the time the vehicle struck the barrier, would not have encountered anything to stop his rightward motion prior to contact with the passenger-side window, and therefore could only have been ejected through that window. Defendant contends that Batzer's opinion that Zeolla was ejected through the driver-side window violates basic principles of physics.

Plaintiff contends that Batzer does not ignore the physics of occupant motion, but rather offers a competing scientific theory for Zeolla's movements. Plaintiff further contends that defendant has merely pointed out places where Batzer disagrees with the opinions of its experts, which is not sufficient to create an issue of reliability under Rule 702.

b. Damage Patterns to the Vehicle's Regulators

Defendant next contends that Batzer ignored physical evidence that contradicts his theory that the driver-side window broke when a load was applied from the inside, as opposed to from the outside. This assertion is based on inconsistencies between damage to the passenger-side window, which all parties agree was broken by a force from the inside, and the driver-side window, which defense experts contend was broken by a force from the outside.

The Expedition was equipped with regulator cams—mechanisms that operated to open the windows—in the third-row windows. The regulator cam on the passenger-side window was severely damaged during the crash, and fractured into multiple pieces. In contrast, the regulator cam on the driver-side window was found intact. Defendant contends that the differing damage

between the two regulator cams demonstrates that they were broken in different ways. It further contends that Batzer's own testing of the regulator cam mechanism supports that conclusion. In a test cited by Batzer in his expert report, a load applied from the inside was shown to break the plastic attachment hardware of the regulator cam before the glass itself. Defendant contends that the physical evidence of the intact driver-side regulator cam definitively proves that the window was not broken by a force originating from inside the vehicle, and is therefore inconsistent with Batzer's opinions.

At oral argument, plaintiff distinguished the circumstances of the test from the circumstances at issue in this case. According to plaintiff, the test was conducted in 2006, prior to the accident, and involved a regulator cam from a 1997 Expedition. No evidence has been presented by either side as to whether the mechanism on the 2004 Expedition is the same as that on the 1997 model, whether the forces tested were equivalent to those that Zeolla's body would have applied, or whether there are other relevant differences between the vehicles or events.

c. Absence of Ground Contact Abrasions

Defendant next suggests that the damage patterns and contact abrasions on the car demonstrate that the vehicle must have rolled over Zeolla's body. Both sides appear to agree that there are no contact abrasions from the pavement on the roof of the vehicle above the third row. It is also undisputed that the roof panel above the third-row, driver-side window is dented, and the roof rail at that spot is somewhat indented. Defendant contends that the only explanation for this damage pattern is that an object was between the vehicle and the roadway as the vehicle rolled, and that the only reliable conclusion is that the object was Zeolla's body. Because this conclusion is contradictory to Batzer's anticipated testimony that Zeolla was not ejected from the

vehicle until after this point, defendant contends that Batzer's testimony is unreliable.

Plaintiff counters that Batzer has an alternate explanation for the damage patterns and absence of abrasions. Specifically, Batzer opines that the Expedition rolled "nose-down," which prevented the rear of the vehicle from making contact with the roadway.

2. Plaintiff's Expert Martha Bidez

Defendant has also moved to exclude testimony of plaintiff's expert Martha Bidez. At trial, plaintiff intends to call Bidez to testify as to how Zeolla's ejection and fatal injuries took place. Defendant objects to Bidez's anticipated testimony that the centrifugal forces caused by the rollover resulted in Zeolla and Sorensen moving outward toward their respective sides of the vehicle. Bidez will testify that this outward motion led to both Zeolla and Sorensen striking and fracturing their respective windows, and that Zeolla's head was crushed between the Expedition's rear roof rail and the ground during the roll. Bidez also intends to testify that Zeolla could not have been ejected through the passenger-side window, because Sorensen's seating position would have blocked his exit. Defendant contends that Bidez should be precluded from offering this expert testimony at trial because (1) her opinions and conclusions are based on insufficient and inaccurate evidentiary foundations, and (2) her methodology is unreliable, as she chose to ignore contrary evidence.

Defendant's challenge to Bidez's testimony is similar to its challenge to the testimony of Batzer, in that defendant essentially objects to the anticipated testimony on the grounds that she ignored available evidence that would undermine her conclusions. Defendant again points to specific data points that Bidez allegedly ignored.

a. Blood-Splatter Evidence

Defendant contends that Bidez ignored blood-splatter evidence on the concrete barrier at a location before the point where Bidez contends Zeolla was ejected from the vehicle. It points to photographs, taken by the police shortly after the accident, that appear to show several blotches on the barrier at a position “upstream” of—that is, prior to—the location at which the roll began. Defendant contends that these photographs depict blood, and that this blood could only have come from Zeolla, as Sorensen was still in the vehicle at the beginning of the roll sequence. That conclusion would support defendant’s theory that Zeolla was ejected from the vehicle much earlier than plaintiff believes. Accordingly, defendant asserts that Bidez did not consider all evidence available to her.

Plaintiff counters that Bidez considered the evidence, and has a different explanation for it. In her rebuttal report, Bidez concludes that if the substance on the barrier was blood, it was likely that of Sorensen. Bidez opines that, prior to the roll, Sorensen’s head was injured in close proximity to the barrier, and that injury could be responsible for the blood splatter. Plaintiff further contends that there are far too many questions about the stains for them to serve as the basis for a finding that the testimony is unreliable. The stains identified as blood at the accident scene were never tested; defendant cannot prove to a certainty that any individual patch is blood at all, let alone Zeolla’s blood; nor is there proof that the location of the blood was not disturbed by emergency workers as they responded to the accident. Plaintiff thus contends that this evidence does not undermine Bidez’s opinion.

b. Roof Damage to the Expedition

Defendant next contends that Bidez ignored damage to the roof of the Expedition when

she formulated her opinion that Zeolla was killed when his head was crushed between the vehicle and the ground. It cites to a portion of Bidez's deposition in which she describes the lack of physical damage to the area of the vehicle above the driver-side third-row window. Defendant contends that the photographic evidence shows obvious roof damage in the area, as well as the absence of ground contact abrasions on the roof. Because Bidez's theory allegedly cannot explain the pattern of roof damage, defendant contends that it is not supported by the facts and therefore should be excluded.

Plaintiff contends that Bidez was aware of and had documented the roof damage, and determined that the damage was not consistent with the vehicle rolling over Zeolla's body. Plaintiff points to deposition testimony in which Bidez explained why she believes both the roof damage and Zeolla's documented physical injuries are inconsistent with defendant's theory.

c. Restraint Control Module Data

Finally, defendant contends that Bidez ignored data from the Expedition's restraint control module ("RCM"). The RCM is a device, somewhat similar to a "black box," that provides information about the vehicle after a crash. Defendant asserts that the RCM data demonstrates that the side canopy airbags were not deployed until the Expedition had experienced at least 16 to 17 degrees of wheel lift. Based on the theory that Zeolla was already ejected at that time, defendant questions Bidez's claim that third-row airbags would have protected Zeolla. Defendant also points to excerpts from Bidez's deposition to suggest that she selectively ignores available evidence. In her deposition, she states, "I've not paid that much discrete attention to the timing issue because, again, we've got the physical evidence." (Def. Bidez Mot. in Limine, Ex. E at 64-65).

Plaintiff again counters that Bidez did not ignore the relevant evidence, but simply offered a different interpretation from that of defendant's experts. To support her opinion, she relies on the general tendencies of side canopy airbags in Ford vehicles, as well as the physical evidence that the second-row side windows were not broken out. Bidez contends that this must indicate that the second-row side canopy airbag was in place in time to retain the occupants in the vehicle at the crucial moment; without the bag to provide cushioning, she believes that those windows would have broken out. Thus, plaintiff asserts that Bidez does not ignore the RCM data, but rather that the data makes no meaningful difference in her opinion.

3. Defendant's Experts Elizabeth H. Raphael and Michael Carhart

Plaintiff has moved to exclude the testimony of defendant's expert Elizabeth H. Raphael, as well as those portions of Michael Carhart's testimony that rely on Raphael's opinions. Specifically, plaintiff asks the Court to exclude Raphael's testimony that Zeolla (1) was ejected from the vehicle through the third-row, passenger-side window at the moment of initial contact with the barrier; (2) traveled through the air, struck the barrier, bounced off it, and came to a stop approximately 17 feet away; and (3) was killed when the vehicle then rolled over him. Plaintiff contends that Raphael and Carhart should be precluded from offering such expert testimony at trial because it is unreliable and unsupported by the facts.

Plaintiff essentially contends that Raphael has not offered a scientific basis for the way she asserts Zeolla's body moved during the crash. Plaintiff points to eight different ways in which Raphael's opinion is alleged to be unreliable and unsupported by the evidence.

a. Trajectory of Zeolla's Body After Ejection

According to Raphael's opinion, Zeolla's body traveled 17 feet after striking the barrier

before it came to rest. Raphael did not precisely describe how the body traveled after it hit the barrier, and stated in her deposition that she would not do so because she did not know the exact pattern of movement. Plaintiff points to her own expert's testimony that the resting location of the body was inconsistent with any contact with the barrier and could not be explained by defendant's theory.

b. High-Speed Impact with the Barrier

Raphael testified that Zeolla's body was ejected from the vehicle at a speed of 48 miles per hour. According to plaintiff's expert, a high-speed impact with a concrete barrier would have caused Zeolla to suffer visible skeletal fractures. However, such fractures were not noted in either the medical records or the autopsy report. Instead, the reports focused on a head decompression and subcutaneous emphysema.

c. Distance from Point of Ejection to Barrier

Raphael's report did not explain how far Zeolla's body traveled from the point of ejection from the vehicle to the point of impact with the barrier. It also did not provide any calculations or kinetic analyses of how the body was able to travel that distance.

d. Sorensen's Position at the Moment of Zeolla's Ejection

Raphael asserts that Zeolla was able to be ejected from the vehicle through the passenger-side window because the third-row, passenger-side passenger (Sorensen) was "pocketed in the corner" of the right seat and the interior right-side wall at the time. Plaintiff contends that this opinion is contradicted by Raphael's own testimony at her deposition. She also contends that Raphael never performed any analysis as to how Sorensen moved, or how much of the window he was blocking, before she concluded that Sorensen's body did not block Zeolla from being ejected.

e. Movement of Second- and Third-Row Occupants

Raphael has provided opinions describing the movement of all second- and third-row occupants at the time when the vehicle first struck the barrier. She asserts that the second-row passengers were pulled back toward the third row; Sorensen moved somewhat forward and to his right initially, then backward and to the right, into the corner; and Zeolla moved sharply to the right and through the window. Plaintiff contends that Raphael has provided no explanation why Zeolla's body moved differently from all other occupants.

f. Physical Forces Acting on Sorensen

Raphael concluded that Sorensen was not ejected through the passenger-side window before Zeolla. Raphael opined that Sorensen was not ejected when Zeolla was because the physical forces acting on him at that time were pressing him backward and to the right. Plaintiff contends that this is contrary to the laws of physics, and that Raphael has provided no explanation for why Zeolla moved forward while Sorensen was pressed backward.

g. Blood-Splatter Evidence

Raphael concluded that Zeolla's ejection from the car caused the "blood" on the barrier. No tests were ever conducted to confirm that the substance was blood or, if it was, that it was the blood of Zeolla.

h. Eyewitness Statement

An eyewitness to the accident gave a statement to the police in which he stated that he was able to see a passenger being thrown from the car as it rolled and landing behind the vehicle. Plaintiff contends that this contradicts Raphael's testimony, because the eyewitness would not have been able to see the body being ejected through the passenger-side window because his view

would have been obstructed by the vehicle itself.

i. Defendant's Response

Defendant responds that Raphael has provided explanations of the methodology behind each of her conclusions. In conjunction with defendant's opposition brief, Raphael submitted an affidavit responding to each of plaintiff's claims. Defendant contends that plaintiff's challenges would more properly be raised during cross-examination, and that such differences of opinion are not a valid basis for excluding Raphael's testimony.

C. Application of Rule 702

The expert witnesses in this case have substantially differing versions of when and how Zeolla was ejected from the vehicle. Both sets of experts have attempted to provide a step-by-step re-creation of the accident. Because a number of critical facts cannot be ascertained directly, the experts have made various inferences arising out of circumstantial evidence. In the course of that analysis, they have found different evidence to be significant, and have dismissed other evidence as irrelevant or less important.

Neither party has challenged the qualifications of the experts. Instead, each side points to alleged analytical gaps in their opponent's analysis, and to various pieces of evidence that they contend the experts have improperly ignored. There is no question that there are evidentiary gaps that the experts have filled with inferences, and that the experts have emphasized certain items of evidence and discounted others. The question for the Court is whether the resulting expert testimony should be excluded under Rule 702 because it is not based on sufficient facts or data, is not the product of reliable principles or methods, or is not a reliable application of those principles and methods.

As a general matter, experts are permitted to sift through the available evidence and identify the data that they deem to be significant. They are permitted to make inferences if evidence is missing, if those inferences are scientifically reasonable. And they are permitted to discount or explain apparently contradictory evidence, again assuming that it is scientifically appropriate to do so. But experts cannot simply ignore contradictory evidence; they are not allowed to pick and choose the facts they find helpful and to pretend that the others do not exist.

Under some circumstances, the scientific method may only allow for one reasonable inference, or the facts may only support one reasonable conclusion. In those instances, a court might conclude that an expert has set forth an insufficient evidentiary foundation, or has used flawed methodology in reaching his or her conclusions, and that therefore the testimony should be excluded. But where the underlying evidence is incomplete or ambiguous, even trained experts following scientific methods might reach differing inferences or conclusions.

Furthermore, while an expert's methodology must be reliable and scientifically sound, there is no requirement that the analysis be perfect. Experts must provide reasonable bases for their assumptions and inferences, but need not always provide exhaustive explanations of each and every step of their analysis. Similarly, while experts cannot ignore relevant facts or disregard available data, it is natural that opposing experts may disagree about the importance or meaning of a particular fact. When this occurs, it is sufficient for Rule 702 purposes if they can offer scientifically reasonable explanations for how such facts are consistent with their findings.

In the present case, the two sets of experts have interpreted an incomplete set of data, using various assumptions and inferences, to reach opposite conclusions. After a careful review, the Court cannot conclude that any of those experts used unscientific methods, or that they

unfairly cherry-picked favorable evidence and ignored unfavorable evidence, such that exclusion of their testimony is required.

To be sure, there is no clear line between improperly (that is, unscientifically) discounting or ignoring contrary evidence, on the one hand, and properly (scientifically) distinguishing it on the other. To a large extent, the question is one of degree. Here, the experts have provided sufficient evidentiary foundations for their opinions, and have set forth reasonable explanations for data that appears inconsistent with those opinions. None of the experts have entirely ignored central, uncontroverted facts. Rather, they have offered competing theories about how physical forces acted on the car's occupants, and differing interpretations of ambiguous evidence. Where relevant facts appear to contradict their testimony, all the experts have attempted to provide explanations for these facts.

Of course, both sets of experts cannot be right; one is necessarily wrong. But it does not follow that one methodology is necessarily unscientific, at least within the meaning of Rule 702. Trained scientists, using scientific methods, often disagree. Nor is the Court permitted to select what it believes to be the correct testimony, and exclude the rest. As long as both sets of opinions meet the requirements of Rule 702, the jury will be permitted to hear the testimony, and to resolve the conflict as they see fit. All four experts will be subject to vigorous cross-examination, during which each side will have the opportunity to confront these experts with inconsistencies, and test the fit between the facts and their conclusions.

In short, this Court finds no basis for excluding any of the expert testimony altogether. Neither the opinions presented by each expert, nor the evidentiary foundations for those opinions, are so unreasonable or unscientific that a jury should be prevented from hearing them. A

reasonable jury could believe either of the differing theories on how the accident occurred.

Accordingly, all three motions *in limine* will be denied.

D. Motion to Strike

Plaintiff has also filed a motion to strike Elizabeth Raphael's supplemental affidavit, filed in conjunction with defendant's opposition to plaintiff's motion in limine. Plaintiff contends that Raphael's affidavit offers new opinions, new bases for her opinions, and further refinements of her opinions. Based on this contention, plaintiff asks the Court to strike Raphael's affidavit as an impermissible supplementary expert report under Rule 26(e) of the Federal Rules of Civil Procedure.

Plaintiff is correct that, at this late stage, neither party will be permitted to submit supplemental expert reports that "state[] additional opinions or rationales or seek[] to 'strengthen' or 'deepen' opinions expressed in the original expert report." *See, e.g., Palmer v. Asarco*, 2007 U.S. Dist. LEXIS 56969, at *15 (N.D. Okla. Aug. 3, 2007). To permit such supplementation would not only violate Rule 26(e), but would also allow a litigant to avoid a meaningful Rule 702 challenge. *Fail-Safe, L.L.C. v. A.O. Smith Corp.*, 744 F. Supp. 2d 870, 878 n.7 (E.D. Wis. 2010). However, the bar on late supplemental expert reports does not preclude either party from submitting additional affidavits intended to establish the reliability of already proffered opinions in response to a motion to exclude.

District courts possess considerable discretion in considering how best to evaluate the reliability of expert testimony on a Rule 702 motion. A district court may hold an evidentiary hearing to decide whether an expert's testimony is reliable. Either in addition or in the alternative, a district court "has the discretion to decide the motion on briefs and with reference

to expert reports, depositions and affidavits on record.” *TNT Road Co. v. Sterling Truck Corp.*, 2004 WL 1626248, at *2 (D. Me. July 19, 2004). Among other things, a court may consider affidavits submitted in connection with an opposition to a Rule 702 motion. *See id.* at *3 (“The plaintiffs appropriately recount[ed] the relevant steps and stages of [the expert’s] investigation to demonstrate the reliability of his methodology, drawing on [the expert’s] deposition testimony and an affidavit submitted in connection with their opposition to the *Daubert* motion.”).

The key distinction, then, turns on the content of the affidavit. If Raphael’s affidavit consists of new opinions, new bases for her opinions, or new findings, then it should rightly be excluded as an impermissible supplementary report. *See Fail-Safe*, 744 F. Supp. 2d at 878-79 (describing an expert’s supplementary report as more than double the size of his previous report, with new sections, changes in the expert’s math from an earlier report, and setting forth entirely new findings). However, if the affidavit is simply intended to provide additional insight into Raphael’s method of analysis, then it is entirely appropriate for the Court to consider the affidavit.

After reviewing the affidavit in conjunction with excerpts from Raphael’s deposition testimony and expert report, the Court concludes that it is a permissible explanation of the reliability of her methodology. For the most part, the affidavit provides further explanation of opinions previously offered in her expert report and at her deposition. Indeed, much of the affidavit is devoted to detailing *where* in her report, deposition, or attached exhibits Raphael already addressed issues that plaintiff contends she did not adequately explain. Where the report includes new content, such as the discussion of the difference between striking a barrier and striking concrete after a several-story fall, it does so only in direct rebuttal of analogies that

plaintiff's expert Bidez put forward to undermine the reliability of Raphael's testimony. This is an appropriate means of supporting the reliability of Raphael's testimony. Accordingly, plaintiff's motion to strike will be denied.

IV. Conclusion

For the foregoing reasons, all three motions *in limine* to exclude expert testimony are DENIED, and plaintiff's motion to strike is DENIED.

So Ordered.

/s/ F. Dennis Saylor
F. Dennis Saylor IV
United States District Judge

Dated: January 24, 2012