# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF KANSAS

WENDY L. DELGADO,

Plaintiff,

v.

Case No. 14-CV-01262-JAR

LYLE J. UNRUH, et al.,

Defendants.

# MEMORANDUM AND ORDER

Plaintiff Wendy Delgado brings this lawsuit to recover for personal injury damages suffered during a motor vehicle collision with Defendant Lyle J. Unruh in Ponca City, Oklahoma on August 20, 2012. Defendant Unruh was an employee of and in a truck owned by Defendant Tim R. Schwab, Inc. at the time of the accident. This matter is before the Court on motions to exclude expert testimony concerning the causation of Plaintiff's back injuries. The Court considers Plaintiff's Motion to Exclude the Testimony of Defendants' Experts Cleve Bare, Dr. Christine Raasch, and Dr. David Smithson (Doc. 101) and Defendants' Motion to Exclude the Testimony of Plaintiff's Rebuttal Experts John Smith, Dr. Kevin Stallbaumer, and Dr. Michael Freeman (Docs. 95, 97, 99). Also pending before the Court is a Joint Motion for a Status Conference (Doc. 110). The motions are fully briefed, and the Court is prepared to rule. As discussed more fully below, the Court grants in part and denies in part the parties' motions to exclude the six expert witnesses pursuant to the standards set forth in Fed. R. Evid. 702 and Daubert v. Merrell Dow Pharmaceuticals, Inc.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> 509 U.S. 579, 592 (1993).

# I. Legal Standard

The Court has broad discretion in deciding whether to admit expert testimony.<sup>2</sup> Generally,

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.<sup>3</sup>

The proponent of expert testimony must show "a grounding in the methods and procedures of science which must be based on actual knowledge and not subjective belief or unaccepted speculation." In order to determine whether an expert opinion is admissible, the Court performs a two-step analysis. "[A] district court must [first] determine if the expert's proffered testimony . . . has 'a reliable basis in the knowledge and experience of his discipline." To determine reliability, the Court must assess "whether the reasoning or methodology underlying the testimony is scientifically valid." Second, the district court must further inquire into whether the proposed testimony is sufficiently "relevant to the task at hand." An expert opinion "must be based on facts which enable [him] to express a reasonably accurate conclusion as opposed to conjecture or speculation . . . absolute certainty is not required." And it is not

<sup>&</sup>lt;sup>2</sup> Kieffer v. Weston Land, Inc., 90 F.3d 1496, 1499 (10th Cir. 1996).

<sup>&</sup>lt;sup>3</sup> Fed. R. Evid. 702.

<sup>&</sup>lt;sup>4</sup> Mitchell v. Gencorp Inc., 165 F.3d 778, 780 (10th Cir. 1999).

<sup>&</sup>lt;sup>5</sup> Norris v. Baxter Healthcare Corp., 397 F.3d 878, 884 (10th Cir. 2005) (quoting Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 592 (1993)).

<sup>&</sup>lt;sup>6</sup> BG Tech., Inc. v. Ensil Int'l Corp., 464 F. App'x 689, 703 (10th Cir. 2012).

<sup>&</sup>lt;sup>7</sup> *Id.* (quoting *Daubert*, 509 U.S. at 597).

<sup>&</sup>lt;sup>8</sup> Dodge v. Cotter Corp., 328 F.3d 1212, 1222 (10th Cir. 2003).

necessary to prove that the expert is "indisputably correct," but only that the "method employed by the expert in reaching the conclusion is scientifically sound and that the opinion is based on facts which satisfy Rule 702's reliability requirements."

Daubert sets forth a non-exhaustive list of four factors that the trial court may consider when conducting its inquiry under Rule 702: (1) whether the theory used can be and has been tested; (2) whether it has been subjected to peer review and publication; (3) the known or potential rate of error; and (4) general acceptance in the scientific community. But "the gatekeeping inquiry must be tied to the facts of a particular case."

Occasionally, courts allow generalized expert testimony to be admitted to explain general or background information. The Advisory Committee's note to Fed. R. Evid. 702 explains that

it might be important in some cases for an expert to educate the factfinder about general principles, without ever attempting to apply these principles to the specific facts of the case. For example, experts might instruct the factfinder on the principles of thermodynamics, or bloodclotting, or on how financial markets respond to corporate reports, without ever knowing about or trying to tie their testimony into the facts of the case. . . . For this kind of generalized testimony, Rule 702 simply requires that: (1) the expert be qualified; (2) the testimony address a subject matter on which the factfinder can be assisted by an expert; (3) the testimony be reliable; and (4) the testimony "fit" the facts of the case. <sup>12</sup>

It is within the discretion of the trial court to determine how to perform its gatekeeping function under *Daubert*. The most common method for fulfilling this function is a *Daubert* hearing, although such a process is not specifically mandated. In this case, the parties have not

<sup>&</sup>lt;sup>9</sup> *Id*.

<sup>&</sup>lt;sup>10</sup> *Daubert*, 509 U.S. at 593–94.

<sup>&</sup>lt;sup>11</sup> Kumho Tire Co. v. Carmichael, 526 U.S. 137, 150 (1998) (quotations omitted).

<sup>&</sup>lt;sup>12</sup> Procter & Gamble Co. v. Haugen, No. 1:95-CV-94 TS, 2007 WL 750435, at \*1 (D. Utah Mar. 7, 2007) (quoting Fed. R. Evid. 702, advisory committee's note, 2000 Amendments).

<sup>&</sup>lt;sup>13</sup> Goebel v. Denver & Rio Grande W. R.R., 215 F.3d 1083, 1087 (10th Cir. 2000); Roco, Inc. v. EOG Res., Inc., No. 14-1065, 2016 WL 6610896, at \*8 (D. Kan. Nov. 9, 2016).

<sup>&</sup>lt;sup>14</sup> Goebel, 215 F.3d at 1087.

requested a hearing on this motion. The *Daubert* issues have been fully and thoroughly briefed by the parties. The Court has carefully reviewed the extensive exhibits filed with the motions, including the written reports, deposition testimony, and affidavits submitted by the experts. The Court finds this review is sufficient to render a decision without conducting an oral hearing.

## II. Background

#### A. The Accident

The following is taken from the pretrial order. <sup>15</sup> On August 20, 2012, Wendy Delgado and Lyle Unruh were in a motor vehicle and truck collision in Ponca City, Oklahoma. The event occurred in the eastbound left turn lane of South Avenue at the intersection with Waverly Street, where both vehicles had been stopped at a red light. Unruh was driving a 2007 Kenworth T600 tractor pulling a Great Dane box trailer. Plaintiff was driving a 2007 Lexus ES350. Kenneth Powell was in the front passenger seat of the Lexus and Christian Powell was in the backseat behind the driver and all were wearing their seatbelts. The contact between the truck and the car occurred when Unruh backed his truck and came in contact with the front of the Lexus.

Plaintiff contends that she did not suffer any back or neck pain before the collision. After August 20, 2012, she suffered from pain and discomfort in her back and neck. She sought chiropractic care from Dr. Jerimy Cox and Dr. Amy Cox on August 22, 2012. She returned for three visits after that. Dr. Jerimy Cox and Dr. Amy Cox believe that Plaintiff's back and neck injuries were caused by the August 20, 2012 accident.

Plaintiff was treated at the Ponca City Medical Center Emergency Room on August 24, 2012 for back pain she argues was a result of the August 20, 2012 collision. At this visit, Plaintiff alleges that the doctor noted moderate spasms of the paracervical musculature

<sup>&</sup>lt;sup>15</sup> Doc. 74.

bilaterally. Dr. Trung Nguyen, a pain management physician, treated Plaintiff from September 6, 2012 through November 13, 2012. Plaintiff alleges that Dr. Nguyen believes her injuries were caused by the trauma from the wreck on August 20, 2012. Dr. Robert Remondino, a neurosurgeon, next treated Plaintiff from December 5, 2012 to the present. Plaintiff alleges that Dr. Remondino has stated that the symptoms of pain and disability and the treatments and surgeries were caused by the accident on August 20, 2012. She alleges suffering extreme permanent physical disability, pain and suffering, medical expenses, and damages.

Defendants contend that these injuries are not attributable to the accident due to the minor forces involved. Defendants allege that Plaintiff's injuries are attributable to generally poor health and a pre-existing degenerative condition. Thus, the main contention in the case is the causation of Plaintiff's injuries—whether related to the accident or preexisting.

## B. Cleve Bare, Dr. Christine Raasch, & Dr. David Smithson

Dr. Christine Raasch, Cleve Bare, P.E., and Dr. David Smithson are witnesses offered by Defendants to contradict that Plaintiff's injuries were sustained in the collision on August 20, 2012. Raasch and Bare are employees of Exponent Failure Analysis Associates ("Exponent") of Phoenix, Arizona. Smithson is a medical doctor.

Cleve Bare is a Senior Managing Engineer in Exponent's Vehicle Engineering practice, specializing in the analysis and reconstruction of motor vehicle crashes involving passenger cars, light and heavy trucks, and sport utility vehicles. He is a licensed Professional Engineer in the states of Michigan and Arizona. His educational background includes a Master of Science in Mechanical and Aerospace Engineering and a Bachelor of Science in Mechanical Engineering from the University of Missouri.

<sup>&</sup>lt;sup>16</sup> For purposes of clarity, Dr. Jerimy Cox, Dr. Amy Cox, Dr. Nguyen, and Dr. Remondino will be collectively referred to as the treating physicians.

He has more than 25 years of experience in the reconstruction of complex accident situations including high-speed collisions, pole/guard rail impacts, and post-collision fuel-fed fires. In the process of his analysis, he has conducted numerous physical demonstrations including high and low-speed full-scale crash tests, vehicle component and restraint system testing, and handling demonstrations. He has particular expertise in the investigation of vehicle rollover crashes, including assessments of vehicle handling, tire/component failure, rollover dynamics, and rollover stability. Bare further has an in-depth background in the analysis of computer programs and simulations used for vehicle dynamics, rollover simulation, and the reconstruction of crashes.

Bare provided a written report that quantified the speed involved in the collision. Bare explained that his opinions were based on inspection of the subject Lexus, the accident site, an exemplar truck and trailer, an exemplar Lexus, and his review of materials listed in Appendix A of his report, including pleadings, depositions, accident reports, and extensive additional materials from the record. He also relied on his training and experience in the fields of mechanical and automotive engineering, crashworthiness, and accident reconstruction; his knowledge of the principles of physics and engineering; books, publications, and treatises in the general fields; and background and review of testing performed by himself, Exponent and others. The methodologies utilized in the analyses of the reconstruction included the principles of Conservation of Momentum and Conservation of Energy. These techniques are generally accepted and commonly used in the accident reconstruction community.

Bare came to four conclusions in his report.<sup>17</sup> First, the Lexus was located behind the Kenworth tractor semitrailer in the eastbound left turn lane on South Avenue. Second, the

<sup>&</sup>lt;sup>17</sup> Doc. 94-7.

Kentworth began backing at a maximum speed of between 2 and 4.5 miles per hour and contacted the front of the Lexus. Third, the underride guard of the trailer overrode the bumper reinforcement of the Lexus and contacted the upper components of the front of the Lexus.

Fourth, during the impact, the Lexus experienced a maximum velocity change between 2 and 4 miles per hour with a principal direction of force from the 12:00 o'clock position.

Dr. Raasch is a Principal in Exponent's Biomechanics practice and is based in the Test and Engineering Center in Phoenix, Arizona. Her educational background includes a Doctorate in Mechanical Engineering with an emphasis in biomechanics from Stanford University. In addition, she has a Bachelor of Science and Master of Science in Mechanical Engineering. She has conducted extensive research in biomechanics, including work funded by the National Institutes of Health and the Veterans Administration.

Dr. Raasch specializes in the biomechanics of injury, vehicle occupant dynamics and kinematics, human injury tolerance and associated test criteria, occupant restraint systems, and accident reconstruction. Dr. Raasch's work involves analysis of traumatic injuries associated with motor vehicle and other accidents, computer simulation of occupant motions using software, and analysis of vehicle restraint system performance. She has conducted test projects including full-scale vehicle crash and sled testing, motorcycle testing, component testing, and specialized biomechanical studies such as helmet impact testing. Dr. Raasch also oversees Exponent's anthropomorphic test dummy ("ATD") laboratory, and provides analysis of ATD biofidelity issues and project-specific modification of ATDs. She has developed ATD calibration fixtures and procedures. Her research has focused on analysis of locomotion and reaching movements, and impaired control of movement after head injury or stroke. Her investigations have included the creation of complex computer models of muscle and skeletal

dynamics, use of optimization techniques, and experiments using motion analysis and electromyography.

Dr. Raasch provided a written report quantifying the forces that acted on Plaintiff during the collision. Dr. Raasch used Bare's analysis of the speed of the accident to quantify the forces. Dr. Raasch explained that her opinions were based on inspection of the police photographs, vehicle inspection photographs, accident site photographs, and her review of materials listed in Appendix A of her report, including pleadings, depositions, accident reports, and extensive additional materials from the record. In Appendix B, she listed 36 articles used in her report, which are comprised of peer-reviewed journal articles and peer-reviewed conference proceedings. She personally observed and inspected the accident scene, Plaintiff's vehicle, and an exemplar tractor-trailer.

Dr. Raasch came to six conclusions in her report. First, during the accident, Plaintiff's motion was arrested by light incidental contact with her seat belt, similar to that experienced in hard braking, and any rebound would have been limited by interaction with her padded seatback and head restraint. She further concluded that the subject accident provided no mechanism to produce pathological range of motion or forces on Plaintiff's spine beyond incidental contact forces, which were well below those necessary to cause injury beyond minor levels. Two, the forces acting on Plaintiff's spine during the accident were well below cervical spine injury tolerances and static voluntary tolerance levels, and comparable to those experienced in vigorous activities. Third, the forces acting on Plaintiff's lumbar spine during the accident were lower than those associated with normal everyday activities. Fourth, data from real-world frontal accidents with severity similar to or greater than that of the subject accident indicates an

<sup>&</sup>lt;sup>18</sup> Doc. 106-3.

extremely low risk of acute spine injury. Fifth, disc pathologies, such as herniations, have been shown in peer-reviewed scientific literature to be created by repetitive loading with force levels similar to those experienced in daily activities, in what is known in engineering terms as a fatigue process. Sixth, based on the above analysis, a causal biomechanical relationship between the subject accident and the injury complaints of Plaintiff, beyond transient strain, has not been established.

Dr. Smithson is a medical doctor who has been board certified by the American Board of Physical Medicine & Rehabilitation for more than 16 years. He is currently the Medical Director for the Inpatient Rehabilitation Unit for Saint Joseph Medical Center in Kansas City, Missouri. He researched the *Role of Flexion Versus Extension Exercises in Low Back Pain* for his thesis. He has performed research in spinal cord injury at the University of Washington that resulted in publication in a peer reviewed journal.

Dr. Smithson provided a written report with medical conclusions on Plaintiff's injuries.<sup>19</sup> His opinion was rendered based on his review of Plaintiff's medical records, his education, and his experience in the medical profession. His opinion is further evidenced based on pages of handwritten notes taken during the review of Plaintiff's records.<sup>20</sup> Dr. Smithson opined that Plaintiff violated the standard of care for a patient, which he concluded required that a patient visit the emergency department with a subsequent follow up with a primary care physician. He also concluded that the conditions that led to her surgery were explained by factors other than the accident, including degenerative arthritis that preceded the surgeries, obesity, and sleep problems.

<sup>&</sup>lt;sup>19</sup> Doc. 94-10.

<sup>&</sup>lt;sup>20</sup> Doc. 106-13.

# C. John Smith, Dr. Kevin Stallbaumer, & Dr. Michael Freeman

John Smith, Dr. Kevin Stallbaumer, and Dr. Michael Freeman are rebuttal witnesses offered by Plaintiff. Plaintiff has conceded that if the Court excludes Dr. Raasch, Bare, and Dr. Smithson, then Smith, Dr. Stallbaumer, and Dr. Freeman may also be excluded as irrelevant.

John Smith is an engineer who specializes in accident investigation and reconstruction. He has a Master of Science in biomechanical trauma and electrical engineering and a Bachelor of Science in geophysical engineering. Smith has been performing accident reconstruction for 38 years and accident biomechanics for 24 years. He has authored more than 19 articles and attended more than 8 courses, conferences, and seminars dealing with accident investigations, accident reconstruction, injury causation, and biomechanics.

Smith filed a rebuttal report to Bare and Dr. Raasch's report. Smith consulted the repair estimate for the Lexus, the reports from Bare and Dr. Raasch, the CARFAX and specification data for both vehicles, and the photographs and medical data from the accident. In his report, Smith first concluded that the data reviewed indicated that the bumper system on Plaintiff's Lexus and the underride bar on Defendants' trailer were involved in the accident. The damage distribution on Plaintiff's vehicle indicated the collision had angular accelerations associated with it. Due to Defendant Unruh not observing Plaintiff's vehicle behind him, on impact, his vehicle continued to engage with the Lexus and pushed the vehicle backward. The invoice for Plaintiff's vehicle was significantly higher than the estimate, which indicates that not all of the damage was identified by the estimate. The Lexus has a three-piece foam core bumper system, and damage to this type of bumper system cannot be assessed without removal of the bumper cover and absorber. The steel reinforcement on the bumper is damaged, although there appears

<sup>&</sup>lt;sup>21</sup> Doc. 105-7.

to be minimal damage to the cover. Based on this, Smith concluded that the damage to the Lexus must be considered not fully defined, and the photographs could not be assumed to be an accurate representation of the damage to the vehicle.

Smith further opined that the truck backed a total of 33 feet. The 33 feet is accounted for by the pre-impact separation of the vehicles and the movement of Plaintiff's vehicle as a result of the collision. Thus, the lower the pre-impact separation, the farther Plaintiff's vehicle was pushed. At the asserted maximum speed of three miles per hour, Defendant Unruh's vehicle would have been backing for more than seven seconds while the other driver attempted to turn. Smith concludes that under any reasonable scenario, the turning driver would have completed the turn before Defendant Unruh finished backing. He opines that there would be no reason for Defendant Unruh to have backed up because there was ample room for the truck to turn.

Smith opines that because Defendant Unruh never observed Plaintiff's vehicle preimpact, the only source as to initial separation is the occupants of Plaintiff's vehicle. Using a
distance of 18 to 20 feet and a reasonable acceleration rate, he estimates an impact speed of 7 to
11 miles per hour, which is consistent with the damage. If there had been no relevant damage to
the vehicle, he estimates the impact speed could have been in excess of seven miles per hour.

However, because of the presence of damage, it was likely a higher speed. As a result of the
impact, he concludes that Plaintiff's vehicle was rapidly accelerated rearward by at least seven
miles per hour and projected rearward. This estimate is not a maximum, but rather a reasonable
minimum.

Smith states that Plaintiff was subjected to forces much more severe than those normally encountered. Thus, the cervical injuries are correlated to the flexion procession, and Plaintiff was subjected to compression, tension, shearing, and differential loading. Also as a result of the

forces, the lumbar region was subjected to compression, tension, and shearing. He adds that there were several aggravating factors in the collision, including seatbelt use, the applied angular acceleration, her gender, and her potential disposition to injury.

Smith contradicts Bare and Dr. Raasch's reports in several ways. He offers that there is no minimum speed change value below which people are not injured, which contradicts Dr. Raasch's testimony about injury thresholds. Smith testified that Bare failed to consider the dimensions of the collision, did not inspect Defendant Unruh's truck, did not discuss the limitations of assessing damage through photographs, did not limit his consideration to minimum speeds, failed to properly use the IIHS test data, failed to consider contradictory testimony, and failed to perform a time distance calculation. Smith also testified that Dr. Raasch did not perform proper biomechanical analysis, provided that Plaintiff sustained a significant rebound from the seatbelt in contravention of the Law of Motion, used volunteer tests that did not match the specifics of the collision, used static testing to compare to a dynamic event, used tests that are not valid, and used comparison of daily activities to the accident in contravention of accepted engineering and scientific principles.

Dr. Freeman is a medical doctor offered to contradict Bare and Dr. Raasch's opinion that the accident could not have caused Plaintiff's injuries. Dr. Freeman is a doctor of medicine and an epidemiologist, and has been a crash reconstructionist since 1996. He has had an Accreditation Commission on Traffic Reconstruction ("ACTAR") accreditation since 2005. He has participated in the reconstruction of more than 2000 crashes. He has more than 30 scientific publications pertaining to injury biomechanics, including a book for the Society of Automotive Engineering. He was co-founder and co-editor in chief of the *Journal of Whiplash and Related Disorders*. He has published more than 170 scientific papers, abstracts, book chapters and books

on topics involved in the cause of injuries in vehicle crashes. He serves as an Affiliate Professor of Epidemiology and Psychiatry at Oregon Health and Science University School of Medicine, in the Departments of Public Health and Preventive Medicine and Psychiatry.

Dr. Freeman filed a rebuttal report to Bare and Raasch's findings in this case.<sup>22</sup> Dr. Freeman concluded that Dr. Raasch's implication that Plaintiff's collision could not have caused her musculoskeletal injuries, including symptomatic spinal disk injuries in her cervical and lumbar spines, because the forces in the collision were less than those of ordinary and benign activities is not reliable, relevant, or validated methodology for assessing injury causation. Further, even if Bare's claimed delta V of 2 to 4 miles per hour as a maximum for the collision were accurate, Dr. Freeman concluded that such a collision could produce a significant occupant motion that in no way resembles any of the comparisons to daily activities used by Dr. Raasch. He concluded that such a comparison is inappropriate and highly misleading as well as irrelevant to any disputed issues in the case. Dr. Freeman critiqued a number of the studies Dr. Raasch used in support of her opinion and her use of the computer program 3DSSPP. Ultimately, Dr. Freeman stated that Dr. Raasch's opinions concerning the subject crash shed no light on any issue of injury risk or injury causation, and give the erroneous impression that it is impossible that Plaintiff was injured in the crash. Dr. Freeman instead concluded that Plaintiff's injuries were caused by the accident given the strong correlation between the onset of the injuries and the timing of the accident. He suggests that there were aggravating factors present during the accident that made Plaintiff more susceptible to injury.

Dr. Freeman's findings were based on review of Plaintiff's medical records, the accident reports, and the accident photographs. He also relied on literature that states that the severity of

<sup>&</sup>lt;sup>22</sup> Doc. 104-7.

the crash is not a determining factor for whether a person is injured in a particular collision. He also reviewed Dr. Raasch and Bare's reports that were submitted in this case as well as many of the articles that Dr. Raasch and Bare used.

Dr. Stallbaumer is a doctor of chiropractic offered to contradict Bare and Dr. Raasch's opinions that the accident could not have caused Plaintiff's injuries. Dr. Stallbaumer has been a licensed chiropractor in Kansas since 2009. He has several post-graduate courses and certifications related to low-speed impact injuries. In 2014, he obtained Advance Certification from the Spine Research Institute of San Diego. In 2013, he obtained an Advanced Certification in Whiplash and Brain Injury Traumatology from the Spine Research Institute of San Diego, California. He has 15 hours of training in accident reconstruction. He has taken other courses in accident reconstruction other than the Spine Research Institute.

Dr. Stallbaumer filed a rebuttal report to Dr. Raasch and Bare's findings in this case. <sup>23</sup> Dr. Stallbaumer concluded that the opinions of Bare, Dr. Smithson and Dr. Raasch are inaccurate and don't stand up to scrutiny of current medical or biomechanical research. The injuries that Plaintiff sustained in the crash are consistent with the mechanism of the collision and sufficient forces were present to cause those injuries. He concluded Plaintiff is a female, with a history of a cervical acceleration/deceleration ("CAD") injury, who was riding in the front driver's seat and was wearing her seatbelt in a crash with a speed less than 10 miles per hour. All of these are risk factors that increase the likelihood of an injury in a collision. He further concluded that the fact that the bullet vehicle was a loaded 18 wheeler significantly increased the forces present in the collision and thus the likelihood of injury. He opined that the accident on August 20, 2012 caused the injuries described in the subsequent medical records he reviewed. Thus, the presence

<sup>&</sup>lt;sup>23</sup> Doc. 103-7.

of muscle spasms immediately after the accident, as documented by all of her providers, is consistent with acute disc herniations.

Dr. Stallbaumer's conclusion was based off his clinical experience as well as current medical and automotive research including the research of Arthur Croft and his crash testing documented in the video and research papers *Man Versus Machines* at the Spine Research Institute of San Diego. He also reviewed Plaintiff's medical records. He reviewed the reports of Dr. Smithson, Dr. Raasch, Bare, Dr. Remondino, Dr. Nguyen, Dr. Jerimy Cox, and Dr. Amy Cox. He reviewed the accident reports and photos.

### III. Discussion

Before discussing the issue of exclusion of the individual experts in this case, the Court must analyze the threshold matter of whether an independent medical evaluation is required in this case. Plaintiff argues that the Court should not consider Defendants' experts because Plaintiff could have submitted to an independent medical evaluation, but instead Defendants chose to use accident reconstruction experts. Plaintiff does not cite nor is the Court aware of law requiring that Defendants conduct an independent medical evaluation in order to offer expert testimony. It is a strategic decision by Defendants whether to conduct an independent medical evaluation as opposed to retaining accident reconstruction experts. Thus, this argument is rejected.

Another threshold issue is whether Plaintiff's arguments opposing Defendants' experts' admission are technical objections that have been waived. Defendants argue the Court should summarily deny Plaintiff's motion to exclude their experts to the extent Plaintiff raises technical objections to the sufficiency of Defendants' experts' reports under Fed. R. Civ. P. 26(a)(2)(B)

because these objections are now untimely. Fed. R. Civ. P. 26(a)(2)(B) requires that expert reports contain:

(1) a complete statement of all opinions the witness will express and the basis and reason for them; (2) the facts or data considered by the witness in forming them; (3) any exhibits that will be used to summarize or support them; (4) the witness's qualifications, including a list of all publications authored in the previous 10 years; (5) a list of all other cases in which, during the previous 4 years, the witness testified as an expert at trial or by deposition; and (6) a statement of the compensation to be paid for the study and testimony in the case.

Pursuant to the Scheduling Order, the parties were required to serve any objections to the expert witness reports (other than objections made pursuant to Fed. R. Evid. 702 and *Daubert*) within 14 days after the service of expert disclosures. Defendants served their disclosure in September 2015, <sup>24</sup> and Plaintiff filed this motion in August 2016. Thus, if these objections did fall under Fed. R. Civ. P. 26(a)(2)(B), these allegedly technical objections would be untimely.

The Court finds that Plaintiff's motion to exclude Defendants' experts are not technical objections made pursuant to Fed. R. Civ. P. 26(a)(2)(B), but rather are made pursuant to Fed. R. Evid. 702 and *Daubert*. In *McCoy v. Whirpool Corp.*, 25 this Court addressed the difference between a substantive attack on the content of an expert report under *Daubert* and an attack on the facial sufficiency of an expert report under Rule 26(a)(2)(B). The Court held that objections to an expert report on the basis that it does not spell out in sufficient detail the facts and scientific methodologies which the expert relied on goes to the form of the expert report and stops short of advancing an argument that the expert is not qualified. 26

Here, Plaintiff advances arguments that go to the substance of whether Defendants' experts are qualified under Fed. R. Evid. 702 and *Daubert*. Plaintiff's arguments go beyond

<sup>&</sup>lt;sup>24</sup> Doc. 62.

<sup>&</sup>lt;sup>25</sup> 214 F.R.D. 646 (D. Kan. 2003).

<sup>&</sup>lt;sup>26</sup> *Id.* at 649.

simply stating that the expert reports lack sufficient detail and scientific methodology. Rather, speaking generally of the testimony Defendants' experts offer, Plaintiff argues that Bare's testimony is erroneous in its calculation of the delta V in this case. She argues that the methodology used was erroneous. Plaintiff argues that Dr. Raasch's testimony uses invalid methodology, including publications that are not generally accepted in the biomechanical community. She argues that Smith's testimony relating to the patient duty of care is not reliable. These grounds are colorable arguments that these experts are not qualified to testify as opposed to mere technical objections. Thus, the Court proceeds to consider whether the retained experts are qualified under the standards espoused in Fed. R. Evid. 702 and *Daubert*.

#### A. Cleve Bare

Based on Bare's curriculum vitae, the Court is satisfied that he is qualified as an expert by knowledge, skill, experience, training or education as required by Rule 702.<sup>27</sup> Bare's testimony merely relates to the physics of the accident, not the medical causation of the injury. With respect to accident reconstruction, Bare is a licensed Professional Engineer with a Master of Science in Mechanical and Aerospace Engineering with more than 25 years of experience. Bare has reconstructed thousands of accidents. He has particular expertise in the investigation of vehicle rollover crashes including assessments of vehicle handling, tire/component failure, rollover dynamics, and rollover stability. Bare further has an in-depth background in the analysis of computer programs and simulations used for vehicle dynamics, rollover simulation, and the reconstruction of crashes. Under the circumstances, Bare possesses sufficient training and experience to qualify as an expert on accident reconstruction and the physics of an accident. It is

<sup>&</sup>lt;sup>27</sup> The Court notes that Bare's testimony was not challenged on qualifications grounds.

important to note that Bare does not offer opinions on the causation of Plaintiff's injuries as he only opines about the delta V for the accident.

The Court also finds that Bare's proferred testimony is highly relevant. In order to prove her negligence claim, Plaintiff must show that the collision caused the alleged injuries. The parties agree that causation is in issue. Bare's testimony goes to the speed at issue in the collision, which was used by Dr. Raasch to determine the force exerted on the body and whether it could have caused the injuries alleged. Thus, this will assist the trier of fact in determining the issue of causation, and it is relevant testimony.

The reliability of Bare's testimony is the issue Plaintiff challenges. Although unclearly stated, Plaintiff's brief can be read to challenge Bare's testimony as based on insufficient facts or data. The Court finds that Bare's testimony is based on sufficient facts or data under Rule 702. In coming to the conclusion concerning the delta V for Plaintiff's Lexus, Bare explained that his opinions were based on inspection of the subject Lexus, the accident site, an exemplar truck and trailer, an exemplar Lexus, and his review of materials listed in Appendix A of his report, including pleadings, depositions, accident reports, and extensive additional materials from the record. He also relied on his training and experience in the fields of mechanical and automotive engineering, crashworthiness, and accident reconstruction; his knowledge of the principles of physics and engineering; books, publications, and treatises in the general fields; and background and review of testing performed by himself, Exponent and others. The methodologies utilized in the analyses of the reconstruction included the principles of Conservation of Momentum and Conservation of Energy. These are generally accepted methods for analysis in the scientific community, and the Court accepts them as reliable.

Plaintiff argues that Bare's assertion, that a 2 to 4 mile per hour delta V is below the range of possible delta V values, is erroneous because there is sufficient information from which to draw the conclusion that the speed change exceeded that. Plaintiff asserts that Bare compared photos and damage estimates from the crash to an Insurance Institute for Highway Safety ("IIHS") crash test to determine that this crash was 50% less forceful than the IIHS crash test, but it is unclear how he made such an assertion. However, upon reading Bare's report and affidavit, it is clear that this conclusion is based on consideration of the bumper interaction during the crash test and the energy required to produce the damage present on the subject vehicle. The Court rejects Plaintiff's argument that this conclusion was based on insufficient methods because Bare has demonstrated a clear method for such a determination. Arguments about the sufficiency of this method go to the weight of the evidence, not the admissibility. Plaintiff's rebuttal witnesses, including Smith, are free to contradict Bare's findings. Bare is also free to be cross examined on such a method.

In conclusion, Bare's testimony is properly admitted under the standards espoused in *Daubert* and Rule 702.

#### B. Dr. Christine Raasch

Based on Dr. Raasch's curriculum vitae, the Court is satisfied that she is qualified as an expert by knowledge, skill, experience, training or education.<sup>28</sup> Dr. Raasch's testimony concerns the forces exerted on Plaintiff's body during the accident and whether this force could cause her injuries. Raasch is a Principal in Exponent's Biomechanics practice and is based in the Test and Engineering Center in Phoenix, Arizona. Her educational background includes a Doctorate in Mechanical Engineering with an emphasis in biomechanics from Stanford

<sup>&</sup>lt;sup>28</sup> The Court notes that Dr. Raasch's testimony was not challenged on qualifications grounds.

University. In addition, she has a Bachelor of Science and Master of Science in Mechanical Engineering. She has conducted extensive research in biomechanics, including work funded by the National Institutes of Health and the Veterans Administration. She has received education and training specific to issues of injury causation in humans resulting from accidents, and she has 17 years of experience consulting on biomechanical issues. Therefore, for purposes of her testimony as it relates to forces involved in the accident and the effect on the human body, Dr. Raasch is qualified to give such testimony.

The Court also finds that Dr. Raasch's testimony is highly relevant. In order to prove her negligence claim, Plaintiff must show that the collision caused the alleged damages. The parties agree that the causation of Plaintiff's injury will be a key issue at trial. Dr. Raasch's opinion goes to the issue of causation of damages as she opines that the forces of the wreck could not have caused Plaintiff's injuries. Therefore, this will likely assist the trier of fact in determining the elements of Plaintiff's claims.

The crux of Plaintiff's motion to exclude Dr. Raasch challenges the reliability of her testimony. Plaintiff argues that Dr. Raasch's opinion is speculative, junk science, and absurd. The Court disagrees. Dr. Raasch's opinion is based on sufficient facts and data, and is the product of reliable principles and methods that were reliably applied to the facts of the case. Dr. Raasch used Bare's analysis of the speed of the accident to quantify the forces. Dr. Raasch based her conclusions on inspection of the police photographs, vehicle inspection photographs, accident site photographs, and her review of materials listed in Appendix A of her report, including pleadings, depositions, accident reports, and extensive additional materials from the record. In Appendix B, she listed 36 articles used to support her report, which are comprised of

peer-reviewed journal articles and peer-reviewed conference proceedings. She personally observed and inspected the accident scene, Plaintiff's vehicle, and an exemplar tractor-trailer.

The Court finds that Dr. Raasch's opinions were based on "methods and procedures" rather than subjective belief or unsupported speculation. Dr. Raasch's report and affidavit identify scientific support for her analysis. Her report included citations to peer-reviewed publications on biomechanics, as well as studies of human tissue mechanics and tolerance to forces. She used published biomechanical data from crash testing using volunteers, instrumented dummies, and cadavers. She evaluated using the laws of physics, principles of occupant kinematics and human tolerance. Her opinion is based on application of the scientific method. She used biomechanical metrics to compare the subject crash to typical, non-acutely injurious activities, which she stated is scientifically sound and tested, peer-reviewed, and universally accepted in the biomechanical engineering community. Thus, this Court concludes that Dr. Raasch's conclusions provide a formulaic, repeatable, sufficiently reliable method of analyzing the stress placed on the body during the subject accident.

Plaintiff makes a number of specific objections to the reliability of Dr. Raasch's findings. Plaintiff specifically objects to Dr. Raasch's use of studies with human volunteers that indicate that the collision could not have caused significant injury.<sup>30</sup> Plaintiff alleges that human

Doc. 94-8 at 16.

<sup>&</sup>lt;sup>29</sup> Mitchell v. Gencorp Inc., 165 F.3d 778, 780 (10th Cir. 1999).

<sup>&</sup>lt;sup>30</sup> Dr. Raasch's report states in regards to the published volunteer crash tests that:

Published volunteer exposures to low-speed frontal crash tests have been conducted to study human response during low-energy collisions. These studies have made use of human volunteers in order to evaluate such issues as occupant kinematics, effectiveness of restraints, and injury potential. Results of these studies are consistent with and supportive of the biomechanical analysis presented above. A review of published research shows multiple studies of volunteer exposures to frontal impacts, most of which were of greater severity than the collision experienced by Ms. Delgado (e.g., McConnell *et al.* 1993, Siegmund and Williamson 1993, Matsushita *et al.* 1994, Bailey *et al.* 1995, Nielsen *et al.* 1997, Goodwin *et al.* 1999). While the vast majority of volunteers had no complaints after testing, some volunteer complained of, at most, transient soreness and headache.

volunteer studies cannot test tolerance levels because the studies use healthy, medically screened, all-male volunteers. Plaintiff states that peer-reviewed authoritative automotive engineering and biomechanical literature specifically state that volunteer crash tests are not an appropriate basis for determination of real-world injury thresholds. Plaintiff also objects to Dr. Raasch's use of the Mertz and Patrick articles, which used two embalmed cadavers subject to crash pulses. Dr. Freeman, one of Plaintiff's rebuttal experts, states in his report that:

The comparison between a real world crash and the results of volunteer crash tests as a means of assessing injury causation is a practice that has been rejected by the relevant scientific and automotive engineering community as improper and unreliable. I have written and had published a number of peer reviewed papers as well as a book on human volunteer crash testing, and can state as a certainty that it is well established in the scientific literature that human volunteer testing (mostly crash testing) is not a valid basis for any determination of injury risk, probability, or cause in real world crashes.<sup>31</sup>

Further, Dr. Freeman offers that the Society of Automotive Engineers ("SAE") publication written by Moss and colleagues explains that "true tolerance levels cannot be determined with volunteers since they cannot be tested into the injury range."

The Court rejects Plaintiff's argument that because Dr. Raasch used volunteer crash tests and embalmed cadaver tests her opinion is unreliable. There is no requirement that the studies used are identical to the circumstances of this collision.<sup>33</sup> The Court recognizes that human crash volunteer studies and embalmed cadaver studies are somewhat different than the situation in this case. Unlike the typical human crash test volunteer, Plaintiff is obese and suffers from various health issues. Plaintiff also is unlike a human volunteer in that the impact of the truck was

<sup>&</sup>lt;sup>31</sup> Doc. 94-12 at 15.

<sup>&</sup>lt;sup>32</sup> Moss R., et al, *Injury Symptom Risk Curves for Occupants Involved in Rear End Low Speed Motor Vehicle Collisions*, SAE Technical Papers (2005).

 $<sup>^{33}</sup>$  See Cooper ex rel. Posey v. Old Dominion Freight Line, Inc., No. 09-2441, 2011 WL 1327778, at \*8 (D. Kan. Apr. 6, 2011).

unanticipated. These issues relate to the weight of the evidence, and Plaintiff is free to cross examine Dr. Raasch on these matters as well as rebut the claims with its own experts.

Even assuming human volunteer crash and embalmed cadaver studies may not be generally accepted in the scientific community, this is not the standard for reliability.<sup>34</sup> Instead, Defendants must show that the method employed in reaching the conclusion is scientifically sound and that the opinion is based on facts that satisfy Rule 702's reliability requirements.<sup>35</sup> Dr. Raasch has provided an affidavit stating that the human volunteer crash test studies and the embalmed cadaver studies are peer-reviewed journal articles, accepted in the engineering and scientific communities, and use the scientific method.<sup>36</sup> Further, human volunteer crash studies are not the only studies used because Dr. Raasch also used a number of published studies of realworld accidents and instrumented dummies that conclude that the risk of even minor injuries was low in low-severity frontal collisions. This appears to be a dispute between Plaintiff's experts Dr. Stallbaumer and Dr. Freeman and Defendants' expert Dr. Raasch about the studies of embalmed cadavers and volunteer crash test participants, which is best resolved by the jury through cross examination and rebuttal witnesses. Also, of particular importance, Dr. Raasch did not use volunteer crash tests as the basis for analysis of accident loading or to derive any threshold for injury, but instead the outcome of the volunteer studies were used to show consistency and support for her analysis.

Further, Plaintiff objected to Dr. Raasch's use of the computer program 3DSSPP to compare forces on Plaintiff's lower back to ordinary and benign activities like walking. Plaintiff

<sup>&</sup>lt;sup>34</sup> *Mitchell v. Gencorp Inc.*, 165 F.3d 778, 781 (10th Cir. 1999) (holding that the proponent of the expert "need not prove that the expert is undisputably correct or that the expert's theory is 'generally accepted' in the scientific community" in order to establish the admissibility of the expert's opinion under Rule 702).

<sup>&</sup>lt;sup>35</sup> *Id.* at 781–82.

<sup>&</sup>lt;sup>36</sup> Doc. 106-14 ¶10.

alleges that the use of this computer tool is contradicted by the instructions, and 3DSSPP is meant to only be used to examine forces on a person when he or she is not moving. The Court rejects this argument. Dr. Raasch provided an affidavit stating that comparison of subject accidents to typical, non-acutely injurious activities is scientifically sound and tested, peerreviewed, and universally accepted in the biomechanical engineering community. <sup>37</sup> Dr. Raasch's report states that the program was used to analyze lumbar spine loads sustained in activities of daily living, such as benign tasks or moderate-speed movements, for a person of Plaintiff's weight and height. This is within the proper use of the software. The loading figure for the subject accident was based on crash tests conducted by Exponent and the federal government using test dummies or ATDs. There is no evidence that the loading figure was determined using the 3DSSPP program in contravention of the instructions. Again, this argument goes to the weight of the evidence, not the admissibility. This finding is consistent with other district courts allowing comparison of the subject collision to force associated with other human activities.<sup>38</sup> Plaintiff is free to cross examine Dr. Raasch on use of 3DSSPP for static movements, like box lifting, bending over, and walking, and how the accident herein is not comparable given the acceleration.

Plaintiff argues that injury thresholds as a bright line below which no injury can occur is not accepted in the scientific community. Plaintiff offers an SAE publication (J885) that summarizes human injury threshold data for use in government crash testing:

 $<sup>^{37}</sup>$  Dr. Raasch cited twelve articles where comparative biomechanics research between incidents and daily activities is used. Doc. 106-14 ¶11. The only citation offered by Plaintiff that this is "junk science" is a reference article written by Plaintiff's rebuttal witness Dr. Freeman for *Spine Magazine*. Doc. 94 at 13.

<sup>&</sup>lt;sup>38</sup> See e.g, Croskey v. Estate of Cheyney, No. 09-44, 2011 WL 3417098, at \*1 (D. Mont. Aug. 4, 2011) ("Assuming his qualifications can be established at trial, it would be within Mr. Stearns' area of expertise to opine as to the amount of force involved in the collision. It would likewise be within the scope of his knowledge to compare the amount of force involved in the collision to the force associated with other human activities.").

Such [tolerance] specifications are beyond the state-of-the-art in biomechanics except perhaps for a few academic situations. There are several difficulties which prevent a ready establishment of human tolerance levels. First, there are differences in judgment as to the specific degree of injury severity that should serve as the tolerance level. Second, large differences exist in the tolerances of different individuals. It is not unusual for bone fracture tests on a sample of adult cadavers to show a three-to-one load variation. Presumably, variations of at least this magnitude exist in the living population. Finally, most tolerance levels are sensitive to modest changes in the direction, shape, and stiffness of the loading source. The above considerations indicate that complete and precise definitions of human tolerance levels will require large amounts of data based on controlled statistical samples. Only in this way can the influence of age, size, sex, and weight be comprehensively assessed and only in this way can mean loads and statistical measures of scatter be linked to specific tolerance levels.<sup>39</sup>

The Court rejects this argument. This statement does not reflect that injury thresholds are not generally accepted in the scientific community. Instead, it establishes some of the considerations when applying injury thresholds. Also, Dr. Raasch does not offer that collisions with a certain severity make injury impossible in this collision. Rather, she uses data from real-world front crashes to conclude that severity similar to or greater than this collision indicates an extremely low risk of acute spinal injury in the population. These are scientific and peer-reviewed studies of the population at large, which Dr. Raasch uses to conclude that there was an extremely low risk of acute spinal injury given the forces of similar collisions. Plaintiff is free to cross examine that there are particulars to this accident that make injury thresholds inapplicable to this collision.

Plaintiff argues that Dr. Raasch's testimony is not reliable because it did not address the critical elements of causal analysis for significant spinal or other musculoskeletal injury.

Plaintiff offers that the three fundamental elements of injury causation are:

- 1. Whether the injury mechanism had the potential to cause the injury in question;
- 2. The degree of temporal proximity between the injury mechanism and the onset of the symptoms reasonably indicating the presence of the injury; and

<sup>&</sup>lt;sup>39</sup> Doc. 94-12 at 9.

3. Whether there is a more likely alternative explanation for the occurrence of the symptoms at the same point in time. 40

Plaintiff argues that Dr. Raasch's methods do not credibly address the second and third element of causal analysis and therefore, can serve no purpose in assessing the cause of Plaintiff's injuries. Plaintiff takes particular issue with Dr. Raasch providing, as to the third element, that the only alternative explanation for the onset of symptoms within hours of the collision is pure coincidence. The Court rejects Plaintiff's argument that Dr. Raasch did not follow this method. Dr. Raasch provided that the collision did not have the potential to cause the injury in question given the force of the accident. Next, Dr. Raasch provided that there was a degree of temporal proximity between the crash and the onset of the symptoms that could be explained by the normal loading events experienced prior to and after the subject accident, which produced the thousands of cycles of fatigue loading leading to degeneration of Plaintiff's spine. Lastly, the Court rejects the argument that Dr. Raasch did not provide a likely alternative explanation for the onset of symptoms within hours of the collision. Dr. Raasch's report provides that Plaintiff's injuries are likely related to degeneration or repetitive strain injury rather than the subject crash.

The Court recognizes that many other federal courts, including this Court,<sup>41</sup> have determined that biomechanical engineers and mechanical engineers are qualified to testify about the forces generated by accidents and the probable effects of such forces on the human body, but not about whether the particular accident at issue is the cause of Plaintiff's injuries.<sup>42</sup> Dr.

<sup>&</sup>lt;sup>40</sup> Etherton v. Owners Ins. Co., 829 F.3d 1209, 1220–21 (10th Cir. 2016).

 $<sup>^{41}</sup>$  Cooper ex rel. Posey v. Old Dominion Freight Line, Inc., No. 09-2441, 2011 WL 1327778, at \*8 (D. Kan. Apr. 6, 2011).

<sup>&</sup>lt;sup>42</sup> See, e.g., Laski v. Bellwood, No. 99-1063, 2000 WL 712502, at \*3–4 (6th Cir. May 25, 2000); Manlapig v. Jupiter, No. 14-235, 2016 WL 916425, at \*3 (S.D.N.Y. Mar. 10, 2016); Layssard v. United States, No. 06-0352, 2007 WL 4144936, at \*3 (W.D. La. Nov. 20, 2007); Bowers v. Norfolk S. Corp., No. 06-CV-98, 2007 WL 2187396, at \*32 (M.D. Ga. July 26, 2007); Wilcox v. CSX Trans., Inc., No. 05-107, 2007 WL 1576708, at \*13 (N.D. Ind. May 30, 2007); Demar v. D.L. Peterson Tr., No. 05-103, 2006 WL 2987314, at \*5 (N.D. N.Y. Oct. 13, 2006); Hernandez v. City of Albuquerque, No. 02-333, 2004 WL 5520000, at \*6—9 (D. N.M. Jan. 29, 2004).

Raasch, as a biomechanical engineer, is qualified to give general opinions about causation, not medical opinions. She may determine injury causation forces in general and can tell how a hypothetical person's body will respond, but she is not qualified to render medical opinions regarding the precise cause of a specific injury. Thus, Dr. Raasch is qualified to testify on injury mechanisms. She is not qualified to diagnose injuries, but she may interpret the diagnoses of Plaintiff's treating physicians in order to opine on the likely mechanisms of Plaintiff's injuries.<sup>43</sup>

In conclusion, Dr. Raasch's testimony is properly admitted under the standards espoused in *Daubert* and Rule 702. She, however, will be limited to the likely mechanisms of Plaintiff's injuries, not the precise diagnoses of the injury.

## C. Dr. David Smithson

Based on Dr. Smithson's curriculum vitae, the Court is satisfied that he is qualified as an expert by knowledge, skill, experience, training or education to render medical opinions regarding other factors that may have caused Plaintiff's injuries. Dr. Smithson is a medical doctor who has been board certified by the American Board of Physical Medicine & Rehabilitation for more than 16 years. He is currently the Medical Director for the Inpatient Rehabilitation Unit for Saint Joseph Medical Center in Kansas City, Missouri. He researched the *Role of Flexion Versus Extension Exercises in Low Back Pain* for his thesis. He has performed research in spinal cord injury at the University of Washington that resulted in publication in a peer-reviewed journal. Thus, for purposes of offering an opinion on medical causation, Dr. Smithson is qualified.

 $^{43}$  See Pike v. Premier Transp. & Warehousing, Inc., No. 13-8835, 2016 WL 6599940, at \*3(N.D. III. Nov. 8, 2016).

<sup>&</sup>lt;sup>44</sup> The Court notes that Dr. Smithson's testimony was not challenged on qualifications grounds.

The Court, however, finds Dr. Smithson is not qualified to testify about a patient duty of care. While he may be qualified to testify that it is normally appropriate for patients to first consult the emergency room, he may not allege that this is the patient duty of care. Under Fed. R. Evid. 702, an expert may not testify as to legal conclusions. The duty of care is a legal conclusion to which Dr. Smithson's medical qualifications do not apply, so he may not testify as to it.

Dr. Smithson offers two opinions—(1) Plaintiff violated her patient duty of care and (2) Plaintiff's injuries could have been caused by other factors including degenerative arthritis, obesity, and sleep problems. Plaintiff objected to Dr. Smithson's testimony regarding seeking chiropractic care before going to the emergency room in violation of the "patient standard of care" under relevancy grounds. Defendants made absolutely no argument in response to the relevancy of the opinion that Plaintiff violated the standard of care. Defendants presented an affirmative defense of comparative negligence in its answer. This may be relevant to comparative negligence, but as the Court found above, Dr. Smithson is not qualified to testify as to the patient duty of care. Dr. Smithson's testimony that Plaintiff's injuries may be attributable to other risk factors including obesity, degenerative arthritis, and sleep problems is relevant to the issue of causation and whether the injuries are from a source other than the subject crash.

Dr. Smithson's opinion regarding other factors for injury causation is based on sufficient facts and data, and is the product of reliable principles and methods that were reliably applied to the facts of the case. Dr. Smithson provided a written report concluding the injuries that led to Plaintiff's surgery could be explained by other factors, like arthritis, obesity, and sleep

<sup>&</sup>lt;sup>45</sup> United States v. Schneider, 704 F.3d 1287, 1293 (10th Cir. 2013) (holding that experts may refer to the law in expressing their opinions, but there is a concern when an expert uses specialized legal terms and usurps the jury's function).

problems.<sup>46</sup> His opinion was rendered based on his review of Plaintiff's medical records, his education, and his experience in the medical profession. His opinion is further evidenced based on pages of handwritten notes taken during the review of Plaintiff's records.<sup>47</sup>

In conclusion, Dr. Smithson is properly admitted under the standards espoused in *Daubert* and Rule 702. He may testify about how the injuries herein complained of may be attributable to other causes like degenerative arthritis, obesity, and sleep problems. He may not testify as to the patient duty of care and whether Plaintiff violated it.

## D. John Smith

Based on Smith's curriculum vitae, the Court is satisfied that he is qualified as an expert by knowledge, skill, experience, training or education. He has a Master of Science in biomechanical trauma accident investigation and reconstruction. He has a Master of Science in biomechanical trauma and electrical engineering and a Bachelor of Science in geophysical engineering. Smith has been performing accident reconstruction for 38 years and accident biomechanics for 24 years. He has authored more than 19 articles and attended more than 8 courses, conferences, and seminars dealing with accident investigations, accident reconstruction, injury causation, and biomechanics. Smith is offering testimony to contradict Bare's conclusion about the speed at which the accident occurred and Raasch's conclusions relating to the forces on Plaintiff's body, so he is qualified to testify as to both engineering and biomechanics.

The Court finds that Smith's testimony is relevant to the case at hand. Defendants object that Smith's testimony is cumulative and redundant of the primary expert testimony, including Dr. Cox and the other treating physicians, and the experts offered on rebuttal, including Dr.

<sup>47</sup> Doc. 106-13.

<sup>&</sup>lt;sup>46</sup> Doc. 94-10.

<sup>&</sup>lt;sup>48</sup> The Court notes that Smith's testimony was not challenged on qualifications grounds.

Freeman and Dr. Stallbaumer. The Court finds that Smith's testimony is different than the treating physicians. He opines that the speed at which the accident occurred was greater than the estimate of Bare. Also, he opines that the forces acting on the body were greater than Dr. Raasch's assessment, and there were several aggravating factors associated with the accident, including seatbelt use, angular acceleration, and gender that contributed to the injuries. This is in no way duplicative of the treating physicians who opine about the diagnoses of Plaintiff's injuries. Further, the Court finds that Smith's testimony is not duplicative of the other rebuttal experts. Smith is the only expert among Dr. Stallbaumer and Dr. Freeman with engineering and biomechanical training. He offers his opinion from this perspective and applies engineering and biomechanical principles. Therefore, the Court finds his opinion relevant and not unduly cumulative.

The Court finds that Smith's testimony is reliable. Smith's reasoning and methodology for his testimony is scientifically valid. To arrive at his conclusions, Smith examined the collision report, photographs of the scene, CARFAX data for the vehicles, repair estimates, deposition testimony, interrogatories, discovery requests, requests for admissions, the Complaint and Answer, Dr. Raasch and Bare's expert reports, and the medical reports of the treating physicians. He relied on his education, experience, and training. In addition, he employed vehicle specification data and information regarding vehicles of similar design and manufacture. To determine velocities, forces, and accelerations, he used Newton's laws of motion, standard equations of motion, conservation of momentum, the principle of restitution, vehicle masses, the principles of thermodynamics, and appropriate friction values. Smith cited seventy-one articles in support of his testimony.

His testimony meets the factors associated with reliability. Smith provided an affidavit<sup>49</sup> stating that his methodology has been tested and is based on the applicable engineering and scientific principles, including the laws of physics. The laws of physics were applied to the specific facts and empirical evidence of the case. He testified that his methodology was based on the laws of physics and accepted techniques that have been subjected to peer review. Both the references he cited to as well as his papers on the subject have been peer reviewed. With regard to the known rate of error, the methodology has an effective rate of zero. He completed a reconstruction and biomechanical analysis to identify errors in Bare and Dr. Raasch's reports.

Defendants object at length to Smith's testimony because he based his conclusions on a misunderstanding of the repair information and damage estimates. Smith's report and deposition testimony opine that there was damage to the vehicle that could not be assessed by simply looking at the photos of Plaintiff's vehicle. Smith makes this assertion based on a difference in cost for the estimate of the damage to the car and the actual cost of the repair (\$5,100 estimate, \$6,503 cost). Based on this information, Smith concludes that the three-piece foam core bumper system on the Lexus could not be assessed fully without removal of the bumper cover and absorber. Thus, the damage to the vehicle was not fully defined and photographs of the vehicle are an inaccurate representation of the severity of damage to the vehicle. Specifically, Smith objects to Bare's "fail[ure] to address the limitations of the photographs and the estimate" when calculating the delta V in this case. Defendants argue Smith's testimony is unreliable and does not stand up to intellectual rigor because an assessment of the final invoice shows that the \$1,403 cost estimate discrepancy is explained by the Lexus needing specialized headlights, not

<sup>&</sup>lt;sup>49</sup> Doc. 105-9.

unassessed damage.<sup>50</sup> Defendants request the Court exclude any reference to the damage differentiation in the estimate and final invoice and in the alternative, exclude the entirety of the testimony as this unreliable conclusion is pervasive throughout the testimony.

The Court does not find Smith's testimony is unreliable on this basis. Defendants are correct that "under *Daubert*, any step that renders the analysis unreliable . . . renders the expert's testimony inadmissible. This is true whether the step completely changes a reliable methodology or merely misapplies that methodology."<sup>51</sup> This is inapplicable to the situation before this Court. Upon assessment of the repair estimate and the final invoice price, there was increase of more than \$1,290 related to the cost of the headlamps as opposed to undocumented damage. The remaining \$113 discrepancy in the final invoice relates to sales tax, not undocumented damage.<sup>52</sup> Smith testified that he had not reviewed the final invoice when he made such a conclusion. Thus, a conclusion that there is undocumented damage is based on unreliable methodology as there is a "gap" between Smith's opinion and the underlying data.<sup>53</sup> However, this does not make the entirety of the testimony unreliable. By the Court's reading of the report, this conclusion only impacts the conclusion that the photographs cannot be assumed to be an accurate representation of the damage to the vehicle and Bare's reliance on those photographs. The undocumented damage evidence is not part of the methodology used for any other conclusion and is not a step that renders any other part of his expert opinion unreliable. This in no way renders the rest of his conclusions or methodology as unreliable. While a reference to

<sup>&</sup>lt;sup>50</sup> Doc. 96-5 at 3, 9.

<sup>&</sup>lt;sup>51</sup> Goebel v. Denver & Rio Grande W. R.R. Co., 346 F.3d 987, 992 (10th Cir. 2003).

<sup>&</sup>lt;sup>52</sup> See Doc. 96-5. The sales tax for the initial estimate was \$292.31, and the sales tax for the final invoice was \$404.20.

<sup>&</sup>lt;sup>53</sup> *Id.* at 994 (assessing whether there was "too great a gap" between the proffered expert opinion and the underlying data).

unassessed damage is properly excluded as it is explained by the headlamps, there is no reason to exclude the entirety of Smith's testimony on this basis alone.

Defendants also argue Smith's testimony about "the defense" throughout his rebuttal report and deposition testimony is speculative and conjecture. For example, Smith's report states "[i]n the course of reviewing numerous reports from Exponent over the years a pattern has emerged that regardless of the damage to the vehicles in a rear impact, the change in velocity is routinely in the vicinity of 5 m.p.h. or less for the struck vehicle," Dr. Raasch's "approach in minimizing speeds is found only in defense litigation," and "Dr. Raasch's cited static testing and compar[ison] to a dynamic event . . . was invented specifically for the defense in civil litigation."54 The Court agrees with Defendants that this is not helpful to the trier of fact as it usurps the juror's role of evaluating Defendants' experts' credibility.<sup>55</sup> Smith does little to discredit Bare and Dr. Raasch's specific methodology other than stating that defense expert tactics are biased and the methodology was invented for litigation. This is not relevant or reliable testimony. In order to be reliable, he must point to the specific methodology for which he disagrees because the Court relies on opposing experts to point out flaws in the logic of the other expert.<sup>56</sup> Smith should speak only to the methodology applied in this case by Bare and Dr. Raasch and how this is contrary to accepted methodology, which he does in many paragraphs of his report with reference to his complete reconstruction of the accident and the biomechanical

<sup>&</sup>lt;sup>54</sup> Doc. 96-2.

<sup>&</sup>lt;sup>55</sup> United States v. Garcia, 635 F.3d 472, 476–77 (10th Cir. 2011) ("In assessing whether testimony will assist the trier of fact, district courts consider several factors, including whether the testimony is within the juror's common knowledge and experience, and whether it will usurp the juror's role of evaluating a witness's credibility.").

<sup>&</sup>lt;sup>56</sup> *Id.* at 990 ("In cases such as this one, where one party alleges that an expert's conclusions do not follow from a given data set, the responsibility ultimately falls on that challenging party to inform (via the record) those of us who are not experts on the subject with an understanding of precisely how and why the expert's conclusions fail to follow from the data set. Any failure by the challenging party to satisfy this responsibility is at that party's peril.").

analysis. He should not use sweeping generalizations about Exponents experts, including methodology employed by Exponent in other defense litigation not before this Court.

In conclusion, Smith is qualified to testify under the standards espoused in Fed. R. Evid. 702 and *Daubert*. However, he may not testify as to generalizations regarding Exponent or defense litigation and he may not testify about undocumented damages that existed in the repair estimate.

## E. Dr. Michael Freeman

Based on Dr. Freeman's curriculum vitae, the Court is satisfied that he is qualified as an expert by knowledge, skill, experience, training or education. Dr. Freeman is a doctor of medicine and an epidemiologist and has been a crash reconstructionist since 1996. He has had an ACTAR accreditation since 2005. He has participated in the reconstruction of more than 2000 crashes. He has more than 30 scientific publications pertaining to injury biomechanics, including a book for the Society of Automotive Engineering. He was co-founder and co-editor in chief of the *Journal of Whiplash and Related Disorders*. He has published more than 170 scientific papers, abstracts, book chapters, and books on topics involved in the cause of injuries in vehicle crashes. He serves as an Affiliate Professor of Epidemiology and Psychiatry at Oregon Health and Science University School of Medicine, in the Departments of Public Health and Preventive Medicine and Psychiatry. Dr. Freeman's testimony relates to medical causation, and his knowledge and expertise gained through his various studies and experience provide sufficient foundation to support this testimony.

The Court finds that Dr. Freeman offers relevant testimony. A considerable amount of the testimony Dr. Freeman offers contradicts the methodology used by Dr. Raasch and Bare. Dr.

<sup>&</sup>lt;sup>57</sup> The Court notes that Dr. Freeman's testimony was not challenged on qualifications grounds.

Freeman offers general comments contradicting the causation methodology used by Dr. Raasch. Specifically, he argues that Dr. Raasch ignored the critical elements of causal analysis, including the temporal association and the lack of a more likely alternative explanation. He is the only expert offered to contradict Dr. Raasch's causation analysis. Thus, this is highly relevant testimony that is not offered by any other experts. Dr. Freeman also testifies that Bare's use of IIHS crash tests to compare to this collision was erroneous and the subject collision occurred at a higher rate of speed. While Smith's testimony is used to contradict Bare's speed calculation, Dr. Freeman offers different methodology to reach his conclusion. He contradicts the use of the IIHS crash test for purposes of comparison. Dr. Freeman employed a widely used crash simulation program, the HVE program, to show that the occupant accelerations would have been substantially greater than Bare's calculations using the IIHS crash test. This is different than the testimony Smith offers. He has a different background than Smith or Dr. Stallbaumer. He is trained in epidemiology in which neither Smith nor Dr. Stallbaumer have training. Thus, Dr. Freeman's testimony will be helpful to the trier of fact in determining causation.

The main argument Defendants advance for exclusion of Dr. Freeman is that his proposed testimony is cumulative and redundant of the treating physicians and the other rebuttal experts offered. The Court does not find Dr. Freeman's testimony is duplicative of either.

Defendants offer no explanation of the overlap between Dr. Freeman and the treating physicians.

Defendants point to specific testimony that runs throughout Plaintiff's rebuttal expert testimony, including the forces involved in this collision were more severe than those normally encountered, factors such as seatbelt use, gender, and weight made Plaintiff more susceptible to injury, research exists that challenges injury thresholds, the change in velocity is not the only relevant

factor, Bare and Raasch's opinions are invalid, and Bare and Raasch ignored testimony and evidence in reaching their conclusion.

First, the Court finds that Dr. Freeman's testimony is not duplicative of the treating physician testimony because much, if not all, of the testimony he offers relates to contradicting Dr. Raasch and Bare's methodology. Defendants do not point to and the Court cannot find any treating physician that similarly opines to such a matter. Second, the Court finds that the methodology and expertise used by Dr. Freeman and the other rebuttal experts is different. While the experts do offer similar conclusions, Dr. Freeman uses methodology that is not used by any of the other Plaintiff's rebuttal experts. For example, Dr. Freeman contradicts Bare's use of IIHS crash testing to reach a different speed conclusion. Dr. Freeman also opposes Dr. Raasch's use of daily activities to compare to the forces in the collision when concluding that the forces exerted on Plaintiff were much greater. Dr. Freeman asserts that Dr. Raasch's use of volunteer crash testing, the 3DSSPP program, and injury threshold publications is improper. No other expert offers this type of analysis or contradiction. While the conclusions offered may be similar, this does not make his testimony irrelevant, especially in light of the fact that only causation remains at issue. Ultimately, the Court finds that Dr. Freeman offers testimony that is not used by any of the treating physicians or other rebuttal experts.

Defendants also advance that Dr. Freeman's testimony is unreliable as there are deficiencies in his methodology regarding causation. Defendants argue that Dr. Freeman's methodology is premised solely on the basis that there is a temporal connection between the onset of the injuries and the accident for purposes of causation. While some of the cherry-picked deposition testimony Defendants cite acknowledge the temporal connection between the injury and the accident, this is not Dr. Freeman's sole means of concluding as to causation. Dr.

Freeman's underlying methodologies to assert causation do meet the *Daubert* and Fed. R. Evid. 702 standards. Dr. Freeman utilized a differential diagnosis method, which is the three-step process the Tenth Circuit cited with approval in *Etherton v. Owners Insurance Co.*<sup>58</sup> Dr. Freeman applied crash reconstruction, biomechanical, medical, and epidemiologic (risk assessment) principles to reach his conclusions. Dr. Freeman's findings were based on review of Plaintiff's medical records, the accident reports, and the accident photographs. He also reviewed Dr. Raasch and Bare's reports that were submitted in this case as well as many of the articles that Dr. Raasch and Bare used. His report relies on a number of peer-reviewed studies, including articles he published. The Court finds that Dr. Freeman's methodology or reasoning is scientifically valid and that methodology was properly applied to the facts in accordance with the differential diagnosis method approved by the Tenth Circuit. Defendants are free to cross examine Dr. Freeman on his reliance and emphasis as to the temporal connection between the injury and the accident, but this goes merely to the weight of the evidence, not the admissibility.

#### F. Dr. Kevin Stallbaumer

Based on Dr. Stallbaumer's curriculum vitae, the Court is not satisfied that he is qualified as an expert by "knowledge, skill, experience, training or education" for some of his testimony. Dr. Stallbaumer is a doctor of chiropractic offered to contradict Dr. Raasch's and Bare's opinion that the accident could not have caused Plaintiff's injuries. Dr. Stallbaumer has been a licensed chiropractor in Kansas since 2009. He has several post-graduate courses and certifications related to low-speed impact injuries. In 2014, he obtained Advance Certification from the Spine Research Institute of San Diego. In 2013, he obtained an Advanced Certification in Whiplash and Brain Injury Traumatology from the Spine Research Institute of San Diego, California. He

<sup>&</sup>lt;sup>58</sup> 829 F.3d 1209 (10th Cir. 2016).

has 15 hours of training in accident reconstruction. He has taken other courses in accident reconstruction other than the Spine Research Institute.

Defendants argue that Dr. Stallbaumer is not qualified to give testimony related the mechanics of the accident. Dr. Stallbaumer may not testify as an engineer. In contradiction to Bare's report, he opines that the maximum speed offered by Bare is not feasible, the Lexus was struck predominately above the bumper and the bumper failed to absorb as much force, and the velocity change was more than Bare offered. These opinions require a background in engineering, so Dr. Stallbaumer, as a chiropractor with no evidence of engineering training, is not qualified to offer such opinions. He admits as much in his deposition testimony. Dr. Stallbaumer, even by his own admission, also is not trained in biomechanics, physics, or kinematics.<sup>59</sup> In contradiction to Dr. Raasch's expert report, he opines Dr. Raasch was incorrect about the forces acting on Plaintiff's body, the studies used by Dr. Raasch are flawed, and the comparison of everyday activities and the collision is flawed. Any reading of these opinions reveals that it is squarely about the type of bodily injuries that would or would not result from the mechanical forces generated by the accident, which is biomechanical, injury-related testimony.<sup>60</sup> Dr. Stallbaumer is not qualified to give such opinions as he has no training relating to biomechanics or kinematic studies. He is not qualified to testify about the forces involved in this crash.

While Dr. Stallbaumer has 15 hours in accident reconstruction training from the Spine Research Institute, various courses in accident reconstruction, and some study of accident reconstruction literature, this is not equivalent to the training required to testify as to physics, biomechanics, or kinematics. The Court is charged with determining whether the testimony is within the reasonable confines of the expert's subject area. *Ralston v. Smith & Nephew Richards, Inc.*, 275 F.3d 965, 970 (10th Cir. 2001). Courts have found that even accident reconstruction experts are not qualified to testify as to biomechanics issues. *See Withrow v. Spears*, 967 F. Supp. 2d 982, 995 (D. Del. 2013) (holding accident reconstruction expert is not qualified to testify as to biomechanical issues). Dr. Stallbaumer himself acknowledges that he is not a biomechanical engineer nor an accident reconstructionist. Given Dr. Stallbaumer's training in chiropractic with only some training in accident reconstruction, testimony regarding the forces on the body in the accident is not "within the reasonable confines" of his specialty.

<sup>&</sup>lt;sup>60</sup> Withrow, 967 F. Supp. 2d at 995.

Dr. Stallbaumer is qualified to testify within the reasonable confines of his practice as a chiropractor. For example, he opines that within his practice, he treats injured patients and it is routine in multiple patients in one crash for some to suffer severe injury while others sustain none at all. He also opines that Dr. Smithson is incorrect that Plaintiff's other risk factors, including obesity and degenerative arthritis, explain her need for surgery rather than the car accident. Instead, he offers that these risk factors made her more susceptible to the injuries. He goes on to list a number of risk factors present in this car accident that attribute to acute injury and long-term symptoms. He would be qualified to offer such testimony because it is within the confines of his chiropractic practices.

The Court also finds that much of Dr. Stallbaumer's testimony relating to criticism of the sources used by Dr. Raasch and Bare is not relevant as it is not helpful to the trier of fact. Dr. Stallbaumer opines that the studies Dr. Raasch uses are "performed, in house, by the defense firm that she works for and are in my opinion- inaccurate, poorly constructed, misleading and biased. Any attempt to still cite these sources illustrates that Dr. Raasch is either uninformed or willfully misleading." Further, he offers that "[t]he Funk et al 2007 study that was also referenced comes from the largest defense firm in the United States, Biodynamics Research Corporation so again suffers from bias and is flawed in countless [ways] and is not valid, reliable or authoritative in any way." These opinions are not helpful to the trier of fact as they are merely an assessment of credibility without offering any methodology or reasoning for such an opinion. By contrast, his testimony relating to criticism of the Mertz and Patrick article and Vijayakumar study offer methodology for his criticism, including the small sample size of the study and his experience as a clinical practitioner treating real-world injury accidents. This is helpful to the trier of fact as it offers methodology for such an opinion.

Defendants again argue with respect to Dr. Stallbaumer that his testimony is unduly duplicative of the other rebuttal experts and treating physicians. Once again, the Court rejects the argument that Dr. Stallbaumer's testimony should be excluded entirely because it is duplicative. Dr. Stallbaumer is the only expert offered on rebuttal contradicting Dr. Smithson's opinion that Plaintiff's need for surgery could be explained by degenerative arthritis, obesity, and sleep problems rather than the accident. Dr. Stallbaumer instead opines that those conditions made Plaintiff more likely to be injured in a minor accident. To the extent that Plaintiff intends to elicit such testimony from Dr. Jerimy Cox about the other factors that influence the severity and permanence of the injury, Dr. Stallbaumer is the only expert witness offered by Plaintiff on this subject.

Dr. Stallbaumer also contradicts Dr. Raasch's opinion that disc pathologies, such as herniation, are created by repetitive loading. Dr. Stallbaumer opines that disc herniations are instantaneous events where the nucleus pulposus tears through the harder annulus fibrosis, so the accident served as the instantaneous event that caused significant herniation. He is the only rebuttal expert offered to give such testimony, even though Dr. Freeman also opines that this injury was the result of the accident. Dr. Freeman testifies, however, that the injury was the result of the accident because of the lack of plausible alternative injury causes and the strong correlation between the spinal injury and the accident. These are similar conclusions, but different reasoning. Dr. Stallbaumer opines from the perspective of a chiropractor, and Dr. Freeman opines from the perspective of an epidemiologist. Therefore, the Court finds that this testimony is not duplicative.

Further, Dr. Stallbaumer is the only rebuttal expert or treating physician to offer an opinion that the presence of muscle spasms immediately after the accident, as documented by the

treating physicians, is consistent with acute disc herniations. Thus, this testimony from Dr. Stallbaumer is not duplicative.

Some of the testimony Dr. Stallbaumer offers is duplicative of testimony otherwise offered, but not unduly duplicative. The Court will allow both Dr. Stallbaumer, as an expert, and the Drs. Jerimy and Amy Cox to testify that delta Vs are not considered by chiropractors when assessing injury. The Court will also allow both Dr. Stallbaumer, as an expert, and Dr. Remondino, as a treating physician, to testify that Plaintiff will, more likely than not, always have back pain and persistent bilateral leg pain. And the Court will allow Dr. Stallbaumer and Dr. Freeman to testify about the issue of using human volunteer crash testing.

The Court finds that Dr. Stallbaumer's testimony is reliable. Dr. Stallbaumer reviewed the deposition testimony of Dr. Amy Cox, Dr. Jerimy Cox, Plaintiff, and Kenneth Powell. He reviewed the reports of Dr. Smithson, Dr. Raasch, and Bare. He also reviewed the reports of Dr. Remondino and Dr. Nguyen. He reviewed Plaintiff's medical records as well as the accident report. He used the differential diagnosis causation analysis approved by the Tenth Circuit in *Etherton*. He opined that it was plausible that the collision caused Plaintiff's back injury. He assessed whether the collision likely caused the specific injuries by reviewing diagnostic studies and determining whether the collision occurred before her back pain commenced. And finally, he considered whether there was a more likely alternative cause for the injury by reviewing Plaintiff's medical history. Dr. Stallbaumer has testified that this is generally accepted methodology and is based on peer-reviewed medical literature.

Defendants argue that Dr. Stallbaumer's testimony is unreliable because he relies heavily on his experience as a chiropractor to justify his disagreement with Dr. Raasch and Bare. With

<sup>61 829</sup> F.3d 1209 (10th Cir. 2016).

the parameters that this Court has already discussed on Dr. Stallbaumer's testimony contradicting Bare and Dr. Raasch in mind, the Court does not find that his testimony is unreliable for this reason. While Dr. Stallbaumer is not qualified to contradict a number of the engineering and biomechanical findings, he may contradict Dr. Raasch, in particular, with chiropractic practices, including not taking into account the severity of the accident when treating patients. He has testified that he was taught this during chiropractic school because the severity of the accident is not indicative of injury. Despite Defendants arguing this is unreliable methodology, the Court does not find this is so given Dr. Stallbaumer's testimony. Where there is science that contradicts this practice, Defendants are free to cross examine Dr. Stallbaumer. However, this issue relates to the weight of the evidence, not the admissibility, so for this reason, the Court rejects Defendants' argument that Dr. Stallbaumer's testimony is unreliable.

In conclusion, Dr. Stallbaumer's testimony is admissible under Fed. R. Evid. 702 and *Daubert*. However, Dr. Stallbaumer is not qualified to testify as to matters requiring engineering or biomechanical backgrounds outlined in more detail above. Dr. Stallbaumer also may not testify about generalized bias in several of the sources cited by Dr. Raasch. Dr. Stallbaumer may not offer duplicative testimony to that of the treating physicians, particularly Dr. Jerimy Cox, Dr. Amy Cox, and Dr. Remondino, and the other rebuttal experts.

IT IS THEREFORE ORDERED BY THE COURT that Plaintiff's Motion to Exclude Defendants' Experts Cleve Bare, Dr. Christine Raasch, and Dr. David Smithson (Doc. 101) is granted in part and denied in part. Cleve Bare's testimony is admissible in its entirety. Dr. Christine Raasch's testimony is admissible as to the likely mechanisms of Plaintiff's injury, but not precise diagnose of injury. Dr. David Smithson's testimony is admissible as to other possible causes of injuries, but it is inadmissible as to the patient duty of care.

IT IS FURTHER ORDERED BY THE COURT that Defendants' Motion to Exclude

John Smith (Doc. 95) is granted in part and denied in part. Smith's testimony is admissible

except as to generalizations about expert defense litigation and conclusions relating to the

damage assessment between the repair estimate and the final invoice. Defendants' Motion to

Exclude Dr. Kevin Stallbaumer (Doc. 97) is granted in part and denied in part. Dr.

Stallbaumer's testimony is admissible except as to matters requiring engineering or

biomechanical qualifications, generalized bias in sources cited by Defendants' rebuttal experts,

and duplicative testimony as outlined in this Order. Defendants' Motion to Exclude Dr. Michael

Freeman (Doc. 99) is **denied**.

IT IS FURTHER ORDERED BY THE COURT that the Joint Motion for a Status

Conference (Doc. 110) is **granted**. The parties are ordered to appear by telephonic conference

on April 5, 2017 at 9:00 a.m. The Court will set the agreed upon deadlines at that time. In light

of the parties' disorganized, unhelpful and superficial briefing on the Daubert motions, the Court

will not favorably entertain the burden of another round of briefing on motions for

reconsideration.<sup>62</sup>

IT IS SO ORDERED.

Dated: March 13, 2017

S/ Julie A. Robinson JULIE A. ROBINSON

UNITED STATES DISTRICT JUDGE

<sup>62</sup> The Court notes that the parties requested a date for which to file motions to reconsider this Order, which had not been filed when such a date was requested. The date for the motion to reconsider this Order will fall before the status conference set for April 5, 2017. This is a non-dispositive order as it is not a decision on the merits, so it is governed by D. Kan. Rule 7.3(b). A.H. ex rel. Hohe v. Knowledge Learning Corp., No. 09-2517, 2011 WL 1466490, at \*4 (D. Kan. Apr. 8, 2011) (analyzing a motion for reconsideration of exclusion of expert testimony as non-dispositive under Rule 7.3(b)); Sawyer v. Southwest Airlines Co., No. 01-2385, 2003 WL 174147, at \*4 (D. Kan. Mar. 31, 2003) (considering motion for reconsideration of exclusion of expert testimony under Rule 7.3(b)). Pursuant to D. Kan. Rule 7.3(b), motions to reconsider non-dispositive orders must be filed within 14 days after the order is filed unless the court extends time.

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