

Certiorari Granted, December 26, 2012, No. 33,884

IN THE COURT OF APPEALS OF THE STATE OF NEW MEXICO

Opinion Number: 2013-NMCA-009

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Docket No. 29,502

**CONCEPCION and ROSARIO ACOSTA,
et al.,**

Plaintiffs/Intervenors-Appellants,

v.

**SHELL WESTERN EXPLORATION
and PRODUCTION, INC.
and SHELL OIL COMPANY,**

Defendants-Appellees.

**APPEAL FROM THE DISTRICT COURT OF LEA COUNTY
Freddie J. Romero, District Judge**

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OPINION

GARCIA, Judge.

{1} In this toxic tort case, the district court granted Defendants' motion to exclude the opinion testimony of Plaintiffs' expert witness as to causation for the Plaintiffs' lupus and autoimmune medical conditions. As a result, the district court granted partial summary judgment in favor of Defendants on Plaintiffs' claims relating to their lupus and other autoimmune disorders. Plaintiffs' remaining claims that relied upon other evidence and expert testimony survived summary judgment and were allowed to proceed to trial. After the jury returned a verdict in favor of Defendants on Plaintiffs' remaining claims, Plaintiffs filed a motion for new trial based on juror misconduct and juror bias. The district court denied the motion for a new trial and entered a final judgment in favor of Defendants. This appeal followed. We affirm.

BACKGROUND

{2} This is an action brought by over 200 individuals asserting either personal injury claims, property damage claims, or both, against Shell Western Exploration and Production, Inc. and Shell Oil Company, (collectively, Shell). Plaintiffs allege that Shell purposely or negligently deposited and left various toxic petrochemicals in the ground where the Westgate neighborhood (Westgate) is presently located in Hobbs, New Mexico. The nine named Plaintiffs in this case were selected for an initial trial. Plaintiffs asserted claims for negligence, strict liability, nuisance, and trespass.

{3} Plaintiffs resided in Westgate at varying times and for varying lengths of time over more than twenty years. Westgate is situated within an active oilfield. Oil and gas operations had been conducted in the area known as the Grimes lease since the 1920's, and development of the area for housing began in the 1970's. From 1946 to 1993, Shell

maintained a tank battery on the Grimes lease and used the tank battery to store crude oil and saltwater produced from wells on the lease. Just east of the tank battery, Shell used an unlined storage pit (the Tasker pit) to dispose of oilfield waste. The Grimes battery was dismantled and removed after it was decommissioned. In 1997, the soil where the battery tanks previously stood was found to be contaminated with hydrocarbons. In addition to the soil contamination, hydrocarbon contamination was found in the water table.

{4} Not long after contamination was detected at the former Grimes battery site, a developer constructing new houses in Westgate discovered a layer of asphalt-like hydrocarbons beneath the ground. It extended across the properties on both sides of Tasker Road. Additional hydrocarbons were found beneath the asphaltic layer. An investigation revealed that the contaminated land, now known as Tasker Road and the adjacent properties, used to be the Tasker pit.

DISCUSSION

{5} This was a complex toxic tort case that involved an extraordinary volume of briefs, affidavits, expert witness reports, case studies, and scientific information. The scientific aspects of this case were critical to this litigation and were addressed at several stages during the pretrial process. This pretrial analysis required the district court to devote an extensive amount of time and attention to complex scientific evidence, including numerous research studies addressing potentially toxic chemicals. The district court did an admirable job controlling and managing the numerous scientific aspects of the case before trial was convened. These efforts resulted in several dispositive rulings prior to trial. In their first argument on appeal, Plaintiffs make two challenges: first to the district court's pretrial rulings excluding Dr. Dahlgren's causation opinions as well as his epidemiological study on lupus and other immune conditions, and second to the resulting grant of summary judgment on these claims. We begin with the first argument. We will also address Plaintiffs' second argument regarding alleged jury misconduct. The additional facts and procedural history pertinent to each argument will be included in the appropriate discussion below.

I. The Partial Grant of Summary Judgment

{6} The initial issue on appeal is whether Shell was entitled to partial summary judgment on Plaintiffs' claims relating to lupus and other autoimmune disorders. In deciding this question, we must determine whether the district court abused its discretion when it excluded Dr. Dahlgren's expert opinions under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and its New Mexico counterpart, *State v. Alberico*, 116 N.M. 156, 861 P.2d 192 (1993).

{7} Plaintiffs alleged that their exposure to contamination from the Tasker pit either caused or aggravated their lupus and other autoimmune medical conditions, as well as their respiratory, neurological, and psychiatric injuries. Plaintiffs sought to have Dr. Dahlgren testify as their expert witness regarding causation. Plaintiffs could not establish a prima

facie case regarding claims that involved lupus and other autoimmune medical conditions without Dr. Dahlgren's testimony. Of particular import to Plaintiffs' appeal, Dr. Dahlgren was prepared to testify that, to a reasonable degree of medical probability, the various autoimmune conditions Plaintiffs suffered, including lupus, were caused by Plaintiffs' exposure to a mixture of three specific chemicals found in crude oil: pristane, benzene, and mercury. Dr. Dahlgren based his opinion, in part, on a cross-sectional epidemiologic study that he performed.

{8} In Dr. Dahlgren's study, he relied on blood pristane data taken from the plaintiff group and a review of their medical records. He compared the plaintiff group data with similar data he collected from an unexposed group of California residents. The district court excluded this blood pristane data as scientifically unreliable. The district court also excluded, as scientifically unreliable, Dr. Dahlgren's calculated "minimum risk" levels for hydrogen sulfide and benzene and related cumulative exposure estimates. These early rulings were important to the nature of Plaintiffs' chemical mixture theory for its lupus and other autoimmune disorder claims and laid the foundation for subsequent summary judgment rulings by the district court. On appeal, Plaintiffs do not challenge the early rulings regarding the blood pristane data and minimum risk level estimates related to cumulative exposure.

{9} Shortly before trial commenced, Shell filed numerous motions in limine and motions for summary judgment regarding all of Plaintiffs' injury claims against Shell. Shell challenged the Plaintiffs' expert witness testimony on every claimed injury, including their claims for respiratory, neurological and psychiatric injuries. As a part of the motions in limine, Shell moved to exclude certain opinion testimony from Dr. Dahlgren as well as his epidemiologic study. Shell argued that Dr. Dahlgren's causation opinions relating to lupus and other autoimmune disorders were scientifically unreliable and lacked sufficient scientific support because his opinions relied solely upon his own epidemiologic study. Shell asserted that Plaintiffs had to prove both general and specific causation and that Dr. Dahlgren was their only general causation expert. Shell argued that the cross-sectional design of Dr. Dahlgren's own epidemiologic study made it non-probative of causation. Shell supported its motions with the affidavit of its own epidemiology expert and by referencing the *Federal Judicial Center, Reference Manual on Scientific Evidence, Reference Guide on Medical Testimony* (2d. ed. 2000) (the *Federal Reference Manual*). Shell further argued that the mice studies that Dr. Dahlgren relied upon did not support his human causation opinions because the requisite extrapolation analysis was not done. Dr. Dahlgren confirmed that there were no other epidemiologic studies showing that the exposure to the specific chemical mixture at issue in this case would cause lupus or other autoimmune disorders.

{10} The scientific studies relied upon by Plaintiffs to establish their claims for respiratory, neurological and psychiatric injuries did not include Dr. Dahlgren's own epidemiologic study. These injuries relied upon a plethora of other scientific evidence and studies involving exposure to petrochemicals generally, as well as exposure to specific chemicals and component elements found in crude oil. In its summary judgment pleadings,

Shell argued that the district court should apply the stringent federal standard that has recently developed for determining whether expert testimony will be admitted to establish causation. *See Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 149 (1999) (extending *Daubert's* gatekeeping function beyond scientific evidence to encompass all expert testimony); *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 142-43, 146 (1997) (applying *Daubert* to expert reasoning, not just general methodology, and clarifying that the district judge's decision whether to admit particular scientific evidence was to be reviewed only for an abuse of discretion).

{11} Plaintiffs responded with various exhibits and rebuttal affidavits that primarily addressed the methodology of Dr. Dahlgren's epidemiologic study. In his rebuttal affidavit, Dr. Dahlgren provided detailed responses to rebut Shell's assertions that his causation testimony was unreliable and that the methodology used in his epidemiologic study was flawed. He also asserted for the first time that he had mislabeled his epidemiologic study as cross-sectional and that the study did not suffer from the usual causal limitations of a cross-sectional analysis. Dr. Dahlgren asserted that his study was more appropriately labeled as a case-control study or a retrospective cohort study. Plaintiffs argued that Dr. Dahlgren's testimony should be admissible under our case law for expert testimony that has developed under *Alberico* and considered less stringent than recent federal precedent. *See Lee v. Martinez*, 2004-NMSC-027, ¶ 48, 136 N.M. 166, 96 P.3d 291 (resolving doubts about the admissibility of scientific evidence in favor of admission and explaining that, where scientific evidence is questionable, "the remedy is cross-examination, presentation of rebuttal evidence, and argumentation"); *State v. Lente*, 2005-NMCA-111, ¶ 4, 138 N.M. 312, 119 P.3d 737 ("New Mexico law requires only that the trial court establish the reliability of scientific knowledge, and does not apply the *Daubert*[/]*Alberico* standard to all expert testimony.").

{12} The district court initially announced its ruling on the motions in limine and motions for summary judgment by letter. The court found that issues concerning the reliability of Dr. Dahlgren's methodology in designing and conducting his study would primarily go to weight and not to the admissibility of the study. As a result, the methodology utilized in Dr. Dahlgren's study was not the basis for granting summary judgment. Using the *Alberico* standard to analyze the scientific evidence, the district court focused on whether there was a valid scientific link between the chemical mixture theory propounded by Plaintiffs to establish its claims regarding lupus and other autoimmune disorders and Dr. Dahlgren's testimony regarding general causation. The district court explained that Dr. Dahlgren's cross-sectional study did not comply with the *Federal Reference Manual* requirements and standing alone it was not scientifically sufficient to support Plaintiffs' claims of a causal relationship between the specific chemical mixture and lupus. The court explained that a cross-sectional study would only be relevant if it was supported by other general causation evidence. The court also explained that despite Dr. Dahlgren's testimony regarding the animal studies, they were too dissimilar factually from the present case and, therefore, they were not relevant. The district court thoroughly examined the other evidence in the record which could serve as a possible foundation for Dr. Dahlgren's general causation testimony.

After an extensive review of the evidence, the district court ultimately found that none of the other cited studies made the necessary connection between the specific hydrocarbon mixture and lupus or other autoimmune disorders. As a result, the district court concluded that the scientific evidence available was insufficient to establish a proper scientific basis for Dr. Dahlgren to testify as to causation for Plaintiffs' claims related to lupus or other autoimmune disorders. The court then granted partial summary judgment in favor of Shell on Plaintiffs' claims related to lupus and other autoimmune disorders. However, the district court denied Shell's numerous other motions in limine and motions for summary judgment regarding the remainder of Plaintiffs' claims. Plaintiffs' other claims alleging respiratory, neurological, and psychiatric injuries, as well as property damage claims, proceeded to trial.

{13} To determine whether the district court's summary judgment decision was proper we shall address: (A) proof of causation in a toxic tort case, (B) Rule 11-702 NMRA and the application of *Daubert/Alberico* under New Mexico law, (C) our standard of review of a district court order excluding expert witness testimony under *Daubert/Alberico*, and (D) the district court orders excluding Dr. Dahlgren's expert opinions regarding the specific chemical mixture theory as it relates to lupus and other autoimmune disorders.

A. Proof of Causation in a Toxic Tort Case

{14} To establish causation in a toxic tort case, expert testimony is required to show both "general causation" and "specific causation." *Andrews v. U.S. Steel Corp.*, 2011-NMCA-032, ¶ 9, 149 N.M. 461, 250 P.3d 887 ("Scientific knowledge of the harmful level of exposure to a chemical, plus knowledge that the plaintiff was exposed to such quantities, are minimal facts necessary to sustain the plaintiffs' burden in a toxic tort case." (internal quotation marks and citation omitted)). "General causation is whether a substance is capable of causing a particular injury or condition in the general population and specific causation is whether a substance caused a particular individual's injury." *Id.* (internal quotation marks and citation omitted); see also *Federal Reference Manual* at 481, 483 (stating that "[g]eneral causation is established by demonstrating (usually by reference to a scientific publication) that exposure to the substance in question causes (or is capable of causing) disease" and that "[s]pecific, or individual, causation is established by demonstrating that a given exposure is the cause of an individual's disease").

{15} In this case, general causation involves whether and at what level the specific petrochemical mixture at issue—pristane, benzene, and mercury—is capable of causing lupus and the varied autoimmune disorders. Specific causation involves whether the petrochemical mixture did in fact cause the varied autoimmune disorders suffered by Plaintiffs.

B. Rule 11-702 and the Application of *Daubert/Alberico*

{16} In *Alberico*, the New Mexico Supreme Court adopted an approach, similar to that established by the United States Supreme Court in *Daubert*, clarifying that Rule 11-702

requires three prerequisites for admission of expert testimony: (1) the expert must be qualified; (2) the scientific evidence must assist the trier of fact; and (3) the expert may only testify to “scientific, technical or other specialized knowledge.” *Alberico*, 116 N.M. at 166, 861 P.2d at 202 (internal quotation marks and citation omitted). The burden is on the party offering the evidence to satisfy these requirements. *Andrews*, 2011-NMCA-032, ¶ 11. The two prerequisites at issue in this case are whether Dr. Dahlgren’s testimony would assist the trier of fact, and whether Dr. Dahlgren’s opinions are reliable. *See State v. Fuentes*, 2010-NMCA-027, ¶ 23, 147 N.M. 761, 228 P.3d 1181 (stating that the reliability requirement for the admission of scientific evidence under *Daubert* implicates the third prerequisite), *cert. denied*, 2010-NMCERT-002, 147 N.M. 704, 228 P.3d 488.

{17} Where essential elements of Plaintiffs’ case are entirely dependent upon expert testimony, the trial judge has a duty to “ensure that an expert’s testimony rests on both a reliable foundation and is relevant to the task at hand so that speculative and unfounded opinions do not reach the jury.” *Parkhill v. Alderman-Cave Milling & Grain Co. of N.M.*, 2010-NMCA-110, ¶ 12, 149 N.M. 140, 245 P.3d 585, *cert. granted sub nom. Joey P. v. Alderman-Cave Milling*, 2010-NMCERT-012, 150 N.M. 493, 263 P.3d 270. This is because “[s]cientific evidence can only assist the trier of fact if it is grounded in valid, objective science and is reliable enough to prove what it purports to prove.” *Lee*, 2004-NMSC-027, ¶ 15 (internal quotation marks and citation omitted).

{18} To be relevant, expert testimony should help the trier of fact understand the evidence or help determine a disputed issue in the case. *See, e.g., Zia Trust, Inc. v. Aragon*, 2011-NMCA-076, ¶ 19, 150 N.M. 354, 258 P.3d 1146 (“To be relevant, expert testimony must fit the facts of the case and prove what it purports to prove.” (alteration, internal quotation marks, and citation omitted)), *cert. denied*, 2011-NMCERT-006, 150 N.M. 763, 266 P.3d. 632. Specific to the issue of relevance, the question is whether the scientific evidence presented by Dr. Dahlgren was sufficient to show whether and at what levels the petrochemical mixture of pristane, benzene, and mercury would cause lupus or other autoimmune disorders. Reliability, on the other hand, requires that the testimony or evidence be grounded in established scientific principles or methods. *Andrews*, 2011-NMCA-032, ¶ 13. Specific to the issue of reliability, the question was whether the studies presented by Dr. Dahlgren were grounded in objective science and reliable enough to be accepted within the scientific community.

C. Standard of Review

{19} The determination of the relevance and reliability, and thus admissibility, of scientific testimony “lies in the discretion of the district court.” *Zia Trust*, 2011-NMCA-076, ¶ 14; *see also Alberico*, 116 N.M. at 169, 861 P.2d at 205 (stating that we review a district court’s admission or exclusion of expert testimony for abuse of discretion). “An abuse of discretion requires this Court to conclude that the district court’s ruling is clearly contrary to the logical conclusions demanded by the facts and circumstances of the case.” *Zia Trust*, 2011-NMCA-076, ¶ 14 (internal quotation marks and citation omitted). “An abuse of

discretion standard of review, however, is not tantamount to rubber-stamping the [district] judge's decision." *Alberico*, 116 N.M. at 170, 861 P.2d at 206. Appellate courts should conduct a meaningful analysis of the record below to "ensure that the [district] judge's decision was in accordance with the Rules of Evidence and the evidence in the case." *Id.*

D. Dr. Dahlgren's Expert Opinion

{20} The opinion testimony from Dr. Dahlgren was proffered by Plaintiffs to establish that at certain measurable levels a mixture of pristane, benzene, and mercury, three specific chemicals found in crude oil, is capable of causing or contributing to lupus and other autoimmune disorders. In fulfilling its function to analyze the scientific evidence, the district court specifically chose not to address whether Dr. Dahlgren's methodology was reliable. Instead, the court excluded Dr. Dahlgren's epidemiologic study and his opinion testimony on the basis of relevance. It explained, "[d]isregarding the questions of invalid data [and] unreliable methodology[,] . . . the real questions are: 1) What are the conclusions of the study? 2) Is it relevant to a matter at issue? and 3) would it help the jury?" Because the district court's Rule 11-702 decision was premised on the issue of relevance rather than reliability, our analysis will only focus on the issue of relevancy.

{21} Plaintiffs argue on appeal that the district court abused its discretion in excluding Dr. Dahlgren's testimony because the basis for exclusion went to the weight of his testimony, not its admissibility. We disagree. The district court found that the underlying scientific data was insufficient to establish the necessary causal nexus between the specific chemical mixture and lupus or other autoimmune disorders. Dr. Dahlgren relied on his own epidemiologic study and a variety of other animal and human studies to form his opinion as to general causation. We shall address the relevance of each foundational basis of Dr. Dahlgren's opinion.

1. Dr. Dahlgren's Own Study

{22} Dr. Dahlgren based his general causation opinion in part on his own epidemiologic study. In performing his study, Dr. Dahlgren collected data from the plaintiff group through questionnaires and blood samples. He collected similar data from an unexposed group of California residents. He compiled the data and labeled his compilation as a community comparison cross-sectional study. The study concluded that there was a higher prevalence of a number of conditions, from respiratory complaints to lupus, in the exposed group. As a result, the study opined that environmental toxins, specifically pristane and mercury, *may* induce lupus. The study also specified that "[f]urther research is needed to determine the mechanism of effect for each of the suspected causal exposures and to assess possible synergy between exposures." As a result, Dr. Dahlgren's study was not designed to determine whether and at what levels the petrochemical mixture of pristane, benzene, and mercury would cause lupus or autoimmune disorders. It simply compared the differences in the reported incidence of certain medical ailments between two geographically specific community groups.

{23} Plaintiffs argue that Dr. Dahlgren’s methodology was a reliable basis to determine general causation and the district court abused its discretion by excluding the study. But the district court did not exclude the study solely because it was labeled as a “cross-sectional study[.]” as Plaintiffs’ claim. Rather, our review of the record reveals that the district court excluded the study because, regardless of the reliability of the study’s underlying methodology, Dr. Dahlgren’s study itself fails to establish the necessary nexus between the underlying data and Dr. Dahlgren’s opinions regarding causation. The district court explained that the study “does not fit” any disputed issue in the case because the data in the study “may not even show an association and it certainly fails to bridge the gap from association to causation.” As such, we need not address Plaintiffs’ numerous arguments regarding the reliability of Dr. Dahlgren’s underlying methodology. Instead we must look at whether the determination of a potential association made by Dr. Dahlgren’s study is appropriate to establish the necessary scientific link to his causation conclusion.

{24} Plaintiffs argue that this approach improperly focuses on Dr. Dahlgren’s conclusions. *See Torres*, 1999-NMSC-010, ¶ 34 (“The focus must be solely on principles and methodology, not on the conclusions that they generate.” (alteration, internal quotation marks, and citation omitted)); *Heller v. Shaw Indus., Inc.*, 167 F.3d 146, 153 (3d Cir. 1999) (explaining that a district court may “not exclude [expert] testimony simply because the conclusion was ‘novel’ if the methodology and the application of the methodology were reliable”). We disagree. “[N]othing in . . . *Daubert* . . . requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.” *Joiner*, 522 U.S. at 146 (citing *Turpin v. Merrell Dow Pharm., Inc.*, 959 F.2d 1349, 1360 (6th Cir. 1992)). “The analytical gap between the evidence presented and the inferences to be drawn on the ultimate issue of [causation] is too wide. Under such circumstances, a jury should not be asked to speculate on the issue of causation.” *Turpin*, 959 F.2d at 1360-61. It is this missing link between that factual data and Dr. Dahlgren’s conclusion that was being addressed by the district court. Nothing in his study stated whether and at what levels this petrochemical mixture of pristane, benzene, and mercury would cause lupus or other autoimmune disorders.

{25} While it is true that epidemiologic studies are generally used as proof of causation, not all epidemiologic studies can establish causation. *See Joiner*, 522 U.S. at 146-47 (upholding district court’s conclusion that four epidemiologic studies on which respondent relied were not sufficient to support experts’ opinions regarding causation). In this appeal, Plaintiffs go to great lengths to explain how Dr. Dahlgren’s methodology overcomes the usual limitations of cross-sectional analysis in determining a casual link. *See Federal Reference Manual* at 339 (“[C]ross-sectional studies are rarely useful in identifying toxic agents.”). But this argument does nothing to dispel the concern identified in this case that at the time the study was executed and conceived it was not intended to establish the necessary causal link to address general causation. The study itself explains that “[t]his is a community comparison study that examines persons living in a subdivision exposed . . . and compares their health status and questionnaire responses to those living in [an

unexposed subdivision.]”

{26} Finally, it is significant that at the time the district court was evaluating the study’s relevance, Plaintiffs argued that the “epidemiologic[] study was not intended to prove causation but was conducted to merely compare the health status of two different populations.” Without a more concrete basis to support the causal link between the specific chemical mixture and these health conditions, Dr. Dahlgren’s study is only relevant to show a generally higher incidence of certain medical disorders in two community groups but is insufficient to establish a general causation link to lupus and other autoimmune disorders. *See State v. Downey*, 2008-NMSC-061, ¶¶ 30, 32, 145 N.M. 232, 195 P.3d 1244. As a result, Dr. Dahlgren’s epidemiologic study alone could not establish a causal relationship because it did not address whether the specific petrochemical mixture in this case would cause lupus and the other autoimmune disorders. In light of these factors, we conclude that the district court did not abuse its discretion when it ruled that Dr. Dahlgren’s study failed to meet the *Daubert/Alberico* prerequisites for an expert opinion on causation.

2. Totality of Dr. Dahlgren’s Evidentiary Basis for His Causation Conclusion

{27} Although the district court found that Dr. Dahlgren’s study, standing alone, was not sufficient to establish general causation, it explained that the study might still be helpful to the jury’s determination. The district court explained that the study might still be relevant if the totality of the other scientific evidence bridges the analytical gap from association to causation for lupus and autoimmune disorders. *See Joiner v. Gen. Elec. Co.*, 78 F.3d 524, 532 (11th Cir. 1996), *rev’d on other grounds by* 522 U.S. at 146-47 (“Opinions of any kind are derived from individual pieces of evidence, each of which by itself might not be conclusive, but when viewed in their entirety are the building blocks of a perfectly reasonable conclusion, one reliable enough to be submitted to a jury along with the tests and criticisms cross-examination and contrary evidence would supply.”). After examining the totality of the other scientific evidence to support an opinion and conclusion that this specific petrochemical mixture can generally cause lupus and other autoimmune disorders, the district court found that there was still insufficient evidence to establish the necessary link.

{28} Dr. Dahlgren had based his general causation opinion on additional animal studies involving various species. The district court specifically addressed a mouse study that involved injecting mice with a high dose of pure alkane pristane and concluded that the facts of this case were sufficiently dissimilar to the animal study. In the study, the mice injected with pristane showed signs of plasmacytosis in as little as three days. Another animal study discussed by Dr. Dahlgren was a rat study involving injections of pristane. In the rat study, the pristane injections induced arthritis. Similarly, Plaintiffs rely on another mouse study conducted by Dr. Yang. However, the results of that study were not identical to human cases, and Dr. Dahlgren admitted that, in those cases, “the route of exposure in the mouse may make a difference.” Plaintiffs’ brief in chief focuses on the reliability of mouse studies for Dr. Dahlgren’s opinion and the fact that mouse studies can be a scientifically valid model for human lupus. But the district court did not find that animal studies were unreliable to

prove causation, instead it explained that the specific studies per se relied on by Dr. Dahlgren did not fit the facts of this case.

{29} The district court previously excluded, as unreliable, the blood pristane analysis of the Westgate population prepared by Dr. Dahlgren for his epidemiologic study. Aside from the problems relating to the dosage in the animal study that involved pristane being injected directly into the bloodstream of mice, the study was irrelevant to the facts of this case without any evidence of the level of pristane in the exposed population's bloodstream. See *Valentine v. PPG Indus., Inc.*, 821 N.E.2d 580, 593 (Ohio Ct. App. 2004) (“[I]n order for animal studies to be admissible to prove causation in humans, there must be good grounds to extrapolate from animals to humans[.]” (internal quotation marks and citation omitted)). “[I]t is . . . within the court’s province to ensure that . . . [an] expert’s ultimate conclusion on causation, ‘fits’ with the data alleged to support it.” *Heller*, 167 F.3d at 158. “[L]aboratory animal studies are generally viewed with more suspicion than epidemiologic[] studies, because they require making the assumption that chemicals behave similarly in different species.” See *In re Agent Orange Prod. Liab. Litig.*, 611 F. Supp. 1223, 1241 (E.D.N.Y. 1985) (alteration, internal quotation marks, and citation omitted), *aff’d*, 818 F.2d 187 (2d Cir. 1987). Dr. Dahlgren did not provide any information regarding why the results involving those species, chemicals, and doses are meaningful to establish the effect the specific petrochemical mixture at issue in this case would have on humans. See *Sorensen v. Shaklee Corp.*, 31 F.3d 638, 646 n.12 (8th Cir. 1994) (“Because of the dose-response differential between animals and humans . . . extrapolating to humans from animal studies is problematic.”).

{30} Plaintiffs’ argument that the district court improperly rejected Dr. Dahlgren’s reliance on mouse studies based solely on a general apprehension about inter-species and inter-dosage extrapolation, see *Metabolife Int’l., Inc. v. Wornick*, 264 F.3d 832, 842 (9th Cir. 2001), is not well taken. Instead, the record reflects that the district court thoroughly reviewed the various animal studies Dr. Dahlgren relied upon in forming his causation opinion. As discussed above, the district court focused on the problems inherent with the animal studies as applied to the specific facts and claims in this case. The district court concluded that the animal studies were too dissimilar to the facts in this case. The district court also concluded that the Plaintiffs presented no information regarding the dose response relationship and extrapolation to humans. This missing link in the causation analysis was never addressed by Plaintiffs. As a result, it was not an abuse of discretion for the district court to determine that the animal studies failed to provide the necessary scientific foundation required to support Dr. Dahlgren’s opinions regarding general causation for lupus and autoimmune disorders.

{31} The record reflects that the district court also reviewed and considered the human studies relied on by Dr. Dahlgren to form his causation opinion. The additional human studies relied on by Dr. Dahlgren discussed the individual immunological, neurological or respiratory effects of pristane, benzene or mercury. Significantly, none of these studies dealt with the specific mixture relied upon by Dr. Dahlgren or the medical disorders at issue in this

case. Plaintiffs provided no information as to how and why the different exposures translated to the plaintiff group in this case. *See Mitchell v. Gencorp, Inc.*, 165 F.3d 778, 781-83 (10th Cir. 1999) (upholding a district court’s exclusion of expert opinions based on studies that address the relationship between diseases and agents different from those at issue in the litigation); *Siharath v. Sandoz Pharm. Corp.*, 131 F. Supp. 2d 1347, 1365 (N.D. Ga. 2001) (excluding proffered testimony because both the agent and the disease at issue were not the same as those discussed in studies on which plaintiffs’ experts relied), *aff’d sub nom. Rider v. Sandoz Pharm. Corp.*, 295 F.3d 1194 (11th Cir. 2002).

{32} Plaintiffs could not articulate any study, other than Dr. Dahlgren’s own study of the Westgate population, that would support the opinion that the petrochemical mixture caused the lupus and other autoimmune disorders identified in this case. Dr. Dahlgren himself explained that the most factually similar study he relied upon involved a lupus cluster near a hazardous waste site in Georgia, but that the study never identified the chemicals present at the waste site. While the non-existence of good data is not fatal to a claim, the fact that there is no other available data does not loosen the requirements that expert witnesses need base their conclusions on adequate scientific evidence and not conjecture. *See Parkhill*, 2010-NMCA-110, ¶ 37 (“Expert testimony may be received if, and only if, the expert possesses such facts as would enable him to express a reasonably accurate conclusion as distinguished from mere conjecture.” (internal quotation marks and citation omitted)); *Perry v. Novartis Pharm. Corp.*, 564 F. Supp. 2d 452, 468 (E.D.Pa. 2008) (“In cases where no adequate study shows the link between a substance and a disease, expert testimony will generally be inadmissible, even if there are hints in the data that some link might exist. This may mean that early victims of toxic torts are left without redress because they are unable to prove their cases with the scientific data that exists.”); *see also Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 319 (7th Cir. 1996) (“[T]he courtroom is not the place for scientific guesswork, even of the inspired sort. Law lags [behind] science; it does not lead it.”).

{33} There must be a link between the factual data used by an expert and the conclusion the expert offers. Here, the record reflects that the district court thoroughly reviewed the various studies, both human and animal, that Dr. Dahlgren relied upon to form his opinion regarding causation. We conclude that the district court did not abuse its discretion when it determined that Dr. Dahlgren could not base his general causation opinions on his cross-sectional study or the other cited human and animal studies. For the foregoing reasons, we affirm the district court’s grant of partial summary judgment in favor of Defendants.

II. The Motion for New Trial

{34} After the jury was selected and sworn, the court instructed the jury pursuant to UJI 13-110 NMRA. Since March 1, 2005, the instruction has allowed jurors to discuss the evidence among themselves throughout the trial, including witnesses, testimony, and exhibits, but only in the jury room when all of the jurors are present. It further cautions jurors to keep an open and impartial mind, to not prejudge the case, and to not attempt to sway other jurors about the outcome of the case before commencing final deliberations.

Throughout the course of the seventeen day trial, the district court repeatedly reminded the jurors about these concepts. The jury deliberated a little over one and a half hours before announcing its verdict. In its verdict, the jury found against Plaintiffs on all claims.

{35} After the verdict was announced, Plaintiffs declined to have the jury polled. Plaintiffs later moved for a new trial based on the affidavit of an alternate juror who did not participate in the final deliberations. The record was also supplemented with affidavits from three jurors who were involved in deliberations.

{36} Plaintiffs assert that the district court abused its discretion by denying their motion for a new trial as to all Plaintiffs. Plaintiffs base this motion on affidavits submitted by the three jurors and the one alternate juror. Plaintiffs do not argue on appeal that extraneous information reached the jury. Before the district court could reach the merits of Plaintiffs' misconduct claims, it had to first determine whether Rule 11-606(B) NMRA permitted the court to even consider the juror affidavits. The district court assumed without deciding that the affidavits were admissible. The district court then addressed the issue of whether comments made primarily by two jurors affected juror deliberations and Plaintiffs' right to a fair trial. To determine whether the district court properly denied Plaintiffs' motion for new trial we discuss: (A) our standard of review, (B) the admissibility of juror affidavits under Rule 11-606(B), (C) the discussions by the jury that are now authorized by UJI 13-110, and (D) the admissibility of the juror affidavits in this case.

A. Standard of Review

{37} The denial of a motion for new trial based on jury misconduct is reviewed under the abuse of discretion standard. *State v. Mann*, 2002-NMSC-001, ¶ 17, 131 N.M. 459, 39 P.3d 124. The interpretation of the scope of Rule 11-606(B), the rule governing admissibility of juror testimony, is subject to de novo review. *Shadoan v. Cities of Gold Casino*, 2010-NMCA-002, ¶ 6, 147 N.M. 444, 224 P.3d 671.

B. Admissibility of the Juror Affidavits under Rule 11-606(B)

{38} Our initial inquiry is whether the juror affidavits are admissible under Rule 11-606(B). With limited exceptions, New Mexico has long adhered to the rule that juror testimony is inadmissible when offered to impeach the jury's verdict. *See Goldenberg v. Law*, 17 N.M. 546, 556-57, 131 P. 499, 502 (1913); *see also Skeet v. Wilson*, 76 N.M. 697, 699, 417 P.2d 889, 890 (1966) ("New Mexico has long been aligned with those courts which deny the right to a new trial based alone on affidavits or statements of jurors presented after the jury has been discharged."). Rule 11-606(B), the mechanism for excluding such testimony, provides:

Upon an inquiry into the validity of a verdict or indictment, a juror may not testify as to any matter or statement occurring during the course of the jury's deliberations or to the effect of anything upon that or any other juror's mind

or emotions as influencing . . . the verdict A juror’s affidavit or evidence of any statement by the juror may not be received on a matter about which the juror would be precluded from testifying.

{39} We have previously explained that the purpose of Rule 11-606(B) is to protect the sanctity of jury deliberations. *See State v. Ramming*, 106 N.M. 42, 48, 738 P.2d 914, 921 (Ct. App. 1987) (stating that New Mexico cases relating to communications with the jury during deliberations and involving matters concerning the deliberations “obviously reflect the sacrosanctity of the jury’s deliberative process”); *Shadoan*, 2010-NMCA-002, ¶ 13 (“[J]ury deliberation is intended to be private, and the potential for deliberations to be open to public investigation would cause a chilling effect and prevent jurors from functioning effectively.”). However, we have not used the rule as a per se bar against consideration of any statement made by a juror. *See Rios v. Danuser Mach. Co.*, 110 N.M. 87, 91, 792 P.2d 419, 423 (Ct. App. 1990) (“[T]he rule does not prevent the questioning of a juror or the consideration of an affidavit concerning the truthfulness of a juror’s answers to questions propounded on voir dire.”). Instead, we have only applied the rule to prevent a court from considering juror testimony or affidavits to impeach a verdict on the basis of alleged juror statements that demonstrate an inquiry into the mental processes of jurors during their deliberations. *See id.*

{40} On appeal, Plaintiffs assert only juror bias and prejudgment during trial. As a result, the juror affidavits, which describe statements made during the course of trial, are inadmissible under Rule 11-606(B) if they implicate the jury’s deliberative process. Plaintiffs argue that Rule 11-606(B) does not preclude consideration of the affidavits due to this Court’s holding in *Goodloe v. Bookout*, 1999-NMCA-061, ¶ 17, 127 N.M. 327, 980 P.2d 652 (Ct. App. 1999). In *Goodloe*, we admitted a juror’s affidavit containing evidence of possible jury misconduct because “[i]t address[ed] matters that occurred prior to the jury’s deliberations; and it [did] not purport to state how those matters affected the later deliberations.” *Id.* However, the jury in *Goodloe* was instructed not to discuss the case with anybody, *including other jurors*, during the trial, *see* UJI 13-106(1) NMRA, and not to form or express an opinion as to any issue until all of the evidence has been heard, *see* UJI 13-106(5) NMRA. *Goodloe*, 1999-NMCA-061, ¶ 15.

{41} In 2005, after this Court decided *Goodloe*, our New Mexico Supreme Court promulgated UJI 13-110, one of the preliminary jury instructions used in this case. UJI 13-110 permits the jury to discuss evidence amongst themselves during trial and states, in relevant part:

[Y]ou may discuss the evidence during the trial, but only among yourselves and only in the jury room when all of you are present. . . . The kinds of things you may discuss include the witnesses, their testimony, and exhibits. Be careful, however, not to make up your minds or try to convince others about the final outcome of the case until you have heard everything—all the evidence, the final instructions of law, and the attorneys’ closing arguments.

It would be unfair to the parties if you attempt to decide the outcome of the case before you begin final deliberations.

Thus, because UJI 13-110 now permits juries to discuss the evidence among themselves during trial, we must first determine the continued vitality of our holding in *Goodloe*.

C. Discussions Authorized by UJI 13-110

{42} The admissibility of the juror affidavits in this case depends on whether juror discussions of evidence throughout trial and amongst themselves, as permitted by UJI 13-110, are shielded from public disclosure by Rule 11-606(B). Plaintiffs contend that the promulgation of UJI 13-110 did not alter the scope or meaning of Rule 11-606(B) and the *Goodloe* exception to the rule still applies. In response, Shell argues that UJI 13-110 permits the jury to deliberate throughout the trial and, therefore, the Rule 11-606(B) shield over the workings of the jury's deliberative process extends to the deliberations authorized under UJI 13-110.

{43} “We apply the same rules of construction to procedural rules adopted by the Supreme Court as we do to statutes.” *State v. Miller*, 2008-NMCA-048, ¶ 11, 143 N.M. 777, 182 P.3d 158. According to those rules of construction, our overarching goal is to determine the underlying intent of the drafters, *Roark v. Farmers Grp., Inc.*, 2007-NMCA-074, ¶ 50, 142 N.M. 59, 162 P.3d 896, and we begin that task by parsing the plain language of the rule. *See State v. Steven B.*, 2004-NMCA-086, ¶ 15, 136 N.M. 111, 94 P.3d 854 (“Our starting point is the plain language of the statute.”). Additionally, to determine whether Rule 11-606(B) protects the juror affidavits from consideration, we must read Rule 11-606(B) in pari materia with the more recently adopted UJI 13-110 to achieve the goals of both. *See Walker v. Walton*, 2003-NMSC-014, ¶ 11, 133 N.M. 766, 70 P.3d 756 (using the concept of in pari materia to guide its interpretation of the Rules of Criminal Procedure); *Att’y Gen. v. N.M. Pub. Regulation Comm’n*, 2011-NMSC-034, ¶ 10, 150 N.M. 174, 258 P.3d 453 (“[T]wo statutes covering the same subject matter should be harmonized and construed together when possible, in a way that facilitates their operation and the achievement of their goals.” (internal quotation marks and citation omitted)).

{44} The plain language of Rule 11-606(B) indicates that the determinative characteristic of the protection set forth in the rule is not when during a trial the discussion occurs, but whether the discussion is, by its nature, part of the jury's discussion and analysis of the evidence in the case. This conclusion is bolstered by the Supreme Court's recent adoption of UJI 13-110 which permits the jury to weigh the evidence presented to them at trial and anticipates that the jury will form preliminary opinions on the evidence. We conclude that the Supreme Court promulgated UJI 13-110 with the intent to permit the jury to engage in a limited form of protected deliberation throughout the course of trial. This conclusion is consistent with the dictionary definition for “deliberation.” Webster's Third New International Dictionary 1191 (Unabridged 1993) (defining “deliberation” as “the act of weighing and examining the reasons for and against a choice or measure”); *see also*

Battishill v. Farmers Alliance Ins. Co., 2006-NMSC-004, ¶ 8, 139 N.M. 24, 127 P.3d 1111 (“We . . . hold that the common and ordinary meaning . . . may be ascertained from a dictionary.”). We also recognize that our Supreme Court was aware of Rule 11-606(B) when it adopted UJI 13-110. *See Pub. Serv. Co. v. N.M. Pub. Util. Comm’n*, 1999-NMSC-040, ¶ 23, 128 N.M. 309, 992 P.2d 860. If the Supreme Court had not intended the protection of Rule 11-606(B) to include discussions of the evidence during trial, then the language of UJI 13-110 would have clearly distinguished between deliberations and discussions of the evidence during trial. *See, e.g.*, Ind. Jury Rule 20(a)(8) (“[J]urors . . . are permitted to discuss the evidence among themselves in the jury room during recesses from trial when all are present, as long as they reserve judgment about the outcome of the case until deliberations commence.”); N.D. R. Ct. 6.11(a) (“In a civil case, the court may, without objection, allow the jury to engage in pre-deliberation discussion.”). Instead, the instruction contemplates both preliminary discussions and “final deliberations.” *See* UJI 13-110. We see no practical way to distinguish between the two for purposes of protecting jury communications. Therefore, the Supreme Court’s promulgation of UJI 13-110 reflects its belief that Rule 11-606(B) shields the jury’s mental processes, including juror discussions of the evidence among themselves prior to final deliberations.

{45} We conclude that the promulgation of UJI 13-110 specifically changed the prohibition for pre-deliberation discussions that this Court outlined in *Goodloe*. Our conclusion is consistent with the purpose of Rule 11-606(B): to cloak the mental processes of the jury in reaching its verdict. To conclude otherwise, that Rule 11-606(B) would only shield final deliberations from disclosure, would thwart the purposes of both Rule 11-606(B) and UJI 13-110. Allowing jurors to discuss their opinions on the witnesses, the testimony, and the exhibits, but not protecting those discussions from public disclosure under Rule 11-606(B), would dissuade jurors from engaging in exactly the type of evidentiary discussions during trial that UJI 13-110 was adopted to permit. Moreover, the sanctity of these preliminary jury discussions would become vulnerable to public exposure if only final deliberations were protected. *See State v. Jojola*, 2005-NMCA-119, ¶ 23, 138 N.M. 459, 122 P.3d 43 (“The sanctity of jury trials cannot be . . . subjected to the hazard of suspicion.” (internal quotation marks and citation omitted)). The purpose of discussing the evidence during trial is to weigh the evidence and examine the different reasons for and against the ultimate issue in the case. *See, e.g.*, Shari Seidman Diamond et al., *Juror Discussions During Civil Trials: Studying an Arizona Innovation*, 45 *Ariz. L. Rev.* 1, 62, 63-64, 71 (2003) (discussing the benefits to jury comprehension of trial evidence when jurors are instructed that trial discussions are proper). The district court cannot review or consider such discussions by the jury unless these discussions directly implicate the narrow issue of improperly “[deciding] the *final outcome* of the case.” UJI 13-110 (emphasis added); *see* Rule 11-606(B). Any other consideration of preliminary jury discussions for the purpose of impeaching a jury’s verdict would undermine the sanctity of the jury deliberation process and violate Rule 11-606(B).

C. Admissibility of the Juror Affidavits in This Case

{46} Having determined that discussions of the evidence prior to final deliberations are protected from disclosure by Rule 11-606(B), we must next determine the application of the rule to the affidavits in this case. The juror affidavits present the following as instances of juror misconduct: (1) statements that some of Plaintiffs' symptoms were the result of medication side effects; (2) a statement that one of the Plaintiffs was ill with something other than contamination; (3) a statement that asthma and bronchitis could only be diagnosed by a chest x-ray, contrary to Plaintiffs' medical expert; (4) a statement that the Department of Health went to the neighborhood because of tuberculosis; (5) comments regarding the sexual orientation and morals of two of the plaintiffs; (6) a statement that oil companies would "pull out" in the event of a pro-plaintiff verdict; and (7) comments during breaks in the trial that the trial was "a waste of . . . time" and that the juror was tired of hearing the same evidence. With one possible exception, we conclude that the juror statements discussed in the affidavits are inadmissible comments on the jury's preliminary deliberation process.

{47} The jury here was instructed that it was proper to discuss the evidence among themselves during trial, and, as the district court recognized, most of the reported remarks are permissible comments on the evidence presented to the jury. Statements one through four, for example, are all remarks on the evidence elicited at trial and are clearly permissible jury evaluations of the strengths and weaknesses of the trial evidence. *See State v. Chamberlain*, 112 N.M. 723, 732, 819 P.2d 673, 682 (1991). These statements regarding Plaintiffs' symptoms, the process for diagnosing the symptoms, and whether those symptoms might be indicative of illnesses other than contamination, indicate little more than that jury members weighed the credibility of the medical witnesses and their testimony as a part of the preliminary deliberation process. As such, statements one through four can be considered inadmissible as a proper preliminary comment on the sufficiency of the evidence presented at trial.

{48} Additionally, while statements five and six are not necessarily relevant evaluations of the evidence, the comments do derive from testimony presented throughout the trial. The statement regarding the morals of one Plaintiff, for example, was based on her testimony that she had a child out of wedlock. Similarly, the comment regarding another Plaintiffs' sexual orientation could have referred to his testimony that after his divorce, a male moved into his home. The district court correctly noted that these comments were insensitive and irrelevant but held that they were nonetheless permissible comments regarding the witnesses and the testimonial evidence received. *See UJI 13-110*. The district court analyzed whether these comments indicated juror bias and ultimately concluded that the jury found against all nine Plaintiffs as to liability and, therefore, the district court could not find that statements regarding only two Plaintiffs had a prejudicial impact on juror deliberations. Additionally, the district court explained that Plaintiffs failed to present any evidence that these comments actually imputed bias to the jurors who uttered them or that the comments imputed bias to the rest of the jury.

{49} Next, the district court found no evidence that discussing the effect a verdict against Shell might have on Shell's continued activity in Hobbs entered into the juror's deliberations

or prejudiced Plaintiffs in any way. Similarly, this was also a permissible discussion on the evidence presented at trial. Plaintiffs themselves discussed the possible effect of a verdict for Plaintiffs on the oil and gas industry in closing argument, and the district court acknowledge that “whether subtly or directly the parties argued the general effect a verdict would have.” The affidavits support an inference that statements one through six were made during jury discussions of the evidence occurring throughout trial and thus the district court improperly considered them. Although the district court erred in considering these portions of juror affidavits under Rule 11-606(B), it properly denied Plaintiffs’ motion for new trial with regard to these statements.

{50} The seventh assertion regarding juror statements that the trial was a “waste of . . . time” may fall outside the shield provided by Rule 11-606(B). As such, if the statements could be considered evidence of fixed predeterminations of the final outcome in the case, then it would be proper for this Court to evaluate the statements. This is because the statements may reflect a violation of the preliminary deliberation instruction under UJI 13-110 and the recognition that one biased juror can destroy “[t]he integrity of a jury.” *State v. Chavez*, 78 N.M. 446, 447, 432 P.2d 411, 412 (1967). The party claiming juror bias has the burden of proof to demonstrate, based on the presence or absence of evidence, “that [the alleged impartial jurors] were unwilling or unable to decide the case based on the evidence adduced at trial and the instructions given by the [district] court[.]” *State v. Rackley*, 2000-NMCA-027, ¶ 11, 128 N.M. 761, 998 P.2d 1212. Here, the record reflects that the district court undertook a thorough analysis of whether these statements indicated that the jurors failed to deliberate before ultimately deciding that Plaintiffs had failed to meet their burden.

{51} Plaintiffs assert that a juror’s statements throughout trial “clearly communicated that [the juror’s] views would not be altered by anything that occurred at trial.” After reviewing the juror affidavits relied on by Plaintiffs, the district court looked at the totality of the circumstances and the trial conduct of the allegedly biased jurors, and ultimately concluded that the Plaintiffs’ allegations of jury pre-determination was not supported by the evidence. This conclusion is supported by the record.

{52} The juror affidavits merely assert that within the first three days of trial a juror stated, “Why are we here? This is a waste of our time[.]” and that “we know what the outcome is.” The juror affidavits also assert that, at some point during the trial, the same juror complained that she was tired of hearing the same evidence and just wanted to go home. However, these statements alone are vague and are insufficient to meet Plaintiffs’ burden of proof to present evidence that the juror’s opinion was immutably fixed. *See United States v. Caldwell*, 83 F.3d 954, 956 (8th Cir. 1996). Instead, the statements can be interpreted many different ways, including the possibility that they are the result of juror discussions regarding the weaknesses of Plaintiffs’ case, and Plaintiffs have failed to point this Court to anything in the record that would indicate otherwise. *See Murphy v. Strata Prod. Co.*, 2006-NMCA-008, ¶ 9, 138 N.M. 809, 126 P.3d 1173 (“Absent a record, we are left with the arguments in the briefs, and argument of counsel is not evidence.”).

{53} On the contrary, to support their argument that these statements reflect a jury member's immutable opinion, Plaintiffs point to permissible discussions of the evidence presented by the parties at trial. But, along with UJI 13-110, the court instructed the jury that they should not hesitate to re-examine their views and change their opinions after consulting with one another and throughout the course of their deliberations. Unlike in *Goodloe*, the jury instructions in this case allowed the jury to form preliminary opinions about the evidence and to discuss those opinions throughout the course of trial. Therefore, a jury member's expression of a preliminary opinion as to liability did not alone violate the district court's instructions. Without any additional basis to establish that any juror's opinion was immutably fixed or that the comments were not based on a preliminary view of the trial evidence, we cannot conclude that the district court abused its discretion in rejecting the Plaintiffs' arguments that they were denied the right to a fair trial based upon the juror affidavits submitted for review.

{54} After reviewing the district court's decisions, we conclude that the district court erroneously reviewed and considered all but one portion of the juror affidavits. Based on our review of the admissible portion of the affidavits addressing the possibility of a juror's comments that could be considered a predetermination of the final outcome of the case, we affirm the district court's denial of Defendant's motion for a new trial on that basis as well.

{55} We note that Plaintiffs' brief in chief factually alleged that some of the allegedly improper discussions of the evidence occurred in small groups outside the presence of all jury members. This allegation arises from the affidavit of the alternate juror who stated that "[d]iscussions would take place when other jurors were out of the jury room." Plaintiffs, however, did nothing to develop how or whether these discussions involved deliberations, evidence, witnesses, testimony or exhibits. Moreover, Plaintiffs did not address or distinguish this argument from their general bias argument or specify the matters discussed outside the presence of the entire jury. Plaintiffs did not argue that comments made in small groups were in violation of UJI 13-110 rather than permitted discussions of topics such as the weather, sports, family, work, or a host of other unrelated topics that did not involve actual deliberation of the case. As a result, we will not address this issue further. *See State v. Ortiz*, 2009-NMCA-092, ¶ 41, 146 N.M. 873, 215 P.3d 811 ("Because the State failed to satisfy its obligation to develop the circumstances and to specifically and fully argue the points, we will not address those points on appeal."); *Headley v. Morgan Mgmt. Corp.*, 2005-NMCA-045, ¶ 15, 137 N.M. 339, 110 P.3d 1076 (asserting that the appellate courts of New Mexico need not entertain inadequately developed arguments); *Joslin v. Gregory*, 2003-NMCA-133, ¶ 8, 134 N.M. 527, 80 P.3d 464 ("We will not decide this case on a theory not explored or argued by the parties on appeal."); *see also State v. Boergadine*, 2005-NMCA-028, ¶ 34, 137 N.M. 92, 107 P.3d 532 (finding that the defendant did not adequately address two issues mentioned only in brief headings).

CONCLUSION

{56} For the foregoing reasons, we affirm the judgment of the district court.

{57} IT IS SO ORDERED.

TIMOTHY L. GARCIA, Judge

WE CONCUR:

CELIA FOY CASTILLO, Chief Judge

MICHAEL D. BUSTAMANTE, Judge

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