

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NORTH DAKOTA
EASTERN DIVISION**

**THE FAMILIES ADVOCATE, LLC,
an Arizona Limited Liability Corporation,
as Conservator of D.M., a Minor;
and SARINA BONNO and JULIAN MORENO,
Individually**

PLAINTIFFS

V.

CASE NO. 3:16-CV-00114

**SANFORD CLINIC NORTH d/b/a
SANFORD CLINIC JAMESTOWN;
SARAH SCHATZ, M.D.; and LUTHERAN
CHARITY ASSOCIATION d/b/a
JAMESTOWN REGIONAL MEDICAL CENTER**

DEFENDANTS

OPINION AND ORDER

The Court held a hearing on May 30, 2019, and received oral argument on several pending motions in limine (Docs. 160, 201, 203, 235, 239, 246, 247). The Court ruled or partially ruled on some of the motions from the bench and took other motions under advisement. The Court is now prepared to rule, and the following Order memorializes the Court's rulings. To the extent anything in this Order conflicts with statements made from the bench during the hearing, this Order will control.

I. MOTIONS IN LIMINE

A. MOTION TO EXCLUDE PORTIONS OF REPORT AND TESTIMONY OF DR. CAROLYN SALAFIA, DR. HARRY CHUGANI, DR. HARRY FARB, DR. THOMAS FERRARA, DR. MARVIN NELSON, DR. MICHAEL RADETSKY, AND DR. STEVEN CALVIN (DOC. 160)

This motion seeks to exclude from trial certain—but not all—expert opinions of defense witness Dr. Carolyn Salafia, a placental pathology expert. The motion also seeks to exclude certain opinions of several other defense experts—Drs. Chugani, Farb, Ferrara, Nelson, Radetsky, and Calvin—to the extent those other experts' opinions have

incorporated and referenced the disputed testimony and opinions of Dr. Salafia. Plaintiffs object to Dr. Salafia offering testimony as to the proximate cause or causes of the brain injury suffered by D.M. They contend that Dr. Salafia plans to explain to the jury through her testimony a “novel theory that a process sufficient to produce certain microscopic features in the placenta and umbilical cord caused a fetal brain injury to D.M. days before his birth.” (Doc. 161 at 2). Dr. Salafia studied sections of D.M.’s umbilical cord and placenta and concluded that there was evidence of cord trauma, cord compression, an excessively long and coiled cord, long-term exposure of the cord and placenta to meconium, and possible exposure of the fetus to infection or an infectious process *in utero*. She opined that the injuries to the cord and placenta that she observed occurred more than 24 hours to a week prior to delivery.

Plaintiffs are concerned that Dr. Salafia will testify that the placental and umbilical cord anomalies she observed proximately caused D.M.’s brain injuries, and further, that she will attempt to time when those brain injuries occurred *in utero*—something even she concedes she is not qualified to do by virtue of her training and experience. Plaintiffs further claim she cannot point to any published medical literature “that states that a process sufficient to cause these findings in the placenta is also sufficient to cause a fetal brain injury.” *Id.* at 10. Plaintiffs concede, however, that Dr. Salafia may be qualified to testify “that there is an association between these findings [regarding cord and placental anomalies] and adverse neonatal outcomes,” but they stress to the Court that “[a]ssociation does not imply causation.” *Id.* Finally, Plaintiffs argue that Dr. Salafia’s testimony about the timing of the appearance of these placental and cord anomalies is likely irrelevant to the case, since “[w]hat is at issue is the cause and timing of D.M.’s

brain injury.” *Id.* (emphasis added). To reinforce this point, they cite to a medical textbook, *Pathology of the Placenta: A Practical Guide*, for the proposition that fetal malperfusion is not necessarily causative of a particular outcome to a fetus. *Id.* But the textbook also notes that the types of structural anomalies associated with malperfusion may “at a minimum . . . reduce[] the fetal threshold for tolerating additional intrauterine/intrapartum stressors.” *Id.*

A *Daubert* motion like this one asks the Court to invoke its “gate-keeping function” to ensure that an expert’s opinion is “supported by the kind of scientific theory, practical knowledge and experience, or empirical research and testing that permit assessment ‘of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.’” *Robertson v. Norton Co.*, 148 F.3d 905, 907 (8th Cir.1998) (quoting *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 592–93 (1993)). Whether to exclude or allow expert testimony is committed to the district court’s sound discretion, subject to the Federal Rules of Evidence, including Rule 702. *Johnson v. Mead Johnson & Co., LLC*, 754 F.3d 557, 561 (8th Cir. 2014).

Rule 702 states:

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.

The Eighth Circuit has “boiled down” these requirements into a three-part test:

First, evidence based on scientific, technical, or other specialized knowledge must be useful to the finder of fact in deciding the ultimate issue of fact. This is the basic rule of relevancy. Second, the proposed witness

must be qualified to assist the finder of fact. Third, the proposed evidence must be reliable or trustworthy in an evidentiary sense, so that, if the finder of fact accepts it as true, it provides the assistance the finder of fact requires.

Johnson, 754 F.3d at 561 (quoting *Polski v. Quigley Corp.*, 538 F.3d 836, 839 (8th Cir. 2008)).

When making a *Daubert* challenge, the Court's objective "is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 152 (1999). To this point, Plaintiffs argued during the hearing on May 30 that the medical literature Defendants cited in their response to the motion—which Defendants contend supports Dr. Salafia's scientific opinions about the negative effects that excessive cord length, cord coiling, and meconium staining, among other noted anomalies, may have on the fetus *in utero*—does not, in fact, support these opinions. Plaintiffs' counsel went so far as to represent to the Court that Defendants "can't point to a single article where it actually supports what she's trying to say in the first place" and then described Dr. Salafia's opinions on the medical effects of cord length and cord discoloration due to meconium staining as "not based on any scientific literature, including the literature that they cite" and as opinions that are tantamount to "junk science."

Before considering the *Daubert* factors, the Court finds it necessary to clarify the scope of the parties' disagreement about Dr. Salafia's proposed testimony. First, Defendants represent to the Court that she will not offer an opinion that any of the cord and placental anomalies she observed proximately caused D.M.'s brain injuries. Given that concession, the Court will order that Dr. Salafia not attempt to offer such opinions as to proximate causation at trial. Second, it appears that Plaintiffs have no quarrel with Dr.

Salafia describing how she analyzed the cord and placental samples, and then explaining the various features and anomalies she observed in those samples. The sole areas of contention between the parties have to do with Dr. Salafia's testimony that: (1) the anomalies she observed in D.M.'s cord and placenta are generally linked to certain negative outcomes in fetuses and (2) these anomalies in D.M.'s cord must have occurred more than 24 hours to a week prior to delivery.

Turning to the "boiled down" three-part test in *Johnson*, the Court must first consider whether Dr. Salafia's proposed, disputed testimony is relevant, in that it must prove potentially useful to the finder of fact in deciding the ultimate issues of fact. After careful consideration, the Court finds that Dr. Salafia's testimony about the placental and cord anomalies she observed, their general association with negative outcomes in fetuses, and their timing *in utero* are all relevant to the central issue of causation in this case. Second, to be admissible, the Court must find Dr. Salafia qualified to assist the finder of fact in understanding these disputed areas of scientific testimony. Here, the Court finds that Dr. Salafia's education and extensive clinical experience in the area of placental pathology make her qualified to opine on all disputed topics.

What remains, therefore, is the crux of the dispute: whether Dr. Salafia's opinions on the negative biological indicators generally associated with the cord and placental anomalies that she observed—and the timing of those anomalies—are grounded in accepted scientific principles and methods, or else are so novel and outside the scientific mainstream that they may more properly be characterized as "junk science." After reviewing the medical literature cited by Defendants in opposition to the motion, the Court concludes that the disputed opinions outlined above appear to be supported by the

literature cited, and Plaintiffs' disagreement with Dr. Salafia's opinions goes more to their weight and credibility, rather than to their admissibility. See, e.g., Doc. 186-4 at pp. 1, 2, 9, 23 (“[S]evere fetal consequences” secondary to compression of the cord and coiling in “[e]xcessively long cord[s] >70 cm”¹ may be “present for weeks or months before delivery” and “can cause chronic, intermittent obstruction of blood flow . . . and resultant thrombosis in the fetal circulation,” as well as “fetal distress, death, or neurologic injury”; excessive cord coiling is “associated with fetal growth restriction and fetal intolerance to labor;” meconium exposure “for a sustained period of time” leads to “damage [to] the amnion, the umbilical cord, and fetal vessels”; and “many hours of meconium exposure are required for gross staining of the umbilical cord,” which may “manifest[] as necrosis of the vascular smooth muscle of umbilical vessels”); Doc. 186-3 at 5 (noting that meconium staining with associated myonecrosis² is associated with “adverse clinical outcomes such as IUGR [Intrauterine Growth Restriction], IUFD [Intrauterine Fetal Death], fetal distress, and low APGAR scores”; and recent studies suggest that 24 hours of more of exposure to meconium may be required “for meconium-filled macrophages to appear in the membranes”).

The Eighth Circuit has made clear that in performing a Rule 702 analysis, “the district court may evaluate one or all of the following factors: 1) whether the theory or technique can be or has been tested; 2) whether the theory or technique has been subjected to peer review and publication; 3) whether the theory or technique has a known

¹ D.M.'s umbilical cord was 72 cm. (Doc. 161-4 at 15).

² Dr. Salafia's report (Doc. 161-3 at 2) noted evidence of “myonecrosis/vascular smooth muscle cell death” in D.M.'s umbilical arteries.

or potential error rate and standards controlling the technique's operation; and 4) whether the theory or technique is generally accepted in the scientific community.” *Allen v. Brown Clinic, P.L.L.P.*, 531 F.3d 568, 573 (8th Cir.2008) (citing *Daubert*, 509 U.S. at 593-94). In performing this analysis, however, “[t]he focus . . . must be solely on principles and methodology, not on the conclusions that they generate.” *Daubert*, 509 U.S. at 595. Here, the Court finds that, according to the evidence presented, the principles and methodology used by Dr. Salafia are sound, and her theories have been tested and subjected to scrutiny in publications generated by the scientific community.

Accordingly, the Motion to Exclude (Doc. 160) with respect to Dr. Salafia is **GRANTED IN PART AND DENIED IN PART**, in that Dr. Salafia will not be permitted to testify that any of her observations as to D.M.’s umbilical cord and placental anomalies proximately caused his brain injuries, nor may she testify as to the timing of his brain injuries; however, she will be permitted to testify about her observation of cord/placental anomalies, the physiological/biological effects that are generally associated with the presence of these anomalies, and the timing of these anomalies *in utero*.

With respect to the motion’s request to exclude certain testimony offered by other defense experts, Plaintiffs have failed to adequately justify why these expert opinions should be excluded under Rule 702, and further, Plaintiffs have failed to adequately identify which opinions merit such exclusion and why. Drs. Chugani, Farb, Ferrara, Nelson, Radetsky, and Calvin all relied on the accuracy of Dr. Salafia’s analysis of D.M.’s cord and placental samples, and they all referenced the anomalies that Dr. Salafia described in their own expert opinions. As far as the Court understands, the accuracy of Dr. Salafia’s analysis of the cord and placental samples is not the subject of this motion.

Moreover, Plaintiffs have not argued that these other doctors are unqualified by either training or experience to analyze the cord/placental data that Dr. Salafia reported. In point of fact, the motion does not even refer the Court to any specific testimony or opinions by these doctors that merit exclusion.³ The Motion instead focuses almost exclusively on Dr. Salafia and her testimony—and then tacks on an oblique criticism of Drs. Chugani, Farb, Ferrara, Nelson, Radetsky, and Calvin for incorporating aspects of her report into their own “litigation-driven opinion[s].” (Doc. 161 at 13). In light of the Court’s decision above regarding the admissibility of Dr. Salafia’s opinions, the Motion with regard to Drs. Chugani, Farb, Ferrara, Nelson, Radetsky, and Calvin relying upon and referencing those opinions in their own reports and testimony is **DENIED**.

B. MOTION TO LIMIT D.M.’S APPEARANCE AT TRIAL (DOC. 201)

At the hearing on May 30, the parties generally discussed their positions regarding D.M.’s right to be present in the courtroom during trial. Plaintiffs’ counsel sketched out the times she planned for D.M. to be present, namely, during *voir dire* of the venire panel, during Plaintiffs’ opening statement, at some point in the middle of trial, and during Plaintiffs’ closing argument. In response, Defendants explained their concern that D.M.’s

³ Plaintiffs have attached the entirety of each doctor’s expert report and deposition, presumably expecting the Court to scour hundreds of pages of testimony for those opinions Plaintiffs consider inadmissible because they “piggyback” onto Dr. Salafia’s. (Doc. 161 at 4). Plaintiffs concede, however, that some of Dr. Salafia’s opinions are admissible, *see supra*. And it would follow that the opinions of Drs. Chugani, Farb, Ferrara, Nelson, Radetsky, and Calvin that rely on Dr. Salafia’s *admissible* findings—would also be admissible. For example, Plaintiffs do not object to the admissibility of Dr. Salafia’s gross anatomical findings that recount the anomalies she observed (i.e., that the cord was 72 inches long, that the cord was stained yellow, that the epithelial layer of the cord was damaged, that the umbilical vessels were dilated, etc.), so it would follow that to the extent Drs. Chugani, Farb, Ferrara, Nelson, Radetsky, and Calvin cited to those admissible findings, their citations would not be inadmissible under Rule 702.

presence in the courtroom would only inflame the passion and prejudice of the jury and serve as a distraction, since D.M. cannot assist counsel in the prosecution of his case. Defendants did ask, however, that if the Court were inclined to deny the motion and allow D.M. in the courtroom for some or all of the trial, then the Court should also require D.M. to be present for *voir dire* so that Defendants may test the venire panel's reactions when encountering D.M. in person and qualify the panel as to their ability to remain fair and impartial.

Ultimately, the Court instructed Plaintiffs' counsel to give further thought to the matter and inform both the Court and opposing counsel in writing by June 5, 2019, when, exactly, Plaintiffs wanted D.M. to be present during the course of the trial. Plaintiffs' counsel complied with this request and sent an email on June 4, stating that she no longer requested D.M.'s presence during *voir dire*, opening statement, or closing argument. Instead, she only planned for D.M. to be present during a brief period of time in Plaintiffs' case in chief for a "meet and greet" with the jury.⁴

It appears that Plaintiffs' current position is that they will only require D.M.'s presence in Court on a single occasion, for the explicit purpose of introducing him to the jury. This is in contrast to their position during the May 30 hearing, when they stated they wanted D.M. in Court several times during the course of the trial. In light of the fact that JRMC has already acknowledged Plaintiffs' "right to introduce D.M. to the jury," (Doc. 202 at 1), Plaintiffs' suggestion that D.M. briefly appear in Court on one occasion during their case in chief is reasonable. However, the Court also agrees with JRMC that Defendants

⁴ The term "meet and greet" was left undefined by Plaintiffs, so the Court has no idea what is meant by this.

have a right to qualify the venire panel in the child's presence. Therefore, subject to a better understanding of what Plaintiffs mean by a "meet and greet," the Court will permit the limited appearance of D.M. on a single occasion during Plaintiffs' case in chief, as contemplated by the Plaintiffs in their email to opposing counsel, provided, however, that D.M. also be made available in Court for at least a portion of *voir dire*. In light of the foregoing, the Motion to Limit D.M.'s Appearance in Court (Doc. 201) is **DENIED IN PART AND MOOT IN PART**. The motion is denied in that Plaintiffs may bring D.M. to Court at one point during their case in chief, provided they also make him available during *voir dire*; and the motion is moot as to all other relief requested.

C. MOTION TO EXCLUDE DOCTORS' OPINIONS ON NURSING STANDARD OF CARE (DOC. 203)

JRMC moves to exclude under Rule 702 the testimony of Plaintiffs' obstetrical experts, Drs. Fred Duboe and Genevieve Reid, about the applicable nursing standards of care in this case and their opinions as to whether JRMC's nurses violated those standards of care. JRMC argues that neither Dr. Duboe nor Dr. Reid has ever been a nurse or been trained as a nurse. JRMC also notes that the standards for nurse licensure in North Dakota are different from the standards for physician licensure, so simply because these doctors work with nurses routinely in their own obstetrical practices does not mean that they are qualified to testify about the applicable standards of care for nurses in this case.

Reviewing the testimony, Dr. Duboe agreed he is not a nurse, nor was he trained or licensed as a nurse. He believes he is qualified to testify as to the nursing standards of care because he works with nurses every day in his own labor and delivery practice, is married to a nurse, does "inservices with nurses," sits on committees with nurses, and

interviews nurses for nursing-supervisor positions. (Doc. 204-3 at 38). Further, he believes himself to be “familiar with elements of their education.” *Id.* As for Dr. Reid, she testified that she has never been trained or licensed as a nurse, nor does she make nursing assessments, (Doc. 204-4 at 37). She qualified that she has “work[ed] with nurses,” *id.* at 39. In addition, she offered anecdotal accounts of what the obstetric nurses who work at her hospital generally do, and she explained how some of the practices and responses of JRMC’s obstetric nurses would be considered “very rare at our hospital,” *id.* at 41.

Plaintiffs argue that Drs. Duboe and Reid should be permitted to opine on the nursing standards of care because they are practicing obstetricians who have worked extensively in clinical settings alongside nurses. The Court disagrees. There is no evidence in the record that either Dr. Duboe or Dr. Reid has any training, skill, or specialized knowledge as to the applicable nursing standards of care beyond the particular expectations and orders they might impose on the nurses who work routinely with them in their own obstetrical practices. Under Rule 702, these physicians’ opinions as to the applicable nursing standards of care lack relevance to this case, as their anecdotal testimony about how nurses generally practice or are expected to practice in particular hospital settings cannot adequately inform the jury about applicable nursing standards of care here. Furthermore, the Court finds under Rule 702 that their opinions on these topics are not sufficiently reliable or trustworthy in the evidentiary sense.

In addition to the above finding, the Court believes this testimony merits exclusion under Rule 403. Dr. Duboe’s and Dr. Reid’s opinions as to the nursing standards of care will be redundant to and cumulative of the opinions of Plaintiffs’ two nursing experts, Dr.

Michelle Murray, who is a labor and delivery nurse, and Nurse Elizabeth Alford. Accordingly, the Motion to Exclude (Doc. 203) is **GRANTED** under Rules 702 and 403. With that said, however, the Court indicated at the hearing on May 30 that Drs. Duboe and Reid appear qualified to testify generally as to the division of labor between obstetrical doctors and nurses in a labor and delivery setting. This testimony may be relevant in explaining to the jury how the work of providing care to an obstetrical patient is apportioned.

D. MOTION TO EXCLUDE SPECULATIVE TESTIMONY ABOUT HERPES (DOC. 239)

In this motion, Plaintiffs move to exclude the testimony of defense expert Dr. Thomas Ferrara, a neonatologist, concerning whether herpes may have possibly caused D.M.'s brain injuries. Dr. Ferrara in his expert report stated that "D.M.'s depressed state at birth was most likely related to an infectious process," though he did not mention any particular infection in the report. (Doc. 239-1 at 2). In his deposition, (Doc. 161-13), he referred to "good evidence" that D.M. had an infection of some sort and then discussed D.M.'s mother's "history of herpes," which he claims "was never ruled out" as having affected D.M. *Id.* at 30. Ms. Bonno had tested positive for herpes in the last weeks of pregnancy and was treated with medication. Dr. Ferrara testified that though "they did skin cultures and that sort of thing" to test D.M. for a herpes infection, "the only way to rule that out is to do a spinal tap and do a PCR for herpes, and that was never done."

During the May 30 motion hearing, counsel for Plaintiffs informed the Court that a PCR test⁵ for Herpes Simplex Virus, or HSV, *was performed* on D.M. after his birth, and

⁵ PCR stands for "Polymerase Chain Reaction." The Mayo Clinic's website notes: "PCR is used to copy your DNA from a sample of your blood, tissue from a sore or spinal fluid.

that test was also negative for herpes.⁶ In light of this, the Court asked defense counsel for a response, and counsel noted that Dr. Ferrara had testified that herpes could not be *completely* ruled out as the cause of D.M.'s brain injury because a spinal fluid test had never been performed. To put it another way: Defendants suggested that Dr. Ferrara should be permitted to tell the jury that D.M.'s brain injury was possibly caused by herpes because one particular test for herpes was never performed—even though multiple other tests were performed, and they were all negative for herpes. This testimony must be excluded.

Although a defense expert may suggest possible causes for a plaintiff's injury without proving them with certainty or to a “more probably than not” standard, see *Allen v. Brown Clinic, P.L.L.P.*, 531 F.3d 568, 574-75 (8th Cir. 2008) (citing *Wilder v. Eberhart*, 977 F.2d 673, 676-77 (1st Cir. 1992)), Rule 702 still requires that the expert's opinions be based on sufficient facts or data. Fed. R. Evid. 702(b). Dr. Ferrara's opinion here is based on nothing more than his own *ipse dixit*, since it is certainly not supported by sufficient facts or data. See *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) (“[N]othing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert.”).

The DNA can then be tested to establish the presence of HSV and determine which type of HSV you have.”

<https://www.mayoclinic.org/diseases-conditions/genital-herpes/diagnosis-treatment/drc-20356167> (last accessed June 7, 2019).

⁶ During the hearing, Plaintiffs' counsel cited the Court and opposing counsel to multiple negative tests for herpes simplex virus one and 2 that were performed on D.M., located at Trial Exhibits 1004-42, -45, -46, and -47.

Furthermore, even if the Court were to find some marginal justification for allowing Dr. Ferrara to testify about the herpes issue more generally (for example, with respect to the mother's herpes diagnosis during pregnancy), the fact that at least two laboratory tests, if not more, showed that D.M. did *not* have herpes means this testimony merits exclusion under Rule 403, as its probative value is substantially outweighed by a danger of misleading the jury, confusing the issues, and/or unfair prejudice. For all these reasons, the Motion to Exclude Speculative Testimony about Herpes (Doc. 239) is **GRANTED.**

E. MOTIONS TO EXCLUDE SPECULATIVE CAUSATION TESTIMONY FROM DRS. CHUGANI AND RADETSKY (DOCS. 235, 246)

Doc. 235 is a Motion to Exclude the Testimony of Dr. Harry Chugani that a vascular injury *in utero* caused D.M.'s brain injury—rather than hypoxic ischemic encephalopathy (“HIE”), or lack of oxygen to the brain at birth. Dr. Chugani testified that he believed a vascular injury before birth, rather than HIE at or near the time of birth, caused the brain damage, though he was not sure which of several possible causes was responsible for the vascular injury. Plaintiffs object that this testimony about possible alternative causes of injury is too speculative and must be excluded under Rule 702.

Doc. 246 is a similar Motion to Exclude the Testimony of Dr. Michael Radetsky. Dr. Radetsky, like Dr. Chugani, opines that there are several possible causes for D.M.'s brain injury *in utero*, including cord abnormalities and infection, but he cannot pinpoint which of two or three causes was the most likely. In any event, he believes to a reasonable degree of medical certainty that these other vascular causes are much more likely to have caused D.M.'s brain injury than Plaintiffs' theory of intrapartum birth asphyxia or HIE.

After careful analysis of the applicable law, the Court finds both Motions (Docs. 235, 246) must be **DENIED**. In *Allen v. Brown Clinic, P.L.L.P.*, 531 F.3d 568 (8th Cir. 2008), the Eighth Circuit found that the district court appropriately allowed a defense expert to testify as to alternative proximate causes for the plaintiff's injury. The plaintiff in that case had undergone surgery for a hiatal hernia, and only after surgery did doctors discover that he suffered an esophageal perforation. The defense expert opined—like Drs. Chugani and Radetsky do here—that the plaintiff's theory of causation was incorrect and that several other possible explanations for the cause of injury were far more likely.

In upholding the district court's decision, the Eighth Circuit observed that a defendant

need not prove another cause, he only has to convince the trier of fact that the alleged negligence was not the legal cause of the injury. In proving such a case, a defendant may produce other "possible" causes of the plaintiff's injury. These other possible causes need not be proved with certainty or more probably than not. To fashion such a rule would unduly tie a defendant's hands in rebutting a plaintiff's case, where as here, plaintiff's expert testifies that no other cause could have caused plaintiff's injury. The burden would then shift and defendant would then bear the burden of positively proving that another specific cause, not the negligence established by plaintiff's expert, caused the injury. Certainly, this is much more than what should be required of a defendant in rebutting a plaintiff's evidence.

Allen, 531 F.3d at 574-75 (quoting *Wilder v. Eberhart*, 977 F.2d 673, 676-77 (1st Cir. 1992)).

The Court concludes from this precedent that the defense is *not tasked* with proving the proximate cause of injury to a reasonable degree of certainty, and by the same token, the defense's expert is not "precluded from testifying unless he could conclusively state what proximately caused the injury." *Allen*, 531 F.3d at 574. Instead, the defense may "present evidence showing that some *other* cause accounts for the

injury.” *Baker v. Dalkon Shield Claimants Trust*, 156 F.3d 248, 252 (1st Cir. 1998) (emphasis in original). “Of course, a claim of alternative causation is not a free ticket to admission of evidence; an alternative causation theory could be incoherent or irrational, or the evidence supporting it inadmissible.” *Id.* In short, a defense expert may only offer possible causation opinions that meet the reliability requisites of Rule 702. Here, the testimony of Drs. Chugani and Radetsky, as identified in the Motions, meets the reliability requisites.

F. MOTION TO EXCLUDE TESTIMONY ABOUT NRP GUIDELINES (DOC. 247)

Plaintiffs argue that expert testimony on the contents of the Seventh Edition of the Textbook of Neonatal Resuscitation (“NRP Guidelines”), which was published in 2015, will not help the trier of fact to understand the appropriate standard of care for neonatal resuscitation that applied in May of 2014, when D.M. was born. The Sixth Edition of the NRP Guidelines was in effect in 2014, and that Edition directed doctors to perform routine intubation with tracheal suctioning on newborns *before* applying positive pressure ventilation. This guidance was removed from the Seventh Edition of the NRP Guidelines, again, after D.M. was born. There is evidence in the record that Defendant Dr. Sarah Schatz, who was the physician in charge during D.M.’s birth, did not follow the Sixth Edition’s published guidance on neonatal resuscitation, in that she did not perform intubation with tracheal suctioning on D.M. before applying positive pressure ventilation.

Plaintiffs explain in the motion that “[s]everal of defendants’ retained experts have also testified that Dr. Schatz complied with the Textbook of Neonatal Resuscitation – 7th edition, which was published in 2015, in support of their opinions that she complied with the standard of care.” Without citing to any specific expert testimony or attaching any

deposition transcripts or reports, Plaintiffs claim that such testimony, to the extent it exists, should be excluded as unreliable and irrelevant under Rules 401, 403, and 702, as the standard of care at the time of D.M.'s birth cannot be established by reference to the version of the NRP Guidelines that was not in effect at that time.

JRMC responds that one of its witnesses, Dr. Ferrara, testified in his deposition that the NRP Guidelines do not, by themselves, define the standard of care. (Doc. 161-13 at 20). He opined that a doctor could still practice within the standard of care even though she was not observing the current published protocols in the NRP. *Id.* at 21. Dr. Ferrara also testified that NRP Guidelines change over time to reflect updates in research. To that point, he observed that there was “data . . . available in 2010 that basically said there’s no evidence that intubating depressed babies with meconium has any—any effect on outcome.” *Id.* He also testified that the Seventh Edition of the NRP Guidelines reflected the new data and new practices in neonatal resuscitation that had already been practiced in the medical community. *Id.* Accordingly, it is JRMC’s position that Dr. Ferrara should be permitted to refer in his testimony to the changes that were made in the Seventh Edition of the NRP Guidelines with respect to neonatal resuscitation policy in order to support his opinion that Dr. Schatz complied with the applicable standard of care.

The Sanford Defendants respond that one of their experts, Dr. Myra Quanrud, intends to testify that the NRP is a “clinical guideline on how to proceed. It's an algorithm on how to proceed allowing for clinical judgment along the way,” but it does not, in and of itself, establish the standard of care. (Doc. 274-4 at 24). Dr. Quanrud also discussed in her deposition how the NRP’s Guidelines on intubation and suctioning “changed for a

reason” to reflect changing practice, *id.*, though she did not specifically testify that Dr. Schatz followed the standard of care because, in hindsight, the Guidelines had changed.

After considering the briefing on this issue, the Court finds that the Motion to Exclude (Doc. 247) is **GRANTED IN PART AND DENIED IN PART**. The motion is granted to the extent that no expert will be permitted to testify that Dr. Schatz met the applicable standard of care in 2014 *because* the NRP Guidelines were amended in 2015 to reflect the protocol she observed during D.M.’s birth. In other words, no expert may base his or her opinion that Dr. Schatz met the neonatal resuscitation standard of care in 2014 merely by referring to the fact that the NRP Guidelines changed in 2015, and thus “validated” what Dr. Schatz did in 2014. The motion is denied to the extent that experts are permitted to explain how the NRP Guidelines inform the standard of care, describe how the Guidelines changed from the Sixth to the Seventh Editions, and offer reasons for the changes to the Guidelines. Experts are also permitted to offer their opinions as to whether the Sixth Edition of the NRP Guidelines no longer reflected the standards and practices being observed in delivery rooms at the time of D.M.’s birth.

II. CONCLUSION

IT IS ORDERED, as set forth in detail above, that:

- Plaintiffs’ Motion to Exclude (Doc. 160) with respect to Dr. Salafia is **GRANTED IN PART AND DENIED IN PART**, and with respect to Drs. Chugani, Farb, Ferrara, Nelson, Radetsky, and Calvin is **DENIED**;
- Defendant JRMC’s Motion to Limit D.M.’s Appearance in Court (Doc. 201) is **DENIED IN PART AND MOOT IN PART**;

- Defendant JRMC's Motion to Exclude Doctors' Opinions on Nursing Standard of Care (Doc. 203) is **GRANTED**;
- Plaintiffs' Motion to Exclude Speculative Testimony about Herpes (Doc. 239) is **GRANTED**;
- Plaintiffs' Motions to Exclude Speculative Causation Testimony from Drs. Chugani and Radetsky (Docs. 235, 246) are **DENIED**; and
- Plaintiffs' Motion to Exclude Testimony about NRP Guidelines (Doc. 247) is **GRANTED IN PART AND DENIED IN PART**.

The Court will take up the remaining motions in limine (Docs. 199, 226) at the telephonic status hearing set for Tuesday, June 11, 2019.

IT IS SO ORDERED on this 7th day of June, 2019.

/s/ Timothy L. Brooks
TIMOTHY L. BROOKS
UNITED STATES DISTRICT JUDGE