In the United States Court of Federal Claims

No. 07-810V
(Filed: August 19, 2015)*
*Opinion originally issued under seal on July 31, 2015

PETER and CHERIE NUTTALL, et al., Petitioners, v. SECRETARY OF HEALTH and HUMAN SERVICES,	)	Childhood Degenerative Disorder; Deference to Credibility Determination; Vaccine; Table Injury; Encephalitis; Expert Testimony; Treating Physician; Encephalitis

Curtis R. Webb, Twin Falls, ID, for petitioners.

Voris E. Johnson, Civil Division, U.S. Department of Justice, Washington, DC, with whom were *Benjamin C. Mizer*, Assistant Attorney General, *Rupa Bhattacharyya*, Director, Torts Branch, *Vincent J. Matanoski*, Deputy Director, Torts Branch, and *Gabrielle M. Fielding*, Assistant Director, Torts Branch, for defendant.

OPINION DENYING PETITIONERS' MOTION FOR REVIEW

FIRESTONE, *Judge*.

Pending before the court is the motion of petitioners Peter and Cherie Nuttall, on behalf of their son N.N., for review of the special master's decision deny compensation under the National Childhood Vaccine Injury Act of 1986, 42 U.S.C. §§ 300a-1 to -34 ("the Vaccine Act"), as amended.

N.N. suffers a severe neurological disorder diagnosed as childhood disintegrative disorder ("CDD").[1] The petitioners allege that N.N.'s CDD is a sequela of encephalitis caused by the measles, mumps, rubella ("MMR") vaccination or the diphtheria-tetanus-acellular pertussis ("DTap") vaccination, both of which were administered on November 22, 2004.

In the hearing before the special master, the most important pieces of evidence as to whether N.N. experienced encephalitis following his vaccinations were two magnetic resonance imaging ("MRI") studies of N.N.'s brain, one conducted in 2005 and one in 2011. Petitioners' expert, Dr. Robert Shuman, a pediatric neurologist, testified that the MRI indicated that N.N. had suffered viral encephalitis. The petitioners also presented the report of Dr. Jose Bauza, the neuroradiologist who supervised N.N.'s 2011 MRI. Dr. Bauza did not testify at the hearing, but in his report noted irregularities in N.N.'s MRI which he found to be consistent with previous encephalitis. The government's expert, Dr. Max Wiznitzer, also a pediatric neurologist, disagreed with Dr. Shuman and Dr. Bauza's interpretation of the MRIs and testified that N.N.'s brain did not show signs of encephalitis.

The special master found that the government's expert was more persuasive than petitioners' expert, primarily because Dr. Wiznitzer was able to cite medical literature to

[1] CDD is a rare condition in which a child develops normally, but then suffers a severe loss of social, language, and other skills. Though CDD is considered part of the larger category of autism spectrum disorder, this case, as Special Master Hastings explained in his opinion, "does not concern whether autism can be caused by the vaccinations N.N. received, but only whether N.N. suffered an encephalitis, with the first symptoms of that encephalitis arising within a Table period after his vaccinations." Special Master's Decision ("Dec.") at 4, ECF No. 100.

support his opinions that N.N.'s brain appeared normal in the MRI scans. The special master decided that Dr. Bauza's report was not entitled to significant weight because Dr. Bauza's opinion lacked reasoning sufficient to outweigh Dr. Wiznitzer's testimony and evidence. The special master also rejected petitioners' argument that Dr. Bauza should be given particular deference because, as a neuroradiologist, Dr. Bauza had a particular expertise that made him more qualified than the other experts who testified in this case. In addition, the special master rejected the petitioners' argument that Dr. Bauza's report should be given additional consideration because Dr. Bauza was N.N.'s treating physician, finding that Dr. Bauza had been retained in connection to the present litigation and not merely for treatment purposes. The special master therefore concluded that petitioners had failed to meet their burden of showing by a preponderance of the evidence that N.N. had suffered encephalitis.

In their Memorandum of Objections, ECF No. 103 ("Pet. Mem."), petitioners argue that the special master's decision was arbitrary and capricious because the special master failed to correctly evaluate and give weight to Dr. Bauza's opinion. The government counters that the special master's treatment of Dr. Bauza's opinion was sufficient, reasonable, and supported by the record.

Upon review of the record in this case, the court finds that the special master carefully considered the medical arguments of both sides, and that his conclusion that plaintiffs had not met their burden was reasonable in light of the evidence in the record. Further, the court finds that it was reasonable for the special master to find that Dr. Bauza was not more qualified or entitled to more deference that the other experts in this case.

Therefore, petitioners' motion is **DENIED** and the decision of the special master is **AFFIRMED**.

I. BACKGROUND

A. Facts and Procedural History

On November 19, 2007, Peter and Cherie Nuttall filed a petition under the Vaccine Act on behalf of their son, N.N., alleging that the MMR or DTap vaccinations N.N. received in November of 2004, when N.N. was four years old, led to his CDD. In addition to CDD, N.N. has been diagnosed with child psychosis, mental retardation, ADD, and cognitive disorder – not otherwise specified. Dec. at 6. He was hospitalized for self-injurious behavior for six days in August of 2006. In 2005 N.N. underwent an MRI study, which a radiologist interpreted as normal.

The case was initially assigned to Special Master Moran, who conducted a fact hearing on June 24, 2008, in Las Vegas, Nevada "in order to resolve factual disputes regarding the onset of N.N.'s condition in light of conflicts between the medical records and petitioners' claims." Id. at 6. Witnesses for N.N., including N.N.'s parents, two grandparents, and a babysitter, testified that N.N.'s development began to acutely regress within a week of his MMR vaccination. Id. at 5-6. However, the regression was not noted in N.N.'s medical records until the spring of 2005. Id. at 5. In his findings of fact, Special Master Moran found that N.N.'s symptoms, particularly his loss of language and speech skills, did in fact arise shortly after his vaccinations on November of 2004. Id. at 7. The case was subsequently stayed pending the outcome of the Omnibus Autism

Proceeding, which addressed and rejected the theory that the MRR vaccine can cause or contribute to autism. Id.

In October of 2011, Dr. Jose Bauza, a neuroradiologist, oversaw a second MRI study on N.N.'s brain. Pet. Mem. 4. Dr. Bauza found that the MRI study demonstrated "subtle peritrigonal hyperintensity which are not expected for the patient's age (11)" and "hyperintensity within the hippocampus bilaterally." Id. Dr. Bauza concluded that these two findings were "in keeping with the patient's history of previous encephalitis . . . ." Id.

On November 7, 2011, after the Autism Omnibus Proceedings had concluded, the case was reassigned to Chief Special Master Campbell-Smith. Dec. at 7. Petitioners filed an amended petition on November 28, 2011. Am. Pet., ECF No. 45. The amended petition alleged that N.N.'s severe neurologic disorder was a result ("sequela") of a limbic encephalitis, a Table Injury, attributable to his November 22, 2004, MMR or DTaP vaccine.[2] The government countered that N.N. suffers from CDD unrelated to his vaccinations, and that N.N.'s MRI scans contain no evidence that N.N. experienced limbic encephalitis. The government also argued that N.N. does not exhibit key symptoms of encephalitis.

[2] The Table entry for the DTaP vaccination provides for recovery for encephalopathy or encephalitis with the first symptoms occurring within seventy-two hours after the vaccination. 42 C.F.R. § 100.3(a). The Table entry for the MMR vaccination provides recovery for encephalopathy or encephalitis with the first symptoms occurring between five days and fifteen days after the vaccination. Id.

Following briefing preceding the expert hearing, Chief Special Master Campbell-Smith accepted the petitioners' argument that "encephalitis" for the purpose of the Vaccine Injury Table meant any swelling of the brain. Dec. at 12. The special master found that in order to recover, the petitioners must prove, first, that N.N. "in fact did experience demonstrable brain inflammation," second, that "the impact of the claimed inflammation on [N.N.'s] brain was severe enough to result in the injuries he experienced," and third, "whether the location of the inflammation in N.N.'s brain could have caused the symptoms he experienced." Id. at 14.

The expert hearing was conducted on January 25, 2013, at the Office of Special Masters in Washington, D.C. Dr. Max Wiznitzer, a pediatric neurologist, testified on behalf of the government. Dr. Robert Shuman, also a pediatric neurologist, testified as an expert on behalf of petitioners. Petitioners also submitted Dr. Bauza's report as evidence that N.N. suffered from encephalitis. N.N.'s medical records also included the report of Dr. Brett Hewell, the radiologist who interpreted N.N.'s 2005 MRI as normal.

B. Special Master Hastings's Findings

On March 8, 2013, the case was reassigned to Special Master Hastings.[3] Special Master Hastings accepted Special Master Campbell-Smith's finding regarding the definition of "encephalitis," and Special Master Moran's finding that N.N.'s symptoms, particularly the loss of his speaking ability, occurred within the time period specified by the Vaccine Injury Table. Id. at 8. Therefore, the special master focused whether N.N.

[3] Any use of the term "the special master" shall hereinafter refer to Special Master Hastings unless otherwise specified.

experienced encephalitis. The special master found that the MRI scans were the best evidence of whether N.N. did have encephalitis, and therefore, the "correct interpretation of N.N.'s MRI studies is clearly the key to the case." Id. at 14. The special master then turned to the parties' respective experts' interpretation of the MRI studies.

1. Drs. Shuman and Wiznitzer's competing interpretations of N.N.'s MRI scans

In his interpretation of N.N.'s MRIs, the petitioners' expert, Dr. Shuman identified what he perceived to be five abnormalities which he argued were evidence of scarring of the brain consistent with past encephalitis inflammation: (1) trigonal hyperintensities; (2) hyperintensity of the hippocampi; (3) hyperintensity of the ventricle lining; (4) enlarged ventricles; and (5) hyperintensity of the fornices. The government's expert, Dr. Wiznitzer, provided a contrary explanation on each of these five points, concluding the MRI images were not consistent with previous encephalitis.

The petitioners argued that Dr. Shuman the better qualified expert to interpret an MRI study because he received a certificate in neuroimaging from the American Society of Neuroimaging. Conversely, the government argued that Dr. Wiznitzer was better qualified because unlike Dr. Shuman, who had retired from clinical practice in 2006, Dr. Wiznitzer continues to practice pediatric neurology and makes use of MRI technology as part of his regular practice. However, after comparing the respective credentials of Dr. Wiznitzer and Dr. Shuman, the special master found that "there is no qualification gap between two experts." Id. at 22. To the extent that there was any qualification gap, the special master found that "Dr. Wiznitzer more than closed that gap by presenting

coherent and detailed testimony that was supported by specific references to medical literature." Id. at 23. The experts' respective opinions, and the special master's analysis of each point, are explained below.[4]

a. Trigonal hyperintensities

Dr. Shuman testified that images from N.N.'s 2005 and 2011 MRI studies identified at trial as Exhibits 42-A and 42-B contained evidence of abnormalities in the peritrigonal region on both sides of the brain. Dr. Shuman stated in an MRI scan of a normal brain, myelination in the centrum semiovale, which he described as "the core of the white matter," should appear as a black space. But according to Dr. Shuman, N.N.'s brain scan showed "linear radiant striped zones of T2 hyperintensity in the same region of the peritrigonal white matter." Dec. at 15. Dr. Shuman explained that in N.N.'s MRI, the centrum semiovale was like "Swiss cheese." Id. Dr. Shuman stated that the area "was lighter than it ought to be" with "holes" and "lines in it." Id. In addition, Dr. Shuman found that N.N.'s MRI exhibit asymmetry, which he testified was consistent with abnormality. Id. Dr. Shuman concluded that the hyperintensities in the MRI in that portion of the brain was "old scaring, consistent with an old perivenular encephalitis." Id.[5]

[4] Because the special master found that N.N.'a MRI showed no evidence of prior encephalitis, the special master did not reach Dr. Wiznitzer's testimony that N.N.'s clinical symptoms were not consistent with encephalitis.

[5] Dr. Shuman also testified that the perivascular spaces were asymmetrical, and stated that "[a]ssymetr[y] usually means pathology." Tr. 251. Because Dr. Shuman did not cite any authority for this proposition, the special master did not find Dr. Shuman's testimony on that issue persuasive. Dec. at 16

Dr. Wiznitzer did not dispute that Exhibits 42-A and 42-B showed linear hyperintensities within N.N.'s white matter. However, according to Dr. Wiznitzer, the hyperintensities were indications of "terminal zones" of immature myelin. Id. According to Dr. Wiznitzer, this terminal myelination was "a normal finding in individuals between 16 months up through the second decade of life." Id. To support his argument that the hyperintensities represented a normal developmental variant instead of a loss of tissue, Dr. Wiznitzer presented MRI images from children, including a six-year-old, appearing in the medical literature that are considered "normal" and which feature what he characterized as the same type of linear hyperintensities identified by Dr. Shuman as abnormal. Id. (citing Trial Ex. 4, Welker and Patton, Assessment of Normal Myelination with Magnetic Resonance Imaging, Seminars in Neurology Vol. 32 (2012) [hereinafter "Assessment of Normal Myelination"]). Dr. Shuman countered that, at age eleven, N.N. was too old at the time of his 2011 MRI to have exhibited immature myelination. Dec. at 16. Dr. Shuman initially testified that images of terminal myelination in babies is "a smooth anatomic phenomenon of age" and is "limited to the first year of life." Dec. at 16.

The special master found that Dr. Wiznitzer's opinion was more persuasive. Dec. at 17. The special master explained that he found Dr. Wiznitzer's explanation that the hyperintensities were a "normal developmental variant known as terminal myelination" was "coherent" and "supported by medical literature." Id. Specifically, the special master found that Dr. Wiznitzer's testimony was consistent with the statement in Assessment of Normal Myelination that "small areas of hyperintensity are considered to

be a normal developmental variant in children and at times are even identifiable in the young adult population." Dec. at 16 (quoting Assessment of Normal Myelination at 11) (emphasis added in special master's opinion). The special master found that Dr. Shuman, on the other hand, did not back up his opinion that the degree of hyperintensity exhibited in N.N.'s 2011 MRI would not be age appropriate for an eleven-year-old with any published medical literature. Id. at 16-17. The special master found that Dr. Shuman's opinion "seemed, if not completely at odds with the medical literature in the record, at the very least less consistent with it," and therefore found Dr. Shuman's explanation for the presence of the trigonal hyperintensities less persuasive. Dec. at 17.

b. Bilateral hyperintensity of the hippocampi

Dr. Shuman testified that Exhibits 43-A and 43-B "show bilateral hyperintensity of the posterior portions of hippocampi." Id. Dr. Shuman testified that this finding was significant because the hippocampus is a "very prominent part of the limbic system" and as such, is "a very prominent site of attack in encephalitis, especially limbic encephalitis." Id.

Dr. Wiznitzer testified that, in his experience in his own practice, the "classic" pattern of limbic encephalitis would be shown as a hyperintensity in the anterior of the hippocampus. Id. at 17-18. In response, Dr. Shuman pointed that the medical literature Dr. Wiznitzer used to illustrate his testimony regarding "classic" pattern of encephalitis does not exclude hyperintensities in the posterior of the hippocampus. Id. at 18. Instead, Dr. Shuman pointed out, and the special master acknowledged, that the article speaks of inflammation "anywhere in the mediotemporal lobe" as evidence of limbic encephalitis,

and does not at any point limit its discussion by using the modifying "anterior" descriptor. Id.

In addition to arguing that Dr. Shuman's interpretation of the MRI was not consistent with limbic encephalitis, Dr. Wiznitzer also argued that the posterior hyperintensity Dr. Shuman identified was "an 'artifact' of the MRI process and was not an abnormality at all." Id. at 18. According to Dr. Wiznitzer, a true finding of abnormality would look "fluffy" or have an "irregular contour" whereas this image is "like a little peg." Id. Dr. Wiznitzer cited several examples of MRIs containing artifacts to support this argument. Id. at 19. Dr. Shuman countered that the hyperintensity was unlikely to be an artifact because it was visible in images of different planes in N.N.'s 2011 MRI study, and also visible in N.N.'s 2005 MRI study. Id.

The special master agreed with Dr. Wiznitzer. With respect to the dispute over whether hyperintensities in the posterior hippocampus could signify prior limbic encephalitis, the special master found that "[t]his ambiguity alone might be indication enough that Petitioners have failed to meet their burden on this issue." Id. at 19. However, the special master went on to find that, "it would appear that the anterior hyperintensity shown on N.N.'s MRI may be no indication of any abnormality at all." Id. The special master explained that Dr. Wiznitzer's opinion "that it is nothing more than an artifact of the MRI process is compelling, particularly in light of the multiple examples he provides from medical literature." Id. Dr. Shuman, on the other hand, had not "substantiated his assertion that MRI artifacts are transient, unreproducible, or limited to a single plane" with citations to medical literature. Id. at 18-19.

c. Hyperintensity in the ventricle lining

Dr. Shuman testified that Exhibit 43-A showed "signal intensity around the lining of the lateral ventricle." Id. at 20. He argued that this finding was significant because the lateral ventricle "is a favored spot for scarring in any kind of inflammatory process." Id. However, in response to Dr. Wiznitzer's testimony (with citations to medical literature) that this type of brightness along the ventricular wall is known as "anterior cap" and is considered normal, Dr. Shuman characterized his argument on this point as "a throw away." Id. Dr. Shuman acknowledged that hyperintensity of the ventricle lining is a normal finding "to a degree," but argued that the thickness in N.N.'s case was pathologic for a child of N.N.'s age. Id. However, because Dr. Shuman was not able to quantify what a normal degree of thickness would be, the special master found that "even if this type of hyperintensity were abnormal, there is an insufficient basis to conclude that it is evidence of encephalitis in particular." Id.

d. Enlarged ventricles

Dr. Shuman compared Exhibit 44-A, from N.N.'s 2011 MR study, with Exhibit 44-B, an image showing the same region of the brain from N.N.'s 2005 study. Id. Dr. Shuman testified that a comparison of these two images showed that the ventricles appear larger in the 2011 image as they did in the 2005 image. Id. Dr. Shuman testified that the 2011 images showed ventricles that are "huge" for a child N.N.'s age, and opined that tissue loss was the only explanation for the increase in size. Id. at 21. Dr. Wiznitzer countered that ventricle growth is normal in children as they age. Id.

The special master found that, though the petitioners showed that the lateral ventricles had grown over time, the petitioners had not demonstrated the medical significance of that change. Id. The special master also concluded that the petitioners had not established that N.N.'s were enlarged to the point that their size was evidence of a pathology. Id.

e. Hyperintensity in the fornices

Dr. Shuman testified the images from N.N.'s MRI studies included hyperintensities in the body of the fornices, which he concluded was indicative of scarring. Id. Dr. Wiznitzer countered that the hyperintensities in the fornix that Dr. Shuman saw as evidence of scarring was actually another example of an "anterior cap," which Dr. Wiznitzer testified also explained the hyperintensities in the ventricle lining. Id. Dr. Wiznitzer argued that the brightness Dr. Shuman had identified as the fornix was actually the "thin rim of the ventricle wall." Id. Dr. Shuman acknowledged that some degree of hyperintensity in the fornix could be a normal finding, but again argued that such a finding would not be appropriate for N.N. given his age, arguing that the relevant zone of the brain is very thin at birth but becomes "thicker and tougher with each decade." Id. at 22.

The special master found that Dr. Shuman "acknowledges that N.N.'s MRI should demonstrate some level of hyperintensity in the region of the fornix." Id. The special master found that Dr. Shuman "failed to offer any normative values from which to judge the appropriate" degree hyperintensity, and therefore could not demonstrate a pathology. Id.

2. The special master determined that Drs. Bauza and Hewell's opinions were not entitled to significant weight

N.N.'s medical records also included the finding of radiologist Dr. Hewell that N.N.'s 2005 MRI study was normal, and Dr. Bauza's report stating that N.N.'s 2011 MRI study was consistent with a prior encephalitis. The petitioners relied heavily on the opinion of Dr. Bauza, the neuroradiologist who supervised N.N.'s 2011 MRI study and provided the initial interpretation of those scans.[6] The petitioners argued that Dr. Bauza, by virtue of being a neuroradiologist, was better qualified than Dr. Shuman or Dr. Wiznitzer to interpret N.N.'s MRI results. In his report, Dr. Bauza found that N.N.'s MRIs exhibited hyperintensities in the hippocampus and hypothalamus regions, and concluded that these findings were "in keeping with the patient's previous history of encephalitis." Pet. Mem. 5. Dr. Bauza did not testify at the hearing.

The special master found that, in light of the other evidence in this case, Dr. Bauza and Dr. Hewell's reports were "not entitled to any great weight in resolving the case." Dec. at 23. The special master reasoned that the fact that "two additional physicians have produced conflicting findings is not in itself enlightening with regard to the question of whether Dr. Shuman or Dr. Wiznitzer has presented superior evidence explaining why one interpretation is correct while another is wrong." Id. The special master reasoned that the evidence in this case made it "quite clear" that "qualified experts can and do differ on questions of MRI interpretation." Id. In addition, the special master found that

[6] Dr. Bauza did not testify at the hearing, nor does the record include any significant information regarding his training and credentials.

while the experts in this case "reported their ultimate findings, but have submitted their underlying reasoning to the scrutiny of the court, through extensive reports and testimony," Dr. Bauza and Dr. Hewell did "not provide any insight as to the reasoning behind" their interpretations. Id. at 25. The special master determined that "these two additional reports do little more than further highlight the disagreement between Drs. Shuman and Wiznitzer, without providing any further elucidation of the issues involved in MRI interpretation as explained by the competing experts in this case." Id. Therefore, the special master found that Drs. Bauza and Hewell's reports were "substantially outweighed by the testimony of those experts who testified fully, Drs. Wiznitzer and Shuman." Id.

In addition, the special master rejected petitioners' argument that Dr. Bauza was N.N.'s treating physician, and as such, that his opinion should be given particular weight under Federal Circuit case law. N.N. was referred to Dr. Bauza by his treating physician, however, the special master found that the petitioners' expert had acknowledged that "the decision to do another MRI in 2011 was made at Dr. Shuman's behest, after he had begun working with Petitioners' counsel on this case." Dec. at 24. Therefore, according to the special master, "even if Dr. Bauza was not hired for the particular purpose of testifying, and even if the referral technically came from N.N.'s treating physician, Dr. Fischer, Dr. Shuman's testimony indicates that Dr. Bauza's MRI study arose not for treatment purposes, but for furtherance of the instant claim." Id. The special master also noted that, in his testimony, "Dr. Shuman indicated that he believed [petitioners' counsel] was in direct contact with Dr. Bauza." Id. at 24 (citing Tr. 116). The special master felt that

the circumstances were "enough to cast doubt, not on Dr. Bauza's integrity, but on his neutrality and on his purpose relative to this case." Id. at 24.[7] Therefore, the special master concluded, Dr. Bauza did not qualify as a "treating physician" and his opinion was not entitled to any particular deference on those grounds.

II. STANDARD OF REVIEW UNDER THE VACCINE ACT

A. Recovery under the Vaccine Act

Congress enacted the Vaccine Act in order to create "a federal no-fault compensation scheme under which awards were to 'be made to vaccine-injured persons quickly, easily, and with certainty and generosity.'" Paluck v. Sec'y of Health and Human Servs., 786 F.3d 1373, 1378 (Fed. Cir. 2015) (quoting H.R.Rep. No. 99-908, at 3, 1986 U.S.C.C.A.N. at 6344). Under the Vaccine Program, there are two means of recovery: claims based on injuries listed in the Vaccine Injury Table ("Table") and claims based on injuries not listed in the Table, known as off-Table claims. In a Table claim, a petitioner is granted a presumption of causation if he or she shows that he or she received a vaccine listed in the Table, that he or she suffered an injury listed in the Table, and that the injury occurred within the prescribed time period. See Andreu v. Sec'y of Health and Human Servs., 569 F.3d 1367, 1374 (Fed. Cir. 2009) (describing Table cases). In an off-Table case, a petitioner who received a vaccine listed in the Table but suffered an injury

[7] The special master also found that "Dr. Bauza's report "does not completely support Dr. Shuman's viewpoint." Id. The special master noted that while "Dr. Shuman believes that N.N.'s MRI shows enlarged ventricles, Dr. Bauza did not make that finding. . . . Dr. Shuman also disagreed with Dr. Bauza's opinion that the asymmetrical size of N.N.'s hippocampi is a normal variant." Id.

not listed in the table does not receive a presumption of causation, and instead must prove causation by a preponderance of the evidence. See Moberly v. Sec'y of Health and Human Servs., 592 F.3d 1315, 1321 (Fed. Cir. 2010) (describing off-Table cases).

When, as in this case, the petitioner alleges an injury listed on the Vaccine Injury Table, the petitioner has the burden of proving by a preponderance of evidence that the injury meets the criteria of the Table injury, and that the Table injury occurred within the prescribed time limits. de Bazan v. Sec'y of Health and Human Servs., 539 F.3d 1347, 1351 (Fed. Cir. 2008) (citing Grant v. Sec'y of Health and Human Servs., 956 F.2d 1144, 1146-47 (Fed. Cir. 1992)). A plaintiff that can make such a showing has established a prima facie case. de Bazan, 539 F.3d at 1351. The petitioner will then be entitled to recover "unless the government shows by a preponderance of the evidence that the . . . injury is due to factors unrelated to the administration of the vaccine . . . ." Grant, 956 F.2d at 1146-47 (quoting 42 U.S.C. § 300aa-13(a)(1)(B)).

B. Standard of Review of Special Master's Opinion

This court has jurisdiction to review the decisions of a special master in a Vaccine Act case upon a motion from the petitioner. 42 U.S.C. § 300aa-12(e)(2). When reviewing a special master's decision, the court may:

> **(A)** uphold the findings of fact and conclusions of law of the special master and sustain the special master's decision,
> **(B)** set aside any findings of fact or conclusion of law of the special master found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law and issue its own findings of fact and conclusions of law, or
> **(C)** remand the petition to the special master for further action in accordance with the court's direction.

Id. at § 300aa–12(e)(2)(A)-(C). Failure to consider an important piece of evidence may be grounds for reversal or remand. See Shapiro v. Sec'y of Health and Human Servs., 101 Fed. Cl. 532, 541 (2011) (finding that a special master does not have discretion to "ignore entirely significant evidence that contradicts a finding."). However, in determining whether a special master's decision should be set aside or remanded, the court does not "reweigh the factual evidence," "assess whether the special master correctly evaluated the evidence," or "examine the probative value of the evidence or the credibility of the witnesses." Lampe v. Sec'y of Health and Human Servs., 219 F.3d 1357, 1360 (Fed. Cir. 2000) (internal quotation marks omitted) (quoting Munn, 970 F.2d 863, 871(Fed. Cir. 1992)).

If the special master "has considered the relevant evidence of record, drawn plausible inferences and articulated a rational basis for the decision," then "reversible error is extremely difficult to demonstrate." Id. at 1360 (internal quotation marks omitted) (quoting Hines ex rel. Sevier v. Sec'y of Health and Human Servs., 940 F.2d 1518, 1528 (Fed. Cir. 1991)). A special master is accorded "great deference" when the case depends on the special master's evaluation of an expert witness's credibility. Cedillo v. Sec'y of Health and Human Servs., 617 F.3d 1328, 1347 (Fed. Cir. 2010). Consequently, when the special master has "clearly articulated his reasons for discrediting [an] expert's opinion," the Federal Circuit has found that the special master's "'credibility determinations are virtually unreviewable.'" Id. (quoting Hanlon v. Sec'y of Health and Human Servs., 191 F.3d 1344, 1349 (Fed. Cir. 1999)).

III. DISCUSSION

The petitioners argue that it was arbitrary and capricious for the special master to disregard Dr. Bauza's report of N.N.'s 2011 MRI scan. Because the correct interpretation of the 2011 MRI was critical to this case, the petitioners argue, it was reversible error to ignore Dr. Bauza's report. The petitioners assert that the special master's opinion was unreasonable because the special master failed to consider two reasons why Dr. Bauza's opinion should be given more weight than Dr. Shuman. First, petitioners argue that as a neuroradiologist, Dr. Bauza was more qualified than the other experts who testified regarding N.N.'s MRI results. Second, petitioners argue that Dr. Bauza's opinion should have been given particular weight because he was a "treating physician" and, under precedent in this circuit, should be given additional consideration on that basis.

The respondent acknowledges that the special master "declined to give any significant weight to Dr. Bauza's interpretation of the 2011 MRI scan." Gov't Resp. 7. However, the government argues that the treatment that the special master gave to Dr. Bauza's report was sufficient, and notes that under the Vaccine Act, a special master is not bound by any particular medical record. The government asserts that the special master rationally found that Dr. Bauza should not be considered a treating physician because the decision to perform the 2011 MRI was motivated by this litigation rather than a need for clinical treatment.

The court agrees with the government that the special master's treatment of Dr. Bauza's report was not arbitrary or capricious. The special master gave a careful and

detailed analysis of the medical issues involved in this case, and found that petitioners had not met their burden in light of relevant medical literature contradictory to their position. Further, the special master articulated a reasonable explanation for his decision not to rely on Dr. Bauza's report. The petitioners make several arguments in support of their position that Dr. Bauza was per se a more credible witness. However, as discussed below, none of plaintiff's arguments are sufficient to show that the special master's decision to rely upon expert witnesses instead of Dr. Bauza's report was arbitrary and capricious. By arguing that Dr. Bauza's opinion should have been more persuasive than the experts who testified in this case, the petitioners are effectively asking this court to re-weigh the evidence and re-make credibility determinations, which this court is not permitted to do. These determinations are properly within the special master's discretion, and the court will not disturb his findings. Lampe, 219 F.3d at 1360 (in reviewing a special master's decision, the court does not "examine the probative value of the evidence or the credibility of the witnesses.")

A. Petitioners Have Not Demonstrated that Dr. Bauza is Entitled to Deference as a Neuroradiologist

Petitioners argued that, as a neuroradiologist, Dr. Bauza is better qualified than Dr. Wiznitzer or Dr. Shuman (both pediatric neurologists) and Dr. Hewell (a radiologist) to interpret an MRI study. Therefore, petitioners argue, Dr. Bauza's opinion should carry more weight than any of the other doctors who gave evidence in this case. Petitioners state that Dr. Bauza is a "board certified neuroradiologist—a specialist who has studied and worked in a specialized residency program developing expertise in interpreting MRI

scans and other neuroimaging studies." Pet. Mot. 4. According to petitioners, "[b]oth Dr. Shuman and Dr. Wiznitzer testified that a board certified neuroradiologist was better qualified to interpret a[n] MRI scan than a pediatric neurologist." Id. at 10 (citing Tr. 36-30, 122-23, 222). Petitioners further state that, during the hearing, "Dr. Wiznitzer testified that he relied on neuroradiologists to interpret his patient[s'] MRI scans." Id. (citing Tr. 222).

The court finds that the record does not contain any significant evidence that Dr. Bauza's credentials make him the most reliable witness, and the evidence that does exist in the record regarding the relative qualifications of a neuroradiologist as compared to a pediatric neurologist is not as decisive as petitioners suggest. On cross-examination, Dr. Wiznitzer testified that, in his clinical practice, the MRI scans he orders are read by a neuroradiologist because, Dr. Wiznitzer explained, "that is [the neuroradiologist's] job in the hospital." Tr. 222. When asked if a neuroradiologist's reading of an MRI is generally more reliable than the interpretation by a pediatric neurologist, Dr. Wiznitzer answered, "[w]hen the neuroradiologist's interpretation makes sense, yes." Id. However, Dr. Wiznitzer also testified that he does not always agree with the neuroradiologist's findings, particularly in the context of adult neuroradiologists interpreting children's MRI findings, explaining that neuroradiologists sometimes have to be "redirected towards a more accurate interpretation of what the neuroimaging actually shows." Tr. 214. Therefore, the court cannot say that it was unreasonable for the special master not to treat Dr. Bauza as the most qualified witness simply because he is a neuroradiologist

Further, even assuming that, all things being equal, "a board certified neuroradiologist was better qualified to interpret a[n] MRI scan than a pediatric neurologist," Pet. Mot. 10, the record still does not contain any evidence that Dr. Bauza would be the best person to interpret this MRI in this particular case. Dr. Bauza did not testify at the hearing to explain his conclusions or qualifications. Unlike Dr. Shuman and Dr. Wiznitzer, who submitted extensive documentation of their credentials, including education, certificates, academic work, and clinical experience, we know almost nothing about Dr. Bauza's training and experience. In his opinion, Special Master Hastings carefully reviewed Dr. Shuman and Dr. Wiznitzer's respective training, clinical experience, certifications, and academic contributions. Though each side argued that its respective expert was better qualified expert to interpret an MRI study, the special master rejected both sides' arguments, finding that neither expert was inherently more qualified:

> Ultimately, I am faced with two qualified experts—both pediatric neurologists—with different strengths. While Dr. Shuman is a pathologist with a certification in neuroimaging, Dr. Wiznitzer is a current practitioner with up-to-date clinical skills in utilizing neuroimaging not demonstrated by Dr. Shuman. I cannot say that one is inherently more qualified than the other.

Dec. at 23. In contrast, the record includes no such documentation of Dr. Bauza's credentials, training, or experience.

Importantly, there is nothing in the record regarding Dr. Bauza's experience in pediatric neuroradiology. A significant question in this case is whether the trigonal hyperintensities observed in N.N.'s MRI scan were a normal developmental variant for a person his age, or whether a normal eleven-year-old brain would not exhibit

hyperintensities of that nature. While Dr. Shuman and Dr. Wiznitzer both have documented experience in developmental neurology, we do not know whether Dr. Bauza does or not. In addition, the petitioners do not give any citation for their assertion that Dr. Bauza "has studied and worked in a specialized residency program developing an expertise in interpreting MRI scans," Pet. Mem. 4, or that he is "highly regarded" in his field, id. at 15. The court does not suggest that the petitioners are not accurately representing Dr. Bauza's background, but this information gap meant that the special master did not have a basis to find on the record that Dr. Bauza was particularly qualified.[8] Therefore, the court cannot fault the special master for not accepting petitioners' position that Dr. Bauza's credentials alone make him the most qualified witness when the record does not contain evidence supporting such a finding.

B. Petitioners Have Not Demonstrated that Dr. Bauza is Entitled to Deference as N.N.'s Treating Physician

The petitioners also assert that the special master's determination that Dr. Bauza was not N.N.'s "treating physician" was reversible error. The "treating physician" designation is important because the Federal Circuit has recognized that medical records of treating physicians may be particularly probative in vaccine cases because "treating physicians are likely to be in the best position to determine whether 'a logical sequence of cause and effect show[s] that the vaccination was the reason for the injury.'" Capizzano v. Sec'y of Health & Human Servs., 440 F.3d 1317, 1326 (Fed. Cir. 2006)

[8] The special master likewise did not have significant evidence on the record to evaluate Dr. Hewell's expertise as compared to Dr. Shuman and Dr. Wiznitzer.

(quoting Althen v. Sec'y of Health and Human Servs., 418 F.3d 1274, 1280 (Fed. Cir. 2005)). Therefore, according to petitioners, the special master should have given Dr. Bauza additional consideration because, unlike the experts retained to testify in this case, Dr. Bauza actually treated N.N. in a clinical capacity. Petitioners argue that there was no reasonable basis not to find that Dr. Bauza was a treating physician, and spend a significant portion of their memorandum refuting the special master's finding that "Dr. Bauza's MRI study arose not for treatment purposes, but for furtherance of the instant claim," and therefore, according to the special master, "[p]etitioners' characterization of Dr. Bauza as a 'treating physician' is somewhat misleading." Dec. at 24. However, whether or not the special master correctly concluded that Dr. Bauza was retained for purposes of furthering the litigation, the petitioners' argument that Dr. Bauza should have been given particular weight as a treating physician fails.

The reasoning underlying the finding that opinions of treating physicians should be given particular weight does not apply when, as here, the treating physician only saw the patient after the injury and based his opinion on the same evidence as relied upon by the retained experts. Capizzano and similar cases were decided in the context of proving causation under the Althen test for off-Table injuries, which requires a petitioner to demonstrate that the vaccine was the cause of his or her injury, see Althen, 418 F.3d at 1279-80. In that connection, the court found that a treating physician who was familiar with the patient both before and after the alleged vaccine injury is likely to be in a better position than an expert retained after the fact with respect to the question of whether there was "'a logical sequence of cause and effect show[s] that the vaccination was the reason

for the injury.'" Capizzano, 440 F.3d at 1326 (quoting Althen, 418 F.3d at 1280). In contrast to treating physicians who had observed the patient as the condition unfolded, retained experts were limited to a review of the records after the fact. Consequently, treating physicians' opinions are often regarded as "quite probative" with respect to the causation prong under Althen. Andreu, 569 F.3d at 1375.

In this case, however, Dr. Bauza does not have a similar advantage over the experts who testified in this case, as he treated N.N. only after the alleged vaccine injury occurred. Like the experts who testified in this case, Dr. Bauza based his conclusions off the MRI scans and not on any interaction with the patient. In Dobrydnev v. Sec'y of Health and Human Servs., the Federal Circuit affirmed the special master's decision to credit other experts over Dr. Bell, the only testifying physician who had examined the petitioner. 566 F. App'x 976, 982-83 (Fed. Cir. 2014), reh'g denied (Aug. 20, 2014), cert. denied sub nom. Dobrydnev v. Burwell, 135 S. Ct. 1560 (2015). The court found that the fact that Dr. Bell had examined the petitioner did not "transform him into a treating physician such that increased deference to his opinion was required . . . ." Id. at 983. It is true that the examining physician in Dobrydnev was a retained expert, while the parties in this case dispute whether or not petitioners sought Dr. Bauza's services for treatment purposes or to further the instant litigation. However, Dobrydnev still shows that there is nothing talismanic about treating a patient that affords special weight to a doctor's opinion when the treating physician has no particular informational or other

advantage over other experts who relied upon the same evidence.[9] In this case, petitioners used Dr. Bauza as an expert witness, not as a treating physician. Therefore, the special master was not required to give Dr. Bauza's report any additional deference.

C. The Special Master Considered the Merits of Dr. Bauza's Opinion

In arguing that the special master improperly disregarded Dr. Bauza's opinion, petitioners note that, in the close to nine pages of the special master's decision discussing the correct interpretation of N.N.'s MRI scans, "[a]t no point in the analysis does [the special master] even mention Dr. Jose Bauza's interpretation of N.N.'s 2011 MRI scan." Pet. Mem. 9. The Vaccine Act requires a special master to "consider . . . any diagnosis, conclusion, medical judgment, or autopsy or coroner's report which is contained in the record regarding the nature, causation, and aggravation of the petitioner's" condition, as well as "the results of any diagnostic or evaluative test which are contained in the record and the summaries and conclusions." 42 U.S.C. § 300aa-13(b)(1)(A)-(B). However, medical records are "not binding on the special master or the court," and in "evaluating the weight to be afforded to any such" medical evidence, the special master "shall consider the entire record and the course of the injury, disability, illness, or condition." 42 U.S.C. § 300aa-13(b)(1)(A)-(B).

---

[9] Further, in their discussion of Dr. Bauza's role as N.N.'s treating physician, the petitioners neglect to discuss the opinion of Dr. Hewell that N.N.'s 2005 MRI was normal. Dr. Hewell was at least as much N.N.'s treating physician as Dr. Bauza. As discussed above, it was reasonable for the special master to find that the mere fact that Dr. Bauza is a neuroradiologist does not automatically make Dr. Bauza's opinion more credible. Therefore, if Dr. Bauza's opinion that N.N.'s 2011 MRI scans were abnormal is entitled to particular deference simply because Dr. Bauza treated N.N., then Dr. Hewell's opinion that N.N.'s 2005 MRI was normal should also be entitled to the same level of special consideration.

Although the section of the special master's decision evaluating the MRI results does not mention Dr. Bauza by name, the special master did thoroughly evaluate the medical evidence from the 2011 MRI study which Dr. Bauza had opined were consistent with encephalitis. Dr. Bauza made two findings that he believed were indicative of previous encephalitis: hyperintensities in the peritrigonal region and bilateral hyperintensities in the hippocampus. These were the first two of the five findings that Dr. Shuman identified as indicative of encephalitis, and the issues that the special master spent the longest time discussing in his opinion. In his decision, the special master noted that Dr. Bauza had made both of these findings, demonstrating that the special master had considered and understood Dr. Bauza's opinion rather than simply disregarding it. Dr. Bauza's report did not include any findings that were not addressed in Dr. Shuman's report; therefore, the special master did in fact evaluate the merits of Dr. Bauza's report. To analyze Dr. Bauza's opinion that hyperintensities in the peritrigonal region and bilateral intensity in the hippocampus were abnormal for a second time would have been redundant.

Ultimately, the special master found that Dr. Wiznitzer was the more reliable witness because Dr. Wiznitzer "present[ed] coherent and detailed testimony that was supported by specific references to medical literature." Dec. at 23. Though not required under the Vaccine Act, the Federal Circuit has found that citations to medical literature are valuable tools in assessing expert testimony. Andreu, 569 F.3d at 1379 (finding that though "a claimant need not produce medical literature . . . where such evidence is submitted, the special master can consider it in reaching an informed judgment . . . .").

The special master carefully analyzed the complicated scientific principles in this case, and took care to correctly represent and analyze each expert's extensive testimony and reports. Under the circumstances, it was perfectly reasonable for the special master to find that the expert whose testimony was supported by medical literature was more persuasive.

In a supplemental brief, petitioners argued that Paluck v. Sec'y of Health and Human Servs., which the Federal Circuit decided while this case was pending, supports their argument that the special master's decision should be reversed for his failure to give weight to Dr. Bauza's opinion. In Paluck, the petitioner relied upon two MRI studies which his radiologist and physician had interpreted as indicating that his neurological decline began shortly after his vaccination. Paluck, 786 F.3d at 1385-86. The court found that the special master had articulated "no reasonable justification for discounting [the reports'] significance." Id. at 1385.

In contrast, the special master in this case did not discount the significance of N.N.'s MRI studies. To the contrary, the special master correctly identified the interpretation of the MRIs as the most important issue in this case and spent the bulk of his opinion carefully considering the experts' differing interpretations of the MRI. As discussed above, the special master fully analyzed the substance of Dr. Bauza's findings because Dr. Bauza's opinion was coextensive with Dr. Shuman's. Therefore, the court finds that the special master's treatment of Dr. Bauza's report was in conformity with the Vaccine Act's instruction to consider medical judgments in light of the entire record.

IV. CONCLUSION

As the special master noted, "qualified experts can and do differ on the questions of MRI interpretation." Dec. at 25. Because the special master carefully considered and weighed all of the evidence presented in this case, his decision to credit Dr. Wiznitzer's opinion over Dr. Bauza or Dr. Shuman is a credibility determination that is "virtually unreviewable." Cedillo, 617 F.3d at 1347 (quoting Hanlon, 191 F.3d at 1349). Petitioners have not demonstrated that the special master's treatment of Dr. Bauza's report was arbitrary and capricious. Therefore, for the reasons stated above, the court now **DENIES** petitioners' motion and **AFFIRMS** the opinion of the special master.

IT IS SO ORDERED.

s/Nancy B. Firestone
NANCY B. FIRESTONE
Judge