

filing a short form petition, petitioners asserted that (1) Tom had a disorder on the autism spectrum⁵ and (2) that one or more vaccines listed on the Vaccine Injury Table⁶ were causal of this condition.⁷ No medical records were filed with their petition.

Respondent has moved to dismiss petitioners' case, asserting that the petition was filed outside the Vaccine Act's 36 month statute of limitations. § 16(a)(2); Respondent's Motion to Dismiss ["Res. Mot."] at 1. Petitioners contend that the petition was timely filed because "the first symptom or manifestation of onset that was objectively recognizable as a sign of autism by the medical profession occurred sometime *after* 11/21/02." Petitioners' Opposition to Respondent's Motion to Dismiss ["Pet. Opp."] at 2 (emphasis in original). Petitioners assert that a neurodevelopmental pediatrician's diagnosis of a communication disorder in lieu of an autism spectrum disorder 29 months before the petition was filed in this case meant that "Thomas had yet to display 'the first event objectively recognizable as a sign of [autism] by the medical profession.'" *Id.* at 6.

For the reasons stated herein, I find that the first symptom or manifestation of onset of Tom's autism spectrum disorder occurred 38 months prior to the date the petition was filed. In the absence of any circumstances warranting equitable tolling, I hold that the petition was untimely filed and is therefore dismissed.

I. Procedural History.

Tom's petition was one of approximately 5400 claims in the Omnibus Autism Proceeding ["OAP"]. A history of that proceeding was set forth in the two decisions I issued in the OAP test cases, and will not be repeated here.⁸ For the first three and one half years after this petition was filed, there was very little case-specific activity, although in the OAP discovery was completed and test cases were litigated. In order to position this case for resolution once the test cases were concluded, petitioners were ordered in January, 2009, to file all medical records from Tom's birth through the date the petition was filed. Order, filed January 15, 2009.

⁵ Autism spectrum disorders are discussed in more detail in Section III, below.

⁶ 42 C.F.R. § 100.3 (2010).

⁷ The two theories of causation specifically addressed in Autism Gen. Order # 1 were that the measles, mumps, and rubella ["MMR"] vaccine was causal [the "MMR theory" or "Theory 1"] or that vaccines containing a mercury-based preservative called thimerosal [the "TCV theory" or "Theory 2"] were causal, or that a combination of the MMR vaccine and TCVs were causal.

⁸ *Snyder v. Sec'y, HHS*, No. 01-162V, 2009 WL 332044, at *4 (Fed. Cl. Spec. Mstr. Feb. 12, 2009), *aff'd*, 88 Fed. Cl. 706 (2009) and *Dwyer v. Sec'y, HHS*, No. 03-1202V, 2010 WL 892250, at *3 (Fed. Cl. Spec. Mstr. Mar. 12, 2010). I incorporate these discussions of the history of the OAP by reference into this decision.

Some medical records were filed on April 9, 2009. Based on those medical records, respondent moved to dismiss this case as untimely filed. Motion to Dismiss, filed Apr. 24, 2009. On May 8, 2009, petitioners filed an opposition to the motion to dismiss.

As numerous other OAP cases presented similar factual and legal issues with regard to timely filing, I deferred acting on respondent's motion to dismiss until cases presenting similar issues could be heard on appeal. See, e.g., *Setnes v. United States*, 47 Fed. Cl. 175 (2003) (holding that when there is no clear start to an injury, such as autism, the statute of limitations hinges on manifestation of onset and not the occurrence of the first symptom), *abrogated by Markovich v. Sec'y, HHS*, 477 F.3d 1353 (Fed. Cir. 2007) (holding statute of limitation runs from either the first symptom or manifestation of onset); *Carson v. Sec'y, HHS*, 97 Fed. Cl. 620 (2010) (identification of the first symptom is determined with the benefit of hindsight), *appeal docketed*, No. 10-5089 (Fed. Cir. March 4, 2010); *Cloer v. Sec'y, HHS*, 85 Fed. Cl. 141 (2008).⁹

While these cases were being litigated, decisions in the OAP test cases were issued on February 12, 2009 (Theory 1) and March 12, 2010 (Theory 2). There were no motions for review filed with regard to the Theory 2 test cases and the appellate review process for the Theory 1 test cases concluded on August 27, 2010 when the Federal Circuit issued its decision in *Cedillo v. Sec'y, HHS*, No. 98-916V, 2009 WL 331968, (Fed. Cl. Spec. Mstr. Feb. 12, 2009), *aff'd*, 89 Fed. Cl. 158 (2009), *aff'd*, 617 F.3d 1328 (Fed. Cir. 2010), the last test case with an appeal pending.

The special masters then began the next step in moving the 4800 remaining OAP cases for final resolution.¹⁰ In general, petitioners were ordered to inform the court if, in light of the results in the test cases, they wanted to move forward with their claims or move to dismiss them. If petitioners wished to pursue their Vaccine Act claims, they were ordered to file an amended petition, setting forth a theory of how vaccines caused their child's condition.

⁹ The U.S. Court of Federal Claims decision was reversed and remanded by a panel of the U.S. Court of Appeals for the Federal Circuit. *Cloer v. Sec'y, HHS*, 603 F. 3d 1341 (Fed. Cir. 2010). The panel's decision was vacated and rehearing en banc was ordered. *Cloer v. Sec'y, HHS*, 399 Fed. Appx. 577 (Fed. Cir. 2010). The en banc decision was issued on August 5, 2011. *Cloer v. Sec'y, HHS*, 654 F.3d 1322 (Fed. Cir. 2011) (en banc) (rejecting a discovery rule and holding the statute of limitations runs from the first symptom or manifestation of onset recognized by the medical profession at large).

¹⁰ Unlike either class actions or multi-district litigation in other state or federal court systems, the remaining OAP petitioners are not bound by the results in the test cases. Nevertheless, by design, the OAP test cases produced a body of evidence available to both petitioners and respondent to use in litigating OAP cases in which petitioners elected to go forward with their claims. *Dwyer*, 2010 WL 892250 at *2; *Snyder*, 2009 WL 332044 at *2 - *3.

Pursuant to this process, on October 12, 2010 petitioners indicated their intent to pursue their claim, and on November 16, 2010 petitioners filed their Statement of Theory of Causation ["Causation Theory"]. They asserted that "the vaccines received by Thomas significantly aggravated an underlying mitochondrial disorder, which predisposed Thomas to deficits in cellular metabolism, manifesting in metabolic decompensation, regressive encephalopathy, epilepsy, and other neurological defects, with features of autism spectrum disorder." Causation Theory, ¶ 8. Petitioners identified diagnoses of Pervasive Developmental Disorder ["PDD"], Autism Spectrum Disorder ["ASD"], epilepsy, apraxia,¹¹ and a mitochondrial disorder. *Id.* at ¶¶ 6-7. The medical records also reflect a diagnosis of autistic disorder. Petitioners' Exhibit ["Pet. Ex.,"] 12, p. 6.

On October 25, 2010, the U.S. Court of Appeals for the Federal Circuit vacated the panel decision in *Cloer* (*Cloer v. Sec'y, HHS*, 399 Fed. Appx. 577 (Fed. Cir. 2010)), and ordered a rehearing en banc. Because the statute of limitations issues in this case appeared similar to those raised in *Cloer*, I suspended any further action in this case pending the en banc decision, which was issued on August 5, 2011.¹² I afforded the parties the opportunity to file additional pleadings addressing the impact of *Cloer* on this case and any additional evidence pertinent to the statute of limitations issue by September 19, 2011. On that date, I received Respondent's Supplemental Response Re: *Cloer v. HHS* and Respondent's Exhibits ["Res. Exs.,"] A-E.¹³ Petitioners did not respond to my order.¹⁴ This case is ripe for decision on respondent's motion to dismiss. The evidence establishes that this case was untimely filed.

II. Facts.

Tom was born on August 10, 2000. Pet. Ex. 1, p. 2. No medical records pertaining to his gestation or birth were filed. Between birth and February 18, 2002, he received routinely administered childhood vaccinations. Pet. Ex. 1, p. 14.

Tom's medical records reflect several bouts of otitis media, with the first

¹¹ As used in Tom's medical records, "apraxia" refers to Tom's inability to speak as well as possible limb apraxia due to his difficulty in imitating signs and other movements. See Pet. Ex. 4, pp. 1-3. Apraxia is a general term for the "loss of ability to carry out familiar, purposeful movements in the absence of paralysis or other motor or sensory impairment." DORLAND'S ILLUSTRATED MEDICAL DICTIONARY ["DORLAND'S"] at 121 (32nd ed. 2012).

¹² *Cloer v. Sec'y, HHS*, 654 F.3d 1322 (Fed. Cir. 2011) (en banc).

¹³ The exhibits included two medical journal articles and transcript excerpts from three witnesses who testified in the OAP test cases concerning the diagnosis of autism spectrum disorders and the presenting symptoms.

¹⁴ I note that on September 26, 2011, petitioners filed a notice of change of address with the court. If petitioners have additional evidence they believe illustrates this case was timely filed, they may file a Motion for Reconsideration pursuant to Vaccine Rule 10(e).

occurring when he was not quite six months of age. Pet. Ex. 1, pp. 5-8. He also experienced contact dermatitis, conjunctivitis, nasal congestion, and one three-week period of diarrhea before he was 15 months old. Pet. Ex. 1, pp. 5-9. Tom had regular well child visits as well, and up until the 15 month well child visit, he was assessed as developmentally normal. Pet. Ex. 1, pp. 3-5, 8.

On November 27, 2001, at Tom's 15 month well child visit, his pediatrician noted that he only used the word "mama." However, the records also reflected that he followed commands and pointed to objects when asked. Pet. Ex. 1, p. 9. Three months later, at his 18 month well child visit, Tom was noted to have only a couple of words, with "mama" and "Joe" listed.¹⁵ He "somewhat" followed commands. The pediatrician ordered a hearing evaluation. Pet. Ex. 1, p. 10.

At the hearing evaluation on February 21, 2002, the history taken reflected that Mrs. Theriot reported "concerns regarding speech development." Pet. Ex. 1, p. 18. She reported that Tom did not use words meaningfully, although he responded appropriately to verbal communication. Tom's hearing was assessed as normal in at least one ear. The audiologist recommended a speech and language evaluation. *Id.*

Tom received that evaluation a month later, on March 21, 2002. The reason recorded for the evaluation was "parental concerns regarding speech and language development." Pet. Ex. 1, p. 21. Tom was reported to have spoken his first word at 12 months of age. *Id.* The examiner noted that Tom's speech skills were very limited, in that he used open, non-differentiated vowels, with no true word approximations. *Id.* Testing revealed a mild to moderate delay in the development of receptive and expressive language. *Id.* at p. 22. Delays were also noted in pragmatics, gestures, play, language comprehension, and expression, with some results at a 6-9 month level and the highest scattered in the 15-18 month range. Pet. Ex. 1, pp. 22, 24. At the time of this evaluation, Tom was between 19 and 20 months old. Although speech therapy was recommended, petitioners reported that they had opted to take a wait and see approach, as Mr. Theriot was late in learning to talk. Pet. Ex. 1, p. 11.¹⁶

Tom was re-evaluated on October 10, 2002, when he was 26 months old. Pet. Ex. 1, pp. 25-27. This evaluation was precipitated by concerns expressed by Tom's preschool teacher. The teacher reported that Tom was not responding to his name and

¹⁵ A standard pediatrics textbook indicates that the average 18 month old has between 10-15 words. Robert Kliegman, Bonita Stanton, Joseph St. Geme, III, Nina Schor, and Richard Behrman, NELSON TEXTBOOK OF PEDIATRICS (19th ed. 2011) ["NELSON'S"] at 32 (table) and 33 (text).

¹⁶ Petitioners note that the date of this visit (at which the "wait and see" approach was discussed) is illegible, and that it therefore may have occurred any time between April 14, 2002 and October 15, 2002. Pet. Opp. at 2. The month is illegible, but the date and year (26 and 2002, respectively) can be read. As the medical record reflects that this visit was for Tom's two year well child checkup, it likely occurred in August 2002 because Tom was born in August 2000.

did not use words to communicate. Pet. Ex. 1, p. 25. A comprehensive evaluation demonstrated that Tom had severe language delay. There was no real improvement in the skill levels that had been measured at the March 2002 evaluation, and because Tom was now older, the delay was more marked, and assessed as severe. Pet. Ex. 1, pp. 26-27.

The pediatric records reflect a telephone call from Mrs. Theriot to Tom's pediatrician a few days after the second speech and language evaluation. She reported that the day care teachers were concerned about Tom's development, and that he did not play with other children at school, although he interacted well when at home. A developmental evaluation was discussed. Pet. Ex. 1, p. 12.

That developmental evaluation was performed on November 21, 2002. By history, "Thomas had never developed any real words." Pet. Ex. 2, p. 1. Petitioners reported that he understood some words for commands and regular routines, but did not consistently respond to his name. He communicated what he wanted or needed by reaching toward an object, bringing it to his parents, or by pulling them to the object or activity. He made eye contact with his parents, and was affectionate with family members. Although he enjoyed being around other children, he did not engage in parallel play with peers and did not imitate domestic activities. He enjoyed opening and closing cabinets and watching videos. He did not engage in imitative play with dolls or figures. Pet. Ex. 2, pp. 1-2. Data from checklists completed by petitioners and his day care teachers indicated that he avoided eye contact. Pet. Ex. 2, p. 3.

The neurodevelopmental pediatrician recorded her own observations of Tom, noting that he played repetitively with the wrapper from a video, vocalized primarily vowel sounds, and did not follow any verbal commands. He did make eye contact. Pet. Ex. 2, pp. 3-4.

She did not diagnose Tom with an autism spectrum disorder at the time of the evaluation, but indicated that the diagnosis might become applicable in the future, commenting that:

[H]e does not seem to present the clinical picture of a child with Autistic Spectrum Disorder at this point in time. Instead, his problems seem to be more related to a Communication Disorder. . . . It also would be important to rule out possible medical causes for his Developmental Delay and to monitor him carefully over the next couple of years to see if he responds to intervention or begins to show more symptoms that look like an Autistic Spectrum Disorder.

Pet. Ex. 2, p. 4.

Although petitioners rely on this evaluation to explain why they did not believe

Tom had ASD, merely a language delay, later records indicate that at some point prior to his diagnosis, they suspected an autism spectrum disorder. In March 2003, Mrs. Theriot called Tom's pediatrician to discuss treating his "stooling problems." She indicated that Tom had been on a special diet for PDD, and that she had read about yeast causing PDD or ASD, and had tried Nystatin, an antifungal agent, which she credited with some improvement in Tom. Pet. Ex. 1, p. 13.

Tom was diagnosed with pervasive developmental disorder, not otherwise specified (PDD-NOS) on June 2, 2003, by Dr. Jean-Ronel Corbier.¹⁷ Pet. Ex. 3, p. 2. He based his diagnosis on speech delay, poor eye contact, inability to point, and some sensory processing difficulties. *Id.* He noted that per Mrs. Theriot, apart from the speech delay, Tom had other difficulties that seemed to start at about 18 months of age. Pet. Ex. 3, p. 1. The records filed do not reflect any diagnostic testing performed by Dr. Corbier, other than a 24 hour electroencephalogram ["EEG"], performed to rule out epileptic aphasia.¹⁸ Doctor Corbier also ordered numerous blood, stool, and urine tests. *See generally*, Pet. Ex. 3. He used chelation therapy¹⁹ beginning in September, 2003 to treat Tom (Pet. Ex. 3, pp. 20-21), although no medical records were filed reflecting heavy metal toxicity. In fact, medical records from January 2005 reflect "a borderline deficiency of most minerals." Pet. Ex. 11, p. 1. Doctor Corbier also recommended oral immunoglobulin treatment, but the records do not reflect why. *See* Pet. Ex. 3, p. 31.

In 2004, the family moved to Houston, and in December 2004, a new pediatric neurologist evaluated Tom. Mrs. Theriot provided a history similar to the history she had provided to Dr. Corbier, indicating that she first became concerned about Tom at about 18 months of age because his language skills appeared to be delayed. Pet. Ex. 10, pp. 1-2. The neurologist assessed him with generalized absence seizures based on history, but recommended another EEG, which was performed on January 13, 2005. It was abnormal during sleep, but the background activity was normal for Tom's age. Pet. Ex. 10, p. 4.

A developmental examination conducted in January 2005 indicated that Tom's diagnosis was "Autistic Disorder." Pet. Ex. 12, pp. 1-7. Several different testing

¹⁷ Doctor Corbier was one of petitioners' expert witnesses in the Theory 1 test cases. *Snyder*, 2009 WL 332044 at *11 - *12.

¹⁸ By history, an earlier EEG, performed in Louisiana on May 16, 2003 was read as normal. Pet. Ex. 3, p. 1. A copy of the May 2003 EEG report was not included in the medical records filed by petitioners. The EEG on July 15-16, 2003, was, according to Dr. Corbier, "significantly abnormal," with frequent bifrontal and generalized epileptiform activity. Pet. Ex. 3, pp. 5-6. Doctor Corbier diagnosed epilepsy, and began treating Thomas with Lamictal, an antiepileptic. He also prescribed supplements. Pet. Ex. 3, p. 23.

¹⁹ Chelation therapy was extensively discussed in the Theory 2 test cases as a remedy for "mercury toxicity," which the test case petitioners contended caused ASD. *Dwyer*, 2010 WL 892250 at *104 - *105. Chelation is medically approved to treat lead and other heavy metal poisoning, but not as an autism treatment. *Id.* at *103 n.428.

instruments were used, including the Childhood Autism Rating Scale (CARS), which placed Tom in the mild to moderately autistic range. *Id.* at p. 5. Petitioners provided a history that they first became concerned with Tom’s development at about 16 months of age, when he experienced a language regression in that he stopped using “mama.” They described him as becoming aloof, not responding to individuals within the same room, but did not specify when this behavior began. At around two years of age, he exhibited some odd behaviors, such as watching television upside down, and staring at the edges of linear objects, such as a chair rail or table. Pet. Ex. 12, pp. 1-2.

This developmental examination appears to be the most recent medical record filed.

III. Diagnostic Criteria for Autism Spectrum Disorders.

Only respondent filed any evidence²⁰ concerning the diagnostic criteria for ASD. The information contained in this section is drawn from that evidence. The transcript excerpts contained in Res. Exs. C-E were from OAP test case testimony provided by three pediatric neurologists with considerable experience in diagnosing ASD.

“Autism Spectrum Disorder” or “ASD” is an umbrella term for certain developmental disorders, including autism (also referred to as autistic disorder), pervasive developmental disorder—not otherwise specified [“PDD-NOS”], and Asperger’s Disorder. See R. Luyster, et al., *Language Assessment and Development in Toddlers with Autism Spectrum Disorders*, J. AUTISM DEV. DISORD. 38: 1426-38, 1426 (2008) [“Luyster”] filed as Res. Ex. A. Pervasive developmental disorders is the umbrella term used in the DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (American Psychiatric Association, 4th ed. text revision 2000) [“DSM-IV-TR”] at 69, rather than ASD. I use the term ASD throughout this opinion rather than PDD because of the possible confusion between “PDD” (the umbrella term referring to the general diagnostic category) and “PDD-NOS” (which is a specific diagnosis within the general diagnostic category of PDD or ASD). I use the term “autism” to refer solely to the specific diagnosis of “autistic disorder.”

The specific diagnostic criteria for ASD are found in the DSM-IV-TR, the manual used in the United States to diagnose dysfunctions of the brain. Res. Ex. C, excerpt of testimony of Dr. Eric Fombonne in the *Cedillo* OAP test case [“Fombonne Tr.”], at 1278A. Thus, these are the behavioral symptoms recognized by the medical profession at large as symptoms of ASD. The DSM-IV-TR contains specific diagnostic criteria for autistic disorder (often referred to as “autism” or “classic autism”), Asperger’s disorder, and pervasive developmental disorder-not otherwise specified (most frequently referred

²⁰ All of the evidence filed in the OAP test cases is available to any petitioner in the OAP, as well as to respondent. However, I note that there did not appear to be any material disputes in the OAP test cases about what constituted the early symptoms of autism or other ASD.

to as “PDD-NOS”). It is not uncommon for parents and even health care providers to use these terms in non-specific ways, such as referring to a child as having an “autism diagnosis,” even though the specific diagnosis is PDD-NOS. Of note, a child’s diagnosis within the autism spectrum may change from autistic disorder to PDD-NOS (or vice versa) over time,²¹ just as Tom’s did in this case.

A. Diagnosing Autism Spectrum Disorders.

The behavioral differences in autism spectrum disorders encompass not only delays in development, but also qualitative abnormalities in development. Fombonne Tr. at 1264A; Res. Ex. D, testimony of Dr. Max Wiznitzer in the *Cedillo* OAP test case [“Wiznitzer Tr.”], at 1589-91. There can be wide variability in children with the same diagnosis. One child might lack language at all, while another with a large vocabulary might display the inability to engage in a non-scripted conversation. Wiznitzer Tr. at 1602A-1604. However, both would have an impairment in the communication domain.

Testing for the presence of an ASD involves the use of standardized lists of questions about behavior directed to caregivers and parents, as well as observations of behaviors in standardized settings by trained observers. Fombonne Tr. at 1272A-74A. One behavioral symptom alone, such as hand-flapping, would not be diagnostic of an ASD, but if present, it would be a symptom that would be part of the diagnostic picture. As Dr. Fombonne explained, in diagnosing an ASD, “we try to observe symptoms, and when we have observed enough symptoms, then we see if the child meets these criteria.” Fombonne Tr. at 1278A-79; see also Res. Ex. E, testimony of Dr. Michael Rutter in the *King* OAP test case [“Rutter Tr.”], at 3253-54 (describing diagnostic instruments and their use in clinical settings).

Typically in children with autism spectrum disorders, the symptoms have been present for weeks or months before parents report them to health care providers. Fombonne Tr. at 1283. The most common age at which parents recognize developmental problems, usually problems in communication or the lack of social reciprocity, is at 18-24 months of age. Rutter Tr. at 3259-60. The development of symptoms of an ASD occurs very gradually, and it is not uncommon for the parents to be unable to date the onset very precisely. Fombonne Tr. at 1285A-1286A.

1. Autistic Disorder.

A diagnosis of autistic disorder requires a minimum of six findings from a list of impairments divided into three domains of impaired function: (1) social interaction; (2) communication; and (3) restricted, repetitive, and stereotyped patterns of behavior, interests, and activities. At least two findings related to social interaction and at least one each in the other two domains are required for diagnosis. To meet the diagnostic

²¹ See Fombonne Tr. at 1266A (explaining that the profile of a child’s symptoms can change as the child gets older, making the specific diagnosis and evaluation sometimes difficult to understand).

criteria for autism, the child must have symptoms consistent with six of the twelve listed types of behavioral impairments. Furthermore, the abnormalities in development must have occurred before the age of three. Fombonne Tr. at 1264A, 1279; Wiznitzer Tr. at 1618; Rutter Tr. at 3250. Although the majority of children with autism have developmental delays, many are of normal intelligence. Fombonne Tr. at 1276; Rutter Tr. at 3256. In testimony in *Cedillo* OAP test case, Dr. Wiznitzer described the three domains as the “core features” of a diagnosis on the autism spectrum. Wiznitzer Tr. at 1589-92. Children with autism are most symptomatic in the second and third years of life. Wiznitzer Tr. at 1618.

2. Pervasive Developmental Disorder-Not Otherwise Specified.

The DSM-IV-TR defines PDD-NOS as “a severe and pervasive impairment in the development of reciprocal social interaction,” coupled with impairment in either communication skills or the presence of stereotyped behaviors or interests. DSM-IV-TR at 84. The diagnosis is made when the criteria for other autism spectrum disorders, or other psychiatric disorders such as schizophrenia, are not met. *Id.* It includes what has been called “atypical autism,” which includes conditions that present like autistic disorder, but with onset after age three, or which fail to meet the specific diagnostic criteria in one or more of the domains of functioning. *Id.* As I noted in *Dwyer*, it is the most prevalent of the disorders on the autism spectrum. *Dwyer*, 2010 WL 892250 at *30.

3. Asperger’s Disorder.

Asperger’s disorder is a form of high-functioning autism. It presents with significant abnormalities in social interaction and with restricted, repetitive, and stereotyped patterns of behavior, interests, and activities. See DSM-IV-TR at 84. Diagnosis of Asperger’s disorder requires two impairments in social interaction and one impairment in restricted, repetitive, and stereotyped patterns of behavior. *Id.* Of note, it does not require language or communication abnormalities. *Id.*

B. The Domains of Impairment and Specific Behavioral Symptoms.

1. Social Interaction Domain.

This domain encompasses interactions with others. Fombonne Tr. at 1264A. There are four subgroups within this domain. Wiznitzer Tr. at 1594. The subgroups include: (1) a marked impairment in the use of nonverbal behavior, such as gestures, eye contact and body language; (2) the failure to develop appropriate peer relations; (3) marked impairment in empathy; and (4) the lack of social or emotional reciprocity. Wiznitzer Tr. at 1594-96. To be diagnosed with autism (autistic disorder), the patient must have behavioral symptoms from two of the four subgroups. Wiznitzer Tr. at 1594. For an Asperger’s diagnosis, there must be two impairments in this domain as well. DSM-IV-TR at 84. For PDD-NOS, there must be at least one impairment in this domain.

Fombonne Tr. at 1275A.

Doctor Wiznitzer described the degrees of impairment in interactions with others as a continuum, with affected children ranging from socially unavailable to socially impaired. A child who is socially unavailable may exhibit such behaviors as failing to seek consolation after injury or purposeless wandering, or may simply appear isolated. Wiznitzer Tr. at 1598. A less impaired child might be socially remote, responding to an adult's efforts at social interaction, but not seeking to continue the contact. This child might roll a ball back and forth with an adult, but will not protest when the adult stops playing. Wiznitzer Tr. at 1599. Given a choice between playing with peers and playing by himself, a child with impairments in social interaction will play by himself. *Id.* Some children with ASD demonstrate socially inappropriate interactions, such as pushing other children in an effort to interact. Wiznitzer Tr. at 1600. A higher functioning child might attempt interaction, but does so as if reading from a script. As an example, Dr. Wiznitzer discussed a patient who, when asked where he lived, could not answer, but responded appropriately when asked for his address. *Id.* at 1601.

Symptoms used to identify young children with impairments in the social interaction domain include lack of eye contact, deficits in social smiling, lack of response to their name, and the inability to respond to others. Fombonne Tr. at 1269A-70A. Others include a lack of imitation, lack of interest in other children, and infrequent seeking to share with others. R. Landa, *Diagnosis of autism spectrum disorders in the first 3 years of life*, NATURE CLINICAL PRACTICE NEUROLOGY, 4(3): 138-47 (2008) ["Landa"], filed as Res. Ex. B, at Table 1.

2. Communication Domain.

The communication domain involves both verbal and non verbal communication, such as intonation and body language. Fombonne Tr. at 1263; Wiznitzer Tr. at 1602A. Language abnormalities in ASD encompass not only delays in language acquisition, but the lack of capacity to communicate with others. Fombonne Tr. at 1267A. "Delays and deficits in language acquisition" are "among the key diagnostic criteria for autism spectrum disorders." Luyster at 1426.

There are four criteria within the communication domain. Wiznitzer Tr. at 1602A. They include: (1) a delay in or lack of development in spoken language, without the use of signs or gestures to compensate; (2) problems in initiating or sustaining conversation; (3) stereotypic or repetitive use of language, including echolalia and repeating the script of a video or radio presentation, such as singing a commercial jingle; and (4) the lack of spontaneous imaginative or make-believe play. Wiznitzer Tr. at 1602A-05.

Language delay, limited babbling, lack of gestures, lack of pointing to communicate things other than basic wants and desires (lack of "protodeclarative" vs. "protoimperative" pointing), are all early symptoms used to diagnose impairments in the communication domain. Fombonne Tr. at 1266A-68A. Doctor Wiznitzer described the

failure to share discoveries via language in autistic children as well. Wiznitzer Tr. at 1606A. Children with ASD who have more developed language skills may display difficulties in social communication outside their limited area of interest. *Id.* at 1607.

Within the communication domain, children with ASD have difficulties in joint attention, which Dr. Wiznitzer described as sharing an action or activity with another person or even an animal. They also have problems with what he called metalinguistic skills, referring to the meaning behind the language used, which may be conveyed by tone, body language, humor or sarcasm. Children with ASD may understand visual humor, illustrated by the cartoon of an anvil falling on the coyote's head, but lack the ability to understand a joke. Wiznitzer Tr. at 1607-09. They focus on the literal, rather than the figurative, meaning of words: telling a child with ASD to "hop to it" may elicit hopping, rather than an increase in speed in completing a task. Children with ASD use language primarily for getting their needs met. *Id.* at 1609. Such a child might lead a parent to the cookie jar, but would not lead a parent to a caterpillar crawling along the sidewalk.

Children with ASD often have impairments in specific types of play. They may understand cause and effect play, but have difficulties in imitative or representational play. In other words, they can push a button to make a toy figure pop up, but have difficulty with holding a tea party, putting a stuffed animal to bed, or feeding a doll. Wiznitzer Tr. at 1610-11. They also have impairments in symbolic play, in which an object such as a stick represents another object, such as a magic wand or sword. *Id.* at 1612.

Speech and language delays are the symptoms most commonly reported by parents as a concern leading to a diagnosis of ASD. Luyster at 1426; *see also* Fombonne Tr. at 1284 (one of first concerns noted by parents is the lack of language development); Rutter Tr. at 3253 (problems in social and communication domains tend to be observed much earlier than stereotyped behaviors).

A deficit in at least one of the subgroups in the communication domain is required for an autism diagnosis. Wiznitzer Tr. at 1602 A. An Asperger's diagnosis does not require a communication domain impairment and a PDD-NOS diagnosis requires an impairment in either this domain or the patterns of behavior discussed next. *See* Fombonne Tr. at 11275A-76; Wiznitzer Tr. at 1592.

3. Restricted, Repetitive and Stereotyped Patterns of Behavior Domain.

There are four categories within this domain. They include (1) a preoccupation with an interest that is abnormal in intensity or focus, such as spinning a plate or a wheel or developing an intense fascination with a particular interest, such as dinosaurs, cartoon characters, or numbers; (2) an adherence to nonfunctional routines or rituals, such as eating only from a blue plate, sitting in the same seat, or walking the same route; (3) stereotypic or repetitive motor mannerisms, such as finger flicking, hand

regard, hand flapping, or twirling; and (4) a persistent preoccupation with parts of an object, such as focusing on the wheel of the toy car and spinning it, rather than playing with it as a car. Wiznitzer Tr. at 1613A-15; Fombonne Tr. at 1271A-72A.

As Dr. Fombonne explained, this domain reflects abnormalities in the way play skills develop, as well as repetitive and rigid behavior. Fombonne Tr. at 1264A. A typical toddler may flick a light switch a few times, but the child with ASD performs the same action to excess. Wiznitzer Tr. at 1616. Doctor Rutter described one child who would not turn right; to make a right turn at a crossroads, he would have to make three left turns. Rutter Tr. at 3252-53.

For a diagnosis of autism, a child must display behaviors in at least one of the categories included in this domain. Wiznitzer Tr. at 1613A. An Asperger's diagnosis also requires at least one behavioral impairment encompassed in this domain. See Fombonne Tr. at 1275A-76. A PDD-NOS diagnosis requires either an impairment in this domain or an impairment in the communication domain. See Wiznitzer Tr. at 1592.

D. Summary.

The evidence establishes that a diagnosis of ASD is based on observations of behavioral symptoms. The symptoms are categorized into three domains.

For a definitive diagnosis of autism, the child must display specific behavioral abnormalities in each of the domains, with six behaviors from the list of twelve present. There must be at least two behaviors encompassed in the social interaction domain, reflecting the importance of impaired social interaction in diagnosing ASD. Of significance, the behavioral abnormalities must be manifest before the age of three.

Thus, the absence of any specific symptom would not rule out the diagnosis, so long as the requisite numbers of impairments in each domain of functioning are present. Conversely, autism cannot be diagnosed by any single abnormal behavior, but the ultimate diagnosis is based on an accumulation of symptomatic behaviors. The existence of any one behavioral abnormality associated with autism is sufficient to trigger the running of the statute of limitations.

For a diagnosis of Asperger's disorder, the child must display behavioral abnormalities similar to those of children with autistic disorder, but need not have a language abnormality. Fombonne Tr. at 1275A-76; see *also* DSM-IV-TR at 84 (requiring two impairments in social interaction and one in restricted, repetitive, and stereotyped patterns of behavior, interests, and activities for this diagnosis).

For a PDD-NOS diagnosis, the child must display behavioral abnormalities in all three domains. However, the diagnosis is given when the impairments fall short of the criteria for a diagnosis of autism (autistic disorder). Fombonne Tr. at 1275A.

Because Tom has a diagnosis of autism, superseding his earlier diagnosis of PDD-NOS, the analysis below applies to the diagnostic criteria for both disorders. I thus use the more general term, “ASD” which, in the analysis below, does not include Asperger’s disorder.

IV. Analysis.

A. Legal Analysis.

The Vaccine Act’s statute of limitations provides in pertinent part that, in the case of:

a vaccine set forth in the Vaccine Injury Table which is administered after October 1, 1988, if a vaccine-related injury occurred as a result of the administration of such vaccine, no petition may be filed for compensation under the Program for such injury after the expiration of 36 months after the date of the occurrence of the first symptom or manifestation of onset or of the significant aggravation of such injury. . . .”

§ 300aa-16(a)(2). The date of occurrence “is a statutory date that does not depend on when a petitioner knew or reasonably should have known anything adverse about her condition.” *Cloer*, 654 F.3d at 1339. Additionally, the date “does not depend on the knowledge of a petitioner as to the cause of an injury.” *Id.* at 1338. When drafting the Vaccine Act, Congress rejected a discovery rule-based statute of limitations, in favor of one that does not consider knowledge and runs solely from the date of an event, the first symptom or manifestation of onset. *Id.*

Because petitioners filed their petition on behalf of Tom on April 12, 2005, the first symptom or manifestation of onset of Tom’s autism must have occurred after April 12, 2002, in order for the petition to be considered timely. *See Markovich v. Sec’y, HHS*, 477 F.3d 1353, 1357 (Fed. Cir. 2007) (holding that “either a ‘symptom’ or a ‘manifestation of onset’ can trigger the running of the statute [of limitations], whichever is first”); *Cloer*, 654 F.3d at 1335 (holding that the “analysis and conclusion in *Markovich* is correct. The statute of limitations in the Vaccine Act begins to run on the date of occurrence of the first symptom or manifestation of onset.”).

B. Applying the Law to the Facts of this Case.

1. Was the Petition Timely Filed?

Petitioners assert “that the first symptom or manifestation of onset that was objectively recognized as a sign of autism by the medical profession occurred sometime after 11/21/02.” This date was apparently selected because it was when a neurodevelopmental pediatrician assessed Tom and did not give him an ASD diagnosis. Pet. Opp. at 2, 6. Additionally, petitioners point to three decisions of special masters

issued before the OAP test case decisions and before the Federal Circuit's decision in *Cloer*, to argue that the facts of Tom's case are more like those cases than two other decisions of special masters dismissing autism cases as untimely filed. Pet. Opp. at 4-5.

a. Opinion of a Health Care Provider.

Contrary to petitioners' assertions, the November 21, 2002 assessment by a neurodevelopmental pediatrician that a diagnosis of autism was not appropriate does not wipe the slate clean of any symptoms of autism that manifested earlier. The statute of limitations begins to run from the "occurrence of an event recognizable as a sign of vaccine injury by the medical profession at large, not the diagnosis that actually confirms such an injury in a specific case." *Goetz v. Sec'y, HHS*, 45 Fed.Cl. 340, 342 (1999), *aff'd*, 4 Fed. Appx. 827 (Fed. Cir. 2001). The OAP transcript excerpts submitted by respondent establish that the deficits exhibited by Tom, as noted in his medical records and histories, include deficits recognized by the medical community at large as symptomatic of ASD.

Petitioners do not actually misstate the neurodevelopmental pediatrician's assessment, but they do take the diagnosis out of the context in which it was rendered. The physician clearly diagnosed problems in communication, which is one of the three domains used to evaluate children for an ASD diagnosis. However, she concluded that his behaviors did not otherwise, at that point in time, point to an autism diagnosis. Pet. Ex. 2, p. 4. The remainder of her assessment reflects her concern that over the next couple of years, Tom could "begin[] to show more symptoms that look like an Autistic Spectrum Disorder." Pet. Ex. 2, p. 4

Moreover, in the November 21, 2002 assessment, there were several symptoms other than the communication disorder, that reflected behaviors on the autism spectrum. Tom's parents and teachers noted a lack of eye contact, lack of consistent response to his name, pulled his parents to an object that he wanted, did not imitate domestic tasks, enjoyed opening and closing cabinets, and lack of imitative play with dolls or figures. Pet. Ex. 2, pp. 1-2.

Although these behaviors are all used to diagnose ASD, a time frame of onset was not provided for any of the behaviors except the speech and language delay. Tom's parents began to be concerned about his language development when Tom was between 16 and 18 months of age. See, e.g., Pet. Ex. 1, pp. 9-10. This time frame for the development of parental concern is consistent with the evidence that the first symptoms of ASD are noted by parents at between 18-24 months of age. Rutter Tr. at 3259. At both his 15 and 18 month well child examinations there are notations in the medical record consistent with a concern developing during this time frame. At the 15 month check up, the notation is that Tom "only says mama" and perhaps one other word. Pet Ex. 1, p. 9. This notation is followed by one that indicates Tom's hearing is adequate, in that he follows commands. *Id.* The 18 month checkup indicates the use of

only two words (at least one of which is the same word, “mama,” that comprised his vocabulary one month earlier). *Id.* at p. 10. Not only was Tom’s language not developing as it should, he was following commands only “somewhat.” At a time when most children are rapidly acquiring language, Tom had made no progress at all.

The speech and language evaluation on March 21, 2002 (Pet. Ex. 1, pp. 21-23) definitively places the first symptoms of Tom’s ASD outside the period for timely filing. Both formal testing and informal observations were used to assess the extent of Tom’s language and developmental delays. On the Rosetti-Infant Toddler Language Scale, Tom’s language comprehension and expression skills were solid for a six to nine month old child, and scattered for a 12-15 month old child. Tom was between 19 and 20 months old at the time of this evaluation.

What caused the language delay was not addressed at this evaluation. At his two year well child visit, his mother indicated that they were not pursuing the recommended speech therapy at that time, as there was a family history of late talking in Tom’s father. Pet. Ex. 1, p. 11. However, just two months later, Tom was re-evaluated and found to have a severe language delay, and other concerns about his development were identified by his day care teachers. *Id.* at pp. 25-27.

I find that speech and language delay constituted the first symptom of Tom’s ASD. His parents indicated they had concerns about this delay by the time Tom was 18 months old, a point in time outside the period for timely filing. Moreover, several medical professionals recognized that Tom had speech and language delay on or before March 21, 2002, also a point in time outside the period for timely filing. Pet. Ex. 1, pp. 18, 21-24. Although no diagnosis of autism was rendered at this time, and, as the November 21, 2002 developmental evaluation indicated, an autism diagnosis was not appropriate at that point, a diagnosis is not necessary to trigger the running of the statute of limitations. A first symptom is all that is necessary. See § 300aa-16(a)(2). In *Markovich*, the court explained the differences between “symptom” and “manifestation of onset,” as those words are used in the Vaccine Act. *Markovich*, 477 F.3d at 1357. A symptom may be associated with more than one condition, and it can be difficult for a lay person to connect a symptom with a particular injury. *Id.* Manifestation of onset, on the other hand, is something more clearly associated with an injury. *Id.* Neither requires a doctor making a definitive diagnosis of the injury. *Id.* at 1358 (quoting *Brice v. Sec’y, HHS*, 36, Fed. Cl. 474, 477 (1996)).

It is true that no health care provider pointed to a specific behavioral abnormality and stated that it constituted the first symptom of Tom’s ASD. However, the pediatric neurologist who diagnosed Tom with PDD-NOS indicated that Tom’s language delay was one of the factors in his diagnosis. Pet. Ex. 3, p. 2. The testimony from the OAP test cases establishes that, for either of Tom’s diagnoses (PDD-NOS or autistic disorder), an impairment in communication is required. It is also true that a specialist declined to diagnose Tom with ASD on November 21, 2002. However, in so declining, the neurodevelopmental pediatrician tacitly acknowledged that Tom displayed some

behaviors consistent with ASD, but not enough of them to make the diagnosis. The language used (commenting that Tom's behaviors did not "at that point in time" warrant an ASD diagnosis (Pet. Ex. 2, p. 4) and noting that Tom might begin "to show more symptoms that look like" ASD (Pet. Ex. 2, p. 4) strongly suggests that Tom's behaviors raised a concern for ASD. I thus reject petitioners' assertions that the reluctance of one physician to make an autism diagnosis in November 2002 means there were no observable symptoms of ASD present at that time. While a communication deficit alone is insufficient to diagnose ASD, it is one of the criteria by which ASD is diagnosed.

2. Similarities to Other Cases.

Petitioners argue that Tom's case is similar to three other cases²² in which the special master declined to grant respondent's motions to dismiss based on the statute of limitations. Pet. Opp. at 4-5. Petitioners' reliance on these three rulings is misplaced.

Initially, it is important to note that decisions of special masters are not binding on other special masters.²³ They are not even binding on the special master who issued the decision. For example, a special master could conclude, based on the evidence adduced in one case, that the influenza vaccine does not cause condition X, but in a separate and subsequent case, might conclude to the contrary. This "inconsistency" is predicated on the simple fact that there are few, if any, definitive answers in science and medicine. New studies, better qualified experts, a different theory of causation, or a different factual predicate could all warrant a change in how the evidence regarding the "can it cause" question is evaluated.²⁴ Likewise, decisions of the judges of the Court of

²² Petitioners cite to *Gormley v. Sec'y, HHS*, No. 03-286V, 2008 WL 5056224 (Fed. Cl. Spec. Mstr. Oct. 30, 2008), *Karns v. Sec'y, HHS*, No. 02-1852V, 2008 WL 5055958 (Fed. Cl. Spec. Mstr. Oct. 30, 2008), and *Verdon v. Sec'y, HHS*, No. 02-208V, 2008 WL 5056293 (Fed. Cl. Spec. Mstr. Oct. 30, 2008).

²³ *Hanlon v. Sec'y, HHS*, 40 Fed. Cl. 625, 630 (1998), *aff'd*, 191 F.3d 1344 (Fed. Cir. 1999) (decisions issued by special masters and judges of the Court of Federal Claims constitute persuasive, but not binding authority).

²⁴ I note that this scenario is developing in cases alleging vaccine causation of Dravet's syndrome, a seizure disorder in children that manifests in early childhood. See *Stone v. Sec'y, HHS*, No. 04-1041V, 2010 WL 1848220 at *11 (Fed. Cl. Spec. Mstr. Apr. 15, 2010), *decision vacated and remanded*, 95 Fed. Cl. 233 (2010), *on remand*, 2011 WL 836992 (Fed. Cl. Spec. Mstr. Jan. 20, 2011), *aff'd*, 99 Fed. Cl. 187 (2011). The discovery of a genetic basis for Dravet's syndrome, coupled with evidence that a vaccine might trigger the initial seizure in a child with the genetic condition, but would not affect the outcome of this genetic disorder has changed the legal landscape regarding seizure cases. See, e.g., *Harris v. Sec'y, HHS*, No. 07-60V, 2011 WL 2446321 (Fed. Cl. Spec. Mstr. May 27, 2011); *Snyder v. Sec'y, HHS*, No. 07-59V (Fed. Cl. Spec. Mstr. July 21, 2011). These SCN1A cases are an example of advances in science affecting the legal causation conclusions drawn by special masters. I also note that a recent unpublished decision of the U.S. Court of Appeals for the Federal Circuit stressed that "a different evidentiary record can lead to different outcomes. To decide otherwise would effectively require special masters to ignore the impact of ever-changing technological advances and medical breakthroughs that might discredit the plausibility of a formerly accepted theory." *Ricketts v. Sec'y, HHS*, No. 2001-5038, slip op. at 13 (Fed. Cir. Nov. 18, 2011).

Federal Claims do not constitute binding precedent, except for the case in which they are issued. *Hanlon*, 40 Fed. Cl. at 630.

Decisions of the Federal Circuit interpreting the Vaccine Act are binding on special masters.²⁵ A decision interpreting how the burden of proof is evaluated would thus be binding (See, e.g., *Althen v. Sec'y, HHS*, 418 F.3d 1274 (Fed. Cir. 2005)), but a decision finding the evidence inadequate to support (or refute) causation in a particular case would not be. Factual determinations differ from legal determinations.

Petitioners' reliance on these cases is misplaced. All three of the rulings are very short, and all three were issued in 2008, by the same special master.²⁶ All three were less definitive on whether speech or language delay constitutes a first symptom of ASD than petitioners make them out to be. In each case, the special master who ruled on the motion to dismiss indicated that the motion was premature and that the case required more factual development before she could definitively rule. In *Karns*, the special master concluded that "[i]t would be premature to dismiss this case without a complete filing of the medical records . . . and an evidentiary evaluation of when [the vaccinee's] PDD began as well as whether he has autism." *Karns*, 2008 WL 5055958 at *1. The identical conclusion is drawn in *Verdon*. *Verdon*, 2008 WL 5056293 at *1. In *Gormley*, the special master indicated that "[w]ithout evidentiary presentation of when the objective medical community would consider [the vaccinee] to have had a vaccine injury, respondent's motion is premature and denied." *Gormley*, 2008 WL 5056244 at *1.

Although the medical records here are far from complete, they are adequate to determine when Tom's first symptom of ASD manifested. I afforded the parties the opportunity to file any additional evidence or pleadings by September 19, 2011. Order, filed Aug. 22, 2011. Petitioners did not make any filings. Respondent filed a supplemental pleading addressing the impact of *Cloer* on this case, and filed evidence that establishes speech and language delay is not only a symptom of ASD, but also that it is often the first symptom observed by parents and caregivers. Moreover, the evidence establishes that at least one deficit in the communication domain is required for an autism or PDD-NOS diagnosis. Thus, this case is factually and legally distinct from those in which another special master ruled that motions to dismiss were premature.

²⁵ *Guillory v. Sec'y, HHS*, 59 Fed. Cl. 121, 124 (2003), *aff'd*, 104 Fed. Appx. 712 (Fed. Cir. 2004).

²⁶ I have since dismissed two of these three cases on petitioners' motion. (*Gormley* and *Karns*). The third (*Verdon*) remains open and on my docket. However, the motions to dismiss were ruled on by another special master who was then assigned to these cases.

V. Conclusion.

Petitioners have the burden to establish timely filing of their claim. They have failed to adduce any evidence in support of their claim that a diagnosis of something other than an ASD wipes the slate clean of any ASD symptoms that were observed prior to that diagnosis. Even if the assessment that an ASD diagnosis could not be supported at that time was correct and appropriate, the assessment was qualified by language that indicated it was limited to the time period in which it was made, and which urged close observation for other symptoms suggestive of an ASD diagnosis. Respondent has filed substantial evidence to demonstrate that speech and language delay is often the first symptom of autism and often the first symptom noted by parents or caregivers. While not sufficient in and of itself for a diagnosis, some evidence of a communication abnormality, which includes language delay or other qualitative impairment in communication, is required for an autism diagnosis.

I recognize that “speech delay” is a behavioral manifestation that can have many possible causes, including hearing loss, malformations of the mouth, palate, or vocal cords, or even non-medical conditions such as living in a multi-lingual household. Unfortunately, of necessity, identifying the “first symptom” involves considerable use of hindsight, particularly in autism cases. A slow-growing cancer, the insidious beginning of a bipolar disorder, or the gradual rise of blood glucose levels and autoantibodies in Type 1 diabetes also present diagnostic challenges, and only in retrospect may the first symptom of these disorders be recognized as such.

The Vaccine Act’s statute of limitations is by no means generous. However, it likely represents one of the many trade-offs inherent in reconciling the competing legislative schemes proposed in 1985, which eventually became the Vaccine Act in 1986.²⁷ Other aspects of the Act are highly favorable to petitioners, including the Table causation presumption, the no-fault nature of actual causation claims, and the extremely generous attorney fee provisions that make obtaining representation in these cases much easier.

Tom’s first symptoms of what was eventually diagnosed as autism occurred before April 12, 2002. By the plain language of the statute, and the interpretations of the Federal Circuit of that language, **this claim was untimely filed and is therefore**

²⁷ See H.R. 1780, 99th Congress (1985); S. 827, 99th Congress (1985); S. 1744 99th Congress (1986), incorporating H.R. 5546, 99th Congress (1986). The initial bills proposed in the House and Senate differed on such matters as the appeal rights of petitioners, the monetary source for payment of damage awards, and whether the Vaccine Program would be the exclusive court for suits regarding vaccine injury. See STAFF OF H. SUBCOMM. ON HEALTH AND THE ENVIRONMENT, 99TH CONG., REP. ON CHILDHOOD IMMUNIZATIONS (Comm. Print 1986) at *Appendix A: Vaccine Compensation Legislation in the 99th Congress*, pgs 93 – 101. The legislation that ultimately created the Vaccine Program borrowed from both the Senate and the House versions of the initial bills.

dismissed. In the absence of a motion for review filed pursuant to RCFC, Appendix B, the clerk is directed to enter judgment accordingly.

IT IS SO ORDERED.

Denise K. Vowell
Special Master