

Vaccine Injury Compensation Program (the Program).² Petitioner alleges that Alexis experienced a number of adverse effects from the vaccines she received on December 19, 2000 and January 17, 2001. Petitioner asserts that the hepatitis B vaccines administered to Alexis caused stool changes, blurred vision, fatigue, sensitivity to sound, smell, and light, barking, muscle twitches, alopecia, intermittent paralysis, headaches, decreased appetite, fibromyalgia, and fainting episodes. Pet. at 2. Alternatively, petitioner claims that the mercury-containing preservative thimerosal in the hepatitis B vaccine Alexis received on December 19, 2000, caused her to experience depression, body swelling, leaky gut syndrome, intermittent abdominal pain, indigestion, and sensitivity to the cold temperatures.³ Pet'r's Ex. 92.

In support of her claim that Alexis suffered various vaccine-related injuries, petitioner filed the following documents: (1) petitioner's affidavits and diary notes, Pet'r's Ex. 23, 34, 36, 82, 83; (2) statements from Alexis's father (Anthony Reid, Sr.), Alexis's grandmother (Rosa Reid), Alexis's brother (Adrian Artis), and the family's neighbor (Mimi Blevins), Pet'r's Ex. 81, 28, 79, 80; (3) petitioner's prenatal records, Pet'r's Ex. 8, 18, 19; (4) Alexis's earliest pediatric records, Pet'r's Ex. 2, 7, 15; (5) Alexis's later pediatric records, Pet'r's Ex. 1, 3, 4, 5, 6, 11, 12, 13, 14, 16, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 35, 38, 47, 49, 52, 53, 54, 55, 59, 60, 61, 62, 78, 89, 90; (6) Alexis's immunization records, Pet'r's Ex. 9, 10, 17, 50, 51, 92; (7) Alexis's school attendance records, Pet'r's Ex. 86, 87; (8) Alexis's homebound instruction documents, Pet'r's Ex. 31, 42, 43, 58, 84, 85, 88, 91; (9) two expert reports from Dr. Joseph Bellanti, an immunologist, Pet'r's Ex. 39, 68; (10) an expert report from Dr. Mary Megson, a pediatrician, Pet'r's Ex. 37; and (11) medical literature, Pet'r's Ex. 40, 69, 70, 71, 72, 73, 74, 75, 76, 77.

The undersigned held a fact hearing in Washington, D.C. in June of 2012, to resolve certain fact issues that emerged during the case's development. During the hearing, petitioner, her husband, and Alexis testified regarding Alexis's state of health before and after receipt of the hepatitis B vaccines on December 19, 2000 and January 17, 2001, respectively.

I. DISCUSSION

² The Program comprises Part 2 of the National Childhood Vaccine Injury Act of 1986, Pub. L. No. 99-660, 100 Stat. 3758, codified as amended, 42 U.S.C. §§ 300aa-10 et seq. (hereinafter "Vaccine Act" or "the Act"). Hereinafter, individual section references will be to 42 U.S.C. § 300aa of the Act.

³ On December 19, 2000 Alexis also received the Measles, Mumps, and Rubella (MMR), Polio (IPV), and Tetanus-Diphtheria-Pertussis (TDaP) vaccines. Pet'r's Ex. 51.

A. The Documentary Record

Alexis Reid was born on May 13, 1990, at Wayne Memorial Hospital in Goldsboro, North Carolina. Pet'r's Ex. 18. She was discharged three days after her birth, as a well infant. Id.

On December 19, 2000, Alexis received her first administration of the hepatitis B vaccine, in addition to her measles, mumps, and rubella (MMR), polio (IPV), and tetanus-diphtheria a cellular pertussis (TDaP) vaccines. Pet'r's Ex. 9. She was ten years of age. Pet'r's Ex. 18. According to petitioner, Alexis developed severe diarrhea and other gastrointestinal symptoms the next day. Pet'r's Ex. 5.

One month later, on January 17, 2001, Alexis received her second administration of the hepatitis B vaccine. Pet'r's Ex. 23. Nearly six months later, on July 24, 2001, Alexis obtained a note from Midlothian Family Practice stating that she was unable to complete the hepatitis B vaccination series due to an allergic reaction. Pet'r's Ex. 50.

On October 1, 2001, nine months after Alexis received the second hepatitis B vaccine, petitioner took Alexis to see Dr. Ann Kessel, a pediatric gastroenterologist, to evaluate Alexis's complaints of chronic abdominal issues. Pet'r's Ex. 26. Dr. Kessel was of the opinion that most of Alexis's symptoms were consistent with gastrointestinal reflux and thus sent Alexis for a barium swallow to examine her upper gastrointestinal tract. Id. Dr. Kessel suggested that in the interim, Alexis take a double dose of Mylanta (an over-the-counter antacid) and adopt a low-fat diet. Id. Three weeks later on October 22, 2001, Dr. Gerry Reece, a radiologist, performed Alexis's upper GI exam. Id. The results were normal. Id.

Six days after the upper GI exam, petitioner took Alexis to Patient First for complaints of severe epigastric pains and a vomiting episode. Id. Two days thereafter, in a record dated October 30, 2001, Dr. Mary Megson, a developmental pediatrician at the Pediatric and Adolescent Ability Center, noted that after receiving the second hepatitis B administration, Alexis experienced severe anorexia, nausea and vomiting, which on several occasions led to dehydration, constipation, blurred vision, temperature sensitivity, intermittent tingling and numbness in her left arm, soreness in her scalp, and alopecia. Pet'r's Ex. 5.

Five days later on November 2, 2001, Alexis returned to Patient First complaining of tingling in her feet. Id. One month later, Alexis had laboratory testing performed. Pet'r's Ex. 5. Dr. Megson reviewed the test results on December 11, 2001, and

determined that Alexis had elevated levels of cadmium and aluminum in her hair. Id. Dr. Megson recommended chelation treatment with Chemet⁴ for five days. Id.

On December 27, 2001, Alexis saw Dr. David Leszczyszyn, a pediatric neurologist. Pet'r's Ex. 12. He expressed concerns about Alexis's psychological condition and the possibility of a conversion disorder, but noted that he could not rule out the prospect that Alexis was suffering from fibromyalgia. Id.

Two weeks later, by letter dated January 10, 2002, Dr. Donald Saunders of the Midlothian Medical Center advised Alexis's mother that neither Alexis nor her brother, Anthony Jr., would be received for future treatment at Midlothian. Pet'r's Ex. 15 at 81. Dr. Saunders cited the Reids' abuse of emergency room visits and repeated requests for referrals as the principal reasons for the medical center's decision to refuse further treatment of the children. Id.

One month later, petitioner took Alexis to Patient First for symptoms of gastroenteritis. Pet'r's Ex. 4. Three weeks later, Dr. Megson saw Alexis again, this time for complaints of intermittent numbness and tingling in her extremities as well as jerking episodes. Pet'r's Ex. 5. Dr. Megson speculated that Alexis had experienced a severe thimerosal reaction and possible mercury poisoning from her first and second administrations of the TDaP vaccine (rather than the hepatitis B vaccinations implicated in the vaccine petition). Id.

On March 22, 2002, petitioner filed this vaccine claim. Pet.

Three months later, on July 3, 2002, petitioner took Alexis back to Patient First with complaints of periodic seizure activity and twitching. Pet'r's Ex. 4. Two weeks later, Alexis returned presenting with leg tingling and weakness affecting her ability to walk. Id.

⁴ Succimer (Brand name Chemet) is used in the treatment of acute lead poisoning to remove excess lead from the body, especially in small children. Succimer combines with lead in the blood stream. The combination of lead and succimer is then removed from the body by the kidneys. By removing the excess lead, the medicine lessens damage to various organs and tissues of the body.
<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMHT0012224/?report=details> (last revised November 1, 2012)

Three months later in October of 2002, Alexis sought treatment at Patient First for a sprained ankle and foot swelling. Id. Three more weeks later, Alexis returned to Patient First for a scalp infection. Id.

The next month, Alexis went back to Patient First--two days in a row--for pain associated with a sprained wrist which she sustained during a fall. Id. Alexis reported an instance of paralysis while doing her homework. Id.

Two weeks later, in December of 2002, Alexis sought treatment at Patient First for “seizure-like” symptoms. Id. Later in December of 2002, Alexis sought further treatment at Patient First for involuntary arm movements, coughing with discolored mucus, and a sore throat. Id.

In January of 2003, two years after her second and last hepatitis B vaccination, Alexis saw Dr. Paul McDermott, Jr., an orthopedic surgeon, for a several week history of pain and tenderness. Id. Dr. McDermott recommended that Alexis see a hand therapist for help with her writing and her daily living tasks. Pet’r’s Ex. 29. Finding no physical explanation for Alexis’s problem, Dr. McDermott strongly encouraged her to continue her psychologic and neurologic office visits. Id. Also in January of 2003, Alexis sought medical care for leg numbness, dizziness, and headaches. Pet’r’s Ex. 4. Thereafter, Alexis continued to receive frequent medical attention for a myriad of complaints and discomforts. Id.

In February of 2003, Alexis received attention for involuntary movements, headaches, low magnesium levels, difficulty breathing, and periodic episodes of loud burping. Id. Puzzled by Alexis’ questionable behavior, the examining physicians recommended psychologic therapy. Pet’r’s Ex. 29.

On March 4, 2003, Alexis consulted with Dr. Bennet Lavenstein, a pediatric neurologist. Pet’r’s Ex. 22. Dr. Lavenstein recommended an elective hospital admission for a comprehensive neurologic, rheumatologic, and psychiatric evaluation over a two-day period spanning from March 5, 2003, to March 6, 2003. Id. On March 7, 2003, a forty-eight hour EEG study returned largely unremarkable results other than several twitches. Id. The results of a chest x-ray were also normal. Pet’r’s Ex. 22. Alexis was discharged from Children’s Hospital on March 9, 2003, diagnosed with seizure-like activity. Id.

The same day that Alexis was discharged from Children’s Hospital, petitioner took Alexis to Patient First for left jaw pain, difficulty opening her mouth, and restless legs. Pet’r’s Ex. 4. Alexis returned the next day, making a barking noise that caused her to have difficulty breathing. Id. She returned again the following day, having developed facial tics and vision marked primarily by the colors blue and green. Id.

During the next month, Alexis saw Dr. Edmund Cornman, a neurologist. Pet'r's Ex. 27. Dr. Cornman detected a conversion disorder, marked by spells of feigned unresponsiveness and collapsing weakness. Id. He suggested that Alexis receive assistance in dealing with the psychologic stressors contributing to her need to present with physical symptoms of illness. Id.

That same month, April of 2003, Alexis received a psychiatric assessment from Dr. Martin Buxton. Pet'r's Ex. 25. He diagnosed her with depression, ruling out Post Traumatic Stress Disorder (PTSD) and conversion disorder. Id. A subsequent cardiologic exam that month was deemed normal. Pet'r's Ex. 22.

In May of 2003, Alexis consulted with an orthopedic therapist who noted that because Alexis' problems were more musculo-skeletal than neurologic, she might benefit from local pain-relieving modalities including flexibility exercises. Pet'r's Ex. 29.

Later in the month, Alexis returned to Dr. Kessel, the gastroenterologist she had previously seen, for an evaluation of her chronic constipation and reflux. Pet'r's Ex. 26. Noting symptoms of frequent nausea, increased burping, and occasional reflux episodes, Dr. Kessel related that some of Alexis's symptoms might respond to psychologic therapy. Id. Dr. Kessel informed Mrs. Reid that Alexis had developed an obsessive behavior of air swallowing that contributed to her excessive burping. Id.

In July of 2003, petitioner took Alexis to see Dr. Megson again. Pet'r's Ex. 5. She determined that Alexis was suffering from a fungal infection, low blood sugar, difficulty sleeping, and hypersensitivity to smells and sounds. Id.

In August of 2003, Alexis was examined at Patient First. Pet'r's Ex. 4. There, the doctors questioned whether Alexis might have fibromyalgia in addition to an exaggerated response to pain. Id.

In January of 2004, nearly three years after Alexis's second hepatitis B vaccination, she was granted indefinite homebound instruction. Pet'r's Ex. 31. Over the next four months, Alexis sought treatment for spasms, tremors, fainting episodes, restless legs, and scalp discomfort. Pet'r's Ex. 53. The cause for Alexis's symptoms was unknown. Id.

The following year in May of 2005, Alexis received a psychologic evaluation at Children's Hospital. Pet'r's Ex. 38. The evaluation revealed intellectual function within the upper limits of the average range as well as average verbal memory, visual organization, and planning skills. Pet'r's Ex. 38. Mild attention problems were also detected, in addition to cognitive weaknesses in vocabulary and nonverbal analogic reasoning. Id. No significant emotional disturbance was uncovered, and Alexis was deemed to be socially and emotionally well-adjusted in her home environment. Id.

Nearly two weeks after that psychological evaluation, Mr. Reid requested permission to continue Alexis's homebound schooling for the rest of the academic year. Pet'r's Ex. 53.

In a report dated May 25, 2005, offered in support of petitioner's vaccine claim, Dr. Megson opined that Alexis had a severe neurologic reaction to the hepatitis B vaccine, which was either autoimmune or the result of thimerosal toxicity. Pet'r's Ex. 37. In a report dated May 31, 2005, also offered in support of petitioner's vaccination claims, Dr. Bellanti opined that Alexis has been severely harmed by her reaction to the received vaccines as evidenced by the various symptoms she displayed. Pet'r's Ex. 39.

Three months later on September 4, 2005, Alexis returned to Patient First with paperwork requesting additional homebound schooling. Pet'r's Ex. 53. At that time, she complained of body pain and fainting spells. Id. Dr. Somerville signed the homebound instruction forms allowing Alexis to be schooled at home for a period of six to twelve weeks, due to her ongoing muscle pain and sensitivity to smells and sounds. Pet'r's Ex. 42. Dr. Megson subsequently referred Alexis to the geneticist, Dr. Mark Geier, in Rockville, Maryland. Id. Alexis returned to school in November of 2005. Id.

In February of 2006, Dr. Somerville wrote a letter indicating she had seen Alexis on three occasions within the last 30 days for recurrent episodes of fainting following her exposure to either noxious stimuli or stressful situations. Pet'r's Ex. 49. Dr. Somerville noted Alexis's numerous visits to different doctors, but no correlative improvement in her condition. Id. In Dr. Somerville's view, Alexis's return to a safe school environment was preferable to continued homebound education. Id. Three months later, Dr. Gail Argenbright, the clinical psychologist who had examined Alexis earlier, urged petitioner to allow Alexis to attend a different high school in the fall semester based on her collapsing episodes at her previous school. Pet'r's Ex. 53.

Seventeen months later, petitioner took Alexis to see Dr. Elaine Turner, an allergist, who observed that Alexis's symptoms were "protean" and "unusual." Pet'r's Ex. 53. She wondered whether the chest pains Alexis experienced were related to asthma and exacerbated by exposure to either gas fumes or cigarette smoke. Id.

Two months later, Alexis visited with another allergist. Pet'r's Ex. 51. She was seventeen years old. Pet'r's Ex. 18. The therapist remarked that Alexis suffered from multiple medical problems that interfered with her daily functioning, affected her sleep, and led to frequent fainting spells. Pet'r's Ex. 52. The therapist diagnosed Alexis with an adjustment disorder, exacerbated by a depressive mood. Id. Of the five recommended therapy sessions, Alexis completed only three. Id. Alexis's prognosis at the time of discharge was poor. Id.

Although Alexis subsequently resumed therapy, she appeared cynical about the process because although she had received significant medical attention for nearly a decade, her symptoms persisted. Id.

Five months later, in May of 2008, Alexis saw Dr. Stephen Clement, an endoscopist, who found no abnormalities. Pet'r's Ex. 53.

Alexis was seen by a licensed social worker at Healthy Changes Counseling Associates in Richmond, Virginia on eight occasions between March 30, 2010, and June 29, 2010. Pet'r's Ex. 62. Petitioner and her husband attended the first few sessions with Alexis. During these sessions, Alexis complained that she lacked family support and described petitioner as overbearing. Id. The therapist noted the ostensible family strain, and after three sessions, petitioner and her husband refused to return. Id. During the remaining therapy sessions, Alexis discussed the tension between her mother and herself, the toll her illness had taken on her parents' relationship, and the fault she perceived her parents had assigned to her for her many health problems. Id. Alexis's therapist diagnosed her with major depressive disorder. Id.

On October 10, 2011, Alexis was hospitalized for possible seizure activity. Pet'r's Ex. 78. The attending physician, Dr. Shankar Perumal, observed that Alexis's condition seemed not to be an epileptic, but psychogenic. Id.

B. The Witnesses' Testimony

Petitioner, her husband (Alexis's father), and Alexis testified during the fact hearing. Petitioner testified first. Petitioner and then her husband described Alexis's health before and after her receipt of the vaccines at issue. Alexis described her condition to the best of her limited recollection.

1. Mrs. Linda Reid

Mrs. Reid first described Alexis's health before she received the hepatitis B vaccines. Healthy at her birth on May 13, 1990, Tr. at 49, Alexis had no notable medical issues prior to her receipt of the hepatitis B vaccine series--other than the common childhood illnesses of upper respiratory tract infections and ear infections. Id. at 49. Alexis also developed, and subsequently outgrew, asthma. But before she outgrew the condition, id. at 49, Alexis was hospitalized in 1995 for pneumonia and aggravated asthma. Id. at 49. Among Alexis's various pre-vaccinal ailments were: foot and mouth disease, an Epstein-Barr viral infection, and chicken pox (which she is alleged to have contracted after receiving the varicella vaccine). Id. at 49-50.

After Alexis received her first hepatitis B vaccination in December of 2000, she experienced diarrhea and stomach symptoms the following day. Id. at 54. Alexis received her second hepatitis B vaccine in January of 2001. Id. at 55. A few weeks thereafter, Alexis complained that her throat, chest, and stomach hurt, her vision was blurred, and she felt cold. Id. at 55. Alexis also suffered from fatigue, nausea, loss of appetite, and a craving for sweets. Id. at 68. Petitioner gave Alexis enemas for her gastrointestinal problems. Id. at 60, 68-69.

Alexis developed infected bumps on her scalp and began losing her hair. Id. at 56, 59, 62. Petitioner sought medical attention for Alexis's symptoms in May of 2001, nearly five weeks after Alexis received her second hepatitis B vaccination. Id. at 62. Petitioner, a nurse by training, consulted the Physician's Desk Reference and determined that the hepatitis B vaccines had caused Alexis's symptoms. Id. at 49.

Petitioner described Alexis's occasional jerking and fainting spells following exposure to certain chemicals and gas fumes. Id. at 66. But petitioner acknowledged that Alexis never soiled herself as one might when having a true seizure. Id. at 66.

Petitioner recalled instances during which Alexis became paralyzed and began to bark as if she had Tourette's Syndrome. Id. at 65. The examining physician could not determine the source of Alexis's problems although several doctors expressed their view that Alexis had multiple chemical sensitivities and suffered from a conversion disorder. Id. at 66-67. Alexis also appeared to gain weight, although her eating habits did not appear to change Id. at 72.

Petitioner eventually took a three month leave of absence to teach Alexis at home. Id. at 73. Petitioner's husband ultimately quit his job to stay home with Alexis and her brother Anthony on a full-time basis. Id. at 73. Petitioner acknowledged Alexis's conditions have improved over the years. Id. at 69-70, 73. Alexis does not collapse as often as she previously did. Id. at 71.

2. Mr. Anthony Reid, Sr.

Mr. Reid is petitioner's husband and Alexis's father. He testified that before Alexis received her hepatitis B vaccines, she had problems with asthma. Id. at 38. She eventually outgrew her asthma but still used a nebulizer. Id. at 39. Mr. Reid acknowledged his own asthma as a child and noted that he too outgrew that condition at five or six years of age. Id. at 34. Mr. Reid denied any family history of asthma.

Mr. Reid testified that he took Alexis and Anthony for their first and second sets of the hepatitis B vaccinations. Id. at 44. He related to his wife the symptoms Alexis reported after vaccination because Mrs. Reid closely tended the children's health issues. Id. at 40. Mr. Reid recalled Alexis's earliest symptom after her first hepatitis B vaccination was diarrhea. Id. at 39-40. Mr. Reid also recalled that Alexis lost her hair and developed tics. Id. at 39-40. Among the symptoms Alexis developed were seizures, violent shaking, insomnia, sensitivity to lights, sounds, and smells, hair loss, food allergies, and lumps on her scalp. Id. at 40. Mr. Reid could not remember when these symptoms first appeared.

Describing Alexis's transition to college, Mr. Reid testified that he had remained at school with her for nearly one week after she started because she had developed mobility issues, and her gait was affected. Id. at 42. These conditions caused Alexis to

miss a semester of school because she also had trouble writing and reaching class without assistance. Id. at 42.

Mr. Reid acknowledged that Alexis's symptoms have improved over the years. But she still suffers from occasional fainting episodes. Id. at 41

Alexis Reid

Alexis Reid is petitioner's daughter and the vaccinee for whom petitioner seeks Program compensation. Alexis testified that prior to receiving the two hepatitis B vaccines at issue here, her only health problem was asthma, a condition she outgrew at the age of eight or nine years. Tr. at 7-8. She was active and enjoyed participating in sports with her brother and playing with the neighborhood kids. Id. at 9. She was an honor roll student all throughout elementary school. Id. at 9.

Alexis received her first hepatitis B vaccination on December 19, 2000. Id. at 8. She does not recall anything unusual happening after that vaccine although she does recall developing constipation. Id. at 20.

Alexis remembered receiving the second hepatitis B vaccination on January 17, 2001. Id. at 9. She also remembered having chest pains and headaches after receipt of the vaccine, but could not recall how soon after her vaccination the symptoms began. Id. at 9. She experienced blurred vision, eating problems accompanied by a sugar craving, scalp eruptions, and hair loss. Id. at 9-10. The points of pain on her body were diagnosed as fibromyalgia. Id. at 12-13. She suffered with sore throats and sensitivity to temperature and sound. Id. at 10-11.

Alexis testified that over the course of time, she developed multiple chemical sensitivity triggered by exposure to cigarette smoke, perfume, and strongly scented cleaning products like bleach.⁵ Id. at 10. Exposure would provoke pseudo-seizures⁶ and

⁵ Multiple chemical sensitivity (MCS) is also known as "environmental illness" or "sick building syndrome."

It refers to a variety of non-specific symptoms reported by some after exposure to chemical, biologic, or physical agents. The levels of exposure considered safe for most can have an effect on a few. The reported symptoms are wide-ranging and not specific, including headache, fatigue, dizziness, nausea, congestion, itching, sneezing, sore throat, chest pain, changes in heart rhythm, breathing problems, muscle pain or stiffness, skin rash, diarrhea, bloating, gas, confusion, difficulty concentrating, memory problems, and mood changes. Reported triggers include tobacco smoke, auto exhaust, perfume, insecticide, chlorine, among other. <http://www.webmd.com/allergies/multiple-chemical-sensitivity> (last revised June 03, 2011).

a lack of memory after collapsing. Id. at 10-11. She would also become paralyzed. Id. at 10-11.

Alexis's health issues persisted throughout high school and affected her academic performance. Id. at 12. She required home schooling in the eighth grade and returned to school for half of her tenth grade year before transferring schools. Id. at 12. With periodic problems, she managed to graduate from high school in 2008. Id. at 12.

After graduation, she went to college. During her freshman year, she experienced only an occasional seizure. Id. at 13. During her sophomore year, she had to withdraw because her symptoms appeared again, and she became depressed. Id. at 12. During her junior year of college, she experienced periodic fainting episodes, but her boyfriend assisted her. Id. at 14. The last fainting episode she could recall occurred six months prior to the hearing. Id. at 12.

C. Legal Standard and Analysis

In determining whether a petitioner is entitled to compensation under the Vaccine Act, a special master must consider "all . . . relevant medical or scientific evidence contained in the record," including "any diagnosis, conclusion, medical judgment, or autopsy or coroner's report . . . regarding the nature, causation, and aggravation of the petitioner's illness, disability, injury, condition, or death" § 300aa-13(b)(1)(A). The special master must consider "the record as a whole," § 300aa-13(a)(1), and cannot make a finding of entitlement based on the claims of the petitioner that are not substantiated by medical records or medical opinion. Id. The special master's decision regarding entitlement must include findings of fact and conclusions of law. § 300aa-12(d)(3)(A)(i).

Before an entitlement determination can be made in this case, the undersigned must first resolve the pending factual dispute regarding the circumstances surrounding Alexis's health before and after she received the vaccines at issue. This ruling is limited to resolving the parties' disagreement on the factual issues.

In a vaccine case, petitioner must prove, by preponderant evidence, the factual circumstances surrounding her claim. § 300aa-13(a)(1)(A). This evidentiary standard requires that the special master "believe that the existence of a fact is more probable than its nonexistence before [she] may find in favor of the party who has the burden to persuade the [special master] of the fact's existence. In re Winship, 397 U.S. 358, 371-72 (1970) (Harlan, J., concurring) (quoting F. James, Civil Procedure 250-51 (1965)).

⁶ A pseudo-seizure resembles an epileptic seizure but is provoked by psychological causes, lacks the electroencephalographic changes that are characteristic of epilepsy, and may sometimes be controlled by an act of will. Dorland's Illustrated Medical Dictionary 1537 (30th ed. 2003).

To resolve factual disputes, the undersigned must determine what weight to assign the documentary record—which in this case includes contemporaneous medical records and laboratory test results—and what weight to assign the later-given oral testimony that includes certain factual details that are largely reflected in the documentary record created several or more years after the subject vaccinations were received. The case law instructs that oral testimony that conflicts with contemporaneous documentary evidence generally receives less evidentiary weight. See United States v. U.S. Gypsum Co., 333 U.S. 364, 396 (1948) (“Where [witness] testimony is in conflict with contemporaneous documents we can give it little weight[.]”); Montgomery Coca-Cola Bottling Co. v. United States, 615 F.2d 1525, 1528 (Fed. Cir. 1993) (stating conflicting oral testimony is afforded less evidentiary weight than written medical records). While a decision concerning whether to accord greater evidentiary weight to contemporaneous records or to later-given oral testimony falls “within the purview of the Special Master,” Burns v. Sec’y of Dep’t of Health & Human Servs., 3 F.3d 415, 417 (Fed. Cir. 1993), such decision must be rationally supported. Id.

Hence, the undersigned accords greater weight to the documentary records than the oral testimony to establish a timeline of events. Petitioner routinely sought medical attention for Alexis for ailments that she was exhibiting at the time petitioner sought the treatment. Accordingly, the undersigned is persuaded that the documentary records more likely than not provide the more accurate timeline of events than the offered testimony.

II. FINDINGS OF FACT

Having carefully considered the evidence presented, the undersigned makes the following findings. The findings pertain to five distinct timeframes: (1) Alexis’s birth to date of the first hepatitis B vaccination, (2) the date of the first hepatitis B vaccination, (3) the period between receipt of the first hepatitis B vaccination and receipt of the second hepatitis B vaccination, (4) the date of the second hepatitis B vaccination, and (5) the period spanning from the second hepatitis B vaccination to the latest filed medical records in 2011.

Birth to First Set of Vaccinations – May 13, 1990 to December 19, 2000

1. Alexis Reid was born on May 13, 1990, to Linda and Anthony Reid, Sr. Pet’r’s Ex. 18.
2. At birth, Alexis appeared a normal, well-infant. Pet’r’s Ex. 18.
3. Alexis experienced common childhood illnesses, including upper respiratory tract infections and ear infections. Tr. 49.
4. Alexis also developed asthma, which she outgrew. Tr. 49. She was hospitalized in 1995 for pneumonia and aggravated asthma. Id.

5. Alexis also had a history of foot and mouth disease, an Epstein-Barr viral infection, and chicken pox. Id. 49-50.

First hepatitis B Vaccination together with MMR, IPV, and TDaP –
December 19, 2000

6. On December 19, 2000, at ten years of age, Alexis received her first hepatitis B vaccine, together with the MMR, IPV, and TDaP vaccines. Pet'r's Ex. 9.

Health from December 19, 2000 to January 17, 2001

7. Alexis developed diarrhea and other gastrointestinal symptoms (including reflux) on December 20, 2000. Pet'r's Ex. 5.

Second hepatitis B Vaccination – January 17, 2001

8. One month later, on January 17, 2001, Alexis received her second hepatitis B vaccine. Pet'r's Ex. 23.

Health from January 17, 2001 – October 10, 2011

9. In the months after her January 17, 2001 hepatitis B vaccination, Alexis complained that her throat, chest, and stomach hurt, her vision was blurred and she felt cold. Tr. at 55. She also suffered from fatigue, nausea, loss of appetite, and a craving for sweets. Tr. at 68.
10. Also during this time, Alexis developed a chemical sensitivity to cigarette smoke, perfume, and strongly scented cleaning products. Following exposure to various chemical and gas fumes, Alexis would suffer pseudo-seizures, (marked by jerking), paralysis, and a lack of memory after collapsing. Alexis also developed tics, insomnia, food allergies and sensitivity to lights, sounds and smells. Tr. 39-40. Her sensory sensitivity persisted throughout high school and college. Tr. 12.
11. On July 24, 2001, Alexis's physician stated she was unable to complete the hepatitis B vaccination series due to an allergic reaction to the earlier hepatitis B vaccinations. Pet'r's Ex. 50.
12. In October of 2001, nearly nine months after her second hepatitis B vaccination, Alexis saw Dr. Ann Kessel, a pediatric gastroenterologist, for complaints of chronic abdominal issues. Pet'r's Ex. 26.

13. On October 22, 2001, Dr. Gerry Reece, a radiologist, performed an upper gastrointestinal exam on Alexis, the results of which were normal. Pet'r's Ex. 26.
14. Alexis also sought treatment at Patient First in October and November of 2001 for complaints of severe epigastric pains, vomiting and foot tingling. Pet'r's Ex. 5, 26.
15. In December of 2001, Dr. Megson indicated that Alexis's hair showed elevated levels of cadmium and aluminum. Pet'r's Ex. 5.
16. In January of 2002, Alexis saw Dr. Megson again--on this occasion for complaints of intermittent numbness and tingling in her extremities, and jerking episodes. Pet'r's Ex. 5. During a return visit in February, Dr. Megson offered that Alexis's post-vaccinal medical complications could have been indicative of thimerosal toxicity and/or mercury poisoning from her first and second administrations of the TDaP vaccine (rather than the hepatitis B vaccinations implicated in the vaccine petitio). Id.
17. That same month in 2002, the Reids were advised by Dr. Donald Sanders of Midlothian Family Practice that no further medical care would be provided to Alexis in light of the excessive number of office and emergency care visits. Pet'r's' Ex. 15 at 81.
18. In July of 2002, Alexis complained of periodic seizure activity and twitching. Pet'r's Ex. 4. Two weeks later she complained of leg tingling and weakness, which affected her ability to walk. Id.
19. In October, November and December of 2002, Alexis sought treatment for a sprained ankle, foot swelling, scalp infection, pain associated with a sprained wrist, an instance of paralysis, seizure-like symptoms, involuntary arm movements, coughing with discolored mucus, and a sore throat. Pet'r's Ex. 4.
20. In January of 2003, more than two years after her receipt of the second hepatitis B vaccine, Alexis was evaluated by Dr. Paul McDermott for a several week history of pain and tenderness. Pet'r's Ex. 29. Dr. McDermott found no physical explanation for Alexis's problems and encouraged her to continue with her psychologic and neurologic office visits. Pet'r's Ex. 29.
21. In January of 2003, Alexis sought medical care for leg numbness, dizziness, and headaches. Pet'r's Ex. 4.

22. In February of 2003, Alexis sought medical attention for complaints of involuntary movements, headaches, low magnesium levels, difficulty breathing, and periodic episodes of loud burping. Pet'r's Ex. 29. Alexis's physicians recommended psychologic therapy. Id.
23. On March 7, 2003, a forty-eight hour EEG returned largely normal results other than several twitches. Pet'r's Ex. 22. The results of a chest x-ray were also normal. Id.
24. Between March 9, 2003 and March 11, 2003, Alexis presented for treatment of her left jaw pain, difficulty opening her mouth, restless legs, a barking noise that caused her to have difficulty breathing, facial tics and vision marked primarily by the colors blue and green. She was also diagnosed with seizure-like activity. Pet'r's Ex. 4.
25. In April of 2003, Alexis presented to Dr. Edmund Cornman, a neurologist, who diagnosed her with a conversion disorder marked by spells of feigned unresponsiveness and collapsing weakness. Pet'r's Ex. 27. Later that month, Alexis received a psychiatric assessment from Dr. Martin Buxton, whose diagnostic impression was depression, rather than a conversion disorder.
26. In April of 2003, a cardiologic exam performed on Alexis was normal. Pet'r's Ex. 22.
27. In May of 2003, Alexis returned to Dr. Kessel, a gastroenterologist, for complaints of chronic constipation, reflux, frequent nausea, and increased burping. Pet'r's Ex. 26.
28. In July of 2003, Alexis saw Dr. Megson, the developmental pediatrician who diagnosed Alexis as suffering from a fungal infection, low blood sugar, difficulty sleeping, and hypersensitivity to smells and sounds. Pet'r's Ex. 5.
29. In January of 2004, Alexis was granted indefinite homebound instruction. Pet'r's Ex. 31.
30. Between January 2004 and May 2004, Alexis sought medical care for spasms, tremors, fainting episodes, restless legs, and scalp discomfort, all symptoms of unknown cause on origin. Pet'r's Ex. 53.
31. In May of 2005, Alexis underwent a psychologic evaluation that revealed mild attention problems in addition to cognitive weaknesses in vocabulary and nonverbal analogic reasoning. Pet'r's Ex. 38. Alexis was deemed to be socially and emotionally well-adjusted. Id.

32. Alexis returned to school in November of 2005. Pet'r's Ex. 42.
33. Alexis saw Dr. Somerville three times between January and February 2006 for recurrent episodes of fainting following her exposure to noxious or stressful stimuli. Pet'r's Ex. 49.
34. In October of 2007, Alexis saw Dr. Elaine Turner, an allergist, who described Alexis's symptoms as "protean" and "unusual." Pet'r's Ex. 53.
35. In December of 2007, Alexis saw a therapist who diagnosed her as suffering from an adjustment disorder, which was exacerbated by a depressive mood. Pet'r's Ex. 52.
36. In May of 2008, Alexis saw Dr. Stephen Clement, an endoscopist, who found no abnormalities. Pet'r's Ex. 53.
37. Alexis saw a therapist on eight occasions between March 30, 2010, and June 29, 2010. Pet'r's Ex. 62. Her therapist diagnosed her with major depressive disorder. Id.
38. On October 10, 2011, Alexis was hospitalized for possible seizure activity. Pet'r's Ex. 78. Alexis's physician, Dr. Shankar Perumal, considered her condition to be psychogenic.
39. Alexis's last fainting episode occurred at some time between December 2011 and January 2012. Tr. 12.

The medical significance of these fact findings must be addressed by the parties' experts. Upon this case's transfer to another special master, the parties shall contact chambers, **on or before June 10, 2013**, to schedule a status conference to discuss this ruling and further proceedings as appropriate.

IT IS SO ORDERED.

s/Patricia E. Campbell-Smith
Patricia E. Campbell-Smith
Chief Special Master