

I. Procedural History

Petitioner filed her claim and medical records to support her petition on March 1, 2018 . Petitioner's Exhibits ("Pet'r") ("Exs.") 1-9. Petitioner supplemented the record on April 9, 2019 and filed additional medical records. Pet'r Exs. 14-16.

The undersigned held a status conference on July 23, 2019 and indicated that petitioner's diagnosis of GBS was not clear in the medical records and ordered petitioner to file a report from her treating neurologist. Status Report ("Rep't") (ECF No. 23). Petitioner filed a short letter from her treating neurologist, Dr. Jeanne M. Edwards on November 4, 2019. Pet'r Ex. 20. Additionally, petitioner filed an expert report from Frederick Nahm, M.D. Pet'r Ex. 21.

Respondent filed a responsive expert report from Vinay Chaudry, M.D. on September 1, 2020. Respondent ("Resp.") Ex. A. The undersigned held another status conference in this matter on October 29, 2020.

During the October 29, 2020 Rule 5 Status Conference, I explained that petitioner's diagnosis is still unclear given her pre-vaccination history. Rule 5 Order at 4. As such, I recommended that petitioner have her expert, Dr. Nahm write a supplemental expert report. *Id.* Petitioner filed a supplemental expert report from Dr. Nahm addressing petitioner's diagnosis. Pet'r Ex. 36.

Respondent filed the Rule 4(c) report on February 4, 2021, stating that petitioner has not established that she has suffered GBS. Resp. Rep't at 4. Respondent stated that resolving petitioner's diagnosis is a preliminary issue that must be resolved before proceeding to the cause-in-fact claim. *Id.* Respondent also filed a supplemental expert report from Dr. Chaudry. Resp. Ex. C (ECF No. 40).

The undersigned held another status conference on January 31, 2022. During that status conference, I explained that it does appear that petitioner had been diagnosed with GBS, however, two additional factual issues had emerged. First, it was unclear if petitioner could meet the six-month severity requirement because her symptoms pre-and-post-vaccination were similar and non-specific. Scheduling Order (ECF No. 44). Additionally, the onset of petitioner's symptoms was 42 days-post vaccination, which is considered an appropriate medical timeframe for GBS post-influenza vaccination, but it is in the outer limits of the timeframe. *Id.* I recommended that petitioner voluntarily dismiss her claim. *Id.*

On March 1, 2022, petitioner filed a status report requesting that her case be scheduled for an entitlement hearing in January 2023. Pet'r Status Rep't (ECF No. 45). The parties were ordered to file a joint status report proposing a date for a one-day entitlement hearing. On April 4, 2022, the parties filed a Joint Status Report requesting that a status conference be held. Joint Status Rep't (ECF No. 46). During a status conference held on July 15, 2022, petitioner's counsel indicated that petitioner wanted to provide testimony "regarding her medical history." Respondent indicated that Dr. Chaudry is unavailable to testify, but having petitioner testify about her pre-and-post-vaccination history may be helpful. Scheduling Order (ECF No. 48). The undersigned explained that having petitioner testify about her condition "after October 2015

and how it was different from the symptoms she experienced prior to the alleged vaccine related injury would be helpful.” *Id.*

Accordingly, a fact hearing was held on January 12, 2023 by video teleconference where petitioner testified.

II. Relevant Legal Standard

A. Factual Issues

As a preliminary matter, to be eligible for compensation under the Vaccine Act, a petitioner must demonstrate that she has “suffered the residual effects or complications of such illness, disability, injury, or condition for more than 6 months after the administration of the vaccine...or suffered such illness, disability, injury, or condition from the vaccine which resulted in inpatient hospitalization and surgical intervention.” 42 U.S.C. § 300aa-11(c)(1)(D)(i)-(iii) (“severity requirement”). Like other elements of petitioner’s proof, the severity requirement must be established by a preponderance of the evidence. *See* § 300aa-13(a)(1)(A); *see also Song v. Sec’y of Health & Human Servs.*, 31 Fed. Cl. 61, 65-66 (1994), *aff’d* 41 F.3d 1520 (Fed. Cir. 2014) (noting that petitioner must demonstrate the six-month severity requirement by a preponderance of the evidence).

A petitioner must offer evidence that leads the “trier of fact to believe that the existence of a fact is more probable than its nonexistence.” *Moberly v. Sec’y of Health & Human Servs.*, 592 F.3d 1315, 1322, n.2 (Fed. Cir. 2010). Finding that petitioner has met the severity requirement cannot be based on petitioner’s word alone, though a special master need not base their finding on medical records alone. *See* § 300-13(a)(1); *see also Colon v. Sec’y of Health & Human Servs.*, 156 Fed. Cl. 534, 541 (2021).

The process for making determinations in the Vaccine Program cases regarding factual issues begins with analyzing the medical records, which are required to be filed with the petition. § 300aa-11(c)(2). Medical records created contemporaneously with the events they describe are generally considered to be more trustworthy. *Cucuras v. Sec’y of Health & Human Servs.*, 993 F.2d 1525, 1528 (Fed. Cir. 1993). While medical records are not presumed to be complete and accurate, medical records while seeking treatment are generally afforded more weight than statements made by petitioner after the fact. *See Gerami v. Sec’y of Health & Human Servs.*, No. 12-442V, 2013 WL 5998109, at *4 (Fed. Cl. Spec. Mstr. Oct. 11, 2013) (finding that contemporaneously documented medical evidence was more persuasive than the letter prepared for litigation purposes), *mot. for rev. denied*, 127 Fed. Cl. 299 (2014). Further, medical records may not be accurate and complete as to all the patient’s physical conditions. *Kirby v Sec’y of Health & Human Servs.*, 997 F.3d 1378, 1383 (Fed. Cir. 2021) (explaining that a patient may not report every ailment, or a physician may enter information incorrectly or not record everything he or she observes).

Accordingly, when medical records are clear, consistent, and complete, they should be afforded substantial weight. *Lowrie v. Sec’y of Health & Human Servs.*, No. 03-1585V, 2005 WL 6117475, at *20 (Fed. Cl. Spec. Mstr. Dec. 12, 2005). However, this rule does not always

apply. In *Lowrie*, the special master wrote that “written records which are, themselves, inconsistent, should be accorded less deference than those which are internally consistent.” *Lowrie*, at *19. The United States Court of Federal Claims has recognized that “medical records may be incomplete or inaccurate.” *Camery v. Sec’y of Health & Human Servs.*, 42 Fed. Cl. 381, 391 (1998). The Court later outlined four possible explanations for inconsistencies between contemporaneously created medical records and later testimony: (1) a person’s failure to recount to the medical professional everything that happened during the relevant time period; (2) the medical professional’s failure to document everything reported to her or him; (3) a person’s faulty recollection of the events when presenting testimony; or (4) a person’s purposeful recounting of symptoms that did not exist. *La Londe v. Sec’y of Health & Human Servs.*, 110 Fed. Cl. 184, 203-04 (2013), *aff’d*, 746 F.3d 1335 (Fed. Cir. 2014).

The special master is obligated to fully consider and compare the medical records, testimony, and all other “relevant and reliable evidence contained in the record.” *La Londe*, 110 Fed. Cl. at 204 (citing Section 12(d)(3); Vaccine Rule 8); *see also Burns v. Sec’y of Health & Human Servs.*, 3 F.3d 415, 417 (Fed. Cir. 1993) (holding that it is within the special master’s discretion to determine whether to afford greater weight to medical records or to other evidence, such as oral testimony surrounding the events in question that was given at a later date, provided that such determination is rational).

B. Nature of Injury

Special masters are generally not tasked with diagnosing injuries. In *Lombardi*, the Federal Circuit explained: “The function of a special master is not to ‘diagnose’ vaccine-related injuries, but instead to determine ‘based on the record evidence as a whole and the totality of the case, whether it has been shown by a preponderance of the evidence that a vaccine caused the petitioner’s injury.’” *Lombardi*, 656 F.3d at 1343, *citing Andreu v. Sec’y of Health & Hum. Servs.*, 569 F.3d 1367, 1382 (Fed. Cir. 2009).

However, the Federal Circuit has determined that in certain instances, “if there is a dispute as to the nature of a petitioner’s injury, the special master may opine on the nature of the petitioner’s injury.” *Contreras v. Sec’y of Health & Hum. Servs.*, 844 F.3d 1363, 1368 (Fed. Cir. 2017), *citing Hibbard v. Sec’y of Health & Hum. Servs.*, 698 F.3d 1355 (Fed. Cir. 2012); *see also Locane v. Sec’y of Health & Hum. Servs.*, 686 F.3d 1375 (Fed. Cir. 2012); *Broekelschen v. Sec’y of Health & Hum. Servs.*, 618 F.3d 1339 (Fed. Cir. 2010)).

In *Hibbard*, the Federal Circuit reasoned: “If a special master can determine that a petitioner did not suffer the injury that she claims was caused by the vaccine, there is no reason why the special master should be required to undertake and answer the separate (and frequently more difficult) question whether there is a medical theory, supported by ‘reputable medical or scientific explanation,’ by which a vaccine can cause the kind of injury that the petitioner claims to have suffered.” 698 F.3d at 1365.

While the special master is not required to reach a specific diagnosis, the special master may appropriately evaluate at least the nature of petitioner’s injury and whether that aligns with petitioner’s theory. For example, in *Broekelschen*, the petitioner posited “transverse myelitis

[which] is an inflammatory event caused by an immune response,” while the respondent posited “anterior spinal artery syndrome, [which] is a vascular event caused by a blockage.” 618 F.3d at 1346. The Federal Circuit observed: “Nearly all of the evidence on causation was dependent on the diagnosis” and because the injury itself [was] in dispute, the proposed injuries differ[ed] significantly in their pathology, and the question of causation turn[ed] on which injury [the petitioner] suffered.” *Id.* Accordingly, the Federal Circuit held “it was appropriate... for the special master to first determine which injury was best supported by the evidence presented in the record before applying the *Althen* test so that the special master could subsequently determine causation relative to the injury.” *Id.*

In contrast, in *Contreras*, the Court of Federal Claims held that the special master erred by diagnosing the petitioner’s illness – as TM and not Guillain-Barré syndrome (“GBS”) – before evaluating the *Althen* prongs. 107 Fed. Cl. 280, 292-93. The Court reasoned that the case contained “ample evidence that TM and GBS are similar diseases with similar pathologies” and the parties’ “unified position [was] that an exact diagnosis of [the petitioner’s illness] was not required to rule on causation.” *Id.* at 293. The Court of Federal Claims articulated that “the general rule is that the special master should not conduct a differential diagnosis, at the outset of the causation analysis, to choose one diagnosis over another, or over a combination of diagnoses.” *Id.*, *aff’d* 844 F.3d 1363; *see also Andreu*, 569 F.3d 1367, 1378 (holding that the special master need not determine whether an initial seizure was febrile or afebrile for purposes of assessing vaccine causation).

Relevant to this inquiry, the Vaccine Act provides that a special master must consider the record as a whole including any medical diagnosis contained therein. Section 300aa-13(b)(1). However, no diagnosis in the medical records is “binding on the special master.” *Id.* Rather, “[i]n evaluating the weight to be afforded to any such diagnosis... the special master... shall consider the entire record and the course of the injury, disability, illness, or condition until the date of the judgment of the special master.” *Id.* The special master shall also consider any expert opinions and additional medical scientific evidence in the record. *Id.*

III. Evidence Submitted

a) Petitioner’s medical records

1) Pre-vaccination History

Prior to the vaccination at issue in this matter, it appears that on or around January 19, 2005, petitioner went to Hillcrest Hospital South for an “intractable headache” and “lower extremity weakness.” Pet’r Ex. 11 at 27. The order for a brain MRI indicates that petitioner’s history was positive for “weakness, inability to walk,” and she was being assessed for multiple sclerosis. *Id.* at 26. The brain MRI was normal. *Id.* She also underwent a lumbar puncture and her CSF protein level was within the normal range. *Id.* at 52.

The next records from 2011 indicate that she was treated for gastroenteritis, a viral cough, depression, fatigue and malaise, and diarrhea. *See* Pet’r Ex 15 at 4-22. Of note, on November 1, 2022, petitioner was treated for depression and anxiety and “lumbar and sacral arthritis” by Dr.

James Beymer. *Id.* at 22. Petitioner's "chief complaint" at this appointment was "left hip pain." *Id.* She reported pain in her left lumbar spine and left sciatic join and hip region. *Id.* Petitioner had been taking Neurontin and ibuprofen, along with performing stretching exercises, but these were ineffective at pain relief. *Id.* Petitioner also indicated the Paxil was not working as well as it had in the past for her depression. *Id.* Her diagnosis was "lumbar and sacral arthritis" along with depression and anxiety. Dr. Beymer prescribed her 20 mg of prednisone for a fifteen-day taper. *Id.* at 23.

On March 28, 2012, petitioner returned to Dr. Beymer for pain in the left buttock and down her left leg, which began after shaving. Pet'r Ex. 15 at 27. Petitioner demonstrated "normal deep tendon reflexes" in her physical exam. *Id.* at 28. The diagnosis was "lumbago" and Dr. Beymer administered a steroid injection. *Id.* He also recommended that she restart physical therapy. *Id.*

On April 24, 2012, petitioner went back to Dr. Beymer with complaints of muscle weakness, tremor, and disequilibrium. Pet'r Ex. 15 at 51. Petitioner reported having tremors in both of her hands and arms, which were getting worse over two months. *Id.* She also stated that she had been "tripping and falling over things." *Id.* Petitioner reported that the tremors and spasms in her legs were occurring during her physical therapy sessions. *Id.* She reported that she had similar symptoms a few years ago and was thought to have all symptoms of MS but testing for it was negative." *Id.* Petitioner stated she was treated with high dose steroids for several weeks and those symptoms improved. *Id.* At this appointment, petitioner demonstrated decreased leg strength "partially due to pain in low back," but also because of "generalized weakness," and she did have some signs of disequilibria. *Id.* at 52. Dr. Beymer observed an "obvious resting tremor and tremor with intention of both hands," and had "some producible tremor in legs with extended strength testing." *Id.* Petitioner's Romberg test was negative, but Dr. Beymer wrote that her "joint position sense is definitely less than previous." *Id.* He ordered an MRI of her brain and another thyroid panel. *Id.*

Petitioner had an appointment with neurologist Dr. Jeanne Edwards on October 2, 2012. Pet'r Ex. 2 at 1. Petitioner reported that she was seeking a consultation for "persistent pain in her left hip and back with some radiation down into the left leg, shaking hands, headaches, and insomnia." *Id.* Dr. Edwards noted that she had seen the petitioner 7 to 8 years prior for a question of a "demyelinating disease" but that no definite diagnosis was made. *Id.* Petitioner told Dr. Edwards that her symptoms of left hip and back pain began one year ago and progressively worsened. *Id.* Petitioner was negative for diplopia, dizziness, or fainting. *Id.* However, the petitioner indicated that she was experiencing muscle pain and back stiffness. Petitioner was not experiencing numbness, hemisensory loss or hemiparesis, aphasia, dysarthria, syncope, or problems with coordination. *Id.* at 3. Petitioner's physical exam showed she had equal deep tendon reflexes, negative Romberg test, and her motor strength was symmetric and equal. *Id.* at 5. Petitioner also had intact sensation to pinprick, position sense, light touch,, vibratory, and thermal sensation. *Id.* Dr. Edwards ordered an EMG/NCS and wanted to review petitioner's most recent MRIs.

On October 11, 2012, petitioner had an EMG/NCS of her left lower extremity. Pet'r Ex. 2 at 14. The Chief complain and Brief History provides, "Left-sided low back pain that extends

into the lower extremity for 10 years. Increased over the last two years....Has 5/5 strength in her left ankle dorsiflex, plantar flexion, knee flexion and extension....Ambulates functionally without assistance.” *Id.* The nerve conduction study of petitioner’s left lower extremity was normal and her EMG of the left lower extremity showed “recruitment full in the peripheral muscles. Motor unit amplitude, duration, and phases in the normal range.” *Id.* at 15. The impression was “no acute L3-4, L4-L5, L5-S1 radiculopathy.” *Id.*

When petitioner returned to Dr. Edwards on November 6, 2012, Dr. Edwards observed that petitioner’s gait was “within normal limits,” and that petitioner was moving “all extremities well without focal deficits.” *Id.* at 6. Dr. Edwards noted that petitioner’s EMG/NCS did not demonstrate any abnormalities and that her MRI showed degenerative changes, but no lesions. *Id.* Dr. Edwards’ impression was that petitioner has “chronic back and leg pain,” and “no definite etiology can be identified.” *Id.* Dr. Edwards recommended that petitioner increase her Lyrica and referred her to pain management. *Id.*

On January 30, 2013, petitioner had an appointment with Dr. Jeanne M. Edwards. Pet’r Ex. 2 at 7. Petitioner reported having difficulty moving around and was “concerned about the possibility of multiple sclerosis.” *Id.* Petitioner had no focal deficits during the physical exam and her gait was normal. *Id.* Dr. Edwards wrote that “there are no signs of cerebellar dysfunction.” *Id.* Dr. Edwards diagnosed petitioner with “dysesthesias in the back,” and noted that “pain management has not been effective.” *Id.* Dr. Edwards ordered brain and cervical spine MRIs. *Id.*

An MRI of petitioner’s cervical spine was taken on February 7, 2013. Pet’r Ex. 2 at 10. The MRI showed normal signal intensity and configuration throughout and petitioner had no central spinal canal or foraminal stenosis present. Her vertebral bodies and intervening discs showed normal configuration and signal intensity on all sequences. The impression of the study was that it was a “normal cervical spine MRI.” *Id.* She also had a brain MRI with and without contrast on February 7, 2013. *Id.* at 8. The brain MRI with contrast was “normal.” *Id.*

In August 2013, petitioner was treated for chronic left hip pain by Dr. Beymer. Pet’r Ex. 15 at 66. Petitioner reported that her left hip pain was making her life miserable. *Id.* Dr. Beymer referred petitioner to an orthopedist since physical therapy was not helping. *Id.* Petitioner went to the Tulsa Bone and Joint Associates on August 27, 2013 for an assessment of her hip pain. Pet’r Ex. 38 ta 18. Petitioner reported that her hip pain “radiates down the leg to the knee.” *Id.* On examination, petitioner had “excellent range of motion of both hips with internal and external rotation,” but had “positive straight-leg raises with emphasis of pain in the left sacroiliac region.” *Id.* at 19. Petitioner was diagnosed with “sacroiliitis” of the left side. *Id.* Petitioner was referred to Dr. Keith Stanley for an injection. *Id.*

Petitioner returned to Dr. Keith Stanley on September 4, 2014 for a follow-up for her back pain. Pet’r Ex. 38 at 26. Petitioner reported that the injection she received one year ago had given her “100% relief” but that her back pain was increasing again. *Id.* She reported difficulty standing for long periods of time and leading with the left leg. *Id.* Additionally, petitioner had left leg weakness. *Id.* The physical examination showed that she had equal deep tendon reflexes bilaterally in her lower extremities. *Id.* at 27. Petitioner had a negative straight

leg test bilaterally, but had tenderness over her left SI joint. *Id.* Petitioner also had a sprain of her left ankle. *Id.* She was diagnosed with left sacroiliitis and given another SI steroid joint injection. *Id.*

Petitioner was in a car accident on March 13, 2015. *See* Pet'r Ex. 3 at 16.

2) Post-vaccination medical history

Petitioner received the tetanus vaccine on March 16, 2015 at the Drumright Regional Hospital. Pet'r Ex. 1 at 1.

On April 29, 2015, approximately 44 days post-vaccination, petitioner went to the emergency department of Drumright Regional Hospital. Pet'r Ex. 3 at 16. Petitioner reported that two days prior, she began to experience weakness and lack of strength. *Id.* Petitioner stated that "this occurred 10 years ago, ended up in a wheelchair, but no diagnosis was ever found." *Id.* Under "neurological" the exam stated that petitioner was "alert and oriented to person, place, time and situation, CN-II-XII intact, normal sensory observed, normal motor observed, normal speech observed, normal coordination observed." *Id.* at 17. Petitioner had a CT scan of her head which was normal. *Id.* at 25. Petitioner was discharged and given instructions to see her primary care physician or return to the emergency department if things got worse. *Id.* at 18.

The following day, on April 30, 2015, petitioner returned to the emergency department of Drumright Regional Hospital. Pet'r Ex. 4 at 2. Petitioner again reported she was weak and it started three days prior to this visit. *Id.* Petitioner reported that she "cannot stand without collapsing." *Id.* The physical exam showed that petitioner's bilateral upper extremity strength was 1 out of 5 and she had 0/5 strength in the lower extremities. *Id.* at 3. Petitioner was transferred to the Oklahoma State University for further care. *Id.* at 6.

At Oklahoma State University emergency department, petitioner reported that she initially had weakness, but it progressed so much that she could not walk. Pet'r Ex. 14 at 11. Petitioner's deep tendon reflexes were 2/4 and it was noted that she had weakness in the upper and lower extremities bilaterally and symmetrically. *Id.* Petitioner was admitted with muscle weakness "to rule out underlying neurologic disorder." *Id.* On May 1, 2015, petitioner was examined by Dr. Damon Baker. Pet'r Ex. 14 at 41. Dr. Baker observed that petitioner had "significant weakness with plantar flexion, dorsiflexion and extension" in the left lower extremity and her strength was 1/5. *Id.* Her deep tendon reflexes were reduced and recorded at 2/4 in the patellar. *Id.* Her right lower extremity also had similar weakness with dorsiflexion and plantar flexion, and extension of the great toe and her strength was 1 out of 4. *Id.* at 42. Petitioner's upper extremity deep tendon reflexes were 2/4 bilaterally and she had weakness with forward flexion, internal and external rotation as well as abduction in both upper extremities. *Id.* Petitioner did not have any sensory deficits. Dr. Baker ordered a lumbar puncture and MRI of her brain. *Id.* at 43.

On May 4, 2015, petitioner had a neurology consultation with Dr. Alok Pasricha. *Id.* at 44. The physical exam showed that petitioner's reflexes at the patella or upper extremities could not be elicited and her strength was recorded as 3/5 bilaterally in both upper and lower

extremities. *Id.* at 46. Petitioner's CSF protein level was 60. *Id.* Dr. Pasricha assessed petitioner with "acute inflammatory demyelinating polyradiculoneuropathy," and "bilateral upper and lower extremity symmetric weakness, progressively worsening." *Id.* at 44. The recommendation was, "Due to clinical progression of generalized weakness and elevated protein in CSF, this is clinically significant for Guillain-Barre, therefore we will start IVIG for 5 days with extension to 7 days with no improvement in weakness." *Id.*

By May 8, 2015, petitioner had the ability to feed herself and lift both legs off the bed. Pet'r Ex. 14 at 146. She was able to ambulate 100 feet with physical therapy and sit on the side of the bed for two hours. *Id.* Her upper extremity strength was 2+/5 in her grip, thumb, elbow flexion and extension, and shoulder flexion. *Id.* at 147. Her upper extremity deep tendon reflexes were recorded as 2/4. Her lower extremity strength at her hip and knee was -3/5 and 1+/5 at the ankle and dorsiflexion. Her deep tendon reflexes were recorded as 1/4. *Id.* On May 9, 2015, her physical exam showed that her upper extremity strength was 5/5, but reaching overhead was still weak. *Id.* at 140. Her lower extremity strength was improved but still weak and her deep tendon reflexes were present. *Id.*

Petitioner was discharged on May 10, 2015. Pet'r Ex. 14 at 28. The discharge summary explained that she had a "dramatic improvement of functional status on IVIG," and that her weakness began to resolve "the day after her first treatment of IVIG." *Id.* Further, petitioner was no longer going to be discharged to a skilled nursing home, but instead daily for physical and occupational therapy was ordered. *Id.* Petitioner's primary discharge diagnosis was "acute inflammatory demyelinating polyradiculoneuropathy." *Id.* at 27.

Petitioner had a physical therapy evaluation on May 13, 2015. Pet'r Ex. 9 at 30. The medical diagnosis for the physical therapy evaluation was, "AIDP-Acute Inflamm. Demyelinating Polyradiculoneuropathy." *Id.* It was noted that she had "weakness-upper and lower extremities," "difficulty walking," and "decreased endurance." *Id.* The record indicated that she had left sciatic nerve pain from an abusive relationship, but that she developed progressive weakness and was admitted to the hospital. *Id.* The lumbar puncture "confirmed AIDP." *Id.* The record noted that petitioner "had immunoglobulin therapy and patient went from total assist to rapid progression/recovery." *Id.* Additionally, petitioner reported that she had no numbness or tingling and her sensation to light touch was intact. *Id.* The problem list includes, "left extremity weakness and difficulty transfers," "difficulty walking," and "fine motor weakness/difficult with activities of daily living." *Id.* at 31. She was also noted to have "decreased endurance." *Id.* Petitioner participated in physical therapy sessions from May 15, 2015 through June 5, 2015. *Id.* at 27-33.

On May 18, 2015, petitioner had an appointment with her primary care physician, Dr. James Beymer. Pet'r Ex. 6 at 18. Under "Subjective" the medical record states, "Diagnosed with Guillain-Barré type syndrome, paralysis has resolved, and weakness is improving but still needs therapy and a walker. Neurologist wants three more weeks of therapy and then re-evaluate in office." *Id.* at 20. He indicated that petitioner's "fine motor skills and muscle groups are still fairly weak," but her larger muscle groups are improving. *Id.* He diagnosed her with "recurrent GBS." *Id.* Petitioner reported that she was still experiencing "some difficulty typing for a long time." *Id.* The report indicates that "patient has progressed well with [physical therapy] and has

met goals and is expected to continue to make progress independent with [home exercise program] and no longer needs skilled [physical therapy intervention] at this time to continue progression.” *Id.*

Petitioner had her last physical therapy session on June 5, 2015. Pet’r Ex. 9 at 27. Petitioner reported that she was “stronger and getting around better at home and the community.” *Id.* Petitioner had met the physical therapy goal of improving lower extremity movement and improved her grip strength of her left upper extremity. Additionally, she met balance goals. *Id.*

Petitioner had an appointment with Dr. Beymer on June 11, 2015, when he wrote that petitioner was “still recovering from GBS,” and that she was “definitely improving,” but he did not feel that she was ready to go back to work. Dr. Beymer wrote that petitioner’s gait was improved but she reported getting fatigued very quickly and still had balance issues, particularly going up and down stairs. *Id.* at 16. He noted that her muscle strength and dexterity was “much improved” since the last visit but “still not back to normal but definitely improving.” *Id.* He recommended that she continue to stay off of work for the next four weeks and is too weak to work half days. He wanted her to continue rehab therapy. *Id.*

Petitioner went to the Drumright Hospital emergency department on July 21, 2015. Pet’r Ex. 8 at 17. Petitioner was complaining of left arm and leg weakness. *Id.* Under “History of Present Illness,” it was noted that petitioner “has history of GBS x 2 different episodes last one about 5 months ago.” *Id.* The physical examination revealed she had “normal range of motion,” and “very minimal difference in the left and right extremity strength in my opinion this is probably simply because right hand dominance.” *Id.* at 18. Her CT scan was normal. *Id.* at 22. Petitioner was given a course of oral steroids and discharged with a diagnosis of GBS. *Id.* at 8.

Petitioner had a follow-up appointment on July 27, 2015 with Dr. Beymer after she had visited the emergency department. Pet’r Ex. 6 at 11. Petitioner reported that her “left side weakness has improved with steroid therapy, although she was having numbness and tingling especially in the left leg and still walks with favoring the left side.” *Id.* He also wrote, “Am going to have follow-up with Neurology but I believe this to still be sequela from GB infection that has been exacerbated by returning to work and fatiguing of muscles from work.” *Id.* He recommended that she not work for four-weeks and that she use short-term disability.

On August 17, 2015, petitioner had an appointment with Dr. Beymer for “muscle weakness (generalized)” and “Recurrent GBS (Guillain-Barré syndrome).” Pet’r Ex. 6 at 7. Petitioner reported that she was “extremely fatigued if doing even small things around the house,” and was “still having trouble with depth perception and weakness, especially in the legs.” *Id.* at 9. Dr. Beymer noted that petitioner’s gait was slower than normal to account for “balance issues” and her left sided weakness was a 1+. *Id.* Dr. Beymer assessed petitioner to with “Recurrent GBS (Guillain-Barré syndrome)” and generalized muscle weakness, and also recommended that she meet with a neurologist “as [it] seems atypical for Guillain-Barré to continue to bother her this far out from acute illness.” *Id.*

On September 21, 2015, petitioner had an appointment with Dr. Beymer for “muscle weakness” and “recurrent GBS (Guillain-Barré syndrome).” Pet’r Ex. 6 at 5. She reported that

her strength had improved but she was still getting tired faster than before and was having “depth perception trouble when driving.” *Id.* at 6. Dr. Beymer recommended that petitioner return to work for only five hours a day and he noted that he did not have much experience with a patient “that has a recurrence of GBS disease and not sure how functional she can return to or if she will continue to suffer setbacks and reoccurrences if she tires herself out by doing too much work.” *Id.* Under the “musculoskeletal exam,” Dr. Beymer wrote that petitioner still had “left sided weakness [now] only 1+ but still slower gait than normal to account for balance issues.” *Id.* at 6. He also wrote that her gait “definitely worsens the more she walks and exerts herself.” *Id.* She reported that she was only able to do a little housework and then she had to rest for several hours because of muscle weakness, fatigue, and dyspnea. *Id.* Dr. Beymer wrote that he “wants to see what neurology says and see how she does with returning to part-time work next week.” *Id.*

Petitioner had an appointment with neurologist, Dr. Jeanne Edwards on October 12, 2015. Pet’r Ex. 7 at 8. Dr. Edwards noted that she had not seen petitioner since 2013 and that petitioner had been admitted to OSU for Guillain-Barré syndrome. *Id.* Petitioner reported that she was “extremely weak and fatigued.” *Id.* A neurology examination indicated that petitioner was “moving all extremities well without focal deficits,” and that her “gait was within normal limits.” *Id.* Dr. Edwards assessed petitioner with “post-Guillain-Barré” but also noted that petitioner has “severe headaches.” *Id.* Dr. Edwards recommended that petitioner have physical therapy and was unable to work for an additional two more months. *Id.* Additionally, Dr. Edwards recommended that petitioner take Midrin for “breakthrough headaches.” *Id.* at 8.

Petitioner returned to physical therapy on October 19, 2015. Pet’r Ex. 9 at 21. The medical and treatment diagnosis was, “Guillain-Barré syndrome,” and included, “weakness, difficulty walking, decreased endurance, and balance deficits,” as problem areas. *Id.* Petitioner reported using a cane to walk long distances and she also reported headaches and pain in her shoulders. *Id.* The record also includes a note that petitioner has been “unable to tolerate working due to fatigue, pain and headaches, and noticed tripping over flat surfaces after first break 2-3 hours.” *Id.* Petitioner also reported that she “has less coordination, less balance, more fatigue, and more headaches and is unable to work at this time; reports she has a gunslinger walk.” *Id.* Petitioner’s active range of motion in her left hip flexor was within normal limits. *Id.* at 22. The problem list included, “1) weakness/decreased coordination; 2) decreased endurance/aerobic capacity; 3) difficulty walking; 4) decreased balance.” *Id.* at 22. It was recommended that she participate in four weeks of physical therapy with three visits per week. *Id.* She participated in physical therapy sessions until November 16, 2015. *Id.* at 17.

At the next appointment with Dr. Edwards on November 12, 2015, petitioner reported that she was still experiencing headaches. Pet’r Ex. 7 at 9. Petitioner stated that the Midrin was helping with the headaches, but her headaches are more frequent after exercising. *Id.* The neurological exam appeared to be normal, and Dr. Edwards wrote that petitioner was “moving all extremities well without focal deficits,” and that her “gait was within normal limits.” *Id.* Dr. Edwards explained that petitioner’s headaches were “persistent” and prescribed a trial of amitriptyline 25 mg at night. *Id.* Dr. Edwards indicated that petitioner should return to her office in three months and to continue physical therapy. *Id.*

When petitioner was discharged from physical therapy on November 16, 2015, it was noted that petitioner “still has a little bit of headache but just started meds to get that under control,” and that she had met most of her goals, however, her “long term functional goals,” were not all met. Pet’r Ex. 9 at 17. One of her long-term goals was to improve endurance, however, that goal was not met. While petitioner did have significant improvement in functional ability during the physical therapy sessions, she self-reported that she was not compliant with the home exercise program. *Id.* at 19. Petitioner also reported that her foot drags “about once every 2 weeks,” and still has fatigue. *Id.*

On December 3, 2015, petitioner was treated for “eustachian tube disorder.” Pet’r Ex. 6 at 3. She complained of fullness and pressure in her ears for one week. *Id.* Under “Past Medical History,” Dr. Beymer noted that the prior “muscle weakness,” had “resolved.” *Id.* at 4. Petitioner was given a Z-pack and Medrol dose pack. *Id.*

On February 3, 2016, petitioner returned to Dr. Edwards, complaining of severe headaches and persistent pain. *Id.* at 10. Petitioner reported that the amitriptyline is not helping with the headaches, but Tylenol with codeine helped. *Id.* Again, petitioner’s gait was recorded as “within normal limits,” and that she was moving “all extremities well without any focal deficits.” *Id.* Dr. Edwards assessed petitioner with “headaches status post-Guillain-Barré,” and prescribed petitioner Topamax 25 mg at night and recommended Tylenol with codeine for breakthrough headaches. *Id.*

Petitioner returned to Dr. Edwards on March 14, 2016, complaining of “unusual sensations in her arms and legs and difficulty controlling her hands.” *Id.* at 11. Petitioner’s neurological exam was consistent with the prior exams. *Id.* Petitioner stated that she was having “difficulty using and controlling her hands and dysesthesias in her hands and legs,” and that those symptoms were present for two weeks prior to the appointment. *Id.* Petitioner reported that her headaches had improved on the Topamax. *Id.* Dr. Edwards ordered an EMG/NCS of petitioner’s right upper and lower extremities and ordered petitioner to “gradually increase Topamax.” *Id.*

Petitioner had an EMG/NCS of her right upper extremity and right lower extremity on March 28, 2016. Pet’r Ex. 6 at 24. The impression of the EMG/NCS for her right lower extremity was that she had “1) no L3-4, L-5-S1 radiculopathy; 2) no tibial nerve entrapment at the tarsal tunnel; 3) no distal lower extremity peripheral neuropathy.” *Id.* Additionally, the results for her right upper extremity was: “1) no median nerve entrapment at the wrist; 2) no ulnar nerve entrapment at the wrist or elbow; 3) no C5-6-7-T1 radiculopathy; and 4) no distal upper extremity peripheral neuropathy.” *Id.* Petitioner had a follow-up appointment with Dr. Edwards on April 27, 2016 and reported that her dysesthesias in her hands had improved and headaches were better controlled on Topamax. Pet’r Ex. 7 at 12. The “Brief History” states that petitioner is “still having some discomfort and is being followed by ophthalmology for visual problems.” *Id.* The “Impression” from this appointment was, “Patient status post-Guillain-Barré. She has headaches and dysesthesias. She also feels that she is still quite weak.” *Id.* Dr. Edwards recommended that petitioner continue physical therapy and return to the office in four months. *Id.* Additionally, Dr. Edwards noted, “The patient is concerned that the tetanus shot may have produced the Guillain-Barré.” *Id.*

Three months later, on June 30, 2016, petitioner returned to Dr. Edwards. Pet'r Ex. 7 at 13. The "Brief History" provides that petitioner "remains weak," and that she was "showing some mild improvement but at this time does not feel that she can go back to work because of the weakness." *Id.* "She needs to continue physical therapy." *Id.* The physical examination provides little insight, but Dr. Edwards recommended that petitioner continue physical therapy and stay off of work for another 4 to 6 weeks. *Id.* At the August 26, 2016 appointment with Dr. Edwards, petitioner reported that her strength had improved and that she "now feels that she can return to work." *Id.* at 14. Dr. Edwards noted that petitioner's gait was "within normal limits." The "Impression" of Dr. Edwards from this appointment was that petitioner "[is] currently doing well and showing improvement in strength and endurance." *Id.* Petitioner was cleared to work for thirty hours a week and it was recommended that she receive a handicap parking sticker. *Id.* At the follow-up appointment on November 29, 2016, petitioner's strength and endurance had improved since the last appointment. *Id.* at 15.

On March 31, 2017, petitioner returned to Dr. Edwards and reported that "she had an upper respiratory infection and has had recurrent symptoms of Guillain-Barré." Pet'r Ex. 7 at 18. Dr. Edwards ordered an EMG/NCS of petitioner's right lower and upper extremities as petitioner reported, "progressive weakness." *Id.* On April 25, 2017, petitioner had another EMG/NCS for "peripheral neuropathy." Pet'r Ex. 17 at 6. Petitioner reported to the examiner that she had the perception of " 'fire ants' and numbness/tingling of the bilateral lower extremities in a stocking glove distribution at the mid-calf level. Similar dysesthesias/paresthesias all digits of the bilateral hands." *Id.* Dr. Tim Pettingell wrote that the "bilateral hand tremor is primarily action/intentional." *Id.* He noted that petitioner had no focal weakness of any extremity. *Id.* The physical examination showed petitioner had 5/5 strength and intact deep tendon reflexes. *Id.* The exam also showed that petitioner's cold sensation was intact bilaterally in her lower extremities, without a stocking-glove sensory loss pattern. *Id.* She did have some diminished sensation to light touch on her right dorsal web space and dorsal mid-foot. The results of the study were a "normal study," and there was "no electrodiagnostic evidence of a peripheral neuropathy, axonal or demyelinating. More specifically, regarding history of GBS, no observation with nerve conduction studies of temporal dispersion, focal conduction block, or segmental/diffuse conduction slowing. Long loop pathways demonstrated normal conduction line." *Id.* at 8.

At the next appointment with Dr. Edwards on May 1, 2017 after the EMG/NCS, Dr. Edwards noted that the EMG/NCS was "absolutely normal." Pet'r Ex. 7 at 19. She wrote, "patient with a previous history of Guillain-Barre. She is now expressing increasing weakness, but the electromyogram and nerve conduction study is normal." *Id.* Dr. Edwards increased petitioner's dosage of Depakote and prescribed Nuvigil for fatigue. *Id.* Between May 15, 2017 and October 30, 2017, petitioner had three appointments with Dr. Edwards. Pet'r Ex. 7 at 20-22. At these appointments, the focus was on controlling petitioner's headaches and fatigue. *Id.*

Petitioner had an appointment with Dr. Jeanne Edwards on March 7, 2018. Pet'r Ex. 17 at 12. Petitioner reported that still was experiencing headaches and was still having problems with fatigue that she associated with the GBS, however, it was noted that petitioner was "up and moving around without any current difficulty." *Id.* Dr. Edwards recorded that petitioner was

“moving all extremities well without focal deficits,” and that her gait was within the normal limits. *Id.* Dr. Edwards prescribed petitioner Topamax and Depakote for her headaches and to go across the street for upper respiratory problems. *Id.*

Relevant to this case, on April 2, 2018, petitioner had appointment with Dr. Don Schumpret for fatigue. Pet’r Ex. 18 at 60. Petitioner reported diminished activity and fatigue. *Id.* at 62. She also reported no numbness, tingling, dizziness, or headaches. *Id.* Her musculoskeletal examination revealed “normal movements of all extremities,” and she had 2+ deep tendon reflexes bilaterally on her neurologic examination. *Id.* Petitioner was diagnosed with malaise and fatigue and Dr. Schumpert suspected it was from “hypothyroidism.” *Id.* at 63. He recommended that she increased her current medications and wanted to test her ANA. *Id.*

On April 9, 2018, petitioner had an appointment with Dr. Jason Sims. Pet’r Ex. 18 at 57. Petitioner reported that she was having fatigue, along with numbness, migraines, and restless legs. *Id.* at 59. Petitioner had a normal gait and station, no tremor, and normal motor strength. *Id.* at 60. Petitioner was ANA positive and her ANA pattern was a “homogeneous pattern” that is “associated with systemic lupus erythematosus (“SLE”), drug induced lupus and juvenile idiopathic arthritis.” *Id.* at 86. Her rheumatoid factor was marked as “high.” *Id.* Dr. Sims diagnosed petitioner with “Autoimmune disease-possible. ANA positive. Systemic involvement of connective tissue, unspecified.” *Id.* at 60.

On August 9, 2019, petitioner returned to Dr. Edwards, reporting “more headaches.” Pet’r Ex. 37 at 6. Dr. Edwards referenced petitioner’s previous diagnosis of GBS and wrote, “She did suffer from Guillain-Barre after an infusion. I am still trying to get the details regarding this as I was not involved in the case at the time.” *Id.* The physical examination for petitioner was normal. *Id.* Dr. Edwards’ impression was “patient with headaches not under good control,” and prescribed a trial of Aimovig. *Id.* Petitioner continued to seek treatment with Dr. Edwards for her headaches in 2021 and 2022. *See id.* 8-10.

Dr. Edwards also wrote a letter, dated October 4, 2019, which stated, “I am writing in response to your letter regarding my patient....She developed Guillain-Barré syndrome following a tetanus vaccination. Although I was not involved in her case at that time, she reports she had no other precipitating factors that would cause Guillain-Barre Syndrome. Therefore, I feel it is more likely than not, that the tetanus was the cause of the Guillain-Barré Syndrome.” Pet’r Ex. 20.

In August 2022, petitioner went back to Tulsa Bone and Joint Associates for right elbow pain. Pet’r Ex. 38 at 36. Petitioner denied a specific injury but went to a new job where she was more active and “lifting and sorting inventory.” *Id.* Petitioner indicated that her primary care physician diagnosed her with tennis elbow and gave her a tennis elbow strap. *Id.* Petitioner was assessed with “right elbow pain,” and “carpal tunnel syndrome of the right wrist.” *Id.* at 37. She was given a prescription for diclofenac and a wrist brace to address the carpal tunnel. *Id.* Petitioner had another EMG/NCS of her right upper limb on August 25, 2022. *Id.* at 45. She was diagnosed with “right ‘severe’ median nerve entrapment at the wrist,” but there was “no ulnar nerve entrapment at the wrist or elbow.” *Id.* at 46.

Petitioner had a right endoscopic carpal tunnel release and at the follow-up on September 29, 2022, indicated that she “feels so much better.” *Id.* at 58. Petitioner had recovered well from the surgery. *Id.* at 60.

b. Petitioner Testimony

Petitioner appeared via videoconference on January 12, 2023. Transcript (“Tr.”). Beginning with her medical history from 2005, she testified that in January 2005, she sought out medical care because she was having difficulty walking, lifting her feet, and standing. Tr. 6. She explained that the “whole incident was about three months.” *Id.* at 7. Petitioner stated that “it never progressed [to] more than my legs,” and that she did not recall having any numbness or tingling at that episode. *Id.* She stated that when she went to the emergency department, they did not give her a diagnosis, but referred her to a neurologist. *Id.* at 8. When petitioner saw the neurologist, she was using a wheelchair. *Id.* at 7, 84. Petitioner testified that the lumbar puncture, x-ray, MRI, and CT scan were normal. *Id.* at 9. On cross-examination, petitioner testified that the neurologist she saw had considered multiple sclerosis. *Id.* at 84.

When petitioner saw Dr. Edwards, she was treated with steroids which resolved her issue, and was able to walk again. Tr. 8-9. Petitioner testified that the prednisone took care of it and she progressively improved. *Id.* at 10. Initially she was prescribed a Medrol dose pack and then received a prescription for prednisone, and within “a couple of weeks” petitioner was walking without a walker. *Id.* at 11. Later in the hearing, she explained that when she began to walk again, she had to focus on putting one foot in front of the other and was feeling that she was not pulling her foot up far enough. *Id.* at 86.

At the beginning of the hearing, petitioner testified that between 2005 and 2012 she did experience other episodes where she had difficulty walking. Tr. 10. On May 11, 2012, petitioner went to her family physician for headaches and weakness. Tr. 13. She stated that her hands were shaking, and it was difficult to hold things. *Id.* The headaches, weakness, and shakiness all occurred “fairly close together.” *Id.* at 14. She testified that the symptoms were present for about a week before she had an appointment with Dr. Beymer. *Id.* Petitioner stated that she was prescribed Midrin for her headaches and referred to a neurologist. *Id.* The Midrin alleviated her headaches, but the weakness and shakiness of her hands remained. *Id.* at 15. She did not have any weakness or issues with her legs at the time this was occurring in 2012. *Id.*

Petitioner had an appointment with Dr. Edwards on October 2, 2012. *Id.* After the Court reviewed the medical history from this appointment, petitioner testified that her left hip and leg hurt. *Id.* at 18. Petitioner stated that she may have had a limp due to the pain and she was unable to lift her leg to take showers. *Id.* at 21. She said that Dr. Edwards referred petitioner to pain management and to get an NCS/EMG. *Id.* at 17-18. She testified that the NCS/EMG was to determine if there was “some kind of nerve condition or something that was causing me to have weakness, the shaking [of her hands].” *Id.* at 90. Petitioner got the NCS/EMG at Tulsa Bone and Joint, where she also got a second opinion regarding her left hip and leg pain. *Id.* She testified that Dr. Josephson at Tulsa Bone and Joint diagnosed her with a damaged SI joint from physical abuse from her ex-husband. *Id.* Dr. Josephson gave her steroid injections in her lower back that resolved her lower back and left leg issues. Tr. 26.

Petitioner testified that in 2012 her symptoms, mostly pain, were limited to her left leg, while the event in 2005 involved both legs. *Id.* at 20, 88. Petitioner clarified that she did not have any weakness in her legs in 2012. *Id.* at 88. The Court reviewed the neurological findings from the October 2, 2012 appointment petitioner had with Dr. Edwards and noted that “nothing appeared abnormal, but Dr. Edwards ordered an MRI of the brain and cervical spine.” *Id.* at 21. Petitioner testified that she had the MRIs and “everything appeared normal.” *Id.* at 22. Later, she testified that the purpose of the MRI was to “find a cause or a diagnosis for the headaches.” *Id.* at 90.

In early 2015 petitioner saw Dr. Beymer for a sinus infection and was regularly taking levothyroxine for her hypothyroidism. Tr. 28. After getting in a car accident on Friday, March 13, 2015, she received the tetanus vaccination on March 16, 2015. *Id.* Petitioner stated that she was sore and had bruises from the car accident for about three weeks. *Id.* at 31. On April 29, 2015, petitioner began to have difficulty walking while at work. *Id.* at 32. Petitioner testified that she began to have balance issues and had to concentrate to lift her feet to walk. *Id.* She testified that if she was not concentrating on walking, she was unable to move. *Id.* Petitioner went to Drumright Hospital and they only did a CT scan, did not find anything “abnormal” and discharged her. *Id.* at 34.

The following day, Friday, April 30, 2015, petitioner went to Dr. Beymer’s office, which is attached to Drumright Hospital. *Id.* at 35. She testified that Dr. Beymer suspected GBS and wanted her to be sent to a larger hospital for a spinal tap for the diagnosis. *Id.* Petitioner was taken by ambulance to Oklahoma State University Medical Center where she was admitted. *Id.*

Petitioner stated that when she got to Oklahoma State University Medical Center she had to hold onto something for balance, but could still walk. Tr. 37. She testified that she had no numbness or tingling, back pain or visual issues. *Id.* Petitioner was admitted on a Friday and by Monday, she was unable to move her legs or arms. *Id.* at 38. Petitioner described sitting in a chair, being unable to get up, and the nurse having to use a machine to get her up from the chair. *Id.* Additionally, she was unable to extend her arms from her body but could use her hands to hold a sandwich. *Id.* The Court asked her if she had any numbness, tingling, or altered sensations in her limbs while hospitalized and petitioner stated that physicians performed a pinprick test, but it only felt like slight pressure, not feeling like a needle. *Id.* at 45. When she finally had the spinal tap, which revealed an elevated protein, her physicians determined that she had Guillain-Barré syndrome and to treat her with IVIG. *Id.* at 40.

Petitioner stated that after the first day of IVIG treatment, which consisted of five small vials, she had improvement in small movements. *Id.* She was able to move her toes after the first day. *Id.* After the fifth day of IVIG, petitioner stated she was able to walk with a walker. *Id.* However, she stated that she was “ready to go home,” and they would not discharge her until she was able to walk without a walker. *Id.* Petitioner walked the length of the hospital room without the walker, which “wasn’t a huge distance, but felt like it.” *Id.* at 42.

Petitioner was asked to compare her symptoms from 2005 to 2015. Tr. 43. She stated that in 2005, only her legs felt weak and the steroids were able to fix her issue. *Id.* In 2015, however, “it hit me like out of left field.” *Id.* In 2005, she had no upper extremity issues, but in 2015, she was unable to move her arms. *Id.* When petitioner was asked, “Was your sensation in the arms and legs different than what it normally was, aside from the fact that you couldn’t move them?” Petitioner responded, “I would have to say, as I recall, yes to that.” *Id.* at 45. Respondent’s counsel ask petitioner if she had described her symptoms in 2015 as “similar” to those that occurred in 2005 or 2012, and petitioner stated, “I had used the word ‘similar’...trying to explain the weakness and walking.” *Id.* at 91. Petitioner

Petitioner was discharged on May 10, 2015 and she participated in physical therapy at the Cleveland Area Hospital within a week or two. Tr. 46. Petitioner used a theraband around her knees, used an elliptical machine and hand bike, and moved a ball up and down a wall. *Id.* at 47. The focus of physical therapy was hand strengthening, strengthening her gait, and addressing balance issues. *Id.*

Petitioner testified that by her next appointment with Dr. Beymer on July 27, 2015, her symptoms had improved from the time she left the hospital, but she felt very fatigued, and she had difficulty lifting her left leg, which was affecting her ability to walk and step. Tr. 50. If petitioner engaged in thirty minutes to an hour of activity, she would get extremely fatigued. *Id.* at 49. Petitioner stated that her weakness was bilateral, but her left side seemed worse. *Id.* at 50. She was not experiencing any hip pain, as she had in the past. *Id.* Petitioner stated that her understanding of Dr. Beymer’s opinion was that her body was still recovering from Guillain-Barré. *Id.* at 51. Dr. Beymer recommended that she take off four weeks of work and concentrate on physical therapy and not to try to do both work and physical therapy at the same time. *Id.*

Between her discharge from the hospital and her appointment with Dr. Beymer on July 27, 2015, petitioner had returned to work because she is a single parent. Tr. 51. She went back to work in June 2015 at a call center in Tulsa. *Id.* at 55. Petitioner testified that her appointment with Dr. Beymer in July 2015 was because she was still experiencing weakness and “coordination type issues.” *Id.* at 53. She testified that when she was walking, she was “making sure the feet were where they were supposed to go, lifting the foot up far enough, not feeling like I was going to be tripping over a flat surface,” and folding laundry took extra effort because her hands “would not do what I want them to do.” *Id.* These symptoms were continuous from May 10th to July 27th, 2015. *Id.* On cross-examination, petitioner reiterated that her leg weakness was continuous from May 2015 to the appointment with Dr. Beymer in July 2015, but that she had felt as if she was “backstepping” by July 2015 because she had been adding more activity, such as returning to work and working with their lambs. *Id.* at 91.

Petitioner testified that she took short-term disability in July 2015 and followed Dr. Beymer’s directions to focus on physical therapy. Tr. 56. She had an appointment with Dr. Edwards in the fall of 2015 and stated that, “It usually takes several months to get back into her.” *Id.* When petitioner saw Dr. Edwards on October 12, 2015, she was experiencing headaches, fatigue, and general weakness. *Id.* at 57. She stated that, “As I went throughout the day and was doing activities, I would just get more tired and wasn’t able to do much, lift as much.” *Id.* Petitioner was asked if Dr. Edwards note from that appointment, which states, “she remains

extremely weak and fatigued,” was new or was ongoing from your hospitalization, and she testified “ongoing.” *Id.* Petitioner testified that when she saw Dr. Edwards in October 2015, she had resumed work and that Dr. Edwards, but Dr. Edwards recommended that petitioner re-establish physical therapy and take off two additional months from work. *Id.* at 58. Petitioner followed through with Dr. Edwards recommendations and went to a physical therapy evaluation on October 19, 2015. *Id.*

Petitioner described her functional limitations that were noted in the evaluation as “weakness,” and “coordination.” Tr. 59. Petitioner stated that it was difficult to open things, like bottles or lifting a pile of laundry. *Id.* She felt as if she “couldn’t make my hands or my legs do exactly what I wanted them to do when I wanted them to do. It was like a slight disconnect.” *Id.* at 60. These symptoms were not new, they had been ongoing since her hospitalization in April 2015. *Id.* She also had decreased aerobic capacity and would be “wiped out” after doing an activity for thirty minutes. *Id.* Previously, she would do laps around the call center while on break and had to walk a lot when she was training lambs with her daughter. *Id.* at 61. During this time period, a friend would come assist her daughter to train the lambs. *Id.* Petitioner also testified that she could not stand for longer than fifteen minutes. *Id.* Finally, petitioner explained that she was still experiencing balance issues at this time, which would interfere with her dressing, or she felt as if she was going to fall over after she stood up, taking her a few minutes to orient. *Id.* at 63. Petitioner attended physical therapy through early December 2016. Tr. 77.

Petitioner testified that when she returned to Dr. Edwards in March 2016, she was still experiencing headaches and unusual sensations in her arms and legs. Tr. 67. Petitioner explained that the “unusual sensations” in her arms was “like a mixture between your foot going to sleep and being crawled all over and bit by fire ants.” *Id.* This sensation could last from a few minutes to half an hour. *Id.* Petitioner was unable to recall when these sensations began. *Id.* She stated that in February 2016, at an animal show, her hands were not reacting well to the cold at an animal show. *Id.* She testified that she began to notice issues with her hands and the cold within the year, but probably around September or October of 2015. *Id.* at 69. She has never been diagnosed with Raynaud’s syndrome. *Id.* Petitioner stated that the unusual sensations would happen two or three times a week around the March 2016 appointment, but have since decreased. *Id.* at 71.

Petitioner testified that between October 2015 and the March 2016 appointment with Dr. Edwards, she had gone back to work full time and helping her daughter with her activities. *Id.* at 70. Her symptoms of fatigue and weakness never really went away during this time, along with not being able to lift more than 20 pounds at a time. *Id.* When petitioner returned to Dr. Edwards the following month, on April 27, 2016, her headaches had improved, and her dysesthesias had improved. *See* Pet. Ex. 7 at 12.

Petitioner testified that she had appointments with Dr. Edwards every three months. Tr. 73. Between her appointment in March 2016 and March 2017, petitioner continued to feel weak and was not able to do “everyday activities up to the level I had done before.” *Id.* When petitioner was asked by respondent how long her examinations with Dr. Edwards were, petitioner testified that the examinations were “very short periods of time,” and that the

examinations would usually take “several minutes.” *Id.* at 93. Additionally, petitioner stated that her walking issues were more pronounced when walking longer distances or for a longer period of time than would have occurred during the appointments she had with Dr. Edwards. *Id.* 93-94.

Petitioner was questioned about her appointment with Dr. Edwards in March 2017, which indicates that she had “recurrent symptoms of GBS,” after an upper respiratory infection. Pet. Ex. 7 at 18. Dr. Edwards wrote, “patient with previous Guillain-Barré and headaches. She is developing progressive weakness.” *Id.* Petitioner explained that after the upper respiratory infection, she felt very weak and tired, and that she was not recovering. Tr. 74. She stated that her weakness and fatigue had been ongoing, but “had not been as severe until after the upper respiratory infection.” *Id.* She stated that her symptoms got worse after her upper respiratory infection. *Id.* at 75. Petitioner testified that “it seemed like it was quite a while,” for her symptoms of weakness and fatigue to improve. *Id.* She stated that her weakness never fully recovered, and had difficulty with her hands, such as opening a soda bottle and could only recently lift 50 pounds. *Id.* 75-76.

Petitioner continued to see Dr. Edwards for her headaches and follows-up every three months. *Id.* at 76.

b. Expert reports

1) Petitioner’s expert’s opinion about her diagnosis

Petitioner submitted two expert reports from Dr. Frederick Nahm. Pet’s Exs. 21 & 36. Dr. Nahm reviewed petitioner’s medical records and concluded that petitioner had suffered from Guillain-Barré syndrome (“GBS.”). Pet’r Ex. 36 at 2. He also opined that petitioner’s GBS began 42-days post-vaccination. Pet’r Ex. 21 at 13.

Dr. Nahm wrote that the “undiagnosed condition” that petitioner suffered in 2005, ten years prior to the tetanus vaccine she received on March 16, 2015, was “too long...to have considered it relevant,” and that the symptoms she complained about prior to vaccination were “different” than the neurological symptoms petitioner had post-vaccination. Pet’r Ex. 36 at 2.

He stated that petitioner’s pre-vaccination history from 2005, which included a CT scan of the brain, a lumbar puncture, and a brain MRI were all “normal.” Pet’r 36 at 2. Dr. Nahm then reviewed petitioner’s medical records from 2011-2013 and concluded that petitioner’s “prior symptoms of pain, numbness, and weakness were more likely than not orthopedic, and not neurologic in nature.” *Id.* at 4. He explained that from 2005-2011, petitioner more likely suffered from “lumbar degenerative process rather than any kind of neuropathy.” *Id.* He noted that petitioner had been diagnosed with sciatica, low back pain, and weakness which all responded to steroids “as would be expected for an orthopedic condition such as sciatica.” *Id.* at 5. He noted that petitioner was diagnosed with “lumbar and sacral arthritis” by Dr. James Beymer in November 2011 and prescribed a dose of prednisone. *Id.* at 2. Petitioner was also diagnosed with lumbago and given a steroid injection. *Id.* Again, on October 2, 2012, petitioner was again diagnosed with left hip pain and back pain with pain that radiated down the left leg.

Id. at 3; *see also* Pet'r Ex. 2 at 1. The EMG from October 2012 was also normal, but her cervical MRI showed some degenerative changes. *Id.* On August 20, 2013, petitioner reported continued left hip pain that "was making her life miserable because of the pain." Pet'r. Ex. 15 at 66. Petitioner's physical examination revealed pain in all ranges of motion, and she was referred to orthopedics for an evaluation. Pet'r. Ex. 16 at 67.

Dr. Nahm opined that in 2005, even though there had been some concern for a neurological disorder, all of the tests were normal. Additionally, the length of time, 10 years prior to vaccination, "is not in any way consistent with a pattern of CIDP." *Id.* at 4. Dr. Nahm wrote that CIDP is a progressive condition and it would be unlikely that it could be "quiescent for 6-7 years." *Id.* While he acknowledged that the diagnosis of petitioner's symptoms in 2004 were unclear, the symptoms that petitioner presented with in 2011-2013, including low-back pain, weakness, and sciatica, would be expected for an orthopedic condition and not GBS or CIDP. *Id.*

Dr. Nahm also opined that in 2012, which Dr. Chaudhry called "episode 2," the symptoms petitioner developed were "not even remotely similar to those which the petitioner developed after vaccination." *Id.* at 5. He stated that petitioner was diagnosed with lumbago on March 28, 2012, which is an orthopedic diagnosis, not a neurological condition. *Id.* He noted that an EMG/NCS performed in October 2012 "did not show any evidence for a polyneuropathy nor for CIDP." *Id.* Petitioner was also diagnosed with lumbago and prescribed prednisone. *Id.* In November 2012, petitioner was diagnosed with chronic back and leg pain and continued to complain of lumbar and thoracic pain from January 2013 through June 2013. *Id.* He noted that petitioner did not have any sensory symptoms on examination. *Id.* Dr. Nahm wrote that "episode 1 and episode 2" "do not represent medical events that are even remotely similar to those which the petitioner developed after vaccination." *Id.* It was his opinion that from 2005-2013, petitioner had "recurring symptoms more consistent with the possibility of an orthopedic spinal process." *Id.* He stated, "...in fact, petitioner was again and again diagnosed with lumbago, or lower back pain, as well as lumbar and sacral arthritis." *Id.* He stated that the reason petitioner was prescribed steroids was because of her diagnosis of back pain and the steroids provided relief and that petitioner's prior response to steroids does not support "an implausible diagnosis of CIDP," and is not consistent with the medical records. *Id.* at 6.

Dr. Nahm stated that approximately 40 to 42 days post-vaccination, petitioner presented with "what can only be described as a neurological emergency with upper and lower extremity weakness to the point of quadriplegia where she had to be lifted by her husband." *Id.*; *see also* Pet'r Ex. 4 at 3.

Dr. Nahm wrote that on petitioner April 29, 2015, she went to Drumright Regional Hospital emergency department for "a 2-day history of muscle weakness and fatigue." Pet'r Ex. 21 at 3. He explained that she went back to her primary care physician on April 30, 2015 against reporting extreme muscle weakness "that began in her hands and feet and had progressed over a two-day period." *Id.* When petitioner was evaluated at Drumright Hospital emergency department again on April 30, 2015, petitioner was unable to walk and had "severe weakness in the upper and (0/5) lower extremities." *Id.*; *see also* Pet'r. Ex. 4 at 2. Dr. Nahm wrote that when petitioner was transferred to Oklahoma State University Medical Center, the examination

showed “diffuse upper and lower extremity weakness, with no gross sensory deficits.” *Id.* He stated that her lumbar puncture showed elevated protein at 60. *Id.* He stated that petitioner was diagnosed with AIDP when she was found to have absent reflexes and decreased strength in the upper and lower extremities. *Id.* at 3-4.

Dr. Nahm reviewed petitioner’s post-hospitalization records and noted that petitioner’s primary care physician, Dr. Beymer diagnosed petitioner with “recurrent GBS” after she presented to him with improved weakness, but still using a walker and needing physical therapy. *Id.* at 4; *see also* Pet’r. Ex. 15 at 11. He noted that through July 2015, petitioner had balance issues. After petitioner was treated in the emergency department again on July 21, 2015 for left sided weakness, Dr. Beymer diagnosed petitioner with “an exacerbation of her GBS.” Pet’r Ex. 18 at 4.

Dr. Nahm stated, “The acute onset of petitioner’s symptom and deficits, and the good response to IVIG strongly suggest that this was GBS/AIDP and not CIDP.” *Id.* at 9. He opined that petitioner’s “acute onset of illness, was not gradual, with rapid recovery with IVIG rather than a steadier decline, and thus a diagnosis of CIDP is not in keeping with the clinical tempo of the neurological injury.” *Id.* at 9. Additionally, Dr. Nahm stated that petitioner’s clinical course of “acute onset, good recovery, an interval of relatively calm, and then another acute event,” is consistent with “recurrent GBS, rather than CIDP.” *Id.* at 8-9.

Dr. Nahm wrote that “recurrent GBS is said to have irregular inter-episode intervals, more intense neurological deficits with each new episode, and affects a younger population with milder initial symptoms.” *Id.* at 10. He referenced an article by Kuitwaard et al., which studied 32 patients that were diagnosed with “recurrent GBS.” Pet’r Ex. 33 at 1.³ The authors noted that in 2-5% of patients with GBS, recurrences occur, even though GBS is thought to be monophasic. *Id.* at 1. The authors defined “recurrent GBS” as a patient having “two or more episodes that fulfilled the GBS criteria, with either a minimum interval ≥ 4 months between the episodes if the patient did not recover completely or ≥ 2 months when there was a complete or near complete recovery after the previous episode. *Id.* Kuitwaard also explained that there is a difference between recurrent GBS and patients with treatment-related fluctuations or chronic inflammatory demyelinating polyneuropathy. *Id.* at 1. The article identified 32 patients with recurrent GBS with a total of 81 episodes of GBS. *Id.* at 2. A preceding infection in two subsequent episodes was reported 17 times, one patient reported a tetanus vaccination as a trigger in two subsequent episodes, and two other patients reported a vaccination (flu virus or hepatitis virus) as a trigger prior to one of the episodes. *Id.* The same article also explained that in GBS patients with treatment related fluctuations, the treatment-related fluctuation in symptoms occurred within 9 weeks from onset and most patients with having an exacerbation after 9 weeks eventually developed CIDP. *Id.* at 4.

He stated that petitioner’s first episode of GBS, had an acute presentation and led to her hospitalization for 12 days. Pet’r. Ex. 21 at 10. Petitioner’s second episode of GBS began 10 weeks later, and she presented with left arm and leg weakness, was treated with IV solumedrol and oral steroids, and improved around July 27, 2015. *Id.* Then he opined that petitioner had a

³ K. Kuitwaard, et al., *Recurrent Guillain-Barré Syndrome*, 80 J. Neurol. Neurosurg. Psych. 56-59 (2009). [Pet’r Ex. 33].

third episode beginning on March 14, 2016, approximately 8 months after her second episode. *Id.* Dr. Nahm explained that treatment related fluctuation-GBS “is another entity characterized by an acute onset and fluctuations along a steady course to recovery.” *Id.* at 11. Dr. Nahm opined that petitioner’s condition was more likely recurrent GBS and not treatment related fluctuations because treatment related fluctuations “tend to occur with the first 8-10 weeks,” and because petitioner had a rapid response to the initial IVIG with a discrete 2nd episode occurring 12 weeks later, the tempo is more consistent with recurrent GBS. *Id.* Later in his first report, he revised his statement, stating, “petitioner’s clinical course is consistent with either recurrent-GBS or treatment fluctuating GBS,” but still favored recurrent-GBS over treatment fluctuation-GBS. *Id.* at 13.

He also distinguished CIDP from recurrent GBS, stating that the symptoms in CIDP “tend to follow a more indolent and prolonged duration.” Pet’r. Ex. 21 at 12. He stated that petitioner’s clinical course is more suggestive of recurrent GBS and not CIDP because of her prolonged periods of recovery, not prolonged periods of symptoms. *Id.*

Finally, Dr. Nahm wrote that petitioner’s symptoms of her initial GBS did last for six-months, meeting the severity requirement. Pet’r. Ex. 21 at 13. He wrote that petitioner continued to have “lingering sensory symptoms including numbness, tingling, and dysesthesias into the fall of 2015, more than 7 months after her initial presentation” and milder symptoms continued until summer 2016. *Id.*

2) Respondent’s Expert’s Opinion Regarding Diagnosis

Respondent submitted two expert reports from Dr. Vinay Chaudhry. Resp’t. Ex. A & C. After an extensive review of petitioner’s medical history, Dr. Chaudhry, opined that petitioner did not have GBS. Resp’t Ex. A at 13. He explained that he had reached this conclusion for the following reasons: 1) Petitioner’s clinical course was not monophasic and he counted 8 episodes of weakness; 2) None of petitioner’s episodes included cranial nerve involvement, respiratory involvement, or autonomic involvement, which are findings in GBS; 3) Petitioner did not reach the peak of her disability for months, when in “GBS, the peak of illness occurs in less than one week;”; 4) Two of petitioner’s episodes were treated with corticosteroids. “Corticosteroids given alone do not significantly hasten recovery from GBS or affect the long-term outcome;”) 5) Petitioner had no sensory involvement and had trouble voiding in the April-May episode. Bladder involvement is not a feature of GBS.; 6) Petitioner had normal NCS/EMG studies, which is not consistent with GBS; 7) Elevated protein in the spinal fluid is non-specific for GBS; 8) Petitioner reported headaches and these are not a feature of GBS. *Id.* at 14.

Dr. Chaudhry suggested that other diagnoses, including CIDP, complicated migraine, periodic paralysis, inherited neuropathy, vascular phenomenon, and mitochondrial disorders are among the differential, and are all “more likely than a diagnosis of GBS.” *Id.* Dr. Chaudhry explained that CIDP responds both to steroid treatment and IVIG, both of which petitioner had at some point. *Id.* He stated that “response to steroids is considered supportive criteria for CIDP in the presence of progressive symmetrical or asymmetrical polyradiculoneuropathy in whom the clinical course is relapsing and remitting or progresses for more than 2 months, especially if there are positive sensory symptoms, proximal weakness, areflexia without wasting, or

preferential loss of vibration or joint position sense.” *Id.* Despite his extensive list of reasons why petitioner did not have GBS, he acknowledged that she had “loss of joint position sense, weakness, [and] areflexia,” which are all consistent with a GBS diagnosis. *Id.* Similarly, he wrote that diagnosis of CIDP should be considered “in patients initially diagnosed with Guillain-Barre syndrome who have three or more periods with clinical deterioration, or when there is a new deterioration after 8 weeks from onset of weakness.” *Id.* Without admitting that petitioner was treated with IVIG and diagnosed with GBS, Dr. Chaudry stated, “[petitioner] had deterioration 8 weeks after onset of weakness and had certainly far more than three periods of deterioration starting from 2015.” *Id.* He did acknowledge that her EMG findings would be inconsistent with a diagnosis of CIDP. *Id.* at 13, 18.

In responding to Dr. Nahm, Dr. Chaudry asserted that CIDP is more likely the appropriate diagnosis because petitioner was treated with corticosteroids and her illness began in 2005, prior to the vaccination, and continued through 2019. Resp’t. Ex. 18 at 22. Dr. Chaudry asserts that petitioner’s hospitalization in April 2015 was actually her “third episode” and that she had two other episodes, one from 2005 and another in 2012 when she reported weakness and inability to walk. *Id.* at 19. He noted that in January 2005, petitioner was evaluated for GBS due to lower extremity weakness, intractable headache, and inability to walk. Resp’t. Ex. C at 1. In February 2013, petitioner had a brain MRI for “dysesthesias and clinical concern for possible multiple sclerosis,” although it was a normal scan. Pet’r. Ex. 2 at 8. The events in 2005, 2012, and then from 2015 through 2019, were more suggestive of CIDP to Dr. Chaudry than GBS.

In his second report, Dr. Chaudry states that CIDP was only one of many possible alternative diagnoses for petitioner, but it is not definitive. Resp’t. Ex. C at 5. He reiterated that he based this opinion on petitioner’s response to steroids, that petitioner’s symptoms prior to the events in 2015 were similar to the symptoms she experienced in 2005 and 2012, and that her course was relapsing and remitting. *Id.* Dr. Nahm contended that petitioner did not have CIDP due to the length of time between relapsing illnesses and that CIDP would not be quiescent for 6-7 years. Pet’r. Ex. 36. Dr. Chaudry wrote that CIDP course can be highly variable and includes a relapsing and remitting course, where patients have complete disease remissions between relapses and then a chronic progressive course, where patients progressively deteriorate until treatment is given. Resp’t. Ex. C at 7. Dr. Chaudry referenced a case report by Pollard which described a patient who received three separate tetanus toxoid vaccinations over a period of 14 years and developed acute demyelinating polyneuropathy soon after each injection, as an example of CIDP relapses occurring years apart. Resp’t. Ex. C at 8; *see also* Resp’t. Ex. C, Tab 4.⁴ The authors explained that in 1971, the patient received a tetanus-toxoid vaccination and two weeks later developed tingling and numbness in his feet and fingers, had absent deep tendon reflexes, and markedly ataxic gait. *Id.* at 2. The patient had also reported that nine years earlier, the same thing had happened after receiving another tetanus-toxoid vaccination. *Id.* Then six years later, in 1976, he received another tetanus toxoid vaccination and ten days later developed numbness and weakness of the hands and feet. *Id.* The patient’s CSF protein level was 300 and no tendon reflexes could be elicited. *Id.* Pollard states, “There is little doubt that the three clinical episodes of demyelinating neuropathy resulted from the administration of tetanus toxoid.” *Id.* at 5. The patient’s biopsied peripheral nerves revealed onion bulb formations in

⁴ Pollard, J.D. & Selby, G., *Relapsing Neuropathy Due to Tetanus Toxoid*, 37 J. of Neurol. Sci., 113-125 (1978). [Resp’t. Ex. C, Tab 4].

different stages of development, illustrating the chronicity of the demyelinating process. *Id.* at 4-5. According to the authors, “the simple repetition of such episodes does not necessarily produce hypertrophic change,” suggesting that the changes in the patient were ongoing, although not translating to clinical expression. *Id.* at 11.

Dr. Chaudhry wrote that even if petitioner did not have CIDP, the records do not support a diagnosis of GBS. *Id.* He contended that her sensory examination was completely normal, her deep tendon reflexes were only decreased not absent, she had no respiratory involvement, no cranial nerve involvement, the onset of weakness in petitioner’s upper and lower extremities occurred at the same time, her NCS/EMG was normal, and finally, she had normal strength one-day after initiation of IVIG. *Id.*

Dr. Chaudhry also disagreed with Dr. Nahm’s opinion that petitioner’s prior episodes of weakness in 2005 or 2012 were related to an orthopedic condition. Resp’t. Ex. C at 6. He wrote, “neither [petitioner] nor her treating physicians thought she had an orthopedic issue,” and that “spinal tap is not done for orthopedic issue.” *Id.* He then asserted that if Dr. Nahm’s opinion is correct that petitioner’s symptoms in 2005 and 2012 were orthopedic in nature, then the episode in 2015 must have been so as well, considering patient reported similar symptoms. *Id.* Dr. Chaudhry stated that petitioner had been evaluated for multiple sclerosis as a cause of petitioner’s tremors, without acknowledging that no diagnosis was made. *Id.* at 7. He also stated that petitioner had undergone multiple EMG/NCS to consider a possible diagnosis, which would be inconsistent with an orthopedic issue. *Id.*

In summary, Dr. Chaudhry opined that the symptoms petitioner experienced in July 2015 were part of the same disease for which she experienced similar symptoms in 2005 and 2012. It was his opinion that the tetanus vaccine petitioner received did not cause her to develop GBS and that she may have had CIDP, and what she experienced in July 2015 was a recurrence of her symptoms. Resp’t. Ex. C at 20.

IV. Discussion and Finding of Fact

There are three factual issues that need to be resolved in this matter before moving to vaccine causation. The first issue is whether petitioner suffered from Guillain-Barré syndrome. The second relates to the onset of her injury. The final fact issue is whether petitioner can show she suffered six-months of residual symptoms or complications after her alleged-vaccine injury, GBS.

a) Petitioner’s diagnosis

Petitioner is alleging that she suffered from new onset Guillain-Barré syndrome after receiving the tetanus vaccination on March 16, 2015. Respondent in the Rule 4(c) report argues that petitioner has not established that she suffered GBS. Resp. Rept. at 4. After a review of petitioner’s medical records, the expert reports and medical literature, and petitioner’s testimony, I find that petitioner has preponderantly established that she suffered from Guillain-Barré syndrome beginning in late April 2015.

As described above, Dr. Chaudhry argued that petitioner did not have GBS in late April 2015, but instead suffered from a relapse or recurrence of CIDP. Resp. Ex. A at 12-13; Resp. Ex. C at 8. Without fully endorsing the alternative diagnosis of CIDP, he stated that it was a possible diagnosis based largely on petitioner's presentation of symptoms in 2005 and 2012 which were described as "similar" in her medical records and her response to steroid treatment. Resp. Ex. C at 5. Dr. Chaudhry engages in confirmation bias to support his opinion that petitioner did not have GBS by focusing on how similar words and phrases were used in petitioner's medical records repeatedly in 2005, 2012, and 2015 without doing a further examination of those records to determine how those phrases were being used in context with her conditions at the time she was presenting to her medical providers; ignoring medical records from 2012 and 2013 that identify musculoskeletal issues that account for some of her lower extremity symptoms; and discounting the signs and symptoms petitioner presented within 2015 that align with a presentation of GBS.

Dr. Chaudhry asserts that the events in 2005, 2012, and 2015 were part of the same disease. Resp. Ex. A at 14. He describes the events that occurred in 2005, 2012, and 2015 as "similar" because the petitioner herself described them as such to medical providers. Resp. Ex. A at 13. There is no question that some of petitioner's medical records from 2005, 2012, and 2015 include the same language to describe how she was feeling at the time of those records, however, the records themselves provide additional context that differentiate the events in 2005 and 2012 from the event in 2015.

There are notations from petitioner's medical records from 2005 which indicate a concern for Guillain-Barré syndrome, however, these records offer scant support for Dr. Chaudhry's opinion that petitioner experienced the same neurological condition in 2005 that was part of the disease manifesting in signs and symptoms in late April 2015. The 2005 records are from tests, such as a brain MRI and lumbar puncture, which only mention petitioner being evaluated for GBS, but there is no physical examination or diagnosis in these records that would otherwise suggest she had GBS during this time. *See* Pet'r Ex. 11 at 27 (CT scan of brain: Intractable headache. Lower extremity weakness.); Pet'r Ex. 11 at 29 ("lower extremity weakness. Evaluation for Guillain-Barre."). Her lumbar puncture from this time period showed she had normal protein in her CSF. *Id.* at 52. Her deep tendon reflexes were normal. Petitioner testified that she had gone to Dr. Edwards around this time and that she was not given any diagnosis. Tr. 9. This is consistent with Dr. Edwards' records from October 2, 2012, when she wrote that petitioner presented with, "persistent pain in her left hip and back with some radiation down into the left leg, shaking hands, headaches, and insomnia. The patient was seen by this examiner approximately 7 or 8 years ago. At that time there was a question of a primary demyelinating disease, *but no definitive diagnosis could be made.*" Pet'r Ex. 2 at 1 (emphasis added).

Dr. Nahm stated that the events in 2005, while there was a concern for a central neurological disease, occurred 10 years prior to her being diagnosed with a neurological condition in 2015 and is inconsistent with a pattern of CIDP. Pet'r Ex. 36 at 4. He also observed that "the diagnosis of the petitioner's symptoms was unclear then, as it remains so now." *Id.* I agree with Dr. Nahm that based on the vagueness of the records, the lack of a definitive diagnosis from any provider, and the ten year time span between the events it cannot

be established that the event in 2005 was part of the same disease that petitioner experienced in 2015.

The records between 2011 and 2015 also do not support Dr. Chaudhry's assertion that petitioner had CIDP. Aside from the fact that many of the records from 2012 and April 2015 use the same language to describe some of petitioner's symptoms, a more careful examination of the full record from those appointments demonstrates differences in presentation and cause for the weakness. For example, the medical record from April 24, 2012 with Dr. Beymer includes the phrase "weakness of muscles," which is also written in the "chief complaint" section of the medical record from petitioner's emergency department visit on April 29, 2015. *See* Pet'r Ex. 15 at 51; Pet'r Ex. 4 at 2. However, at the March 28 and April 24, 2012 appointments, the focus appeared to be on left hip pain and sciatica along with tremors and some loss of joint position sense. Her reflexes were normal. Dr. Beymer's physical examination noted that petitioner had "decreased strength in legs partially due to low back, but also because of generalized weakness." *Id.* at 52. There was no mention of decreased strength in her upper extremities. *Id.* The April 29, 2015 emergency room note though states that petitioner was "unable to walk," and the physical examination indicated that her strength was 0/5 bilaterally in her lower extremities and 1/5 bilaterally in her upper extremities. Pet'r Ex. 4 at 3. Both records include "muscle weakness" as a diagnosis but the presentations and examinations are completely different. Another example where "weakness of muscles" is documented in pre-vaccination records and post vaccination records, but used in separate contexts are from an appointment on May 11, 2012 with Dr. Beymer and her examination at Oklahoma State University on May 4, 2015. On May 11, 2012, Dr. Beymer diagnosed petitioner with "weakness of muscles" and her exam showed she had normal range of motion bilaterally in her lower extremities with 1+ weakness in lower legs. Pet'r Ex. 15 at 49. Compare this notation of muscle weakness to the examination on May 4, 2015, when petitioner was "unable to lift her leg against gravity and is barely able to hold her forearms." Pet'r Ex. 5 at 11. She had "decreased range of motion in bilateral upper and lower extremities" and absent reflexes at the patella and upper extremities." *Id.* at 13. The reason for the consultation was "upper and lower extremity weakness." *Id.* at 11. In the 2011 and 2012 records, it appears that petitioner's weakness was more musculoskeletal in nature, albeit she demonstrated some neurological type complaints, compared to her presentation in 2015 where her weakness was more clearly neurologically based.

Dr. Chaudhry's report was written prior to the fact hearing when petitioner was able to explain her symptoms from 2005, 2012, and 2015. She acknowledged that she had told providers in 2015 that she had experienced something "similar" in 2012 or 2005 as a way to explain the weakness and her walking issues, but that the episodes from 2005 and 2015 were "night and day," with the weakness only occurring in her legs in 2005, where in 2015 both her arms and legs were affected. Tr. 43-44. Her testimony is consistent with medical records which indicate that her weakness from the events in 2005 and 2012 appear to be limited to her legs, but when she presented in 2015, both her arms and legs were affected with muscle weakness, along with decreased deep tendon reflexes.

Additionally, in coming to his opinion that petitioner's presentations in 2005, 2012, and 2015 were part of the same process, Dr. Chaudhry overlooked relevant records that confirm that at least some of petitioner's symptoms of weakness and difficulty walking were musculoskeletal

in nature instead of neurological. For example, he states that petitioner’s “bilateral leg weakness, inability to walk, and difficulty controlling hands,” are not caused by orthopedic issue.” Resp. Ex. C at 6. However, on November 1, 2011, petitioner reported “pain in left lumbar spine and left SI joint and hip region.” Pet’r Ex. 15 at 23. Petitioner was given a tapering dose of steroids. *Id.* She was diagnosed with lumbago on March 28, 2012 and given a steroid injection. Pet’r Ex. 15 at 27. On September 4, 2012, she again was diagnosed with lumbago and given a tapering dose of prednisone. *Id.* at 41. Dr. Edwards diagnosed petitioner with chronic back pain on November 6, 2012. Pet’r Ex. 2 at 6. On August 27, 2013, petitioner reported to Dr. Josephson at Tulsa Bone and Joint Associates that she had “bilateral hip pain for a few years,” and she was diagnosed with sacroiliitis and given a steroid injection. Pet’r Ex. 38 at 19.

Dr. Nahm’s opinion that “none of petitioner’s prior symptoms were anything approaching her neurological condition that occurred post-vaccination,” is better supported by the medical records and petitioner’s testimony. *See* Pet’r Ex. 36 at 1. He correctly observed that between 2005 and 2013 petitioner was diagnosed with lumbago and sacral arthritis in multiple records and that petitioner was prescribed steroids to treat those orthopedic conditions. *Id.* at 5. Petitioner’s symptoms in 2005 and 2012, of lower back pain, left hip, and some weakness. Petitioner’s predominantly lower back left hip and some lower extremity weakness in 2005 and is readily explained by petitioner’s diagnosis of sciatica. *See* Pet’r Ex. Dr. Chaudhry’s contention that these remote complaints, ten years prior and three years prior to her April 2015 presentation with inability to move arms or legs, absent deep tendon reflexes and elevated protein, none of which were present before, were part of a single CIDP condition seems to be a stretch at best. b

Petitioner’s testimony regarding her symptoms during 2012 were consistent with the medical records. She confirmed the leg symptoms she experienced in 2012 were limited to her left leg and when she went to see Dr. Beymer it was for her left leg pain, headaches, and hand shaking. Tr. 21,22. Later in the hearing, petitioner testified that she thought that Dr. Edwards ordered the brain MRI after her appointment on October 2, 2012 due to petitioner’s headaches and the EMG to determine if there was a nerve condition causing her hand tremor. Tr. 89; *see also* Pet’r Ex. 2 at 5.

Further, the medical literature that Dr. Chaudhry referenced does little to advance his opinion that petitioner’s 2005, 2012 and 2015 events were part of the same disease or were separate relapsing events as part of CIDP. First, petitioner’s EMG/NCS were all normal, as Dr. Chaudhry acknowledged, thus inconsistent with the Vallat and Dyck articles which state that NCS/EMG tests in CIDP patients will show evidence of acquired demyelination. Resp’t Ex. C, Tab 3 at 5⁵; Resp’t Ex. C, Tab 1 at 4.⁶ Second, the medical records from 2011 and 2012 point to a more orthopedic issue for the cause of petitioner’s weakness and treatment with both oral steroids and steroid injections. Therefore, eliminating the 2012 events as possible “relapse” in CIDP. Finally, when petitioner was evaluated in 2005 for suspicion of GBS, her spinal tap had no elevated CSF protein, but in 2015 she had elevated CSF protein level, indicating that these

⁵ Dyck, James P. & Tracy, Jennifer, A, *History, Diagnosis, and Management of Chronic Inflammatory Demyelinating Polyradiculoneuropathy*, 93(6) Mayo Clin. Proc., 777-793 (2018). [Resp’t. Ex. C, Tab 3].

⁶ Vallat, Jean-Michael, et al., *Chronic Inflammatory Demyelinating Polyradiculoneuropathy: Diagnostic and Therapeutic Challenges for a Treatable Condition*, 9 Lancet Neurol., 402-12 (2010). [Resp’ Ex. C, Tab 1].

two events were distinct and different. As explained in the Dyke article, “spinal fluid evaluation is also important in evaluation [of CIDP] and will typically exhibit cytoalbuminologic dissociation with an elevated CSF protein level and no increase in white blood cell count.” Resp’ Ex. C, Tab 3 at 9. Thus, even the objective medical tests show that petitioner’s events from 2005 and 2015 were different in nature.

Finally, petitioner’s clinical presentation and treatment is consistent with GBS described in the medical articles filed in this matter. The Vallat article explains, “In AIDP, the symptoms and neurological deficits develop quickly over days to weeks and maximal deficits are reached within 1 month. Then gradual improvement occurs, and patients get stronger, although long term deficits can persist.” Resp’t Ex. C, Tab 3 at 3. The Hernandez article explains that the “typical cases [of GBS] are characterized by symmetric muscle weakness....Other signs are: diminished deep tendon reflexes, abnormalities of autonomic function; pain, cramps, and numbness. The maximum peak of the disease is reached at 2-4 weeks and then it is stabilized to reach the plateau phase; the duration is variable and after that recuperation phase is started.” Pet’r Ex. 32 at 2.

When petitioner first presented to the emergency department on April 29, 2015, her chief complaint was “muscle weakness started yesterday and is worse today.” Pet’r Ex. 3 at 16. This would put the onset of petitioner’s symptoms 42 days post-vaccination. Her physical exam appeared to be normal, and she was discharged with “weakness” as the diagnosis. *Id.* at 17. The following day, April 30, 2015, petitioner returned to the emergency department of Drumright Hospital with “muscle weakness” but at this point she was unable to walk. Pet’r Ex. 4 at 2. Petitioner also reported to the nurse that “she cannot stand without collapsing.” *Id.* Her upper extremity strength was 1/5 bilaterally and her lower extremity strength was 0/5 bilaterally. *Id.* at 3. Petitioner testified that her primary care physician, Dr. Beymer wanted her transferred to Oklahoma State University Hospital because it would have better facilities to treat her for GBS. Tr. 35-36. When she was examined by Dr. Baker at OSU, petitioner reported “progressive weakness and instability in her extremities over the last 3-4 days.” Pet’r Ex. 5 at 8. Petitioner had “significant weakness with plantar flexion, dorsiflexion, and extension of the great toe on the left” and “weakness with dorsiflexion and plantar flexion, and extension of the great toe” on the right lower extremities and her muscle strength bilaterally in her lower extremities was 1 out of 4. *Id.* at 9. Initially, her deep tendon reflexes were 2 out of 4 bilaterally in her upper and lower extremities. *Id.* Four days later, when petitioner was evaluated by neurologist, Dr. Pasricha, petitioner had no reflexes in her patella or upper extremities. *Id.* at 13. Additionally, petitioner was unable to lift her leg and “is barely able to hold her forearms.” *Id.* at 11. Her progressive symptoms and neurological deficits from April 29, 2015 through May 4, 2015 rapidly progressed, consistent with the description of AIDP from the Vallat article.

Petitioner had elevated protein in her CSF, also consistent with GBS which she had never had before. *See* Pet’r Ex. 5 at 5. *See* Pet’r Ex. 32 at 2. Petitioner was started on IVIG treatment on May 2, 2015. Petitioner’s strength and motor function improved while in the hospital. A note from May 8, 2015 indicates that she was able to lift both legs off the bed, reach her arms forward away from her trunk and flex ankles “slightly.” Pet’r Ex. 14 at 146. Her deep tendon reflexes had returned in her lower extremities but only noted as a 1/5 while her upper extremity reflexes returned to 2/4. *Id.* at 147. The following day, May 9, 2015, petitioner was able to walk around

the room with a walker and requested going home on Monday. *Id.* at 139. When she was discharged on May 10, 2015, she was able to walk with the use of a walker. *Id.* at 28. She began outpatient physical therapy on May 13, 2015 at the Cleveland Area Hospital. *See* Pet'r Ex. 9 at 30. Petitioner participated in physical therapy until June 2015. *Id.* at 27.

While Dr. Nahm suggested that petitioner's return to the Drumright Hospital emergency department on July 21, 2015 for left arm and leg weakness could be characterized as "recurrent GBS," he formulated this opinion without hearing petitioner's description of her condition between her physical therapy discharge and this hospital encounter. During the hearing, petitioner testified that her weakness in July 2015 was not as severe as what she experienced in late April 2015. Tr. 50. Additionally, she explained that she "did not feel that she was improving. Any activity just took so much out of me, I would not lift the left leg quite as far as I should in order to walk, to step...things started to get fatigued." *Id.* Further, petitioner testified that symptoms she was experiencing in July 2015 was a continuation of her symptoms that she had when discharged from the hospital on May 10, 2015. *Id.* at 52. Finally, while Dr. Beymer used the phrase "recurrent GBS," in the record he suggested that petitioner's continued weakness was "sequelae from GB[S]." Pet'r Ex. 6 at 11. Petitioner's testimony combined with this record makes it more likely that petitioner was experiencing sequelae of her GBS that began in late April 2015 and had not yet fully recovered.

b) Onset of petitioner's condition

Petitioner received the tetanus vaccine on March 16, 2015 after being involved in a car accident. Pet'r Ex. 15 at 79; Tr. 29. Petitioner first presented to the emergency department on April 29, 2015, her chief complaint was "muscle weakness started yesterday and is worse today." Pet'r Ex. 3 at 16. When she returned to the emergency department on April 30, 2015, petitioner reported that the onset of her weakness was 3 days ago. Pet'r Ex. 4 at 2. While hospitalized at Oklahoma State University Hospital, petitioner reported that "on Tuesday of this week, she began to experience weakness that started in her lower extremities and since has progressed to her upper extremities." Pet'r Ex. 5 at 7. Given that April 29, 2015, fell on a Wednesday, this would put onset on Tuesday, April 28, 2015. Petitioner's symptoms rapidly progressed while she was hospitalized at Oklahoma State University Hospital, leading to a diagnosis of GBS and treatment with IVIG.

Petitioner testified that on April 29, 2015, she noticed she was having difficulty walking. Tr. 32. She stated, "I felt like I had balance issues, was having to concentrate to lift my feet to walk forward, a general feeling just-not-right feeling." *Id.* Petitioner explained that her daughter and boyfriend told her she was walking strange and convinced her to go to the emergency department. *Id.* Petitioner stated that she did not recall having any pain, only that she had to "actually think about lifting my foot and stepping forward," and if she did not concentrate her foot "would drag or wouldn't move very well at all." *Id.* at 33. Petitioner testified that she "does not recall" any symptoms beginning prior to April 29, 2015.

Petitioner's medical records, created contemporaneously in time to her seeking treatment warrant some level of trustworthiness. *Cucuras v. Sec'y of Health & Human Servs.*, 993 F.2d 1525, 1528 (Fed. Cir. 1993). Three medical records, the ones from the Drumright Emergency

Hospital emergency department and Oklahoma State University Hospital, put onset at one to two days prior to her seeking treatment on April 29, 2015. While petitioner testified that she did not recall having symptoms prior to April 29, 2015, it could be explained by her faulty recollection of events that occurred eight years before testifying. *See La Londe v. Sec’y of Health & Hum. Servs.*, 110 Fed. Cl. at 203 (2013). Given that petitioner was seeking treatment on April 29, 2015 for acute onset of weakness and she had reported to medical professionals for the purposes of treatment that the symptoms began one to two days prior, it is likely that the onset of her GBS occurred on or around April 27, 2015, approximately forty-two days post-vaccination.

Accordingly, I find that the evidence preponderantly establishes that petitioner’s GBS began on or around April 27, 2015.

c) Petitioner’s Vaccine Injury Sequelae

The Vaccine Act provides that petitioner must show that she suffered the residual effects or complications of [her] illness, disability, injury, or condition for more than six months after the administration of the vaccine. § 300aa-11(c)(1)(D)(i). To satisfy such requirement, petitioner would have to show that she suffered the residual effects or complications of her GBS past September 15, 2015. “Residual effects” focuses on lingering signs, symptoms, or sequelae characteristics of the course of the original vaccine injury, and “complications” encompasses conditions that may not be ‘essential part[s] of the disease, or may be outside the ordinary progression of the vaccine injury.’ *See Wright v. Sec’y of Health & Hum. Servs.*, 22 F.4th 999, 1005 (Fed. Cir. 2002).

Based on petitioner’s medical records and her testimony, it appears that she meets the severity requirement, as she had signs and symptoms consistent with her GBS through April 2016.

When petitioner was discharged from OSU on May 10, 2015, she participated in physical therapy from May 13, 2015 through June 5, 2015. At her initial evaluation, petitioner was observed with weakness in her upper and lower extremities, difficulty walking, and decreased endurance. Pet’r Ex. 9 at 30. When she was discharged on June 5, 2015, petitioner had reported that she was stronger and “getting around better at home,” and compliant with home exercises. *Id.* a 27. She had met her lower extremity movement goal, improved her grip strength, and improved her balance and gait. *Id.* Petitioner testified that when she was discharged from physical therapy, she attempted to go back to work and take on more activities with her daughter, like helping train lambs. Tr. 49. She testified that “things got better after physical therapy” but when she took on more activities, the worse she felt. *Id.* She went to see Dr. Beymer on July 11, 2015 and reported that she was having numbness and tingling, along with weakness of her left leg. Pet’r Ex. 6 at 11. Dr. Beymer wrote, “I believe this to still be sequelae from GB infection that has been exacerbated by returning to work and fatiguing of muscles from work.” *Id.*

Petitioner testified that she still experienced weakness in her upper extremities and lower extremities in and around July 2015. Tr. 53. She stated that she had to “make sure the feet were where they were supposed to go, lifting the foot up far enough, not feeling like I was going to be tripping over a flat surface.” *Id.* Petitioner testified that she took another four weeks of short-

term disability. *Id.* at 56. She returned to Dr. Edwards on October 12, 2015. Pet'r Ex. 7 at 8. Petitioner stated that it took awhile to get an appointment with Dr. Edwards. Tr. 56. At this appointment, Dr. Edwards noted that petitioner was admitted to OSU with Guillain-Barre and that she "remains extremely weak and fatigued." Pet'r Ex. 7 at 8. The physical exam, though noted that petitioner's gait was within normal limits and she was moving all extremities well. *Id.* Dr. Edwards recommended petitioner re-start physical therapy and not work for another two months. *Id.*

Petitioner was evaluated by physical therapy again on October 19, 2015. Pet'r Ex. 9 at 21. Petitioner's treatment diagnosis was "Guillain-Barre syndrome," and her symptoms were noted as "weakness, decreased endurance, balance deficits, and difficulty walking." *Id.* Petitioner reported using a cane to walk long distances and she was experiencing pain in her shoulder that goes up to her head. *Id.* The record also indicates that petitioner has been unable to tolerate working because of fatigue, pain and headache, along with eyes drifting. *Id.* Petitioner's strength was recorded as symmetric in both her upper and lower extremities. *Id.* Petitioner participated in physical therapy through November 16, 2015. *Id.* at 17. The physical therapy discharge summary notes that petitioner's headaches were under control and that she had met short term goals of improved movement, independence, and coordination with activities of daily living. *Id.* Petitioner met her balance goal, but her endurance goal was not met. However, her "functional ability during PT session...improved significantly to tolerate 13 minutes treadmill level 2, 13 bike, level 4, 45 min session including weights, endurance, free weights all without complication or difficulty." *Id.*

The next time petitioner met with Dr. Edwards was on February 3, 2016 for "severe headaches." Pet'r Ex. 7 at 10. Petitioner was prescribed Topamax and Tylenol with codeine as necessary for breakthrough headaches. *Id.* Petitioner returned to Dr. Edwards the following month on March 14, 2016 and reported having "unusual sensations in her arms and legs and difficulty controlling her hands." *Id.* Dr. Edwards ordered an EMG which was normal. When petitioner returned to Dr. Edwards on April 27, 2016, she reported that her headaches were better controlled by the Topamax. *Id.* at 12. Later, when petitioner was reporting numbness, migraines, and fatigue, her physician, Dr. Jason Sims, suspected that her symptoms were "linked to [an] immune disorder and not the Guillain Barré that patient initially thought," and he referred her to rheumatology and to test her thyroid levels. *See* Pet'r Ex. 18 at 60. Further, Dr. Schumpert, rheumatologist, also suspected that petitioner's fatigue and diminished activity was related to petitioner's hypothyroidism and opined that petitioner would need to increase her medication. *Id.* at 63. She began re-taking medication for hypothyroidism. *Id.* at 65.

The records of her physical therapy in October and November of 2015 appear to be the most definitive indication of residual symptoms of GBS with issues of fatigue, balance, endurance, coordination problems, gunslinger gait, some numbness and tingling and inability to return to full time work. She had some abnormalities in controlling her hands and unusual sensations in her arms and legs when she saw Dr. Edwards on February 3, 2016, however, petitioner had reported shaking hands prior to her vaccine injury in 2012 and apparently resolved when taking medication. As her headaches and hypothyroid issues were not related to GBS, I conclude based on the testimony and current record that she continued to experience residual of GBS until March of 2016.

V. Conclusion

Upon review of the record as a whole, petitioner has provided preponderant evidence to demonstrate that she suffered from Guillain-Barré syndrome, her condition began about forty-two days post-vaccination, and that she suffered the residual effects of her GBS through March 2016. Given the findings above, the parties are directed to file a joint status report within thirty (30) days, by **Monday, December 2, 2024**, indicating if they can resolve this case informally or propose further proceedings to resolve this matter.

IT IS SO ORDERED.

s/Thomas L. Gowen
Thomas L. Gowen
Special Master