In the United States Court of Federal Claims

OFFICE OF SPECIAL MASTERS
No. 20-1919V
Filed: January 21, 2026

JAMES PATTERSON, Petitioner, v. SECRETARY OF HEALTH AND HUMAN SERVICES, Respondent.	Special Master Horner

Leah VaSahnja Durant, Law Offices of Leah V. Durant, PLLC, Washington, DC, for petitioner.
Rachelle Bishop, U.S. Department of Justice, Washington, DC, for respondent.

RULING ON ENTITLEMENT[1]

On December 21, 2020, petitioner filed a petition under the National Childhood Vaccine Injury Act ("Vaccine Act"), 42 U.S.C. § 300aa-10, *et seq.* (2012).[2] He initially alleged a left-side Table Injury of "SIRVA," *i.e.*, a shoulder injury related to vaccine administration, resulting from influenza ("flu") and Hepatitis A vaccinations he received on November 19, 2019. (ECF No. 1.) Alternatively, he alleged a left shoulder injury "caused-in-fact" or significantly aggravated by his vaccination. (*Id.*) However, he later filed an amended petition alleging that the two vaccinations had been administered in separate arms, resulting in bilateral shoulder injuries. (ECF No. 19.) In the amended petition, petitioner asserted his bilateral shoulder injuries constituted Table SIRVAs or,

[1] Because this document contains a reasoned explanation for the action taken in this case, it must be made publicly accessible and will be posted on the United States Court of Federal Claims' website, and/or at https://www.govinfo.gov/app/collection/uscourts/national/cofc, in accordance with the E-Government Act of 2002. 44 U.S.C. § 3501 note (2018) (Federal Management and Promotion of Electronic Government Services). **This means the document will be available to anyone with access to the internet.** In accordance with Vaccine Rule 18(b), petitioner has 14 days to identify and move to redact medical or other information, the disclosure of which would constitute an unwarranted invasion of privacy. If, upon review, I agree that the identified material fits within this definition, I will redact such material from public access.

[2] Within this decision, all citations to § 300aa will be the relevant sections of the Vaccine Act at 42 U.S.C. § 300aa-10, *et seq.*

alternatively, that he suffered bilateral significant aggravation of preexisting shoulder issues. (*Id.*)

For the reasons set forth below, I conclude that petitioner is entitled to compensation for a significant aggravation of bilateral shoulder pathology caused-in-fact by his November 19, 2019 vaccinations.

I. Applicable Statutory Scheme

Under the National Vaccine Injury Compensation Program, compensation awards are made to individuals who have suffered injuries after receiving vaccines. In general, to gain an award, a petitioner must make a number of factual demonstrations, including showing that an individual received a vaccination covered by the statute; received it in the United States; suffered a serious, long-standing injury; and has received no previous award or settlement on account of the injury. Finally – and the key question in most cases under the Program – the petitioner must also establish a causal link between the vaccination and the injury.

In some cases, the petitioner may simply demonstrate the occurrence of what has been called a "Table Injury." That is, it may be shown that the vaccine recipient suffered an injury of the type enumerated in the "Vaccine Injury Table," corresponding to the vaccination in question, within an applicable time period following the vaccination also specified in the Table. If so, the Table Injury is presumed to have been caused by the vaccination, and the petitioner is automatically entitled to compensation, unless it is affirmatively shown that the injury was caused by some factor other than the vaccination. § 300aa-13(a)(1); § 300aa-11(c)(1)(C)(i); § 300aa-14(a).

As relevant here, the Vaccine Injury Table lists a Shoulder Injury Related to Vaccine Administration or "SIRVA" as a compensable injury if it occurs within 48 hours of vaccine administration. § 300aa-14(a), *amended by*, 42 C.F.R. § 100.3. Table Injury cases are guided by statutory "Qualifications and aids in interpretation" ("QAIs"), which provide a more detailed explanation of what should be considered when determining whether a petitioner has suffered an injury listed on the Vaccine Injury Table. 42 C.F.R. § 100.3(c). To be considered a "Table SIRVA," petitioner must show that his injury fits within the following definition:

> SIRVA manifests as shoulder pain and limited range of motion occurring after the administration of a vaccine intended for intramuscular administration in the upper arm. These symptoms are thought to occur as a result of unintended injection of vaccine antigen or trauma from the needle into and around the underlying bursa of the shoulder resulting in an inflammatory reaction. SIRVA is caused by an injury to the musculoskeletal structures of the shoulder (e.g. tendons, ligaments, bursae, etc.). SIRVA is not a neurological injury and abnormalities on neurological examination or nerve conduction studies (NCS) and/or electromyographic (EMG) studies would not support SIRVA as a diagnosis . . . . A vaccine recipient shall be

considered to have suffered SIRVA if such recipient manifests all of the following:

(i) No history of pain, inflammation or dysfunction of the affected shoulder prior to intramuscular vaccine administration that would explain the alleged signs, symptoms, examination findings, and/or diagnostic studies occurring after vaccine injection;

(ii) Pain occurs within the specified time-frame;

(iii) Pain and reduced range of motion are limited to the shoulder in which the intramuscular vaccine was administered; and

(iv) No other condition or abnormality is present that would explain the patient's symptoms (e.g. NCS/EMG or clinical evidence of radiculopathy, brachial neuritis, mononeuropathies, or any other neuropathy).

42 C.F.R. § 100.3(c)(10).

Alternatively, if no injury falling within the Table can be shown, the petitioner may still demonstrate entitlement to an award by showing that the vaccine recipient's injury was caused-in-fact by the vaccination in question. § 300aa-13(a)(1)(A); § 300aa-11(c)(1)(C)(ii). To so demonstrate, a petitioner must show that the vaccine was "not only [the] but-for cause of the injury but also a substantial factor in bringing about the injury." *Moberly v. Sec'y of Health & Human Servs.*, 592 F.3d 1315, 1321 (Fed. Cir. 2010) (quoting *Shyface v. Sec'y of Health & Human Servs.*, 165 F.3d 1344, 1352-53 (Fed. Cir. 1999)); *Pafford v. Sec'y of Health & Human Servs.*, 451 F.3d 1352, 1355 (Fed. Cir. 2006). In particular, a petitioner must show by preponderant evidence: (1) a medical theory causally connecting the vaccination and the injury; (2) a logical sequence of cause and effect showing that the vaccination was the reason for the injury; and (3) a showing of proximate temporal relationship between vaccination and injury in order to prove causation-in-fact. *Althen v. Sec'y of Health & Human Servs.,* 418 F.3d 1274, 1278 (Fed. Cir. 2005). Additionally, where a petitioner in an off-Table case is seeking to prove that a vaccination aggravated a pre-existing injury, the petitioner must establish the three *Althen* prongs along with three additional factors described in the *Loving* case. *See Loving v. Sec'y of Health & Human Servs.*, 86 Fed. Cl. 135, 144 (2009) (combining the first three *Whitecotton* factors for claims regarding aggravation of a Table injury with the three *Althen* factors for off-Table injury claims to create a six-part test for off-Table aggravation claims); *see also W.C. v. Sec'y of Health & Human Servs.*, 704 F.3d 1352, 1357 (Fed. Cir. 2013) (applying the six-part *Loving* test). The additional *Loving* factors require petitioners to demonstrate aggravation by showing: (1) the vaccinee's condition prior to the administration of the vaccine, (2) the vaccinee's current condition, and (3) that the vaccinee's current condition constitutes a "significant aggravation" of the condition prior to the vaccination. *Loving*, 86 Fed. Cl. at 144.

For both Table and non-Table claims, Vaccine Program petitioners must establish their claim by a "preponderance of the evidence." § 300aa-13(a). That is, a petitioner must present evidence sufficient to show "that the existence of a fact is more probable than its nonexistence." *Moberly*, 592 F.3d at 1322 n.2. Proof of medical certainty is not required. *Bunting v. Sec'y of Health & Human Servs.*, 931 F.2d 867, 872-73 (Fed. Cir. 1991). However, a petitioner may not receive a Vaccine Program award based solely on his assertions; rather, the petition must be supported by either medical records or by the opinion of a competent physician. § 300aa-13(a)(1). Once a petitioner has established their *prima facie* case, the burden then shifts to respondent to prove, also by preponderant evidence, that the alleged injury was caused by a factor unrelated to vaccination. *Althen*, 418 F.3d at 1278; § 300aa-13(a)(1)(B).

Cases in the Vaccine Program are assigned to special masters who are responsible for "conducting all proceedings, including taking such evidence as may be appropriate, making the requisite findings of fact and conclusions of law, preparing a decision, and determining the amount of compensation, if any, to be awarded." Vaccine Rule 3(b)(1). Special masters must ensure each party has had a "full and fair opportunity" to develop the record but are empowered to determine the format for taking evidence based on the circumstances of each case, including having the discretion to decide cases without an evidentiary hearing. Vaccine Rule 3(b)(2); Vaccine Rule 8(a); Vaccine Rule 8(d). Special masters are not bound by common law or statutory rules of evidence but must consider all relevant and reliable evidence in keeping with fundamental fairness to both parties. Vaccine Rule 8(b)(1).

In determining entitlement to compensation, the special master is required to consider "all [] relevant medical and scientific evidence contained in the record," including "any diagnosis, conclusion, medical judgment, or autopsy or coroner's report which is contained in the record regarding the nature, causation, and aggravation of the petitioner's illness, disability, injury, condition, or death," as well as the "results of any diagnostic or evaluative test which are contained in the record and the summaries and conclusions." § 300aa-13(b)(1). The special master is required to consider the entirety of the evidentiary record, draw plausible inferences, and articulate a rational basis for the decision. *Winkler v. Sec'y of Health & Human Servs.*, 88 F.4th 958, 963 (Fed. Cir. 2023) (citing *Hines ex rel. Sevier v. Sec'y of Health & Human Servs.*, 940 F.2d 1518, 1528 (Fed. Cir. 1991)).

II. Procedural History

This case was initially assigned to the Chief Special Master for potential informal resolution as part of the Special Processing Unit (or "SPU") based on the allegations of the petition. (ECF No. 15-16.) However, respondent was not willing to entertain settlement and filed his Rule 4 report in June of 2023, recommending against compensation. (ECF No. 30.) In addition to disputing whether petitioner could demonstrate either Table SIRVAs or shoulder injuries caused-in-fact by his two

vaccinations, respondent also contested a bilateral administration of the two vaccines, as well as whether petitioner suffered at least six months of sequela. (*Id.* at 10-18.)

Within the SPU, the Chief Special Master issued a finding of fact, which concluded that petitioner had received his Hepatitis A vaccine in his right arm and his flu vaccination in his left arm.[3] (ECF No. 31, p. 2.) However, because the finding of fact did not foster settlement discussions, the case was reassigned to the undersigned for further litigation. (ECF No. 37.)

After reassignment, both parties filed expert reports. Petitioner filed a report by orthopedic surgeon Uma Srikumaran, M.D., and respondent filed a responsive report by orthopedic surgeon Paul Cagle, M.D. (ECF Nos. 39-40; Exs. 16, A.) After petitioner filed a reply by Dr. Srikumaran (ECF No. 43; Ex. 36), the parties agreed that the case was ripe for briefing. (ECF No. 45.) Petitioner then filed a motion for a ruling on the written record in January of 2025, which is now fully briefed. (ECF Nos. 47-49.)

In light of the above, I have determined that the parties have had a full and fair opportunity to develop the record and that it is appropriate to rule on the existing record. *See* Vaccine Rule 8(d); Vaccine Rule 3(b)(2); *Kreizenbeck v. Sec'y of Health & Human Servs.*, 945 F.3d 1362, 1366 (Fed. Cir. 2020) (noting that "special masters must determine that the record is comprehensive and fully developed before ruling on the record"). Accordingly, petitioner's motion is now ripe for resolution.

III. Summary of Record Evidence

a. Medical Records

i. Pre-vaccination

In his motion, petitioner asserts that his medical history prior to the vaccinations at issue was noncontributory. (ECF No. 47, p. 3.) Respondent disagrees. (ECF No. 48, pp. 2-3.) Specifically, seven weeks before the subject vaccinations, petitioner presented to an integrative medicine specialist ("Wellspring") on October 1, 2019, for an initial evaluation. (Ex. 12.) At that time, petitioner reported, among other complaints, a "bilateral shoulder pain complaint of unknown origin ongoing for years." (*Id.* at 31.) More specifically, petitioner felt his pain was related to his rotator cuff, though he was unaware of any injury. (*Id.*) However, he did note a prior history of multiple shoulder dislocations in both shoulders while playing football and rugby 30 years ago. (*Id.* at 6.) He rated his pain, which was noted to be constant, as ranging from 3-5 on a 10-point scale. (*Id.*) On physical exam, petitioner had reduced range of motion in both

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[3] I have reviewed the Chief Special Master's finding of fact and adopt it as my own. Generally, special masters may change or revisit any ruling until judgment enters, even if the case has been transferred. *See McGowan v. Sec'y of Health & Human Servs.*, 31 Fed. Cl. 734, 737-38 (1994). In most cases, however, a judicial officer such as a special master departs from previously decided issues only in the event of "new evidence, supervening law, or a clearly erroneous decision." *Id.* at 737; *see also Sullivan v. Sec'y of Health & Human Servs.*, No. 10-398V, 2015 WL 1404957, at *20 n.36 (Fed. Cl. Spec. Mstr. Feb. 13, 2015).

shoulders (based on Apley's 1 and 2 tests) with muscle spasm trigger points affecting multiple muscles of the neck and shoulders. (*Id.* at 31-32.) He was assessed as having both cervicalgia and shoulder pain. (*Id.* at 32.) He returned for therapeutic exercises on November 7, 2019, November 12, 2019, and November 18, 2019, and it was noted at each encounter that his complaints were essentially unchanged. (*Id.* at 35, 37, 39.)

On November 19, 2019, petitioner presented to his primary care provider, Mark Greenawald, M.D., for routine care, as well as vaccinations for an upcoming trip to Nepal. (Ex. 1, pp. 1-2.) He did not report any musculoskeletal complaints, and physical exam appears to have been cursory, though it was noted that his obesity may be worsening and that his activity had been limited due to joint and muscle pains. (*Id.* at 2, 4-5.) At this encounter he was administered the Hepatitis A and flu vaccinations at issue. (*Id.* at 8-9.) As found in the prior finding of fact, these vaccines were administered one in each shoulder. (ECF No. 31.)

ii. Post-vaccination

Petitioner returned to Wellspring on November 20, 2019, the day after the subject vaccinations. (Ex. 12, p. 41.) It was again noted that petitioner's condition had not changed. (*Id.*)

On December 9, 2019, petitioner returned to his primary care provider with a complaint of bilateral hip and shoulder pain. (Ex. 2, p. 30.) He reported that the shoulder pain "started after received hep A and flu vaccine in both deltoids about 1 month ago," whereas the hip pain started "a few months ago." (*Id.* at 31.) Petitioner denied neck pain, weakness or decreased strength, but indicated that his pain worsened with reaching and interfered with his sleep. (*Id.*) On physical exam, petitioner had full range of motion in all planes for both his hips and shoulders; however, the shoulder movement reproduced pain. He had tenderness to palpation over the deltoids, but no tenderness or crepitus of the acromioclavicular joint and normal glenohumeral stability. He had full strength in both shoulders, but had a positive Hawkins test (also called a Hawkins Kennedy test), which tests for shoulder impingement. Empty can test, which tests for rotator cuff issues, was negative. (*Id.* at 34.) C Reactive Protein and sedimentation rate, nonspecific inflammatory markers, were high. (*Id.* at 37; *see also* Ex. 9, p. 38.) X-ray findings from both shoulders were consistent with arthritis. (Ex. 2, pp. 19, 21; *see also* Ex. 9, p. 38.) Petitioner did not receive a definitive diagnosis at this encounter. Buritis was considered possible given the positive Hawkins test; however, the additional presence of hip pain raised a concern for polymyalgia rheumatica ("PMR"). (Ex. 2, p. 30.) Petitioner was started on prednisone. (Ex. 9, p. 38.)

Petitioner's pain was initially "resolved completely" while he was on prednisone, but he reported that pain in both shoulders and legs returned as of December 18, 2019. (Ex. 2, p. 14; Ex. 9, p. 29.) He returned to his primary care provider, Dr. Greenawald, on December 24, 2019. (Ex. 2, p. 14.) At that time, he reported that the pain "has been quite severe" and that "temporally [he] attributes the symptoms to when he received

bilateral shots." (*Id.* at 14-15.) However, the pain was alleviated by ibuprofen. (*Id.* at 14.) He did not have any weakness, numbness, or symptoms radiating down his arm. He reported being unable to lift his arms above 90 degrees. (*Id.*) Bilateral bursitis continued to be questioned. (*Id.* at 15.) On physical exam, it was noted that petitioner was "[o]bviously in significant pain" and Neer (a test for subacromial impingement) and empty can tests were positive. (*Id.* at 18.) An MRI of the right shoulder was ordered, with a plan to recommend bilateral steroid injections if the MRI confirmed bursitis. (*Id.*) Petitioner was prescribed Meloxicam. (*Id.*) Petitioner underwent a right shoulder MRI on December 30, 2019. (*Id.* at 12; Ex. 14, p. 5.) The impression was: (1) moderate acromioclavicular osteoarthritis with undersurface osteophytes; (2) mild subacromial bursitis; (3) mild supraspinatus bursal surface tendon fraying with no evidence of a full thickness tear; and (4) a superior glenoid labral tear. (Ex. 14, p. 5.)

On January 28, 2020, petitioner followed up with an orthopedist for his bilateral shoulder (and neck) pain. (Ex. 5, p. 10.) Petitioner reported a prior history of multiple dislocations from a college and semi-pro football career but associated his shoulder pain to his vaccinations, noting his shoulders to have been "nonproblematic" in the decades since his football career. (*Id.*) He rated his pain as a 9 out of 10 at worst. (*Id.*) Petitioner noted that he saw a chiropractor prior to vaccination, but felt his post-vaccination symptoms were distinct. (*Id.*) He reported significantly decreased activity due to shoulder pain, as well as "a fair bit of sleep disruption." (*Id.*) On physical exam, petitioner had positive Hawkins, Neer, and Obrien's tests, bilaterally, but negative Yergason's and Spurling's tests.[4] (*Id.* at 11.) The orthopedist diagnosed bilateral shoulder bursitis[5] and administered bilateral steroid injections. (*Id.* at 11-12.)

Petitioner returned to the orthopedist for a re-evaluation on March 12, 2020. (Ex. 5, p. 6.) He reported that his left shoulder had improved, but that his right shoulder, while less debilitating, remained painful. (*Id.*) He felt that his steroid injections may be wearing off. (*Id.*) He rated his pain as a 6 out of 10 at rest and an 8 out of 10 with activity. (*Id.*) His assessment continued to include bilateral bursitis with some noted improvement in symptoms, but also now included a right-side biceps tendonitis for which he was administered a right biceps tendon sheath injection. (*Id.* at 7-8.) Shortly thereafter, petitioner presented for a physical therapy evaluation. (Ex. 3, p. 11.) He had full range of motion of both shoulders, but he had pain with resisted internal rotation on the right, as well as mild weakness and pain with Neer and Hawkins tests. He also had pain with a Hawkins test on the left. (*Id.*) He only attended one follow up session at which he was reportedly improved, but with some remaining weakness. (*Id.* at 9-10.)

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[4] The O'Brien's test checks for labral tears and/or acromioclavicular issues, while the Yergason test checks for issues affecting the biceps tendon. The Spurling test checks for cervical radiculopathy.

[5] The "Assessments" for this encounter specified bursitis of both the left and right shoulders. (Ex. 5, p. 11.) However, in notes, the orthopedist stated that the "differential includes, or perhaps is a combination of, subacromial bursitis, possible mild Parsonage-Turner syndrome, SILVA." (*Id.* at 12.) Given that the orthopedist had noted the injury to have occurred "in the setting of injection" (*Id.*), the reference to "SILVA" is likely a typographical error meant to refer to "SIRVA."

On May 4, 2020, approximately five and a half months post-vaccination, petitioner returned for a follow up with his orthopedist. (Ex. 5, p. 2.) The orthopedist characterized petitioner's condition as "bilateral shoulder pain, primarily attributable to some combination of [SLAP] and biceps tendon symptoms, and subacromial bursitis, in the setting of a flare after vaccination." (*Id.*) Petitioner reported experiencing some improvement following his right biceps tendon sheath injection and that his left shoulder was "more bothersome." (*Id.*) Physical exam confirmed that, although he had positive O'Brien's bilaterally, it was worse on the left than the right. (*Id.* at 3.) The orthopedist added left shoulder biceps tendonitis to petitioner's assessment and administered a left-side biceps tendon sheath injection. (*Id.* at 3-4.) The orthopedist advised that the next step would potentially be an arthroscopic examination, debridement, or biceps tenodesis. (*Id.* at 4.)

Thereafter, petitioner did not return again for care until more than thirteen months later, on June 14, 2021. (Ex. 7, p. 9.) Petitioner's interval history was as follows:

> Pain Level: 4/10 at rest and 7/10 with activity. Patient reports 5/10 overall function in both of his shoulders. Pain is intermittent and is described as being dull that does not radiate in nature. He admits to occasional weakness in his shoulders. Patient reports he has been working his muscles recently. He still reports soreness which is worse on the left shoulder when compared to the right shoulder. He reports several dislocations in the past in the left shoulder. He also reports scapular spasms and discomfort. Patient admits to starting PT and has transitioned to home exercises for further strengthening. Patient is interested in having a MRI done on his left shoulder in order to plan for next steps.
>
> Pain is worse with pushing, reaching overhead, reaching across body, and with lifting weights. Pain is relieved with rest, ice/heat, and medication.
>
> Symptoms have stayed around the same.

(*Id.*) Based on the physical exam, the orthopedist felt that petitioner was experiencing "biceps soreness from working out recently," left worse than right, as well as periscapular muscle spasms of the right shoulder. (*Id.* at 11.) An MRI was ordered to assess the left biceps tendon, and physical therapy was recommended for right-side scapular dyskinesis. (*Id.*)

Petitioner returned on July 12, 2021, to discuss his MRI results. (Ex. 7, p. 1.) The MRI showed

> moderate to advanced [acromioclavicular] arthritis with arthrosis, anterior labral irregularity without significant heterogeneity that may represent chronic [SLAP] tear versus non pathologic[.] Buford complex or labral foramen, inferolateral subacromial spurring, relatively narrow acromial humeral interval without full-thickness tears, there is intrasubstance tearing

> of the supraspinatus and possibly a near full-thickness small tear at the very anterior margin, also with some superior biceps tendinopathy.

(*Id.* at 3.) The orthopedist felt that surgery was appropriate because the magnitude of the left-side rotator cuff tear could not be determined, but petitioner deferred surgery and opted for a therapeutic injection instead. (*Id.*)

Petitioner has not had any further medical evaluations. (ECF No. 27.)

b. Affidavits

i. Petitioner

After describing his encounter for vaccination, petitioner stated that "[w]ithin 2 days my shoulders began getting really sore and on the third day I was surprised that I couldn't even lift them up to wash my hair in the shower." (Ex. 10, p. 1.) The pain and reduced mobility persisted up to the time of his encounter with Dr. Greenawald, after which time he received temporary relief from prednisone. (*Id.*)

Petitioner further explained that

> I had a break in visiting the doctor from May of 2020 to June of 2021. Even though I still had pain in my shoulders, I was not able to be seen during COVID. I was finally able to return for treatment in June of 2021. I went back in to be seen as the pain and limited range of motion had not fully resolved. I was getting stronger, but still not where I was prior to the vaccinations.

(Ex. 10, p. 2.)

In a supplemental affidavit, petitioner explained that he is still symptomatic despite having ceased formal treatment. (Ex. 38.) He stated that "[t]o this day, I continue to suffer pain and limitations because of the injuries to both my shoulders" and that, "[a]lthough I am not currently undergoing formal treatment for my shoulders, I continue to do a daily home exercise program to try to relieve some of my discomfort and mobility problems." (*Id.*) He concluded that "I have reached a point of toleration that I consider to be my new normal." (*Id.*)

ii. Jeanie L. Patterson

Ms. Patterson, petitioner's spouse, is a registered nurse. She avers that she observed petitioner on the evening that he was vaccinated and noticed that his two injection site band aids were higher on his shoulders than would be expected from a proper administration. (Ex. 13, p. 1.) She further states that

> [a]fter 2 days of [petitioner] experiencing ongoing pain, I encouraged him to go back to the primary care physician to get support and relief as I was very concerned as to his pain and limited movement when showering, driving, dressing, and other motions. It was apparent to me that [petitioner]'s reduced range of motion was clearly due to the location of the injections he had received.

(*Id.*)

c. Expert Opinions

Petitioner filed an expert report by orthopedic surgeon Uma Srikumaran, M.D.[6] (Ex. 16.) Dr. Srikumaran acknowledges that petitioner had a prior history of bilateral shoulder pain, but suggests that "it is important to note a change in [the] type and severity of pain following the vaccinations." (*Id.* at 7.) Prior to vaccination, petitioner's chiropractic records reflect a base level of constant pain between 3-5 on a 10-point scale with no specific shoulder complaints included in his subjective reports. Only Apley tests suggested any shoulder issues. (*Id.* at 7-8.) However, Dr. Srikumaran characterizes Apley tests as measuring muscle "tightness," rather than pain. (*Id.* at 8.) Following vaccination, petitioner suffered a "drastic" change in his condition, with pain and disability that prompted ongoing care. (*Id.*) Moreover, Dr. Srikumaran opines that the post-vaccination signs and symptoms were consistent with SIRVA. (*Id.*) Specifically, he stresses that petitioner had demonstrated reduction in motion following vaccination, as well as positive impingement tests (Hawkins) from his very first post-vaccination medical encounter. (*Id.*)

Dr. Srikumaran acknowledges that petitioner had pre-existing changes visible on his MRI; however,

> [t]he general, and specific theory in this case, of causation of shoulder dysfunction related to vaccination is the initiation of inflammation directly related to vaccine antigen being delivered to or near the bursa or synovium

[6] Dr. Srikumaran received his medical degree from Johns Hopkins University School of Medicine in 2005, before going on to complete an internship in general surgery and orthopedic surgery, as well as a residency in orthopedic surgery, at Johns Hopkins Hospital in 2006 and 2010, respectively. (Ex. 17, p. 1.) From there, Dr. Srikumaran completed a fellowship in shoulder surgery at Harvard in 2011. (*Id.*; Ex. 16, p. 1.) He is board certified in orthopedic surgery, and he maintains an active medical license in Maryland. (Ex. 17, p. 19.) Dr. Srikumaran currently works as the Director of the shoulder fellowship and Vice Chair-Quality, Safety, and Service of the Department of Orthopaedic Surgery, as well as an associate professor of orthopaedic surgery in the shoulder division, at Johns Hopkins University School of Medicine. (*Id.* at 1-2.) He also maintains positions as the Medical Director at Johns Hopkins Ambulatory Surgery Center and an attending physician at Johns Hopkins Hospital, Howard County Medical Center. (*Id.*) In his clinical capacity, Dr. Srikumaran has treated approximately 10-12 patients with shoulder dysfunction following vaccination in the last five years. (Ex. 16, p. 1.) In his research capacity, Dr. Srikumaran has authored several publications in the field of shoulder surgery, including two articles specifically discussing SIRVA. (*Id.* at 2-16; Ex. 16, p. 1.)

of the joint. It is this inflammation which initiates pain in previously longstanding, chronic degenerative conditions.

(Ex. 16, p. 9 (emphasis omitted).) He adds that "inflammation and pathology that starts in the subacromial space can easily travel to adjacent tissues such as the rotator cuff and [acromioclavicular] joint, causing inflammation and pain in those areas as well." (*Id.*) Dr. Srikumaran suggested his opinion supports both a Table Injury of SIRVA, as well as causation-in-fact of a shoulder injury. (*Id.* at 7, 9-10.)

In response, respondent filed an expert report by orthopedic surgeon Paul Cagle, M.D.[7] Dr. Cagle opines that petitioner's pre-vaccination complaints of bilateral shoulder pain, confirmed by imaging, and history of football-related injury, refute any assertion of a Table SIRVA. (Ex. A, p. 6.) He further notes that petitioner's chiropractic visit occurring the day after vaccination confirms that there was no change in his condition at that time, casting doubt on an abrupt (within 48 hours) post-vaccination onset of new symptoms. (*Id.* at 6-7.) Relative to the third SIRVA QAI criterion, Dr. Cagle asserts that the medical records do not document any reduction in range of motion. (*Id.* at 7.) Whereas petitioner had documented reduced range of motion pre-vaccination (on October 1, 2019), he was subsequently noted to have full range of motion on December 9, 2019. (*Id.*) In any event, Dr. Cagle opines petitioner's condition is alternatively explained by osteoarthritis, scapular symptoms, and SLAP tears, all unrelated to vaccination. (*Id.* at 8.)

Dr. Cagle does not disagree that MRI results will often include age-related findings. In this case, however, he opines that the "mild" bursitis demonstrated on petitioner's initial post-vaccination MRI is insufficient to demonstrate the type of robust inflammatory response that can be related to SIRVA. (Ex. A, pp. 8-9.) Moreover, Dr. Cagle disagrees that petitioner has demonstrated any shoulder injury caused-in-fact by his vaccination because there is no evidence of a new onset of inflammation or any other new structural shoulder injury. (*Id.* at 9.) Additionally, he charges that Dr. Srikumaran's opinion is too generic, asserting that "[s]imply saying the shoulder is painful so it must be inflamed lacks scientific rigor and is fundamentally unsupported." (*Id.*)

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[7] Dr. Cagle received his medical degree from Loyola University Chicago Stritch School of Medicine in 2008, before going on to complete a residency in orthopedic surgery at the University of Minnesota Academic Health Center and Medical School in 2013, as well as a shoulder and elbow fellowship at Mount Sinai Hospital in New York, New York, and an additional shoulder fellowship at Private Hospital Jean Mermoz/Centre Orthopaedic Santy in Lyon, France, in 2014. (Ex. B, p. 1.) He is a board certified orthopedic surgeon. (*Id.* at. 2.) He currently works as an associate professor and associate program director in the Department of Orthopedic Surgery at the Icahn School of Medicine at Mount Sinai. (*Id.* at 1; Ex. A, p. 1.) He is a member of the American Shoulder and Elbow Surgeons, as well as a member of the American Academy of Orthopaedic Surgeons and the American Orthopaedic Association. (Ex. A, p. 1.) As a faculty member of an internationally recognized shoulder surgery fellowship, Dr. Cagle is involved in teaching and educating medical students, graduate students, and orthopedic surgical residents. (*Id.*) He also conducts clinical, biomedical, and basic science research. (*Id.* at 2.) He has published over 90 publications and provided over 50 presentations pertaining to shoulder-related injuries. (Ex. B, pp. 4-19.)

In reply to Dr. Cagle, Dr. Srikumaran opines that evidence of bursitis on MRI will be affected by a variety of factors, including anti-inflammatory treatments, such as those received by petitioner prior to his MRI. (Ex. 36, p. 2.) He suggests that, in his own clinical experience, the degree of buritis seen on MRI is not necessarily predictive of the degree of bursitis later seen intraoperatively. (*Id.*) MRI is "only a piece of the puzzle" and must be read in conjunction with petitioner's physical exam findings, which confirmed impingement. (*Id.*) Dr. Srikumaran further stresses that it is not structural degeneration, but inflammation, that causes pain according to his theory of causation. (*Id.*) Thus, the presence of pain and its temporally associated onset evidences new inflammation and there is no need for any new structural issue. (*Id.*) In his second report, Dr. Srikumaran also further discusses the experts' differing interpretations of the clinical history relative to the requirements for a Table SIRVA. (*Id.* at 1-3.)

IV. Discussion

In his motion for a ruling on the written record, petitioner argues both that his bilateral shoulder injuries meet the Table requirements for SIRVA and, alternatively, that he can demonstrate that he suffered a vaccine-caused significant aggravation of his pre-existing shoulder pathology. (ECF No. 47.) In response, respondent disputes that petitioner has demonstrated either type of injury. (ECF No. 48.) Moreover, he disputes that petitioner has demonstrated that his condition persisted for at least six months. (*Id.*) Because I find that petitioner is entitled to compensation for a significant aggravation of his pre-existing shoulder pathology, I do not address petitioner's Table SIRVA allegations.

a. *Loving* prong one

Under the first *Loving* prong, the special master must make factual determinations with respect to the petitioner's pre-vaccination condition. *W.C.*, 704 F.3d at 1357. Petitioner argues that, while he had a medical history that included remote prior shoulder dislocations, his shoulders were asymptomatic up to the point of the vaccinations at issue. (ECF No. 47, pp. 10-11.) In that regard, petitioner stresses Dr. Srikumaran's opinion that petitioner's positive Apley tests indicate only muscle tightness, rather than pain. (*Id.* at 11.) By contrast, respondent argues that petitioner did have active shoulder pain prior to vaccination (ECF No. 48, p. 13), but contends that petitioner's pre-vaccination records are inadequate to establish a specific or concrete condition that could have been aggravated (*Id.* at 17-18). Based on my own review of the record, neither party adequately grapples with the details of petitioner's history.

Petitioner is not persuasive in arguing that he was asymptomatic prior to the vaccinations at issue. Regardless of whether the Apley test is indicative of shoulder pain, petitioner specifically sought care for, *inter alia*, bilateral shoulder pain, within the weeks leading up to his vaccination. (Ex. 12.) When he first presented for evaluation on October 1, 2019, he reported "constant" bilateral shoulder pain that he felt may be related to his rotator cuff. (*Id.* at 6.) Moreover, at the time he was vaccinated, it was

observed that petitioner was experiencing worsening obesity thought to be due to inactivity related to joint and muscle pain. (Ex. 1, pp. 2, 4-5.) If petitioner's remote history of football injuries were the only issue, this would not necessarily prevent petitioner from demonstrating a Table SIRVA. *Accord O'Leary v. Sec'y of Health & Human Servs*., No. 18-584V, 2021 WL 3046617, at *8 (Fed. Cl. Spec. Mstr. June 24, 2021). However, given his explicit report of constant shoulder pain occurring weeks prior to the time of vaccination, petitioner is not credible in arguing that he was asymptomatic prior to vaccination.

Respondent is also not persuasive is seeking to underplay what can be fairly understood regarding petitioner's pre-vaccination condition. While it is true that petitioner's pre-vaccination records are thin with respect to specific findings of shoulder pathology, both parties' experts agree that, based on his later MRI results, petitioner had pre-existing chronic shoulder pathology. (Ex. 16, p. 9; Ex. A, p. 8.) In that regard, Dr. Cagle clearly argues both that petitioner's condition is explained by osteoarthritis, scapular symptoms, and SLAP tears, and that he suffered no new injury post-vaccination. (Ex. A, p. 8.) Thus, Dr. Cagle necessarily argues that these findings explain petitioner's pre-existing condition and likely his symptoms. (*Id.*) Moreover, this is at least partly consistent with the treating orthopedist's assessment that petitioner's later post-vaccination condition was "primarily attributable to some combination of [SLAP] and biceps tendon symptoms, and subacromial bursitis." (Ex. 5, p. 2.)

Accordingly, the evidence preponderates in favor of a finding that petitioner was suffering symptomatic shoulder pathology, likely inclusive of bilateral SLAP tears and acromioclavicular osteoarthritis, affecting both of his shoulders prior to the vaccinations at issue.

b. *Loving* prong two

Under the second *Loving* prong, the special master must make factual determinations regarding the petitioner's post-vaccination condition. *W.C.*, 704 F.3d at 1357. Petitioner argues that, following vaccination, he suffered an acute onset of worsened shoulder pain, which is explained by an inflammatory process that was diagnosed as bursitis. (ECF No. 47, pp. 11-12; ECF No. 49, pp. 4-7.) Respondent argues that petitioner has not identified a medically recognized injury that explains his post-vaccination condition. (ECF No. 48, pp. 18-19.)

Pertinent to the analyses that follow, four factual determinations are necessary and preponderantly supported with respect to petitioner's post-vaccination condition:

- The severity of petitioner's pain increased. When petitioner presented pre-vaccination for his bilateral shoulder pain, he rated his pain as a 3-5 out of 10. (Ex. 12, p. 6.) However, when treating with his primary care provider post-vaccination, petitioner reported that his pain was "quite severe to the point that he can no longer function doing his daily activities" and his physician documented as part of the physical exam that he was "[o]bviously in

significant pain." (Ex. 2, pp. 14, 18.) When petitioner's orthopedist later documented a numerical rating, petitioner first reported his pain to be a 9 out of 10 at worst and later indicated that his pain ranged from 6-8 out of 10. (Ex. 5, pp. 6, 10.)

- Petitioner had new onset of bursitis post-vaccination. Whereas petitioner's pre-vaccination exam found only positive Apley's tests and was generally characterized as limited by muscle tightness (Ex. 12, p. 9), his primary care provider detected positive signs of impingement (Hawkins test) during his post-vaccination exam, which she found concerning for bursitis (Ex. 2, p. 30). Petitioner subsequently underwent a right shoulder MRI that detected bursitis, albeit noted to be mild. (Ex. 14, p. 5.) Although Dr. Cagle questions the significance of this finding given that it was noted to be mild (Ex. A, pp. 8-9), Dr. Srikumaran reasonably suggests that the MRI results could have been affected by petitioner's prior treatment with steroids (Ex. 36, pp. 2-3). Petitioner's treating orthopedist subsequently diagnosed bilateral bursitis, despite being aware the MRI report indicated only "mild" bursitis. (Ex. 5, pp. 11-12.)

- Subsequent to his development of buritis, petitioner also developed symptoms of biceps tendinitis. Right-side biceps tendonitis was first documented at petitioner's March 12, 2020 orthopedic encounter. (Ex. 5, pp. 7-8.) And, indeed, petitioner's Yergason's test (a test for issues affecting the biceps tendon) at his prior encounter of January 28, 2020, had been negative. (*Id.* at 11.) It was not until his later encounter of May 4, 2020, that he was first assessed and treated for a left-side biceps tendinitis. (*Id.* at 3-4.) Although the tendinitis appears to have had a later onset than the bursitis, the treating orthopedist did not distinguish petitioner's tendinitis from the overall "flare" of his pre-existing pathology. (*E.g.*, *id.* at 2 (attributing bilateral shoulder pain to "some combination of [SLAP] and biceps symptoms, and subacromial bursitis").) On petitioner's behalf, Dr. Srikumaran incorporated tendinitis in his assessment of petitioner's vaccine-related injury. (Ex.16, pp. 10-11.) However, Dr. Cagle did not discuss tendinitis in his own discussion of petitioner's condition, despite noting the treating orthopedist's diagnosis in his summary of the medical history. (Ex. A.)

- No other structural abnormality explains petitioner's increased pain post-vaccination. Both parties' experts agree that petitioner had no new structural abnormalities post-vaccination. (Ex. A, p. 9 (Dr. Abrams opining that "we have no objective evidence of new onset inflammation or a new structural shoulder injury as clearly demonstrated by the right shoulder MRI and the left shoulder MRI"); Ex. 16, p. 9 (Dr. Srikumaran opining that, in petitioner's own case, inflammation acted upon chronic, asymptomatic shoulder pathology).)

c. *Loving* prong three

Under the third *Loving* prong, the special master must assess whether a comparison of the pre- and post-vaccination conditions constitutes a "significant aggravation" of the condition at issue. *W.C.*, 704 F.3d at 1357. The Vaccine Act defines significant aggravation as "any change for the worse in a preexisting condition which results in markedly greater disability, pain, or illness accompanied by substantial deterioration of health." § 300aa-33(4). Although petitioner need not prove the expected outcome of his pre-vaccination condition or that her post-vaccination condition is worse than the expected outcome, petitioner still must show that his post-vaccination condition was affected by his vaccination. *Locane v. Sec'y of Health & Human Servs.*, 685 F.3d 1375, 1381 (Fed. Cir. 2012); *Sharpe v. Sec'y of Health & Human Servs.*, 964 F.3d 1072, 1082 (Fed. Cir. 2020).

Petitioner argues that Dr. Greenawald's encounter records demonstrate that, following vaccination, petitioner experienced "a highly significant deterioration of [his] condition," noting the December 24, 2019 notation that "pain has been quite severe to the point that he can no longer function doing his daily activities." (ECF No. 47, p. 12 (emphasis omitted) (quoting Ex. 2, p. 14).) He argues that this marks a contrast to his pre-vaccination records, which, despite documenting shoulder pain, did not document that petitioner had any inability to function. (*Id.* (citing Ex. 12, pp. 10, 39).) He further stresses Dr. Srikumaran's observation that petitioner had new findings of impingement post-vaccination. (*Id.* at 12-13.) Thus, petitioner argues that "petitioner experienced new and/or exacerbated pain and disability following the November 19, 2019, flu and hepatitis A vaccinations, thus, demonstrating a significant aggravation of any pre-existing conditions." (*Id.* at 13 (emphasis omitted).)

Comparing the findings made under *Loving* prongs one and two, I agree. Prior to vaccination, petitioner was suffering constant shoulder pain likely related to bilateral SLAP tears and acromioclavicular osteoarthritis. Following vaccination, petitioner suffered a new onset of bursitis accompanied by symptoms of impingement and significantly increased pain and then later biceps tendinitis. No condition other than the bursitis is evidenced to explain the new symptoms. Thus, petitioner's treating orthopedist ultimately opined that petitioner was experiencing "bilateral shoulder pain, primarily attributable to some combination of [SLAP] and biceps tendon symptoms, and subacromial bursitis, in the setting of a flare after vaccination last year." (Ex. 5, p. 2.) That is, petitioner's post-vaccination condition constituted a flare of his pre-existing condition inclusive of symptoms caused in part by both his longstanding pathology and his post-vaccinal subacromial bursitis.

Respondent argues, however, that "[p]etitioner has not properly pled his claim to satisfy *Loving* prong three." (ECF No. 48, p. 19.) He contends that "[t]he amorphousness of SIRVA as a significant aggravation injury subsumes a prior condition: by using 'SIRVA' as his current condition, petitioner simply assumes several shoulder pathologies can be aggravated by vaccination, without specifying or providing evidence for any particular one." (*Id.*) Respondent also argues that "relying on Dr. Srikumaran's analysis to evaluate the *Loving* prongs is flawed because Dr. Srikumaran

was fundamentally mistaken that petitioner's prior condition was 'asymptomatic.'" (*Id.* at 18.)

Respondent's argument misconstrues petitioner's filings. While respondent is obviously correct to suggest that SIRVA *can* subsume pre-existing asymptomatic pathologies, petitioner has not merely relied on the broader concept of SIRVA to explain his current, aggravated condition. Petitioner's amended petition was explicit in pleading significant aggravation "[i]n the alternative" to SIRVA (ECF No. 19, p. 1), and he is clear within his motion for a ruling on the written record in arguing that his vaccinations caused bursitis, which is a specific condition. (ECF No. 47, pp. 10-17.) This is also consistent with how I have addressed significant aggravation in prior cases. *E.g.*, *Kelly v. Sec'y of Health & Human Servs*., No. 17-1918V, 2022 WL 1144997 (Fed. Cl. Spec. Mstr. Mar. 24, 2022). How bursitis can aggravate pre-existing shoulder pathology is addressed further under *Loving* prongs four and five.

I have also considered respondent's argument regarding Dr. Srikumaran's credibility. *Accord Pulsipher v. Sec'y of Health & Human Servs*., No. 21-2133V, 2025 WL 1364203, at *13 (Fed. Cl. Spec. Mstr. Apr. 24, 2025) (rejecting Dr. Srikumaran's opinion in part because "Dr. Srikumaran's predicate assumption that petitioner initially suffered bursitis, as called for by his theory of causation, is unsupported speculation"), *mot. for rev. denied*, No. 21-2133, 2025 WL 3526353 (Fed. Cl. Sep. 3, 2025). However, while petitioner did himself argue first and foremost that he was asymptomatic prior to vaccination, I do not agree with respondent's characterization of Dr. Srikumaran's opinion. In asserting a Table SIRVA, Dr. Srikumaran clearly opined that "[a]lthough the petitioner did have a history of shoulder pain, it does not explain the signs, symptoms, examination findings, and diagnostic studies that occurred after the vaccination." (Ex. 36, p. 1 (emphasis omitted).) This is not the same thing as asserting the petitioner was previously asymptomatic. Moreover, in asserting causation-in-fact, Dr. Srikumaran asserted that petitioner's "shoulder symptoms were mild prior to the vaccinations, and increased to severe following the vaccinations . . . . the time course of events supports that he had a significant aggravation of a condition that existed prior to vaccination." (Ex. 16, p. 11.)

In light of the above, there is preponderant evidence that petitioner's post-vaccination condition constitutes a significant aggravation of his pre-existing shoulder condition.

d. *Loving* prong four

Petitioner's burden under the first *Althen* prong/fourth *Loving* prong is to provide, by preponderant evidence, "a medical theory causally connecting the vaccination and the injury." *Althen,* 418 F.3d at 1278; *W.C.*, 704 F.3d at 1357. Such a theory must only be "legally probable, not medically or scientifically certain." *Knudsen v. Sec'y of Health & Human Servs.*, 35 F.3d 543, 548-49 (Fed. Cir. 1994). Moreover, scientific evidence offered to establish *Althen* prong one is viewed "not through the lens of the laboratorian, but instead from the vantage point of the Vaccine Act's preponderant evidence

standard." *Andreu v. Sec'y of Health & Human Servs*., 569 F.3d 1367, 1380 (Fed. Cir. 2009). However, to satisfy this prong, petitioner's theory must be based on a "sound and reliable medical or scientific explanation." *Knudsen*, 35 F.3d at 548; *Boatmon v. Sec'y of Health & Human Servs.*, 941 F.3d 1351, 1359 (Fed. Cir. 2019). Petitioner's burden under *Loving* prong four varies from the burden under *Althen* prong one in that a significant aggravation claim requires petitioner only to show that the vaccine at issue can worsen the condition at issue, rather than be its cause. *Sharpe v. Sec'y of Health & Human Servs.*, 964 F.3d 1072, 1083 (Fed. Cir. 2020) (explaining that, "[u]nder *Loving* prong 4, a petitioner need only provide 'a medical theory causally connecting [petitioner's] significantly worsened condition to the vaccination'" (second alteration in original) (quoting *Loving*, 86 Fed. Cl. at 144)).

Petitioner argues that Dr. Srikumaran has demonstrated that inflammation caused by vaccination in or near the bursa can result in subacromial bursitis that initiates pain from chronic degenerative changes and that inflammation of the subacromial space can further affect adjacent structures, such as the rotator cuff and acromioclavicular joint. (ECF No. 47, p. 13 (discussing Ex. 16, pp. 9-16).) Respondent argues, however, that

> Dr. Srikumaran's theory is neither reputable nor persuasive in this case because it fails to account for a vaccinee with a prior symptomatic condition. Indeed, merely that vaccines induce some inflammation as a general immunologic proposition does not establish that vaccination was the substantial and but-for cause of petitioner's post-vaccination condition.

(ECF No. 48, p. 21.)

I addressed a substantially similar argument in the prior *Kelly* case. 2022 WL 1144997, at *22-23. In that case, I agreed with respondent that a significant limitation of much of the SIRVA literature, such as the seminal Atanasoff study cited in the Secretary's SIRVA rulemaking, is that it isolated SIRVA as a phenomenon based on the absence any confounding symptoms. Specifically, I explained that "[t]he Atanasoff authors stressed that there is no diagnostic test available to assess whether shoulder dysfunction is vaccine-caused, leaving only this type of clinical qualification to aid in identifying post-vaccination shoulder injuries as a distinct entity." *Id.* at *22. Importantly, however, in the *Kelly* case and in this case, Dr. Srikumaran has also cited an epidemiologic study by Hesse et al., which demonstrated an elevated risk of subdeltoid bursitis following vaccination. 2022 WL 114997, at *22; Elisabeth M. Hesse et al., *Risk of Subdeltoid Bursitis After Influenza Vaccination: A Population-Based Cohort Study*, 173 ANNALS INTERNAL MED. 253 (2020) (Ex. 29). Thus, even respondent's own expert in this case agrees that "[i]t is clear from the SIRVA literature that a SIRVA can cause inflammation of the shoulder." (Ex. A, p. 9.) Therefore, the evidence preponderates in favor of a finding that vaccines can cause subacromial bursitis.

With a relationship between vaccination and bursitis established, the only remaining question is whether it is sound and reliable for Dr. Srikumaran to theorize that

subacromial bursitis can activate pain in adjacent structures of the shoulder. On that point, Atanasoff et al. explained:

> In general, chronic shoulder pain with or without reduced shoulder joint function can be caused by a number of common conditions including impingement syndrome, rotator cuff tear, biceps tendonitis, osteoarthritis and adhesive capsulitis. In many cases, these conditions may cause no symptoms until provoked by trauma or other events. Reilly et al. reviewed a series of shoulder ultrasound and MRI studies obtained in asymptomatic persons past middle age and found partial or complete rotator cuff tears in 39% of those individuals. Therefore, some of the MRI findings in our case series, such as rotator cuff tears, may have been present prior to vaccination and became symptomatic as a result of vaccination-associated synovial inflammation.

(S. Atanasoff et al., *Shoulder Injury Related to Vaccine Administration (SIRVA)*, 28 VACCINE 8049 (2010) (Ex. 18, p. 3) (citations omitted).)

In effect, Dr. Srikumaran reasonably opines that if subacromial bursitis can be shown to generate pain in adjacent shoulder structures in previously asymptomatic patients, then its pain generating potential is established in all events. Neither logic, nor any evidence on this record, would support the notion that the same mechanism would not also apply if the pre-existing pathology at issue were already painful. Instead, respondent's argument to the contrary – that prior symptoms preclude a finding that the vaccination was a but-for cause and substantial contributing factor – speaks to actual causation under *Loving* prong five, rather than general causation under *Loving* prong four.

Regarding the specific pre-existing pathology at issue in this case, Dr. Srikumaran cited a study examining the clinical characteristics of conceded SIRVA claims. (Elisabeth M. Hesse et al., *Shoulder Injury Related to Vaccine Administration (SIRVA): Petitioner Claims to the National Vaccine Injury Compensation Program, 2010-2016*, 38 VACCINE 1076 (2020) (Ex. 28).) With regard to MRI findings, the study documented that 16.2% of SIRVAs had evidence of labral tears, 16.2% had acromioclavicular arthritis, and 6.5% had findings referable to the biceps tendon. (*Id.* at 5 tbl. 5.) Additionally, among surgical cases, 29.7% underwent rotator cuff repair in treatment of their SIRVA and 5.2% underwent a labral or SLAP repair. (*Id.* at 6 tbl. 6.) While this alone does not suffice to demonstrate that these findings were pain generators in these cases, *Pulsipher*, 2025 WL 1364203, at *12, Atanasoff et al. specifically hypothesize that biceps tendinitis and osteoarthritis may be among the conditions activated by bursitis. And, while many prior decisions have noted that SLAP tears are not caused by vaccination, it has also been observed that they can interact with SIRVA pathology to cause pain and suffering. *Garcia v. Sec'y of Health & Human Servs.*, No. 19-1529V, 2025 WL 1159016, at *8 (Fed. Cl. Spec. Mstr. Mar. 21, 2025) (explaining with regard to a SLAP tear that a petitioner's SIRVA "may have

compounded her pain and suffering connected with those comorbid conditions, [but] it did not cause them").

e. *Loving* prong five

The second *Althen* prong/fifth *Loving* prong requires proof of a logical sequence of cause and effect showing that the vaccine was the reason for the injury, usually supported by facts derived from a petitioner's medical records. *Althen*, 418 F.3d at 1278; *W.C.*, 704 F.3d at 1357; *Andreu*, 569 F.3d at 1375-77; *Capizzano v. Sec'y of Health & Human Servs.*, 440 F.3d 1317, 1326 (Fed. Cir. 2006); *Grant v. Sec'y of Health & Human Servs.*, 956 F.2d 1144, 1148 (Fed. Cir. 1992). However, medical records and/or statements of a treating physician do not *per se* bind the special master to adopt the conclusions of such an individual, even if they must be considered and carefully evaluated. *See* § 300aa-13(b)(1) (providing that "[a]ny such diagnosis, conclusion, judgment, test result, report, or summary shall not be binding on the special master or court"); *Snyder v. Sec'y of Health & Human Servs.*, 88 Fed. Cl. 706, 745 n.67 (2009) (stating that "there is nothing . . . that mandates that the testimony of a treating physician is sacrosanct – that it must be accepted in its entirety and cannot be rebutted"). The special master is required to consider all the relevant evidence of record, draw plausible inferences and articulate a rational basis for the decision. *Winkler*, 88 F.4th at 963 (citing *Hines*, 940 F.2d at 1528).

In this case, the evidence preponderates in favor of a finding that petitioner's treating physicians felt that his vaccinations likely exacerbated his underlying shoulder pathology. Initially, petitioner's primary care provider felt that "[i]t is possible that both vaccines were given too superiorly and caused a bursitis." (Ex. 9, p. 38.) Later, his orthopedist assessed bilateral bursitis (Ex. 5, p. 11) and explained that petitioner's bilateral shoulder pain was "in [the] setting of injection, on evaluation, differential includes, or perhaps is a combination of, subacromial bursitis, possible mild Parsonage-Turner syndrome, SI[R]VA" (*Id.* at 12). The orthopedist remarked that, based on history and examination, concern for any significant rotator cuff tear was low. (*Id.*) After petitioner later began reporting symptoms of biceps tendinitis, the orthopedist ultimately characterized petitioner's condition as representing "some combination of [SLAP] and biceps tendon symptoms, and subacromial bursitis, in the setting of a flare after vaccinations." (*Id.* at 2.) Petitioner also argues that these opinions are further supported by Dr. Srikumaran's opinion and theory. (ECF No. 47, p. 15.)

Respondent argues, however, that the facts of petitioner's own case do not align with Dr. Srikumaran's explanation for several reasons. (ECF No. 48, pp. 22-24.) The worsening of petitioner's symptoms did not occur over a time course consistent with Dr. Srikumaran's theory. (*Id.* at 22.) That is, onset of his pain was not immediate after vaccination, and he did not experience reduced range of motion until about five weeks post-vaccination. (*Id.* at 22-23.) Additionally, petitioner's right-side MRI showed only mild bursitis, which respondent's expert opined is inconsistent with SIRVA. (*Id.* at 23.) His later left-side MRI showed no evidence of bursitis. (*Id.* at n. 9.) Furthermore, the radiologist's interpretation included a note of undersurface osteophytes relative to

petitioner's observed acromioclavicular osteoarthritis, which "could" explain petitioner's impingement. (*Id.* at 23.) And, finally, "petitioner's applied theory and sequence of events is undermined by his well-documented shoulder pathology that was symptomatic prior to his vaccinations and would be expected to worsen with aging and activity." (*Id.*)

Respondent's argument with respect to timing is addressed under *Loving* prong six. Because it is not persuasive relative to *Loving* prong six, it is also not persuasive with respect to *Loving* prong five. Respondent's argument with respect to the expected course of petitioner's pre-existing pathology is also largely addressed by the analyses of the other *Loving* prongs. Specifically, as explained under *Loving* prong three, petitioner is not obligated to prove the expected outcome of his pre-vaccination condition or that his post-vaccination condition is worse than the expected outcome. *Sharpe*, 964 F.3d at 1082. Instead, he must only demonstrate that his condition was affected by his vaccination. *Locane*, 685 F.3d at 1381. As explained under *Loving* prong two, the evidence preponderates in favor of a finding that petitioner developed bursitis post-vaccination, that he experienced a significant change in his symptoms, and that this change in symptoms was due to his diagnosed bursitis. And, as discussed above relative to *Loving* prong five, both Dr. Srikumaran and petitioner's treating physicians opined that petitioner's bursitis was likely vaccine-related and a significant factor in his post-vaccination condition. Only Dr. Cagle's competing assessment of the bursitis is to the contrary; however, Dr. Cagle is not persuasive on this point.

In his report, Dr. Cagle cites his own review of the SIRVA literature for the proposition that the observation of "mild bursitis" on petitioner's right shoulder MRI "speak[s] strongly against a SIRVA. The SIRVA literature clearly has shown that the robust inflammatory response that occurs with an actual SIRVA caus[es] a significant fluid formation (bursitis)." (Ex. A, pp. 8-9 (citing Paul J. Cagle Jr., *Shoulder Injury After Vaccination: A Systematic Review*, 56 REVISTA BRASILIERA DE ORTOPEDIA 299 (2021) (Ex. A, Tab 1)).) However, after reviewing the paper cited by Dr. Cagle, I do not see where it ever characterizes the degree of bursitis that would be indicative of a SIRVA or SIRVA-like inflammatory process. (Cagle, *supra*, at Ex. A, Tab 1, p. 3.) While Dr. Cagle does discuss some prior papers that include specific reference to effusions, he also discusses papers that included only "minor effusions" and noted that Atanasoff et al. observed fluid collection in only 69% of SIRVA subjects. (*Id.*) Ultimately, Dr. Cagle indicated that "early MRI findings after a SIRVA event correlated with inflammatory changes such as increased fluid, buritis and tendinitis." (*Id.*) Respondent also notes the fact that petitioner's later left shoulder MRI showed no evidence of bursitis, seeming to suggest this should cause doubt on the finding of bursitis on the earlier right shoulder MRI. However, Dr. Cagle's paper suggests that "MRIs taken months later may not be an accurate method of assessment." (*Id.*) Significantly, Dr. Cagle contests the idea that petitioner had any significant bursitis as evidence of a "new onset of inflammation" that would support Dr. Srikumaran's assessment. (Ex. A, p. 9.) He does not specifically identify any other cause of petitioner's diagnosed bursitis.

Respondent's citation to the radiologist's impression regarding the presence of osteophytes is also not persuasive. The radiologist's impression that the osteophytes

"could contribute" to impingement is tentatively stated and lacks any clinical correlation. (Ex. 14, p. 5.) Instead, when petitioner first presented for orthopedic care, the orthopedist specifically diagnosed petitioner's condition as bursitis after reviewing the radiologist's MRI report. (Ex. 5, pp. 11-12.) And, although Dr. Cagle noted the fact of the radiologist's observation of osteophytes (Ex. A, p. 4), he did not endorse osteophytes as a cause of petitioner's impingement or as a cause of his condition (*Id.* at 6-9).

Accordingly, there is preponderant evidence of a logical sequence of cause and effect whereby petitioner's bilateral vaccinations did cause a significant aggravation of petitioner's pre-existing shoulder condition.

f. *Loving* prong six

The third *Althen* prong/sixth *Loving* prong requires establishing a "proximate temporal relationship" between the vaccination and the injury alleged. *Althen*, 418 F.3d at 1281; *W.C.*, 704 F.3d at 1357. That term has been equated to the phrase "medically-acceptable temporal relationship." *Althen*, 418 F.3d at 1281. A petitioner must offer "preponderant proof that the onset of symptoms occurred within a timeframe which, given the medical understanding of the disorder's etiology, it is medically acceptable to infer causation-in-fact." *de Bazan v. Sec'y of Health & Human Servs.*, 539 F.3d 1347, 1352 (Fed. Cir. 2008).

Petitioner asserts in his briefing that *Loving* prong six should be assessed in accordance with the 48-hour onset period otherwise recognized in the context of a Table SIRVA. (ECF No. 47, p. 16 (arguing onset occurred within 48 hours); ECF No. 49, p. 9 (requesting judicial notice of the Table SIRVA onset period). Respondent does not take a position relative to *Loving* prong six as to what would constitute a medically-acceptable temporal relationship as a general matter (ECF No. 48, pp. 24-25); however, as noted above, he argued with respect to *Loving* prong five that Dr. Srikumaran's theory calls for an "immediate injection-related pain" affecting the bursa (*Id.* at 22).

As discussed above, Dr. Srikumaran's theory of causation is that petitioner's vaccinations caused an inflammatory response affecting the bursa and resulting in bursitis. This bursitis, in addition to being painful itself, aggravated petitioner's pain and shoulder dysfunction related to his pre-existing shoulder pathology. And, as explained under *Loving* prong four, one study cited by Dr. Srikumaran in support of his theory, Hesse et al., found an elevated risk of bursitis occurring after vaccination. (Hesse et al., *supra*, at Ex. 29.) Pertinent to *Loving* prong six, the elevated period of risk was up to 3 days post-vaccination. (*Id.* at 4.)

In this case, when petitioner sought treatment for his shoulder pain, he repeatedly associated a new onset of acute pain with his vaccinations. (Ex. 2, pp. 14, 31; Ex. 5, p. 10.) However, respondent stresses that petitioner had a chiropractic appointment for, *inter alia*, his bilateral shoulder pain the day after the vaccinations at issue. (ECF No. 48, p. 22 (citing Ex. 12, p. 41).) As of that encounter, it was noted that

petitioner was doing "okay" and that he had no new symptoms. (*Id.*) This is the only reason respondent provides for doubting the initial onset of petitioner's shoulder pain. Importantly, however, this raises an issue only under respondent's assumption that shoulder pain must have occurred "immediately," which I do not find to be the relevant onset period. In that regard, petitioner's affidavit account indicated that the onset of his shoulder pain occurred "[w]ithin 2 days" of his vaccination, which remains consistent with Dr. Srikumaran's theory and the fact of the November 20, 2019 chiropractic assessment. (Ex. 10, p. 1.)

Accordingly, there is preponderant evidence that petitioner suffered onset of bilateral shoulder pain, consistent with a post-vaccination bursitis, within a timeframe from which a causal inference can be drawn.

g. Factor unrelated to vaccination

Once petitioner has met his own *prima facie* burden of proof, respondent may still demonstrate by a preponderance of evidence that the injury was nonetheless caused by a factor unrelated to the vaccination. § 300aa-13(a)(1)(B). In this case, respondent argued relative to both petitioner's Table SIRVA claim, as well as his significant aggravation claim, that petitioner's pre-existing shoulder pathology prevents him from meeting his own burden of proof. (ECF No. 47, pp. 17, 23.) These arguments are addressed by the preceding analyses. Respondent has not otherwise argued that he can affirmatively demonstrate under a shifted burden of proof that petitioner's pre-existing shoulder pathology explains his alleged injury. Nor has respondent presented any other argument with respect to any other factor unrelated to vaccination.

h. Severity requirement

In order to state a claim for a vaccine-related injury under the Vaccine Act, a vaccinee must have either:

> (i) 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 (ii) died from the administration of the vaccine, or (iii) suffered such illness, disability, injury, or condition from the vaccine which resulted in inpatient hospitalization and surgical intervention.

§ 300aa-11(c)(1)(D). In this case, only the first of these conditions is potentially met.

Neither "residual effects" nor "complication" is defined within the Vaccine Act itself. *See* § 300aa-33. However, in *Wright v. Secretary of Health & Human Services*, the Federal Circuit described these terms as follows: "'Residual' suggests something remaining or left behind from a vaccine injury. An effect that is 'residual' or 'left behind' is one that never goes away or that recurs after the original illness." 22 F.4th 999, 1005 (Fed. Cir. 2022) (internal citation omitted). A "complication," however, is a "morbid process or event occurring during a disease which is not an essential part of the

disease, although it may result from it." *Id.* at 1006 (quoting *Abbott v. Sec'y of Health & Human Servs.*, 27 Fed. Cl. 792, 794 (1993)).

> Read together, "residual effects" and "complications" appear to both refer to conditions within the patient, with "residual effects" focused on lingering signs, symptoms, or sequelae characteristic of the course of the original vaccine injury, and "complications" encompassing conditions that may not be "essential part[s] of the disease" or may be outside the ordinary progression of the vaccine injury.

Id. (alteration in original).

Respondent argues that petitioner sought regular and persistent treatment of his shoulder condition for only five and a half months post-vaccination. (ECF No. 48, p. 12.) Thereafter, the medical records reflect a 13-month gap in treatment for which respondent does not agree that the Covid-19 pandemic offers a reasonable explanation. And, although petitioner later returned to care, respondent argues that he

> has not established that the recurrence of his bilateral shoulder pain on June 14, 2021 was caused by his alleged SIRVA; rather, petitioner's recurrence of bilateral shoulder pain is consistent with his thirty-year history of waxing and waning bilateral shoulder symptomology and extensive shoulder pathology that includes numerous findings of degeneration as well as bilateral SLAP tears.

(*Id.*)

In reply, petitioner argues that, in light of pandemic-related restrictions and the availability of a home exercise program from his orthopedist, it was reasonable for petitioner to forgo further in-person follow up. (ECF No. 49, pp. 1-2.) Moreover, at the time of his May 4, 2020 encounter, he was just two-weeks shy of the six month mark and, at that time, he was administered a steroid injection into his shoulder and his orthopedist advised that he may still be a candidate for shoulder surgery. (*Id.* at 2 (citing Ex. 5, p. 4).) Thus, petitioner argues that it is not reasonable to assume that petitioner's condition would have completely resolved within two weeks. (*Id.*)

In *Kirby v. Secretary of Health & Human Services*, the Federal Circuit confirmed that it is not an error for a special master to find the severity requirement met where that finding is based on a collection of "plausible evidence." 997 F.3d 1378, 1381 (Fed. Cir. 2021). In that case, petitioner's medical records reflected active treatment of her condition for only a few months before she was released as having reached maximum medical improvement, though not entirely symptom free. *Id.* at 1380. Thereafter, the medical records were silent as to her alleged residual effects for the remaining duration of the six-month post-vaccination period. *Id.* However, petitioner testified that she continued a home exercise plan for more than a year. *Id.* at 1381. Her testimony was corroborated by documentation in the form of her retained home exercise sheet, a more

remote return visit where the relevant symptoms were again reported, and an expert opinion confirming her reported symptoms were consistent with her injury. *Id.* The Federal Circuit concluded that where the medical records are silent, rather than contradictory, it was not error for the special master to credit the petitioner's corroborated testimony as evidence satisfying the six-month severity requirement. *Id.* at 1383-84.

Here, similar to the *Kirby* petitioner, this petitioner averred that he remained symptomatic after his formal treatment ended in May of 2020 and that he continued to follow instructions for at home rehabilitation exercises. (Ex. 10, p. 2.) In that regard, the medical records confirm that petitioner was taught a home exercise program as part of his physical therapy. (Ex. 3, p. 8.) And, whereas the *Kirby* petitioner's absence from continued treatment was explained by having reached maximum medical improvement, this petitioner's absence from treatment is reasonably explained by the Covid-19 pandemic. *Accord Tackett v. Sec'y of Health & Human Servs*., No. 20-1705V, 2023 WL 6995391, at *9 (Fed. Cl. Spec. Mstr. Sep. 25, 2023) (finding the severity requirement met where treatment stopped after five months and placing "significant weight on the disruptions caused by the Covid-19 pandemic as the reason petitioner stopped attending physical therapy when he did"). Furthermore, the nature of petitioner's condition at the time of his May 4, 2020 encounter is significant. That is, the medical records confirm that, as of five-and-a-half months post-vaccination, petitioner was still symptomatic by physical exam, still assessed as having both bursitis and tendinitis at that time, received treatment as of that date, and was advised that surgery remained a potential next step. (Ex. 5, pp. 3-4.) Nothing in the medical record suggests that petitioner's condition was resolved at that time or expected to resolve promptly. Accordingly, considering all of this, I find that petitioner has satisfied the severity requirement by preponderant evidence, albeit just barely, regardless of whether his later presentation in June of 2021 and later represents a continuation of the injury.

On the current record, I am not persuaded that petitioner has demonstrated that his current condition, or the condition for which he sought treatment after June of 2021, are sequela of his vaccine-related injury.[8] Whereas petitioner's statements reflect that he himself views his current condition as a continuation of his injury, there is no medical opinion available to support that belief. Contrary to petitioner's statement that his shoulder pain never resolved (Ex. 38), petitioner's June 14, 2021 medical record indicates that, at some time during his 13-month gap in treatment, his pain and become "intermittent" (Ex. 7, p. 9). Moreover, whereas petitioner's significant aggravation of his shoulder pathology was in part evidenced by the fact that he went from merely experiencing pain to experiencing debilitation, his later medical records reflect that he check-marked in July of 2021 that he is able to work or play sports (*Id.* at 6) and his subjective pain rating ranged from 3-6 out of 10, which is not dissimilar to his pre-vaccination rating of 3-5 out of 10 (*Compare id.*, *with* Ex. 12, p. 6). Further still, petitioner's June 14, 2021, and July 12, 2021, encounter records indicate that his current condition was sequela to working out recently. (Ex. 7, p. 9 ("Patient reports he

[8] Because entitlement does not turn on this issue for the reasons discussed above, this may be further addressed in the damages phase of litigation.

has been working his muscles recently."); *id.* at 1 ("Patient had previously stated soreness in the biceps after working out . . . .").) And, whereas petitioner's orthopedist had previously felt the concern for a significant rotator cuff tear was low (Ex. 5, p. 12), he felt petitioner's 2021 MRI was concerning for a near full-thickness rotator cuff tear of uncertain magnitude (Ex. 7, pp. 2-3). In contrast to his 2019 and 2020 medical records, none of the updated orthopedic records discuss petitioner's 2021 condition as a continuation of the "flare" he had previously experienced. (Ex. 7.) Although Dr. Srikumaran's report suggests that petitioner's "current condition is well documented in the medical records" (Ex. 16, p. 11), he did not meaningfully discuss these issues or explicitly opine that the findings from 2021 represent an ongoing aggravation of petitioner's condition.

V. Conclusion

After weighing the evidence, and considering the record as a whole, I find that petitioner has preponderantly demonstrated that he is entitled to compensation for a significant aggravation of bilateral shoulder pathology caused-in-fact by his November 19, 2019 vaccinations. A separate damages order will be issued

IT IS SO ORDERED.

s/Daniel T. Horner
Daniel T. Horner
Special Master