

## Disclaimer

The following report(s) provides findings from an FDA-initiated query using Sentinel. While Sentinel queries may be undertaken to assess potential medical product safety risks, they may also be initiated for various other reasons. Some examples include determining a rate or count of an identified health outcome of interest, examining medical product use, exploring the feasibility of future, more detailed analyses within Sentinel, and seeking to better understand Sentinel capabilities.

Data obtained through Sentinel are intended to complement other types of evidence such as preclinical studies, clinical trials, postmarket studies, and adverse event reports, all of which are used by FDA to inform regulatory decisions regarding medical product safety. The information contained in this report is provided as part of FDA's commitment to place knowledge acquired from Sentinel in the public domain as soon as possible. Any public health actions taken by FDA regarding products involved in Sentinel queries will continue to be communicated through existing channels.

FDA wants to emphasize that the fact that FDA has initiated a query involving a medical product and is reporting findings related to that query does not mean that FDA is suggesting health care practitioners should change their prescribing practices for the medical product or that patients taking the medical product should stop using it. Patients who have questions about the use of an identified medical product should contact their health care practitioners.

The following report contains a description of the request, request specifications, and results from the modular program run(s).

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## Overview

**Date Run:** March 6, 2018

**Request Description:** The purpose of this report was to compare the frequency of diagnoses for myositis using International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes. Two separate ICD-9-CM code definitions were used to define myositis. ICD-10-CM code definitions were determined by mapping from ICD-9-CM code definitions using the Centers for Medicare and Medicaid Services (CMS) General Equivalence Mappings (GEMs). Forward-backward mapping (FBM) was used to map ICD-9-CM to ICD-10-CM codes.<sup>1</sup>

**Sentinel Modular Program Tool Used:** Cohort Identification and Descriptive Analysis tool, version 5.2.1

**Data Source:** This request was run against a 100% sample from the Truven Health MarketScan® Commercial Claims and Encounters Database and Medicare Supplemental Database, which included 121 million members. Data from October 1, 2010 to September 30, 2016 were included in this report. The report includes three separate time periods: 1) October 1, 2010 to September 30, 2016 2) April 1, 2015 to September 30, 2015 and 3) April 1, 2016 to September 30, 2016. See Appendix A for a the dates of available data used in this report.

**Study Design:** We examined the incidence and prevalence of myositis across the ICD-9-CM era (October 2010 - September 2015) and ICD-10 era (October 2015 - September 2016) in the US. Incidence was additionally evaluated from April 2015 - September 2015 and April 2016 to September 2016. See Appendices B and C for specific codes.

**Cohort Eligibility Criteria:** Members included in the cohorts were required to be enrolled in plans with medical and drug coverage. Individuals of all ages were included in this report.

**Incident Cohorts:** Members included in the incident cohorts were required to be continuously enrolled in health plans with medical and drug coverage for at least 183 days prior to myositis during which gaps in coverage of up to 45 days were allowed. Incident myositis was defined as no previous myositis in the 183 days preceding the index date with respect to ICD-9-CM and ICD-10-CM codes.

**Prevalent Cohorts:** There was no enrollment requirement for members in the prevalent cohort. All qualifying diagnosis codes that occurred between October 1, 2010 and September 30, 2016 were included.

**Limitations:** Algorithms used to define outcomes are imperfect; thus, it is possible that there may be misclassification. Therefore, data should be interpreted with this limitation in mind. The MarketScan claims databases are based on a large convenience sample. Because the sample is not random, it may contain biases or fail to generalize well to other populations. Data come mostly from large employers; medium and small firms may be underrepresented.<sup>2</sup>

**Please refer to Appendix D for detailed specifications of parameters used in the analyses for this request.**

**Notes:** Please contact the Sentinel Operations Center Query Fulfillment Team (qf@sentinelssystem.org) for questions and to provide comments/suggestions for future enhancements to this document.

<sup>1</sup>Fung, K. W., et al. (2016). "Preparing for the ICD-10-CM Transition: Automated Methods for Translating ICD Codes in Clinical Phenotype Definitions." EGEMS (Wash DC) 4(1): 1211.

<sup>2</sup>Hansen, L. (2017). [online] Truvenhealth.com. Available at: <https://truvenhealth.com/Portals/0/Assets/2017-MarketScan-Databases-Life-Sciences-Researchers-WP.pdf> [Accessed 14 Jun. 2018].

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## Glossary of Terms for Analyses Using Cohort Identification and Descriptive Analysis (CIDA) Tool\*

**Amount Supplied** - number of units (pills, tablets, vials) dispensed. Net amount per NDC per dispensing.

**Blackout Period** - number of days at the beginning of a treatment episode that events are to be ignored. If an event occurs during the blackout period, the episode is excluded.

**Ambulatory Visit (AV)** - includes visits at outpatient clinics, same-day surgeries, urgent care visits, and other same-day ambulatory hospital encounters, but excludes emergency department encounters.

**Emergency Department (ED)** - includes ED encounters that become inpatient stays (in which case inpatient stays would be a separate encounter). Excludes urgent care visits.

**Inpatient Hospital Stay (IP)** - includes all inpatient stays, same-day hospital discharges, hospital transfers, and acute hospital care where the discharge is after the admission date.

**Non-Acute Institutional Stay (IS)** - includes hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays.

**Other Ambulatory Visit (OA)** - includes other non overnight AV encounters such as hospice visits, home health visits, skilled nursing facility visits, other non-hospital visits, as well as telemedicine, telephone and email consultations.

**Cohort Definition (drug/exposure)** - indicates how the cohort will be defined: 01: Cohort includes only the first valid treatment episode during the query period; 02: Cohort includes all valid treatment episodes during the query period; 03: Cohort includes all valid treatment

**Days Supplied** - number of days supplied for all dispensings in qualifying treatment episodes.

**Eligible Members** - number of members eligible for an incident treatment episode (defined by the drug/exposure and event washout periods) with drug and medical coverage during the query period.

**Enrollment Gap** - number of days allowed between two consecutive enrollment periods without breaking a "continuously enrolled"

**Episodes** - treatment episodes; length of episode is determined by days supplied in one dispensing or consecutive dispensings bridged by

**Episode Gap** - number of days allowed between two (or more) consecutive exposures (dispensings/procedures) to be considered the same

**Event Deduplication** - specifies how events are counted by the Modular Program (MP) algorithm: 0: Counts all occurrences of a health outcome of interest (HOI) during an exposure episode; 1: de-duplicates occurrences of the same HOI code and code type on the same day; 2: de-duplicates occurrences of the same HOI group on the same day (e.g., de-duplicates at the group level).

**Exposure Episode Length** - number of days after exposure initiation that is considered "exposed time."

**Exposure Extension Period** - number of days post treatment period in which the outcomes/events are counted for a treatment episode. Extensions are added after any episode gaps have been bridged.

**Lookback Period** - number of days wherein a member is required to have evidence of pre-existing condition (diagnosis/procedure/drug

**Maximum Episode Duration** - truncates exposure episodes after a requester-specified number of exposed days. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

**Member-Years** - sum of all days of enrollment with medical and drug coverage in the query period preceded by an exposure washout

**Minimum Days Supplied** - specifies a minimum number of days in length of the days supplied for the episode to be considered.

**Minimum Episode Duration** - specifies a minimum number of days in length of the episode for it to be considered. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

**Monitoring Period** - used to define time periods of interest for both sequential analysis and simple cohort characterization requests.

**Principal Diagnosis (PDX)** - diagnosis or condition established to be chiefly responsible for admission of the patient to the hospital. 'P' = principal diagnosis, 'S' = secondary diagnosis, 'X' = unspecified diagnosis, '.' = blank. Along with the Care Setting values, forms the

**Query Period** - period in which the modular program looks for exposures and outcomes of interest.

**Treatment Episode Truncation Indicator** - indicates whether the exposure episode will be truncated at the occurrence of a requester-

**Washout Period (drug/exposure)** - number of days a user is required to have no evidence of prior exposure (drug dispensing/procedure) and continuous drug and medical coverage prior to an incident treatment episode.

**Washout Period (event/outcome)** - number of days a user is required to have no evidence of a prior event (procedure/diagnosis) and continuous drug and medical coverage prior to an incident treatment episode.

**Years at Risk** - number of days supplied plus any episode gaps and exposure extension periods all divided by 365.25.

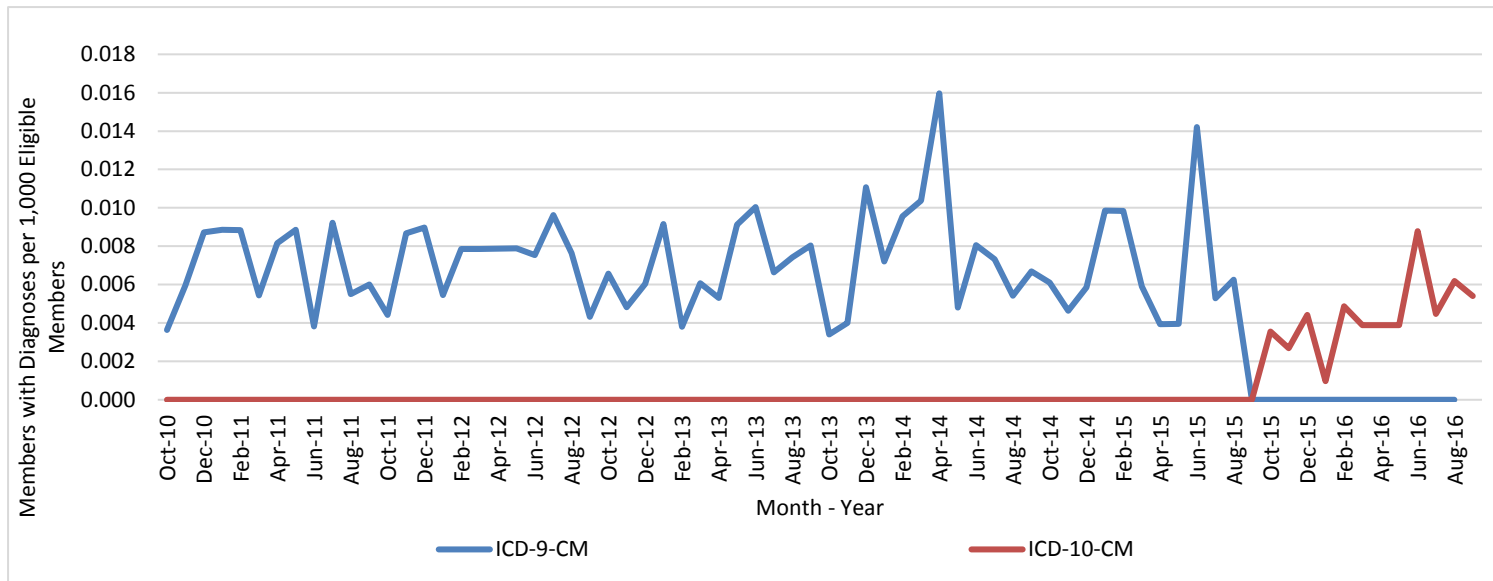
\*all terms may not be used in this report

**Table 1. Comparison of Incident Myositis Diagnoses\* in the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Eras (April 1, 2015 - September 30, 2015 and April 1, 2016 - September 30, 2016)**

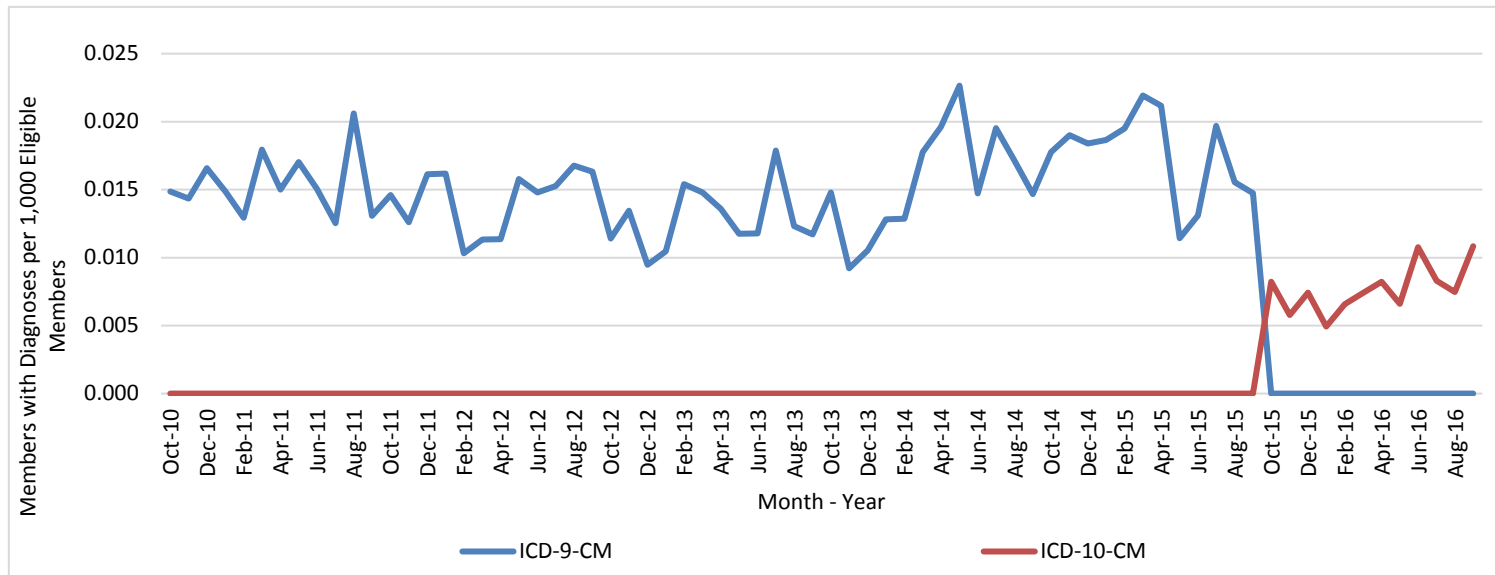
|  | Members with<br>Diagnosis | Eligible Members | Members with<br>Diagnosis per 1000<br>Eligible Members |
|--|---------------------------|------------------|--|
| <b>Myositis Definition 1</b>                         |                           |                  |  |
| <b>ICD-9-CM: April 1, 2015 - September 30, 2015</b>  |                           |                  |  |
|  | 43                        | 1,198,095        | 0.04   |
| <b>ICD-10-CM: April 1, 2016 - September 30, 2016</b> |                           |                  |  |
|  | 35                        | 1,185,819        | 0.03   |
| <b>Myositis Definition 2</b>                         |                           |                  |  |
| <b>ICD-9-CM: April 1, 2015 - September 30, 2015</b>  |                           |                  |  |
|  | 15,314                    | 1,186,827        | 12.90  |
| <b>ICD-10-CM: April 1, 2016 - September 30, 2016</b> |                           |                  |  |
|  | 15,082                    | 1,175,479        | 12.83  |

\*Incidence defined by 183 day washout

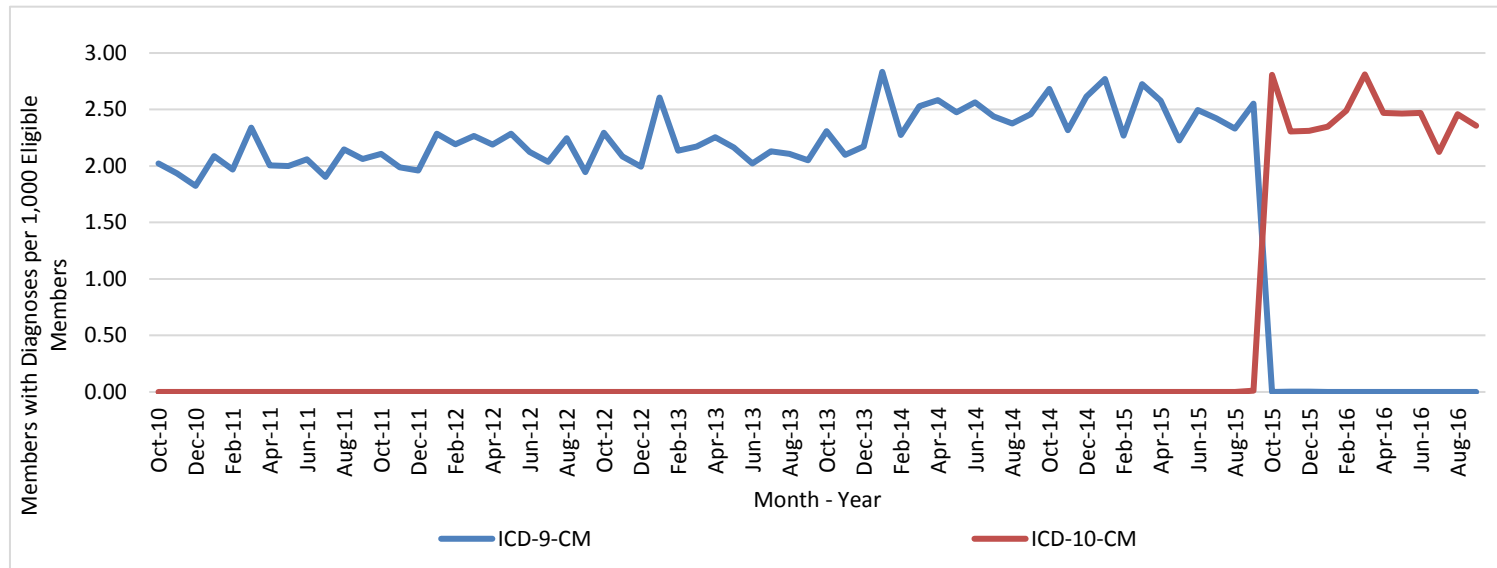
**Figure 1. Incidence of Myositis Diagnoses (Definition 01) per 1,000 Eligible Members from October 2010 - August 2016, by Code Type, 183-Day Washout**



**Figure 2. Prevalence of Myositis Diagnoses (Definition 01) per 1,000 Eligible Members from October 2010 - August 2016 by Code Type, 0-Day Washout**

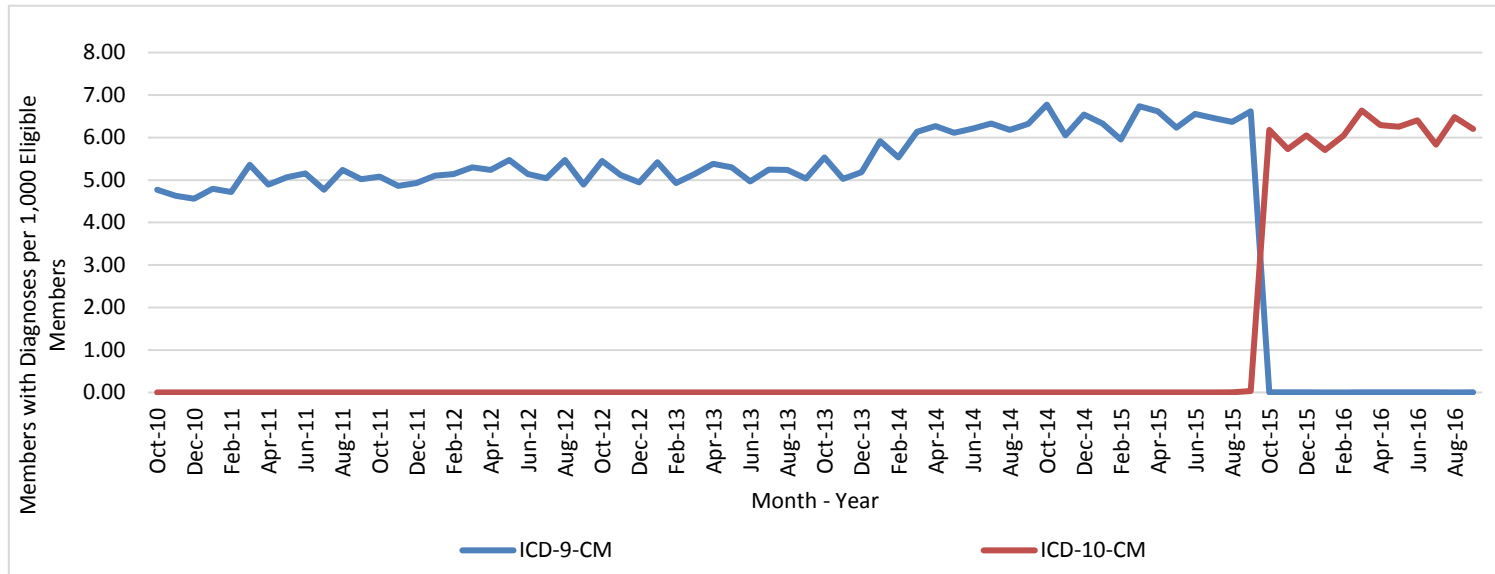


**Figure 3. Incidence of Myositis Diagnoses (Definition 02) per 1,000 Eligible Members from October 2010 - August 2016 by Code Type, 183-Day Washout**





**Figure 4. Prevalence of Myositis Diagnoses (Definition 02) per 1,000 Eligible Members from October 2010 - August 2016 by Code Type, 0-Day Washout**



# Modular Program Report



## Appendix A. Dates Available for Truven Health MarketScan Commercial and Medicare Supplemental Databases

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| Databases  | Start Date | End Date  |
|--|------------|-----------|
| MarketScan Commercial and Medicare Supplemental Databases <sup>1</sup> | 1/1/2010   | 9/30/2016 |

<sup>1</sup> The MarketScan Databases includes a sample of 121 million employees, dependents, and retirees in the United States with primary or Medicare supplemental coverage through privately insured fee-for-service, point-of-service, or capitated health plans. The MarketScan claims databases are based on a large convenience sample. Because the sample is not random, it may contain biases or fail to generalize well to other populations. Data come mostly from large employers; medium and small firms may be underrepresented. For more information on the MarketScan Databases, please review the White Paper here: <https://truvenhealth.com/Portals/0/Assets/2017-MarketScan-Databases-Life-Sciences-Researchers-WP.pdf>.

**Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and ICD-10-CM Codes Used to Define Myositis (Definition 01)**

| Code             | Description                                       | Code Type |
|------------------|---|-----------|
| <b>ICD-9-CM</b>  |   |           |
| 376.12           | Orbital myositis                                  | ICD-9-CM  |
| <b>ICD-10-CM</b> |   |           |
| H05.12           | Orbital myositis                                  | ICD-10-CM |
| H05.121          | Orbital myositis, right orbit                     | ICD-10-CM |
| H05.122          | Orbital myositis, left orbit                      | ICD-10-CM |
| H05.123          | Orbital myositis, bilateral                       | ICD-10-CM |
| H05.129          | Orbital myositis, unspecified orbit               | ICD-10-CM |
| M60              | Myositis  | ICD-10-CM |
| M60.1            | Interstitial myositis                             | ICD-10-CM |
| M60.10           | Interstitial myositis of unspecified site         | ICD-10-CM |
| M60.11           | Interstitial myositis, shoulder                   | ICD-10-CM |
| M60.111          | Interstitial myositis, right shoulder             | ICD-10-CM |
| M60.112          | Interstitial myositis, left shoulder              | ICD-10-CM |
| M60.119          | Interstitial myositis, unspecified shoulder       | ICD-10-CM |
| M60.12           | Interstitial myositis, upper arm                  | ICD-10-CM |
| M60.121          | Interstitial myositis, right upper arm            | ICD-10-CM |
| M60.122          | Interstitial myositis, left upper arm             | ICD-10-CM |
| M60.129          | Interstitial myositis, unspecified upper arm      | ICD-10-CM |
| M60.13           | Interstitial myositis, forearm                    | ICD-10-CM |
| M60.131          | Interstitial myositis, right forearm              | ICD-10-CM |
| M60.132          | Interstitial myositis, left forearm               | ICD-10-CM |
| M60.139          | Interstitial myositis, unspecified forearm        | ICD-10-CM |
| M60.14           | Interstitial myositis, hand                       | ICD-10-CM |
| M60.141          | Interstitial myositis, right hand                 | ICD-10-CM |
| M60.142          | Interstitial myositis, left hand                  | ICD-10-CM |
| M60.149          | Interstitial myositis, unspecified hand           | ICD-10-CM |
| M60.15           | Interstitial myositis, thigh                      | ICD-10-CM |
| M60.151          | Interstitial myositis, right thigh                | ICD-10-CM |
| M60.152          | Interstitial myositis, left thigh                 | ICD-10-CM |
| M60.159          | Interstitial myositis, unspecified thigh          | ICD-10-CM |
| M60.16           | Interstitial myositis, lower leg                  | ICD-10-CM |
| M60.161          | Interstitial myositis, right lower leg            | ICD-10-CM |
| M60.162          | Interstitial myositis, left lower leg             | ICD-10-CM |
| M60.169          | Interstitial myositis, unspecified lower leg      | ICD-10-CM |
| M60.17           | Interstitial myositis, ankle and foot             | ICD-10-CM |
| M60.171          | Interstitial myositis, right ankle and foot       | ICD-10-CM |
| M60.172          | Interstitial myositis, left ankle and foot        | ICD-10-CM |
| M60.179          | Interstitial myositis, unspecified ankle and foot | ICD-10-CM |
| M60.18           | Interstitial myositis, other site                 | ICD-10-CM |
| M60.19           | Interstitial myositis, multiple sites             | ICD-10-CM |
| M60.8            | Other myositis                                    | ICD-10-CM |
| M60.80           | Other myositis, unspecified site                  | ICD-10-CM |
| M60.81           | Other myositis shoulder                           | ICD-10-CM |
| M60.811          | Other myositis, right shoulder                    | ICD-10-CM |

**Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and ICD-10-CM Codes Used to Define Myositis (Definition 01)**

| <b>Code</b> | <b>Description</b>                         | <b>Code Type</b> |
|-------------|--|------------------|
| M60.812     | Other myositis, left shoulder              | ICD-10-CM        |
| M60.819     | Other myositis, unspecified shoulder       | ICD-10-CM        |
| M60.82      | Other myositis, upper arm                  | ICD-10-CM        |
| M60.821     | Other myositis, right upper arm            | ICD-10-CM        |
| M60.822     | Other myositis, left upper arm             | ICD-10-CM        |
| M60.829     | Other myositis, unspecified upper arm      | ICD-10-CM        |
| M60.83      | Other myositis, forearm                    | ICD-10-CM        |
| M60.831     | Other myositis, right forearm              | ICD-10-CM        |
| M60.832     | Other myositis, left forearm               | ICD-10-CM        |
| M60.839     | Other myositis, unspecified forearm        | ICD-10-CM        |
| M60.84      | Other myositis, hand                       | ICD-10-CM        |
| M60.841     | Other myositis, right hand                 | ICD-10-CM        |
| M60.842     | Other myositis, left hand                  | ICD-10-CM        |
| M60.849     | Other myositis, unspecified hand           | ICD-10-CM        |
| M60.85      | Other myositis, thigh                      | ICD-10-CM        |
| M60.851     | Other myositis, right thigh                | ICD-10-CM        |
| M60.852     | Other myositis, left thigh                 | ICD-10-CM        |
| M60.859     | Other myositis, unspecified thigh          | ICD-10-CM        |
| M60.86      | Other myositis, lower leg                  | ICD-10-CM        |
| M60.861     | Other myositis, right lower leg            | ICD-10-CM        |
| M60.862     | Other myositis, left lower leg             | ICD-10-CM        |
| M60.869     | Other myositis, unspecified lower leg      | ICD-10-CM        |
| M60.87      | Other myositis, ankle and foot             | ICD-10-CM        |
| M60.871     | Other myositis, right ankle and foot       | ICD-10-CM        |
| M60.872     | Other myositis, left ankle and foot        | ICD-10-CM        |
| M60.879     | Other myositis, unspecified ankle and foot | ICD-10-CM        |
| M60.88      | Other myositis, other site                 | ICD-10-CM        |
| M60.89      | Other myositis, multiple sites             | ICD-10-CM        |
| M60.9       | Myositis, unspecified                      | ICD-10-CM        |

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and ICD-10-CM Codes Used to Define Myositis (Definition 02)**

| Code             | Description  | Code Type |
|------------------|--|-----------|
| <b>ICD-9-CM</b>  |  |           |
| 359.71           | Inclusion body myositis  | ICD-9-CM  |
| 710.4            | Polymyositis   | ICD-9-CM  |
| 359.4            | Toxic myopathy   | ICD-9-CM  |
| 359.6            | Symptomatic inflammatory myopathy in diseases classified elsewhere | ICD-9-CM  |
| 359.79           | Other inflammatory and immune myopathies, NEC                      | ICD-9-CM  |
| 359.89           | Other myopathies   | ICD-9-CM  |
| 359.9            | Myopathy unspecified   | ICD-9-CM  |
| 729.1            | Unspecified myalgia and myositis                                   | ICD-9-CM  |
| 425              | Cardiomyopathy   | ICD-9-CM  |
| 425.4            | Other primary cardiomyopathies                                     | ICD-9-CM  |
| 425.8            | Cardiomyopathy in other diseases classified elsewhere              | ICD-9-CM  |
| 425.9            | Secondary cardiomyopathy unspecified                               | ICD-9-CM  |
| <b>ICD-10-CM</b> |  |           |
| G72.41           | Inclusion body myositis [IBM]                                      | ICD-10-CM |
| M33              | Dermatopolymyositis  | ICD-10-CM |
| M33.0            | Juvenile dermatomyositis   | ICD-10-CM |
| M33.00           | Juvenile dermatomyositis, organ involvement unspecified            | ICD-10-CM |
| M33.01           | Juvenile dermatomyositis with respiratory involvement              | ICD-10-CM |
| M33.02           | Juvenile dermatomyositis with myopathy                             | ICD-10-CM |
| M33.03           | Juvenile dermatomyositis without myopathy                          | ICD-10-CM |
| M33.09           | Juvenile dermatomyositis with other organ involvement              | ICD-10-CM |
| M33.1            | Other dermatomyositis  | ICD-10-CM |
| M33.10           | Other dermatomyositis, organ involvement unspecified               | ICD-10-CM |
| M33.11           | Other dermatomyositis with respiratory involvement                 | ICD-10-CM |
| M33.12           | Other dermatomyositis with myopathy                                | ICD-10-CM |
| M33.13           | Other dermatomyositis without myopathy                             | ICD-10-CM |
| M33.19           | Other dermatomyositis with other organ involvement                 | ICD-10-CM |
| M33.2            | Polymyositis   | ICD-10-CM |
| M33.20           | Polymyositis, organ involvement unspecified                        | ICD-10-CM |
| M33.21           | Polymyositis with respiratory involvement                          | ICD-10-CM |
| M33.22           | Polymyositis with myopathy   | ICD-10-CM |
| M33.29           | Polymyositis with other organ involvement                          | ICD-10-CM |
| M33.9            | Dermatopolymyositis, unspecified                                   | ICD-10-CM |
| M33.90           | Dermatopolymyositis, unspecified, organ involvement unspecified    | ICD-10-CM |
| M33.91           | Dermatopolymyositis, unspecified with respiratory involvement      | ICD-10-CM |
| M33.92           | Dermatopolymyositis, unspecified with myopathy                     | ICD-10-CM |
| M33.93           | Dermatopolymyositis, unspecified without myopathy                  | ICD-10-CM |
| M33.99           | Dermatopolymyositis, unspecified with other organ involvement      | ICD-10-CM |
| G72              | Other and unspecified myopathies                                   | ICD-10-CM |
| G72.0            | Drug-induced myopathy  | ICD-10-CM |
| G72.2            | Myopathy due to other toxic agents                                 | ICD-10-CM |
| G72.4            | Inflammatory and immune myopathies, not elsewhere classified       | ICD-10-CM |
| G72.49           | Other inflammatory and immune myopathies, not elsewhere classified | ICD-10-CM |
| G72.8            | Other specified myopathies   | ICD-10-CM |

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and ICD-10-CM Codes Used to Define Myositis (Definition 02)**

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| <b>Code</b> | <b>Description</b>                              | <b>Code Type</b> |
|-------------|---|------------------|
| G72.89      | Other specified myopathies                      | ICD-10-CM        |
| G72.9       | Myopathy, unspecified                           | ICD-10-CM        |
| G73.7       | Myopathy in diseases classified elsewhere       | ICD-10-CM        |
| M36.0       | Dermato(poly)myositis in neoplastic disease     | ICD-10-CM        |
| I42.7       | Cardiomyopathy due to drug and external agent   | ICD-10-CM        |
| I42.9       | Cardiomyopathy, unspecified                     | ICD-10-CM        |
| I43         | Cardiomyopathy in diseases classified elsewhere | ICD-10-CM        |
| I42         | Cardiomyopathy                                  | ICD-10-CM        |
| M79.1       | Myalgia   | ICD-10-CM        |
| M79.7       | Fibromyalgia                                    | ICD-10-CM        |
| I42.5       | Other restrictive cardiomyopathy                | ICD-10-CM        |
| I42.8       | Other cardiomyopathies                          | ICD-10-CM        |

**Appendix D. Specifications for Parameters for this Request**

Sentinel's Cohort Identification and Descriptive Analysis (CIDA) tool was used to compare the frequency of diagnoses for a selection of health outcomes using International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) versus ICD-10-CM codes.

**Enrollment Gap:** 45 days  
**Enrollment Requirement:** 183 days for incidence scenarios; 0 days for prevalence scenarios  
**Coverage Requirement:** Medical and drug coverage

|           | <b>Query Start Date</b> | <b>Query End Date</b> | <b>Event</b> | <b>Event Code Type</b> | <b>Incidence Code Type</b> | <b>Washout (days)</b> | <b>Cohort Definition</b> | <b>Care Setting</b> |
|-----------|-------------------------|-----------------------|--------------|------------------------|----------------------------|-----------------------|--------------------------|---------------------|
| <b>1</b>  | 10/1/2010               | 9/30/2016             | Myositis 1   | ICD-9                  | ICD-9 or ICD-10            | 183                   | 02                       | Any                 |
| <b>2</b>  | 10/1/2010               | 9/30/2016             | Myositis 1   | ICD-10                 | ICD-9 or ICD-10            | 183                   | 02                       | Any                 |
| <b>3</b>  | 10/1/2010               | 9/30/2016             | Myositis 1   | ICD-9                  | N/A                        | 0                     | 02                       | Any                 |
| <b>4</b>  | 10/1/2010               | 9/30/2016             | Myositis 1   | ICD-10                 | N/A                        | 0                     | 02                       | Any                 |
| <b>5</b>  | 10/1/2010               | 9/30/2016             | Myositis 2   | ICD-9                  | ICD-9 or ICD-10            | 183                   | 02                       | Any                 |
| <b>6</b>  | 10/1/2010               | 9/30/2016             | Myositis 2   | ICD-10                 | ICD-9 or ICD-10            | 183                   | 02                       | Any                 |
| <b>7</b>  | 10/1/2010               | 9/30/2016             | Myositis 2   | ICD-9                  | N/A                        | 0                     | 02                       | Any                 |
| <b>8</b>  | 10/1/2010               | 9/30/2016             | Myositis 2   | ICD-10                 | N/A                        | 0                     | 02                       | Any                 |
| <b>9</b>  | 4/1/2015                | 9/30/2015             | Myositis 1   | ICD-9                  | ICD-9                      | 183                   | 01                       | Any                 |
| <b>10</b> | 4/1/2016                | 9/30/2016             | Myositis 1   | ICD-10                 | ICD-10                     | 183                   | 01                       | Any                 |
| <b>11</b> | 4/1/2015                | 9/30/2015             | Myositis 2   | ICD-9                  | ICD-9                      | 183                   | 01                       | Any                 |
| <b>12</b> | 4/1/2016                | 9/30/2016             | Myositis 2   | ICD-10                 | ICD-10                     | 183                   | 01                       | Any                 |

ICD-9-CM and ICD-10-CM are provided by Optum360. ICD-10-CM codes were mapped using forward-backward mapping from ICD-9-CM codes using the Centers for Medicare and Medicaid Services General Equivalence Mappings (Fung et al, eGEMs 2016;4(1):Article 4.)