RWD22

A Novel Patient-Centered Real-World Evidence Study Designed to Better Understand Chronic Inflammatory Demyelinating Polyneuropathy Using Longitudinal Data in the United States

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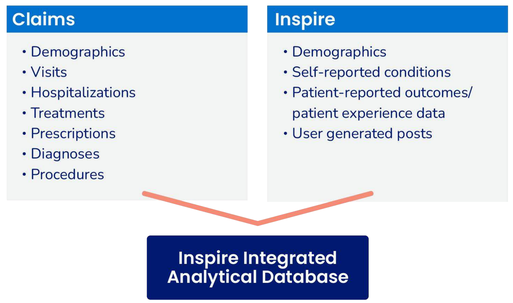
Introduction

Chronic inflammatory demyelinating polyradiculoneuropathy (CIDP) is a rare autoimmune inflammatory disorder of the peripheral nervous system. Evidence is limited with the real-world patient population. This study aims to better understand patient demographics, diagnostic journey, healthcare resource utilization (HCRU) and treatment patterns of patients in the Inspire CIDP cohort using primarily medical claims and user-generated contents.

Methods

Figure 1: Inspire Integrated Analytical Database



Members in the Inspire Integrated Analytical Database with ≥ 1 diagnosis of CIDP (ICD-10 G61.81) from 01/01/2015 to 11/30/2021 were included. Index date was defined as the date of first claim with a CIDP diagnosis. Baseline patient characteristics, and all-cause and CIDP-related HCRU were evaluated. CIDP-related procedures, occupational therapy (OT), and physical therapy (PT) were identified through CPT/HCPCS codes. Medications were identified through non-proprietary names and NDC codes. Analysis was performed using descriptive statistics and conducted in R.

Results

Table 1: Patient Characteristics

	Total (N = 392)
Age at CIDP diagnosis (dx), Median [Range]	55 [20, 87]
Age at CIDP dx, categorical	
18 - 34	40 (10%)
35 - 44	58 (15%)
45 - 54	92 (23%)
55 - 65	116 (30%)
65+	86 (22%)
Gender	
Female	263 (67%)
Male	129 (33%)
Follow-up time from CIDP dx date (months), Median [Range]	49.2 [0.3, 88.5]
Related diagnoses prior to CIDP dx	
Polyneuropathy, unspecified	139 (35%)
Multifocal motor neuropathy	3 (0.8%)
Ehlers Danlos Syndrome	14 (3.6%)
Charcot Marie Tooth Disease	9 (2.3%)

Figure 2: Geographic location of Inspire members with CIDP

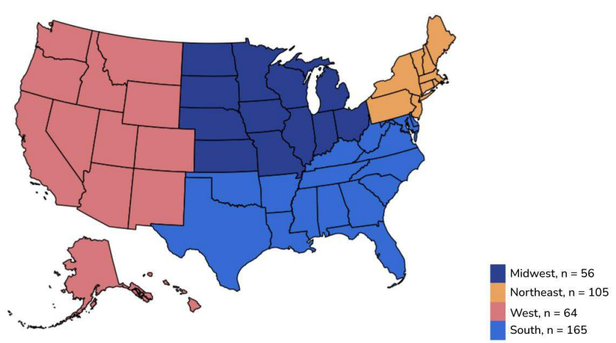


Table 2: Healthcare Resource Utilization

	Total (N = 392)
No. of medical/pharmacy claims	332 [5, 3461][1]
No. of distinct providers	36 [2, 321][1]
No. of distinct facilities	28 [2, 235][1]
No. of CIDP related claims	7 [1, 408][1]
No. of institutional claims after CIDP dx	11 [1, 350][1]
No. of professional claims after CIDP dx	93 [1, 1938][1]
No. of CIDP related proc. prior to dx[2]	2 [1, 5][1]
Months from first CIDP proc. to dx	7.3 [0.03, 59.1][1]
No. of NCS/EMG tests prior to dx[2]	2 [0, 13][1]
Received PT/OT	
No	251 (64%)
Yes	139 (35%)
Unknown	2 (0.5%)

Notes:
[1] Median, [Range]
[2] n = 75 patients had a CPT/HCPCS code for a CIDP related procedure prior to CIDP diagnosis. The following CPT/HCPCS codes were considered as CIDP related procedures: 36514, 38204, 38205, 38206, 38208-38215, 38232, 38240, 38241, *95860, 95861, 95863, 95864, 95866-95870, 95885-95887, 95905, 95908-95913*, S2140, S2142, and S2150. CPT codes in italics correspond to NCS/EMG tests.

Table 3: Top 5 most common CIDP medications

Non-proprietary name	No. of Claims	No. of Patients
Human immunoglobulin	2422	56
Methylprednisolone	126	29
Azathioprine	257	14
Rituximab	40	7
Dexamethasone	26	5

Notes:
132 patients had a medical or pharmacy claim for a CIDP related medication: immune globulin, rituximab, prednisolone, azathioprine, methylprednisolone, dexamethasone, cyclophosphamide, cyclosporine, etanercept, interferon alpha-2a, interferon beta-1a, mycophenolate, methotrexate and tacrolimus

Figure 3: Topics posted, viewed and/or searched by CIDP patients on Inspire

Figure 4: Post snippets on Inspire from CIDP patients

My feet hurt so bad and they feel like they are burning on the inside Bad enough to the point where I can't hardly walk

For anyone out there with CMT or CIDP how do you handle the neuropathy heaviness?

Has anyone tried IVIG or CIDP? What side effects did you experience? How long did it take you to realize it helped?

I had a significant change in my ability to walk then loss of fine motor. IVIG gives me a quality of life that I would not have otherwise

Conclusion

CIDP patients in this ongoing retrospective analysis had a median of 4 years of healthcare visit data since diagnosis. Majority of patients had 100+ claims, which indicate substantial healthcare resource utilization. CIDP patients endure a long diagnostic journey, including misdiagnosis, to undergo appropriate treatment.

Limitations: Medical and pharmacy claims may not provide a patient's complete medical journey as there may be gaps in insurance coverage. Findings from this study may not be generalizable to the broader CIDP population.