PCR218

Patient Characteristics and One-year Persistence Among Commercially-Insured Patients with Multiple Sclerosis Receiving Cladribine Tablets

Chris M. Kozma, PhD,[1] Emily Evans, MD,[2] Lori Lebson, PhD,[2] Amy L. Phillips, PharmD,[3] Carroline Lobo, PhD[3]

[1]CK Consulting Associates, LLC; Saint Helena Island, SC, USA; [2]US Medical Affairs–Neurology & Immunology, EMD Serono, Inc., Rockland, MA, USA, an affiliate of Merck KGaA, Darmstadt, Germany; [3]North America Evidence & Value Development, EMD Serono, Inc., Rockland, MA, USA, an affiliate of Merck KGaA, Darmstadt, Germany

CONCLUSIONS

- **Among 200 patients, mean (SD) age was 45.3 (10.0) years, and 76.0% of the patients were female**
- **Depression and anxiety were the most common baseline comorbidities**

- **Total switch rate for the cohort was 3.5%, and overall persistence was 93.0%**
- **Mean survival time to switching to another treatment within 1 year was 215.2 days (SE 3.2)**
- **DMTs to which patients switched included fingolimod, dimethyl fumarate, and glatiramer acetate**

This study is one of the earliest studies demonstrating 1-year persistence and switching among a cohort of cladribine tablets patients using large healthcare claims databases in the US. Findings are from patients with commercial health insurance and may not be generalizable to patients with other types of insurance

BACKGROUND

- Real-world evidence for cladribine tablets in patients with MS is emerging

OBJECTIVE

- **To evaluate patient characteristics and persistence among commercially-insured US patients with MS receiving cladribine tablets**

METHODS

- Patients from the IQVIA PharMetrics® Plus database were included if they had ≥1 cladribine tablets claim from 4/1/2019–12/31/2020 (day of cladribine tablets initiation=index date), ≥2 MS diagnoses ≥30 days apart from 1/1/2012–12/31/2021, continuous insurance eligibility 1-year pre- (baseline) and 1-year post- (follow-up) index, aged 18 to <64 at index, no pregnancy claims during baseline, and no place of service codes of hospice, inpatient mental health, or inpatient rehabilitation during baseline
- Data were analyzed descriptively. Persistence was defined as patients completing all of their first-year cladribine tablets treatment cycles and not switching to another DMT within 1 year

RESULTS

Patient selection

- Among 830 patients with ≥1 pharmacy claim for cladribine tablets after 4/1/2019, 200 met the inclusion criteria (**Table 1**)

Table 1. Patient selection

Criteria	# patients	% excluded (prior row)
Have at least 1 cladribine tablets claim after 4/1/2019	830	**NA**
Exclude if index date is after 12/31/2020	440	47.0
Have ≥2 MS diagnoses separated by at least 30 days between 1/1/2012 and 12/31/2021	431	2.0
Had 1 year of continuous medical and pharmacy eligibility pre- and post-index	228	47.1
Exclude patients with age <18 or ≥64 at index	213	6.6
Exclude patients with any code that could indicate pregnancy 1-year pre-index	204	4.2
Exclude patients with POS codes of assisted living facility, skilled nursing facility, nursing facility, custodial care, hospice, inpatient mental health or inpatient rehabilitation 1-year pre- or post-index	202	1.0
Exclude patients with an IV cladribine claim 1-year pre- or post-index	200	1.0
Exclude patients with a diagnosis for hairy cell cancer (C91.4) or myelofibrosis (D7581)	200	0.0

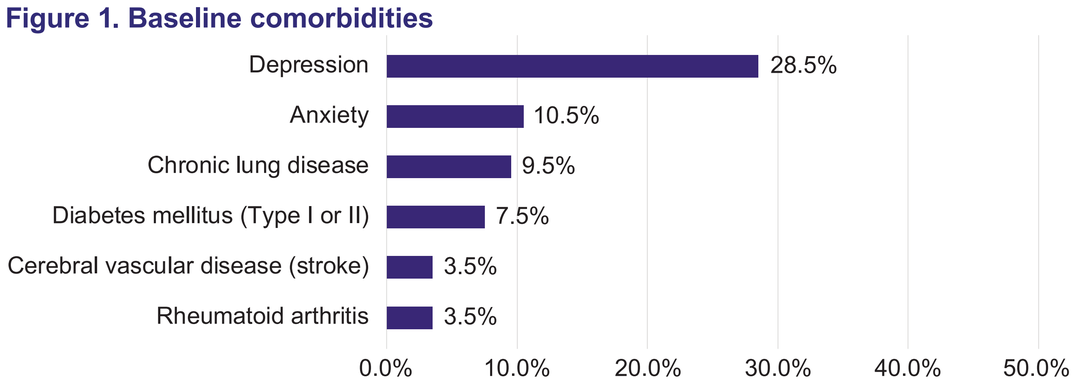
Baseline demographic and clinical characteristics (n=200)

- Mean (SD) age was 45.3 (10.0) years, 76.0% of the patients were female, and 58.5% had commercial health insurance and 35.5% had health insurance through their self-insured employer (**Table 2**)
- Common comorbidities during baseline included depression (28.5%), anxiety (10.5%), chronic lung disease (9.5%), diabetes (7.5%), stroke (3.5%), and rheumatoid arthritis (3.5%) (**Figure 1**)

Table 2. Baseline demographics

Demographic characteristic	Value
Age, years	
Mean (SD)	45.3 (10.0)
Median	46.0
Sex, n (%)	
Female	152 (76.0)
Male	48 (24.0)
Region, n (%)	
Northeast	47 (23.5)
Midwest	56 (28.0)
South	81 (40.5)
West	15 (7.5)
Payer at index, n (%)	
Commercial	117 (58.5)
Self-insured employer	71 (35.5)
Other	12 (6.0)

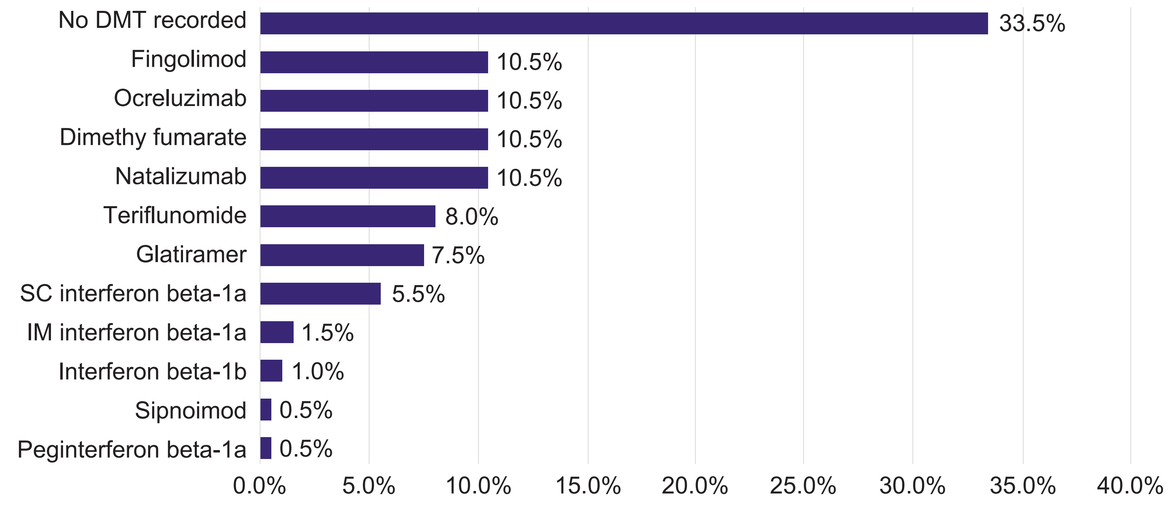
Figure 1. Baseline comorbidities



DMT use prior to cladribine tablets (n=200)

- The majority of patients (66.5%) had a prior DMT during the pre-index period
- The most common pre-index DMTs were dimethyl fumarate, fingolimod, natalizumab, and ocrelizumab (**Figure 2**)

Figure 2. Percentage of patients by the last DMT claim before cladribine tablets



One-Year persistence and switches

- One-year persistence with cladribine tablets was 93.0% overall and 98.4% for patients who completed their first full course of cladribine tablets (**Table 3**)
  - Only 14 patients (7%) discontinued their first cladribine tablets treatment cycle
    - Few patients (n=7; 3.5%) switched to another DMT (**Table 3**)
    - DMTs to which patients switched included fingolimod, dimethyl fumarate, and glatiramer acetate

Table 3. One-year persistence and switches

Characteristic	n (%)
Have only 1 cladribine tablets prescription claim (ie, received half of the first course)	11 (5.5)
Patients with 1 cladribine tablets claim who switched (ie, 7 patients had no claims for any non-cladribine tablets DMT after index)	4 (2.0)
Have at least 2 cladribine tablets prescription claims (ie, full first course)	189 (94.5)
Patients with 2 cladribine tablets claims who switched	3 (1.0)
Total switches in the cohort (n=200)	7 (3.5)
One-year persistence among those with a full 1-year course (n=189)	186 (98.4)
One-year persistence among the entire cohort (n=200)	186 (93.0)

Time to non-persistence (n=14)

- Mean survival time to first assignment of non-persistence was 215.2 days (SE 3.2)
  - Persistence was defined as patients completing all of their first-year cladribine tablets treatment cycles and not switching to another DMT within 1 year

Abbreviations: DMT, disease-modifying therapy; **IV,** intravenous; **MS,** multiple sclerosis; **POS,** place of service; **SD,** standard deviation; **SE,** standard error; **US,** United States.

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