Your Abstract Submission Has Been Received

Print this page

You have submitted the following abstract to 2024 Annual Meeting of the Consortium of Multiple Sclerosis Centers. Receipt of this notice does not guarantee that your submission was complete or free of errors.

Travel Burden for Patients with Multiple Sclerosis Treated with Infusion Disease Modifying Therapies

Ming-Hui Tai, PhD[1], Swetha R Palli, PhD[1], Qiujun Shao, PhD[1], Brandon Brown, PharmD[1], Cheng Shi, PhD[1], John Arsenault, PhD[2] and Abhijit Gadkari, PhD[1], (1)Novartis Pharmaceuticals Corporation, East Hanover, NJ, (2)Humbi Analytics, Indian Creek, IL

Abstract Text:
Background:

Ofatumumab, ocrelizumab, natalizumab, alemtuzumab, and ublituximab are generally considered as high efficacy disease modifying therapies (HETs) for multiple sclerosis. Except ofatumumab, all other HETs are IV infusion therapies that need to be administered by healthcare providers at a hospital or infusion center. This could be a major access barrier for patients with MS due to limited mobility, time off work, traffic, and disruption to daily activities.

Objectives:

To assess the travel burden for patients with MS treated with infusion disease modifying therapies (DMTs).

Methods:

100% Medicare Fee-For-Service data was used to identify patients with MS diagnosis and receiving >=1 infusion DMTs of interest (i.e., ocrelizumab, alemtuzumab, natalizumab and ublituximab) from January 2017 to December 2022. The travel (i.e., commuting) distance and time calculations were based off the 5-digit zip codes of the patient (from their enrollment file) and the facility where the infusion was administered (from the infusion claim). Patients with travel distance >250 miles each way were considered outliers and excluded from analysis. The cumulative of individual road segment lengths making the most efficient route was used to calculate the one-way driving distance. Similarly, travel time was calculated as the cumulative time obtained by dividing each road segment length by the corresponding maximum speed limit. Total distance and time travelled (2*one-way) were summarized at per-visit level. Patient characteristics including demographics and urban-rural classification were reported.

Results:

Among 36,599 included patients, mean (±SD) age was 54 (±12) years, 70% were female, 83% were White, 70% resided in urban areas, and 72% received ocrelizumab. The mean and median total distance travelled per visit was 54 (±66) miles and 30 miles respectively. Substantial variation across geographic areas (urban vs. rural) was observed. 22% of patients living in large rural areas travelled >120 miles per visit for infusion DMTs vs. 7% of urban residents. Mean and median travel time per visit was 95 and 66 mins, respectively. There were differences for urban (78 and 54 mins) vs. large rural residents (125 and 103 mins).

Conclusions:

Among Medicare beneficiaries with MS, travel distance and time for infusion DMTs may pose a significant burden for a substantial number of patients, particularly for those living in rural areas. Future research will assess the impact of travel burden on outcomes.

Title:

Travel Burden for Patients with Multiple Sclerosis Treated with Infusion Disease Modifying Therapies

Submitter's E-mail Address:
mindy.tai@novartis.com

Preferred Presentation Format:
Poster

Category:
Disease-modifying therapy

Has this abstract been presented/published elsewhere prior to this meeting?:
No

Have you simultaneously submitted this abstract to another organization for consideration?:
No

Would you give CMSC and International Journal of MS Care the first preference to any article that is submitted for publication based on this abstract presentation?:
Yes

Category: Disease-modifying therapy

Keywords:
Disease-modifying treatments in MS and Travel Burden

First Presenting Author

Presenting Author

Ming-Hui Tai, PhD
Email: mindy.tai@novartis.com -- Will not be published

Novartis Pharmaceuticals Corporation
East Hanover NJ
USA

Click to view Conflict of Interest Disclosure

Second Author

Swetha Palli, PhD
Email: swetha.palli@novartis.com -- Will not be published

Novartis Pharmaceuticals Corporation
East Hanover NJ
USA

Click to view Conflict of Interest Disclosure

Third Author

Qiujun Shao, PhD
Email: samantha.shao@novartis.com -- Will not be published

Novartis Pharmaceuticals Corporation
East Hanover NJ
USA

Click to view Conflict of Interest Disclosure

Fourth Author

Brandon Brown, PharmD
Email: brandon.brown@novartis.com -- Will not be published

Novartis Pharmaceuticals Corporation
East Hanover NJ
USA

Click to view Conflict of Interest Disclosure

Fifth Author

Cheng Shi, PhD
Email: cheng.shi@novartis.com -- Will not be published

Novartis Pharmaceuticals Corporation
East Hanover NJ
USA

Click to view Conflict of Interest Disclosure

Sixth Author

John Arsenault, PhD
Email: john.arsenault@humbianalytics.com -- Will not be published

Humbi Analytics
Indian Creek IL
USA

Click to view Conflict of Interest Disclosure

Seventh Author

Abhijit Gadkari, PhD
Email: abhijit.gadkari@novartis.com -- Will not be published

Novartis Pharmaceuticals Corporation
East Hanover NJ
USA

Click to view Conflict of Interest Disclosure

First Contact

Mindy Tai, PhD
Email: mindy.tai@novartis.com -- Will not be published

Novartis Pharmaceuticals Corporation
East Hanover NJ
USA

Any changes that you make will be reflected instantly in what is seen by the reviewers. You DO NOT need to go through all of the submission steps in order to change one thing. If you want to change the title, for example, just click "Title" in the abstract control panel and submit the new title.

When you have completed your submission, you may close this browser window.

Tell us what you think of the abstract submission process

Home Page