

Your abstract submission has been received

[Print this page](#)

You have submitted the following abstract to 2020 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.

Injection-Related Reactions with Subcutaneous Administration of Ofatumumab in Relapsing Multiple Sclerosis: Pooled Analysis of the Phase 3 Asclepios I and II Trials

Ratnakar Pingili, MD¹, Amit Bar-Or, MD, FRCPC², Jeffrey A. Cohen, MD³, Patricia K. Coyle, MD⁴, Anne H. Cross, MD⁵, Stephen L. Hauser, MD⁶, Ludwig Kappos, MD⁷, Cecile Kerloeguen, MSc⁸, Ayan Das Gupta, MS Stats⁹, Valentine Jehl, MSc⁸, Dieter A. Haering, PhD⁸, Krishnan Ramanathan, PhD⁸ and Martin Merschhemke, MD⁸, (1)Novartis Pharmaceuticals Corporation, East Hanover, NJ, (2)Center for Neuroinflammation and Experimental Therapeutics and Department of Neurology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, (3)Department of Neurology, Mellen MS Center, Neurological Institute, Cleveland Clinic, Cleveland, OH, (4)Department of Neurology, Stony Brook University, Stony Brook, NY, (5)Department of Neurology, Division of Neuroimmunology, Washington University School of Medicine, St Louis, MO, (6)Department of Neurology, UCSF Weill Institute for Neurosciences, University of California San Francisco, San Francisco, CA, (7)Neurologic Clinic and Policlinic, Departments of Medicine, Clinical Research, Biomedicine and Biomedical Engineering, University Hospital and University of Basel, Basel, Switzerland, (8)Novartis Pharma AG, Basel, Switzerland, (9)Novartis Healthcare Pvt. Ltd., Hyderabad, India

Abstract Text:

Background:

Ofatumumab, the first fully human anti-CD20 monoclonal antibody, with a monthly 20 mg subcutaneous (s.c.) dosing regimen, demonstrated superior efficacy (reductions in clinical relapses by 51%–59%, disability worsening by 33%–34%, and gadolinium-enhancing lesions by 94%–98%) versus teriflunomide in the two Phase 3 ASCLEPIOS I/II relapsing multiple sclerosis (RMS) trials. Injection-related reactions (IRRs) were the most common adverse events (AEs) observed.

Objectives:

To characterize the risk of IRRs (systemic and local site reactions) observed with ofatumumab in RMS patients.

Methods:

In the pooled ASCLEPIOS I/II trials, patients were randomized (1:1) to receive s.c. ofatumumab 20 mg (n=946) (loading dose: Days 1, 7 and 14; maintenance dose: every 4 weeks from Week 4) or oral teriflunomide 14 mg once daily (n=936), for up to 30 months. Patients in the teriflunomide group received matching placebo injections. All patients received the first four injections at the clinic and subsequent injections at home. Premedication was recommended, but not mandatory. Both systemic (during and within 24 hours post injection) and local site IRRs (at any time) were reported.

Results:

In the ofatumumab group, 20.6% (n=195) of the patients, and 15.3% (n=143) in the teriflunomide group experienced ≥ 1 systemic IRR. Incidence of systemic IRRs with the first injection was 14.4% with ofatumumab versus 7.5% with teriflunomide. The incidence of systemic IRRs decreased with subsequent doses and was similar to the matching placebo injections in the teriflunomide group. The majority of IRRs (99.8%) were Grade 1/2 in severity; Grade 3 IRRs were observed in two patients (0.2%) with ofatumumab at the first injection (one of which was reported as a serious AE) versus none with teriflunomide. One additional IRR (Grade 1) was also reported as a serious AE with ofatumumab. The serious IRRs (0.2%) were manageable and patients continued treatment with no recurrences. No life-threatening IRRs were reported during the study. The most frequent ($\geq 2\%$) IRR symptoms observed with ofatumumab were fever, headache, myalgia, chills, and fatigue. Majority of local site IRRs were mild to moderate in severity and non-serious in nature; the most frequently reported symptoms ($\geq 2\%$) included erythema, pain, itching, and swelling.

Conclusions:

Systemic and local IRRs with ofatumumab 20 mg s.c. were mostly mild to moderate in severity. Beyond the first injection, IRRs were no more frequent with ofatumumab versus matching placebo injections.

Title:

Injection-Related Reactions with Subcutaneous Administration of Ofatumumab in Relapsing Multiple Sclerosis: Pooled Analysis of the Phase 3 Asclepios I and II Trials

Submitter's E-mail Address:

ratnakar.pingili@novartis.com

Preferred Presentation Format:

Platform/Oral

Category:

Disease-modifying therapy

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?:

No

Category: Disease-modifying therapy

Keywords:

Disease-modifying treatments in MS, Immunology and MS and Injection-related reactions

First Presenting Author

Presenting Author

Ratnakar Pingili, MD

Email: ratnakar.pingili@novartis.com -- Will not be published

Novartis Pharmaceuticals Corporation

East Hanover NJ

USA

[Click to view Conflict of Interest Disclosure](#)

Second Author

Amit Bar-Or, MD, FRCPC

Email: amitbar@pennmedicine.upenn.edu -- Will not be published

Center for Neuroinflammation and Experimental Therapeutics and Department of Neurology, Perelman

School of Medicine, University of Pennsylvania

Philadelphia PA

USA

[Click to view Conflict of Interest Disclosure](#)

Third Author

Jeffrey Cohen, MD

Email: cohenj@ccf.org -- Will not be published

Department of Neurology, Mellen MS Center, Neurological Institute, Cleveland Clinic
Cleveland OH
USA

Biographical Sketch Cleveland, OH

[Click to view Conflict of Interest Disclosure](#)

Fourth Author

Patricia Coyle, MD
Email: Patricia.Coyle@stonybrookmedicine.edu -- Will not be published
Department of Neurology, Stony Brook University
Stony Brook NY
USA

[Click to view Conflict of Interest Disclosure](#)

Fifth Author

Anne Cross, MD
Email: crossa@neuro.wustl.edu -- Will not be published
Department of Neurology, Division of Neuroimmunology, Washington University School of Medicine
St Louis MO
USA

[Click to view Conflict of Interest Disclosure](#)

Sixth Author

Stephen Hauser, MD
Email: Stephen.Hauser@ucsf.edu -- Will not be published
Department of Neurology, UCSF Weill Institute for Neurosciences, University of California San Francisco
San Francisco CA
USA

[Click to view Conflict of Interest Disclosure](#)

Seventh Author

Ludwig Kappos, MD
Email: ludwig.kappos@usb.ch -- Will not be published
Neurologic Clinic and Policlinic, Departments of Medicine, Clinical Research, Biomedicine and Biomedical Engineering, University Hospital and University of Basel
Basel
Switzerland

[Click to view Conflict of Interest Disclosure](#)

Eighth Author

Cecile Kerloeguen, MSc
Email: cecile.kerloeguen@novartis.com -- Will not be published
Novartis Pharma AG
Basel
Switzerland

[Click to view Conflict of Interest Disclosure](#)

Ninth Author

Ayan Gupta, MS Stats
Email: ayan.das_gupta@novartis.com -- Will not be published
Novartis Healthcare Pvt. Ltd.
Hyderabad
India

[Click to view Conflict of Interest Disclosure](#)

Tenth Author

Valentine Jehl, MSc
Email: valentine.jehl@novartis.com -- Will not be published
Novartis Pharma AG
Basel
Switzerland

[Click to view Conflict of Interest Disclosure](#)

Eleventh Author

Dieter Haering, PhD
Email: dieter.haering@novartis.com -- Will not be published
Novartis Pharma AG
Basel
Switzerland

[Click to view Conflict of Interest Disclosure](#)

Twelfth Author

Krishnan Ramanathan, PhD
Email: krishnan.ramanathan@novartis.com -- Will not be published
Novartis Pharma AG
Basel
Switzerland

[Click to view Conflict of Interest Disclosure](#)

Thirteenth Author

Martin Merschhemke, MD
Email: martin.merschhemke@novartis.com -- Will not be published
Novartis Pharma AG
Basel
Switzerland

[Click to view Conflict of Interest Disclosure](#)

First Contact

Ratnakar Pingili, MD
Email: ratnakar.pingili@novartis.com -- Will not be published
Novartis Pharmaceuticals Corporation
East Hanover NJ
USA

If necessary, you can make changes to your abstract submission

- To access your submission in the future, use the direct link to your abstract submission from one of the automatic confirmation emails that were sent to you during the submission.
- Or point your browser to </cmsc/reminder.cgi> to have that URL mailed to you again. Your username/password are 6668/798147.

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](#)