

Your Abstract Submission Has Been Received

Print this page

You have submitted the following abstract to 2021 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.

Efficacy of Ofatumumab on Microglia in Patients with Relapsing Forms of Multiple Sclerosis: Study Design

Tarun Singhal, MD¹, Howard L Weiner, MD¹, Tanuja Chitnis, MD¹, Rohit Bakshi, MD¹, Maria Houtchens, MD¹, Bonnie Glanz, PhD¹, Kelsey O'Connor, MSN¹, John Hunter Ficke, BA¹, Eero Rissanen, MD, PhD¹, Jon Zurawski, MD¹, Steven Cicero, BS¹, Harald Kropshofer, PhD², Nicholas Seneca, PhD², Brandon Brown, PharmD³ and Marina Ziehn, PhD², (1)Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, (2)Novartis Pharma AG, Basel, Switzerland, (3)Novartis Pharmaceuticals Corporation, East Hanover, NJ

Abstract Text:

Background:

Ofatumumab, an FDA approved fully-human anti-CD20 monoclonal antibody, is indicated for the treatment of relapsing forms of multiple sclerosis (RMS) following the results from the ASCLEPIOS trials. However, the potential impact of ofatumumab on microglial activation in MS is unknown.

Objectives:

Here we present the design of a study aimed to determine the effect of ofatumumab on microglial activation using [F-18]PBR06-positron emission tomography (PET) in RMS patients.

Methods:

An open-label, observational, prospective, 9-month study will be conducted in active RMS patients (aged 18–60 years), with evidence of clinical and/or MRI disease activity (Lublin 2014 criteria) and EDSS 0 to 5.5. Patients will undergo PET and other procedures at baseline and at days 5, 28, 90 and 270 after initiating ofatumumab. The primary objective is to determine the effect of ofatumumab on microglial activation over 9 months. Secondary objectives are time course of effect of ofatumumab on microglial activation and its relationship with peripheral B-cell depletion, serum neurofilament light chain and glial-fibrillary acid protein levels and relationship of PET changes following ofatumumab initiation with 3T MRI changes and clinical parameters.

Results:

This is a single-center study in the United States consisting of 10 patients with active RMS. The first patient first visit occurred in October 2020, and the expected study completion is in Q4 2021. The detailed study design will be presented at the congress.

Conclusions:

This is the first study to evaluate the effect of ofatumumab on microglial activation and its relationship with serum markers of neurodegeneration and reactive astroglia in RMS patients.

Title:

Efficacy of Ofatumumab on Microglia in Patients with Relapsing Forms of Multiple Sclerosis: Study Design

Submitter's E-mail Address:
grace.jeong@alphabet-health.com

Preferred Presentation Format:
Poster

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?:
Yes

Category: Disease-modifying therapy

Keywords:
Disease-modifying treatments in MS and Imaging and MS

First Presenting Author

Presenting Author

Tarun Singhal, MD
Email: tsinghal@bwh.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
USA

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

Any relevant financial relationships? Yes

Organization Name	Relationship
Sanofi-Genzyme	Contracted Research
Novartis Pharmaceuticals	Contracted Research

Second Author

Howard Weiner, MD

Email: hweiner@rics.bwh.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
USA

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

Any relevant financial relationships? Yes

Organization Name	Relationship
Genentech	Consulting Fee
Medday Pharmaceuticals	Consulting Fee
vTv Therapeutics	Consulting Fee
Tiziana Life Sciences	Scientific Advisory Board member
vTv Therapeutics	Scientific Advisory Board member
Medday Pharmaceuticals	Scientific Advisory Board member
vTv Therapeutics	Board Member
vTv Therapeutics	Ownership Interest
National Institute of Health	Contracted Research
National MS Society	Contracted Research
Genzyme Corp	Contracted Research
Genentech, Inc.	Contracted Research
Verily Life Sciences LLC	Contracted Research
EMD Serono, Inc.	Contracted Research

Third Author

Tanuja Chitnis, MD

Email: tchitnis@rics.bwh.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
USA

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

Any relevant financial relationships? Yes

Organization Name	Relationship
Novartis, Biogen, Sanofi-Genzyme, Genentech	Consulting Fee

Fourth Author

Rohit Bakshi, MD

Email: rbakshi@bwh.harvard.edu -- Will not be published

Alternate Email: rbakshi@post.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
USA

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

Any relevant financial relationships? Yes

Organization Name	Relationship
EMD Serono	Consulting Fee
Journal of Neuroimaging	Editor-in-Chief
Biogen	Ownership Interest
BMS/Celgene	Contracted Research
EMD Serono	Contracted Research

Fifth Author

Maria Houtchens, MD

Email: mhoutchens@bwh.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
USA

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

Any relevant financial relationships? Yes

Organization Name	Relationship
Biogen	Consulting Fee
EMD-Serono	Consulting Fee
Genzyme-Sanofi	Consulting Fee
Novartis	Consulting Fee
Roche Genentech	Consulting Fee
Genzyme-Sanofi	Contracted Research
Biogen	Contracted Research
Merck	Contracted Research

Sixth Author

Bonnie Glanz, PhD

Email: bglanz@bwh.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
USA

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

Any relevant financial relationships? Yes

Organization Name	Relationship
CMSC	Contracted Research
NIH	Contracted Research

Seventh Author

Kelsey O'Connor, MSN

Email: koconnor25@bwh.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
USA

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

Any relevant financial relationships? No

Eighth Author

John Ficke, BA
Email: tsinghal@bwh.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
USA

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

Any relevant financial relationships? No

Ninth Author

Eero Rissanen, MD, PhD
Email: erissanen@bwh.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
USA

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

Any relevant financial relationships? No

Tenth Author

Jon Zurawski, MD
Email: jzurawski@bwh.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
USA

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

Any relevant financial relationships? Yes

Organization Name	Relationship
Adelphi Real World Consulting	Consulting Fee
ERT	Consulting Fee

Eleventh Author

Steven Cicero, BS

Email: scicero@bwh.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
USA

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

Any relevant financial relationships? No

Twelfth Author

Harald Kropshofer, PhD

Email: harald.kropshofer@novartis.com -- Will not be published

Novartis Pharma AG
Basel
Switzerland

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

Any relevant financial relationships? Yes

Organization Name	Relationship
-------------------	--------------

Novartis	Salary
----------	--------

Thirteenth Author

Nicholas Seneca, PhD

Email: nicholas.seneca@novartis.com -- Will not be published

Novartis Pharma AG
Basel
Switzerland

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

Any relevant financial relationships? Yes

Organization Name	Relationship
Novartis	Salary

Fourteenth 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](#)

Any relevant financial relationships? Yes

Organization Name	Relationship
Novartis	Salary
Novartis	Ownership Interest

Fifteenth Author

Marina Ziehn, PhD
Email: marina.ziehn@novartis.com -- Will not be published

Novartis Pharma AG
Basel
Switzerland

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

Any relevant financial relationships? Yes

Organization Name	Relationship
Novartis AG	Salary

First Contact

Tarun Singhal, MD
Email: tsinghal@bwh.harvard.edu -- Will not be published

Brigham Multiple Sclerosis Center, Brigham and Women's Hospital, Harvard Medical School
Boston MA
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 7637/569677.

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](#)