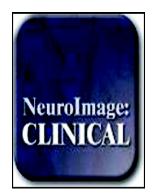
### Accepted Manuscript

Gray matter atrophy patterns in multiple sclerosis: A 10-year source-based morphometry study



Niels Bergsland, Dana Horakova, Michael G. Dwyer, Tomas Uher, Manuela Vaneckova, Michaela Tyblova, Zdenek Seidl, Jan Krasensky, Eva Havrdova, Robert Zivadinov

PII: DOI: Reference:	S2213-1582(17)30282-6 doi:10.1016/j.nicl.2017.11.002 YNICL 1192
To appear in:	NeuroImage: Clinical
Received date: Revised date: Accepted date:	<ol> <li>18 September 2017</li> <li>30 October 2017</li> <li>2 November 2017</li> </ol>

Please cite this article as: Niels Bergsland, Dana Horakova, Michael G. Dwyer, Tomas Uher, Manuela Vaneckova, Michaela Tyblova, Zdenek Seidl, Jan Krasensky, Eva Havrdova, Robert Zivadinov, Gray matter atrophy patterns in multiple sclerosis: A 10-year source-based morphometry study. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Ynicl(2017), doi:10.1016/j.nicl.2017.11.002

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## ACCEPTED MANUSCRIPT

#### Bergsland 1

## Gray matter atrophy patterns in multiple sclerosis: A 10-year source-based morphometry study

Niels Bergsland<sup>1</sup>, Dana Horakova<sup>2</sup>, Michael G. Dwyer<sup>1</sup>, Tomas Uher<sup>2</sup>, Manuela Vaneckova<sup>3</sup>,

Michaela Tyblova<sup>3</sup>, Zdenek Seidl<sup>3</sup>, Jan Krasensky<sup>3</sup>, Eva Havrdova<sup>2</sup>, Robert Zivadinov<sup>1,4</sup>

<sup>1</sup>Buffalo Neuroimaging Analysis Center, Department of Neurology, Jacobs School of Medicine

and Biomedical Sciences, University at Buffalo, State University of New York, Buffalo, NY,

USA;<sup>2</sup> Department of Neurology and Center of Clinical Neuroscience, First Faculty of Medicine

Charles University and General University Hospital in Prague, Prague, Czech Republic;

<sup>3</sup>Department of Radiology, 1st Faculty of Medicine and General University Hospital, Charles

University, Prague, Czech Republic<sup>4</sup> Translational Imaging Center at Clinical Translational

Research Center, University at Buffalo, State University of New York, Buffalo, NY, USA

**Corresponding Author:** 

Niels Bergsland, PhD Buffalo Neuroimaging Analysis Center Department of Neurology Jacobs School of Medicine and Biomedical Sciences State University of New York, Buffalo, NY 100 High St., Buffalo, NY 14203, USA Tel. 716 859 7038 Fax. 716 859 4006 Email: npbergsland@bnac.net

Running title: Patterns of GM atrophy in MS over 10-years of follow-up
Key words: multiple sclerosis, disability, MRI, atrophy, gray matter
Abstract word count: 235; Word count: 3974; Number of Tables: 4; Number of Supplementary
Tables: 2; Number of Figures: 2; Number of Supplementary Figures: 2; Number of
Supplementary Videos: 1; Number of references: 43.

# دريافت فورى 🛶 متن كامل مقاله

- امکان دانلود نسخه تمام متن مقالات انگلیسی
   امکان دانلود نسخه ترجمه شده مقالات
   پذیرش سفارش ترجمه تخصصی
   امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
   امکان دانلود رایگان ۲ صفحه اول هر مقاله
   امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
   دانلود فوری مقاله پس از پرداخت آنلاین
   پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات
- ISIArticles مرجع مقالات تخصصی ایران