Timothy L. Vollmer, M.D. CURRICULUM VITAE

1. Personal history

University of Colorado School of Medicine 12631 East 17th Avenue, Mail Stop B185

Aurora, Colorado 80045

Academic Office: 303-724-2187

Patient Scheduling Phone: 720-848-2080

Office Fax: 303-724-0985

timothy.vollmer@cuanschutz.edu

2. Education

- University of Wyoming, Laramie, WY (B.A. Zoology with Highest Honors), 1973-1977
- Stanford University School of Medicine, Stanford, CA (M.D.), 1977-1982*
- Intern in Internal Medicine, Yale New Haven Hospital, New Haven CT, 1982-1983
- Resident in Neurology, Stanford University Hospital, Stanford, CA, 1983-1985
- Post-Doctoral Fellow in Neuroimmunology, University Hospital, Stanford, CA, 1985-1986
- Chief Resident in Neurology, Stanford University Hospital, Stanford, CA, 1986-1987
- ACPE Physician Executive Course I, 1995
- Yale School of Medicine and Yale School of Business Physician Executive Course, 1997

3. Academic Appointments

- Assistant Professor, Department of Neurology, Yale University School of Medicine, New Haven, CT, 1987—1993
- Medical Director, Rocky Mountain Multiple Sclerosis Center, Swedish Medical Center, Englewood, CO, 1993—1995
- Associate Clinical Professor, Department of Neurology, University of Colorado, Denver, CO, 1993— 1995
- Associate Professor, Department of Neurology, Yale University School of Medicine, New Haven, CT, 1996—2002
- Vice Chairman-Clinical Affairs, Department of Neurology, Yale University, New Haven, CT, 1996—2002
- Director, Yale Multiple Sclerosis Research Center, New Haven, CT, 1996—2002
- Associate Director for Clinical Studies, Center of Excellence on Restoration of Function in Spinal Cord Injury and Multiple Sclerosis, U.S. Dept. of Veterans Affairs, Division of Rehabilitation Research and Development, Connecticut VA Healthcare System, West Haven, CT, 1996—2002
- Chair, Division of Neurology, Barrow Neurological Institute at St. Joseph's Hospital and Medical Center, Phoenix, AZ August, 2002—March, 2007

- Associate Residency Program Director, Barrow Neurological Institute at St. Joseph Hospital and Medical Center, Phoenix, AS, January, 2004—August, 2008
- Director, Neuroimmunology Program, Barrow Neurological Institute at St. Joseph Hospital and Medical Center, Phoenix, AZ, August, 2002—August, 2008
- Van Denburgh Professor of Neurology, Barrow Neurological Institute at St. Joseph Hospital and Medical Center, Phoenix, AZ, March 2002—August, 2008
- Co-Director, Rocky Mountain MS Center at Anschutz Medical Campus 2008—Present
- Medical Director, Rocky Mountain MS Center 2008—Present
- Professor of Neurology, University of Colorado School of Medicine 2008—Present
- Director, Neurosciences Clinical Research, University of Colorado at Anschutz Medical Campus 2010— Present
- Neuroscience Program Faculty, University of Colorado Graduate Program 2012 Present
- Appointed Vice Chair for Clinical Research, Department of Neurology 2014—present

4. Other Professional Positions

- Nancy Davis Center Without Walls Investigator, 1994—2002
- Director, NARCOMS Project for Consortium of MS Centers 1996—2011
- Active Staff member, Colorado Children's Hospital Aurora, CO 2010--Present

5. Honors, Recognitions and Awards

- Albert Nelson Marquis Lifetime Achievement Award, 2018
- Named as one of America's Top Doctors by Castle Connolly, 2016
- Vitals Patients' Choice Award for 2015
- Named as one of America's Top Doctors by Castle Connolly, 2015
- Fellow, American Neurological Association, 2013
- Named to "Best Doctors in America", 2013
- Voted in top quartile of attending physicians by medical students at University of Colorado School of medicine for academic year 2010-2011
- Accelerated Cure Project for Multiple Sclerosis PHYSICIAN OF DISTINCTION AWARD, 2011
- Best Doctors, Top 1% of neurologists ranked nationally by US News & World Report and Castle Connolly Medical, Ltd. 2011
- Fellow, American Academy of Neurology 2009
- University of Colorado Department of Neurology Teaching Award 2009
- Diplomat, American Academy of Neurology, Section of Multiple Sclerosis 2001
- Best Doctors in American 2003—2004
- National Multiple Sclerosis Society Volunteer Hall of Fame

Timothy L. Vollmer, M.D.

Page 3 of 56

- Who's Who in North America
- Who's Who in Science
- Who's Who in Medicine
- Best Doctors in New York, Castle Connolly Medical LTD
- 2000 Outstanding Scientists of the 21st Century-First Edition (Melrose Press, LTD., Ely, Cams. UK)
- American Neurology Association Fellow
- Scholars Program (Appointment (Stanford University)
- Dean's Fellowship (Stanford University)
- Alpha Epsilon Delta
- Omicron Delta Kappa
- Phi Beta Kappa
- Phi Kappa Phi
- University of Wyoming Honors Scholarship

6. Memberships in Professional Organizations

- Colorado Society of Clinical Neurologists
- Arizona Medical Association 2003-2004
- American Academy of Neurology
- American Association of Immunology
- American Neurological Association
- Consortium of Multiple Sclerosis Centers
- International Society for Neuro Immunology
- Royal Academy of Physicians

7. Major Committee and Service Responsibilities

- University of Colorado School of Medicine Admissions Committee, 2010--
- Advisory Committee, 109MS201, Biogen Idec
- NARCOMS Director 1996-20011
- Consortium of Multiple Sclerosis Centers (CMSC Board of Governors member) 1996-2011
- Steering Committee, FTY720 Studies, Novartis
- National Professional Advisory Committee-National MS Society
- Yale Medical Student Preclinical Curriculum Committee Chairman, 1992-1993
- Yale School of Medicine Senior Clinician Committee, Member, 1993/01996-2002
- Yale Clinical Research Policies Review Committee 2000
- Councilor, MS Section, American Academy of Neurology, 2001
- Data Safety and Monitoring Committee, ARAVA, Adventis, Chairman, 2001-2002

- Yale Dept of Neurology Clinical Management Team, Chairman, 1996-2002
- Yale Medical Student Admission Committee, Member, 1998-2002
- Yale Faculty Practice Plan Contracting Committee, Member, 1999-2002
- Yale Provost's Standing Committee on Conflict of Interest, Member, 2000-2002
- Yale School of Medicine Credentialing committee, Member, 1999-2002
- Clinical Review Committee, CHAPS and CHAMPIONS Study, 1998-2002
- Yale School of Medicine Strategic Planning Committee, Member, 1996

8. Licensure and Board Certification

- State of Colorado licensure
- State of Wyoming licensure
- Board certified, American Board of Psychiatry and Neurology, 1991

9. Review and Referee Work

- Editor, Multiple Sclerosis Quarterly Report (MSQR); 1999—2005
- Co-Editor, Multiple Sclerosis Quarterly Report (MSQR); January, 2005-2011
- Editorial Board, European Journal of Neurology; 2010-2012
- Ad Hoc reviewer for European J. of Neurology, Multiple Sclerosis, Neurology, Lancet, Annals of Neurology

10. Invited Extramural Lectures, Presentations and Visiting Professorships

- "New Treatment Strategies in MS" presentation at New Perspectives in Multiple Sclerosis:
 Epidemiology, Pathology, Imaging and Treatment Strategies CME symposia, sponsored by State
 University of New York, University at Buffalo. New Orleans, LA., Sept. 11, 2010
- Multiple Sclerosis presentation to "Updates in Internal Medicine" CME conference, University of Colorado School of Medicine. Estes Park, CO July 19, 2012
- Johns Hopkins University CME videotaped presentation "Advances in MS: Emerging Strategies for Neuroprotection and Neuroregeneration" 2012
- "Freedom from MS Disease Activity" presentation to Cleveland Clinic, Cleveland, Ohio. September 20, 2012
- University of Colorado Center for Neuroscience Retreat presentation, "MS: Key Challenges to Future Progress". Estes Park, CO November 9, 2012
- University of California San Diego Annual MS Symposium, San Diego, CA March 16, 2013
- University of Florida PeerView CME Symposium, Course Director, Orlando, Florida May 29, 2013
- October 31, 2013 Presentation to Erdheim Chester Disease Foundation, San Diego, CA

10.1 Conferences Organized and/or Chaired

- Yale Clinical Neuroimmunology Conference, Yale School of Medicine, Chair, 1993
- International Committee on Databases in MS, Inaugural Meeting, Venice, Italy, Chair, 1999
- International Committee on Databases in MS, Second Annual Meeting, Fort Worth, Texas, Chair, 2001
- Yale Neuroimmunology Conference, Yale School of Medicine, Chair, 2001
- Yale International Conference on Schwann Cell Transplantation in MS, Yale School of Medicine, Chair,
 2001
- 29th Annual Barrow Neurological Institute Neurology Symposium, Barrow Neurological Institute, Committee Member, 2003
- 30th Annual Barrow Neurological Institute Neurology Symposium, Barrow Neurological Institute, Committee Member, 2004
- 31st Annual Barrow Neurological Institute Neurology Symposium, Barrow Neurological Institute,
 Committee Member, 2005
- 32nd Annual Barrow Neurological Institute Neurology Symposium, Barrow Neurological Institute, Committee Member, 2006
- 33rd Annual Barrow Neurological Institute Neurology Symposium, Barrow Neurological Institute,
 Committee Member, 2007
- Exercise as a Prescriptive Therapy in MS: What We Know and What We Need to Know. A Consensus Conference, organizer and presenter. Denver, Colorado October 2-3, 2010

11. Teaching Record

- Grand Rounds presentation-University of Colorado Department of Neurology
 - December 11, 2009
 - December 12, 2010: "Immunotherapies of MS: New Opportunities and New Risks"
 - December 7, 2011: "Is Multiple Sclerosis a Disease of Oligodendrocytes, Neurons or Astrocytes?
 Why does it Matter?"
 - November 18, 2015: "B Lymphocytes: The Driver of MS Pathology and Key Target in the Treatment of MS"
- Invited Grand Rounds presentations
 - August 12, 2011, University of California San Diego
 - May 9, 2012, MS Research Center of New York, New York City

June 6, 2013 University of St. Louis

Resident Education presentations

- June 3, 2009. Goals of Immunotherapy in MS Using FDA Approved DMANS
- June, 2010 Our Evolving Understanding of MS, Implications for Future Therapies
- October 6, 2010. case presentations
- December 8, 2010: Immunological therapy in MS
- August 1, 2012: Basics of Journal Review
- February 6, 2013: Immunological Treatments and case presentations
- February 18, 2014: Emerging Concepts in MS

Student Teaching

- October 7, 2009 4th year student lecture, Path 8001, CNS Analysis, University of Colorado School of Medicine
- Presentation on MS to CU Boulder Neuroscience Club October 28, 2010
- October 11, 2011 4th year student lecture, University of Colorado School of Medicine Clinical Laboratory Medicine, Pathology 8001, CSF Analysis.
- January 31, 2012 Neuroscience Graduate Education Lecture, University of Colorado School of Medicine
- September 11, 2012 4th year student lecture, University of Colorado School of Medicine Clinical Laboratory Medicine, Pathology 8001, CSF: Its Analysis and Practice in Medicine September 3, 2014, and September 23, 2015

Attending Neurologist at University Hospital

- March 1—March 15, 2009
- June 1—June 15, 2009
- Oct 4—Oct 7, 2010
- Oct 18, 2010
- Oct. 19—Oct. 31, 2010
- January 1—January 15, 2011
- Neuro Service/Stroke Call August 18, 2011, September 14, 2011, October 31, 2011,
- December 21, 2011, February 13, 2012, March 14, 2012, May 30, 2012, June 28, 2012, August 2, 2012, September 17, 2012, October, 17, 2012, November 1, 2012, December 19, 2012, February 7, 2013, August 17-August 24, 2015

Mentees/trainees

- Jonathan Goldstein, M.D., Associate Professor of Neurology, Yale School of Medicine
- Jana Preiningerova, M.D. formerly Assistant Professor of Neurology, Yale School of Medicine.
 Currently residing in Eastern Europe
- Robert Bomprezzi, M.D., PhD. Assistant Professor of Neurology, Barrow Neurological Institute
- Wenhua Piao, PhD
- Wei Liu, PhD. Faculty, Albert Einstein College of Medicine
- Mrinalini Kala, PhD. Faculty, University of California San Francisco
- Youn Jee, M.D., PhD. Assistant Professor, Cheju National University, School of Medicine, Korea
- 3rd year medical students at University of Colorado 2010--2011: Daren Eblovi, Brent Fowler,
 Julian Maendel, Yihan Lin, Samuel Mast, Matthew Percy, Amy Reppert, Benjamin Snyder, Tobin
 Strom, Tyra Thorstad, Asa Ware.
- Residents, University of Colorado School of Medicine, 2010-2013: Charles Braun, Haley Burke, Emily Gertsch, Takamasa Higashimori, Kimberly Horiuchi, Drew Kern, Angel Pulido, Peter Bergman, Emily Lampe, Eryn Lonnquist, Danielle McDermott, Marius Birlea, Adam Graham, Aaron Haug, Wesley Reynolds, Katie Polovitz, Teri Schreiner, 2010--2011
- David Case, Mentee Resident University of Colorado School of Medicine 2008—2009; 2009—2010;
 2010—2011
- Cliff Hampton, Mentee Resident University of Colorado School of Medicine 2012--current
- Preceptor for Kiara Foltyn 1st year medical student, University of Colorado School of Medicine,
 2010
- Matthew West, M.D., Neuro-Immunology Fellow, 2010--2011
- Teri Schreiner, M.D., Neuro-Immunology Fellow, 2011—2012
- Preceptor for Jacob Pellinen, 2nd year medical student, University of Colorado School of Medicine
 2011—
- Preceptor for Jeremy Hua 1st year medical student, University of Colorado School of Medicine,
 2011—
- Preceptor for Jarred Arensen, medical student, University of Colorado School of Medicine 2012--

12. Community Outreach

- "A Conversation on MS" for the Rocky Mountain MS Center presentations to communities across Colorado and Wyoming (2010—present)
- January 20, 2010, February 16, 2010, March 20, 2010, May 4, 2010, June 11, 2010, July 23, 2010, August 20, 2010, September 17, 2010, October 19, 2010, November 17, 2010, April 5, 2011, May 17, 2011, June 14, 2011, July 22, 2011, August 30, 2011, September 9, 2011, February 6, 2012,

April 10, 2012, May 15, 2012, July 20, 2012, September 11, 2012, February 22, 2013, April 16, 2013, May 14, 2013, July 26, 2013, October 18, 2013, April 15, 2014, August 1, 2014, April 17, 2015, July 10, 2015.

- Round table meeting with community Neurologists sponsored by Rocky Mountain MS Center
- March 23, 2010
- Rocky Mountain MS Center Provider Summit April 7, 2010
- Invisible Symptoms Seminar with Rocky Mountain MS Center April 24, 2010
- Gadgets, Gizmos & Strategies, Rocky Mountain MS Center October 9, 2010
- Rocky Mountain MS Center Fall Seminar October 23, 2010
- Rocky Mountain MS Center Research Seminar Colorado Springs, CO November 6, 2010
- Rocky Mountain MS Center Research Conference Ft. Collins, CO April 30, 2011
- Rocky Mountain MS Center Research Seminar Colorado Springs, CO October 15, 2011
- Rocky Mountain MS Center Aurora, CO November 19, 2011
- Doctor Line 9 and on camera interview with Kyle Dyer and Gary Shapiro KUSA Channel 9 January 19, 2012 http://www.9news.com/news/article/243215/222/Expert-Multiple-Sclerosis-prevalent-in-Colorado
- Interview with The Denver Post February 25, 2012
- http://www.denverpost.com/popular/ci_20041756?source=pop_neighbors_denver
- Autoimmune Diseases Association conference, Aurora, CO March 3, 2012, Improved Understanding of MS Through Clinical Trials
- Interview with Bloomberg-On-Line March 6, 2012
- http://www.bloomberg.com/news/print/2012-03-06/novartis-multiple-sclerosi-pill-loses-market-share-as-doctors-become-wary.html
- Presentation to MS Alliance of Colorado Springs
- Radio Interview for 1430 AM March 31, 2012
- Radio Interview for ALICE 105.9 FM April 1, 2012
- Radio Interview THE MOUNTAIN 99.5 FM April 1, 2012 http://www.entercom.com/markets.php
- Presentation to the MS Alliance of Colorado Springs, March 20, 2012
- Rocky Mountain MS Center Research update Denver, CO April 14, 2012
- Rocky Mountain MS Center Managing MS Symptoms Loveland, CO May 12, 2012
- Rocky Mountain MS Center Living well with MS Seminar, Denver, CO September 15, 2012
- Rocky Mountain MS Center Research Seminar Northglenn, CO April 20, 2013
- Rocky Mountain MS Center Living Well Seminar—Exercise, Lone Tree, CO May 11, 2013
- Rocky Mountain MS Center Living Well with MS Seminar, Golden, CO October 12, 2013
- Rocky Mountain MS Center Research Seminar Aurora, CO November 23, 2013
- Rocky Mountain MS Center Spring Education Seminar, Denver, CO May 16, 2015
- Rocky Mountain MS Center Fall Education Seminar, Golden, CO Oct. 25, 2015
- Rocky Mountain MS Center Spring Education Summit, Westminster, CO May 21, 2016

- Presentation to Transverse Myelitis Symposium-Overview of Research in Neurology at University of Colorado Anschutz Campus. Denver, Colorado August 13, 2016
- Rocky Mountain MS Center Fall Education Summit Aurora, CO October 29, 2016

13. Grant support—Current as Primary Investigator

1.	Rocky Mountain Network for Neuroscience Clinical Stud	,	
	NIH/NINDS 1U10NS077277-01	Vollmer (PI)	9/30/11-9/30/18
2.	TV5600-CNS-206 Teva ARPEGGIO	Vollmer (PI)	6/9/15—6/9/18
	Parallel-group, placebo-controlled study to evaluate the efficacy, safety, tolerability of once daily of		
	administration of laquinimod (0.6 or 1.5 mg) in patients with primary progressive multiple sclerosis		
3.	IIP-PRO Rocky Mountain MS Center	Vollmer (PI)	05/14ongoing
4.	Patient reported outcomes (PROs) as part of routine clinical care in the RMMSC Neuroimmunology		
	Department, University of Colorado		
5.	NINDS NeuroNext	Vollmer (PI)	9/30/2011- 6/30/2018
6.	Hoffmann-LaRoche	Vollmer (PI)	1/1/2011-10/1/2018
7.	A Phase III, Multicentre, Randomized, Parallel-Group, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of Ocrelizumab in Adults with Primary Progressive Multiple Sclerosis		
8.	Pfizer	Vollmer (PI)	1/10/2014-2/25/2018
9.	A phase 1 study to evaluate the safety, tolerability, pharmacokinetics and pharmacodynamics of multiple ascending doses of pf-06342674 (rn168) in subjects with relapsing multiple sclerosis (MS)		
10.	UTSW	Vollmer (PI)	10/14/2016-10/14/2019
11.	Multicenter, randomized, double-blind, parallel-group,	add-on, superio	rity study to compare the
	efficacy and safety of ponesimod to placebo in subjects with active relapsing multiple sclerosis who		
	are treated with dimethyl fumarate (Tecfidera®)		
12.	Hoffman-LaRoche	Vollmer (PI)	10/15/2011-12/31/2019
13.	A Randomized, Double-Blind, Double-Dummy, Parallel-Group Study to Evaluate the Efficacy and Safety		
	of Ocrelizumab in Comparison to Interferon-Beta-1a (Rebif) in Patients with Relapsing Multiple		
	Sclerosis		
14.	TG Therapeutics	Vollmer (PI)	10/18/2016-10/17/2019
15	A Placebo-Controlled Multi-Center Phase IIa Dose Finding Study of Ublituximab, a Third-Generation		
	Anti-CD20 Monoclonal Antibody, in Patients with Relapsing Forms of Multiple Sclerosis.		
16.	TEVA	Vollmer (PI)	12/1/2009-12/31/2018
17.	A multination, multicenter, open-label, single-assignment extension of the MS-LAQ-302 (BRAVO) study, to evaluate the long-term safety, tolerability and effect on disease course of daily oral laquinimod 0.6 mg in subjects with relapsing multiple sclerosis		
18.	TEVA	Vollmer (PI)	2/1/2015-6/30/2018

- 19. A Multi-National, Multi-center, Double-Blind, Parallel-Group, Placebo-Controlled Study to Evaluate the Efficacy, Safety and Tolerability of Daily Oral Administration of Laquinimod (0.6 mg or 1.0 mg, or 1.5 mg) in Subjects with PPMS
- 20. Actelion Vollmer (PI) 4/26/2017-4/25/2020
- 21. Multicenter, randomized, double-blind, parallel-group, add-on, superiority study to compare the efficacy and safety of ponesimod to placebo in subjects with active relapsing multiple sclerosis who are treated with dimethyl fumarate (Tecfidera®)
- 22. Genentech Vollmer (PI) 5/19/2017-5/18/2020
- 23. Evaluating the tolerability and safety profile of switching from rituximab to ocrelizumab: A real world evaluation of patients with relapsing forms of multiple sclerosis
- 24. TEVA Vollmer (PI) 9/3/2013-12/31/2018
- 25. Phase 3, multi-center, randomized, double-blind, parallel-group, placebo-controlled study followed by an active treatment period to test the safety and efficacy and tolerability of an oral treatment for patients with Relapsing Remitting Multiple Sclerosis.

13.1 Grant support—Past

- CAMMS32409, Genzyme Vollmer (PI) 02/07/2011- 02/06/2017
 This project is an extension protocol for Multiple Sclerosis patients who participated in Genzyme-Sponsored studies of Alemtuzumab, such as CAMMS32400507
- MS-LAQ-302E Teva BRAVO Vollmer (PI) 11/31/12—11/30/16
 Extension of BRAVO study to evaluate the long-term safety, tolerability and effect on disease of daily oral laquinimod 0.6 mg in relapsing multiple sclerosis
- 3. 14-1101 EMD-Serono-CNS B Cells Vollmer (PI) 7/2/14—7/1/17 Determining of B cell-astrocyte interactions initiate CNS pathology in multiple sclerosis
- 062113 Teva Vollmer (PI) 11/14/13—11/13/15
 Exploring the mechanism of action of laquinimod on B lymphocytes and astrocytes in multiple sclerosis
- 5. TV44400-CNS-60150 Teva Vollmer (PI) 1/14/15—1/13/18 Comparative effects of glatiramer acetate on BG0012 on lymphocyte survival and matebolism
- 6. Biogen STRIVE Vollmer (PI) 6/14/12—6/13/16
- 7. Open-label study of Tysabri in early relapsing-remitting MS in anti-JCV antibody negative patients
- Duloxetine in patients with central neuropathic pain Vollmer (PI) 10/31/2008-10/30/2011
 Lilly Research Laboratories
 This project assesses the efficacy of duloxetine 60 mg once daily (QD) compared with placebo on the
 - This project assesses the efficacy of duloxetine 60 mg once daily (QD) compared with placebo on the reduction of pain severity as measured by the weekly mean of the daily 24-hour average pain scores in patients with central neuropathic pain in MS.
- 9. A 12-month double-blind, randomized, multicenter, active-controlled, parallel-group study comparing the efficacy and safety of 0.5 mg and 1.25 mg fingolimod (FTY720) administered orally once daily

- versus interferon β -1a (Avonex®) administered IM once weekly in patients with relapsing-remitting multiple sclerosis with optional Extension Phase, Novartis , (Sub Investigator)
- 10. A Double-Blind, Placebo Controlled Multi-Center Study to Evaluate the Efficacy and Safety of MBP8298 in Subjects with Secondary Progressive Multiple Sclerosis, BioMS Technology Corp., (SubInvestigator)
- 11. Improved Diagnosis of Multiple Sclerosis Using Magnetoencephalography (MEG) and the Synchronous Neural Interaction TM Test: MS Template Development Study. Orasi (Sub Investigator)
- 12. A 14 week Randomized, Double-Blind, Placebo-Controlled Parallel Group Study to Evaluate the Efficacy, Safety, and Tolerability of Nerispiridine 50 mgm, 100 mg. and 200 mg in Patients With Multiple Sclerosis, Sanofi Aventis (Principal Investigator)
- 13. A Phase 1 Open-Label, Flexible-Dose Titration Study of the Safety and Tolerability of ONO-4641 in Patients with a Relapsing Form of Multiple Sclerosis, Ono Pharma USA. ONO 4641 (Principal Investigator)
- 14. A Study with IPX056 in Subjects with Spasticity Associated with Multiple Sclerosis (Principal Investigator)
- 15. A Phase II, Multi-Center, Randomized, Double-Blind, Placebo-Controlled, Safety, Tolerability and Efficacy Study on Add-on Cladribine Tablet Therapy with Rebif® New Formulation in Multiple Sclerosis Subjects with Active Disease, Serono International S.A., Serono, Inc., (Principal Investigator)
- 16. A Phase 2 Randomized, Double-Blinded, Placebo-Controlled, Multi-Center Study of Subcutaneous Daclizumab® in Patients with Active, Relapsing Forms of Multiple Sclerosis, PDL BioPharma, Inc., (Principal Investigator)
- 17. Biomarkers in Multiple Sclerosis, Division of Intramural Research (DIR), NIH/NINDS, (Principal Investigator)
- 18. Online Validation of Multiple Sclerosis International Quality of Life (MuSI-QoL) Questionnaire, Serono/Pfizer, (Principal Investigator)
- 19. A Prospective Study of Quality of Life and Cost of Disease in a Selected Group of MS Patients Treated with Novantrone, Serono International S.A., Serono, Inc. (Principal Investigator)
- 20. Development of Peripheral Blood Diagnostics and Biomarkers for Alzheimer's Disease, Arizona Biomedical Research Commission (ABRC), (Subinvestigator)
- 21. Double-Blind, Placebo-Controlled, 20-Week, Parallel Group Study to Evaluate Safety, Tolerability and Activity of Oral Fampridine-SR in Subjects with Multiple Sclerosis, Acorda Therapeutics, Inc. (Principal Investigator)
- 22. Open-Label Study to Evaluate the Safety, Tolerability and Activity of Oral Fampridine-SR in Subjects with Multiple-Sclerosis, Acorda Therapeutics, Inc. (Principal Investigator)
- 23. A Double-Blind, Placebo-Controlled, Multicenter Study to Assess the Safety and Efficacy of AVP-923 (Dextromethorphan/Quinidine) in the Treatment of Pseudobulbar Affect in Patients with Multiple Sclerosis (Principal Investigator)
- 24. A Phase II/III, Randomized, Double-Blind, Parallel-Group, Placebo-Controlled, Multicenter Study to Evaluate the Safety and Efficacy of Rituximab (MabThera®/Rituxan®) in Adults with Primary Progressive Multiple Sclerosis, Genentech, Inc., (Principal Investigator)

- 25. A Phase II, Proof-of-Concept, Randomized, Double-Blind, Parallel-Group, Placebo-Controlled, Multicenter Study to Evaluate the Safety and Efficacy of Rituximab (MabThera®/Rituxan®) in Adults with Relapsing-Remitting Multiple Sclerosis, Genentech, Inc., (Principal Investigator)
- 26. A Cross Sectional Study to Evaluate the Persistence of Immunological Effects of Glatiramer Acetate (Copaxone®) in Patients with Relapsing Forms of Multiple Sclerosis, Barrow Neurological Foundation, (Principal Investigator)
- 27. Specimen and Data Collection and Archiving for Immunological Investigations Aiming to Understand the Immunological Mechanism of Multiple Sclerosis (MS) and Identify New Targets For Immune Therapies for Multiple Sclerosis and Other Autoimmune Diseases and Neuroinflammatory Disorders, Barrow Neurological Foundation (Principal Investigator)
- 28. Gene Expression Assay of Patients with Multiple Sclerosis and Other Neurological Diseases, On and Off Immunological Therapy, Compared to Healthy Controls, Barrow Neurological Foundation/TGen, (Principal Investigator)
- 29. A Genomics Study of Blood Markers of Disease Activity in Multiple Sclerosis (Co-Principal Investigator)
- 30. Phase I Trial of Immunotherapy with BHT-3009 Alone or Combined with Atorvastatin in Patients with Multiple Sclerosis (Lead Investigator)
- 31. International, randomized, multicenter, Phase IIIb study in patients with relapsing-remitting multiple-sclerosis comparing over a treatment period of 104 weeks: 1) Double-blinded safety, tolerability, and efficacy of Betaseron/Betaferon 250 ug (8MIU) and Betaseron/Betaferon 500 ug (16 MIU), both give subcutaneously every other day, and 2) Rater-blinded safety, tolerability, and efficacy of Betaseron/Betaferon s.c. every other day with Copaxone 20 mg s.c. once daily. (Principal Investigator)
- 32. A Randomized, Rater-blinded, Multicenter, Parallel-group Study Comparing the Efficacy and Safety of Betaseron® 250mg Subcutaneously Every Other Day with Avonex® 30mg Intramuscularly Once per Week in Relapsing-remitting Multiple Sclerosis Patients Previously Treated with Avonex®. (Principal Investigator)
- 33. A Phase II, Randomized, Double-Blind, Placebo Controlled Study to Evaluate the Preliminary Efficacy, Pharmacokinetics and Immunogenicity of BMS-188667 Administered to Subjects with Relapsing Remitting Multiple Sclerosis" (Principal Investigator)
- 34. A Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Safety, Tolerability and Efficacy of NBI-5788- in Patients with Relapsing Multiple Sclerosis (Principal Investigator)
- 35. Multiple Sclerosis Instrument Quality of Life Project (MuSI-QoL) (Principal Investigator)
- 36. Phase IV, Multicenter, Open Label, Randomized Study Of Rebif 44 Mcg Administered Three Times Per Week By Subcutaneous Injection Compared With Copaxone 20 Mg Administered Daily By Subcutaneous Injection In The Treatment Of Relapsing Remitting Multiple Sclerosis (Principal Investigator)
- 37. A Multi-Centered, Randomized, Two-Arm, Open Label Study to Evaluate the Safety, Tolerability and Efficacy of Induction Treatment with Mitoxantrone (Novantrone®) Preceding Treatment with Glatiramer Acetate (Copaxone®) versus Chronic Treatment with Glatiramer Acetate Alone in Relapsing Forms of Multiple Sclerosis Teva Neuroscience, (Lead Investigator)

- 38. Immunological Studies for a Multi-Centered, Randomized, Two-Arm, Open Label Study to Evaluate the Safety, Tolerability and Efficacy of Induction Treatment with Mitoxantrone (Novantrone) Preceding Treatment with Glatiramer Acetate (Copaxone) versus Chronic Treatment with Glatiramer Acetate Alone in Relapsing Forms of Multiple Sclerosis Teva Neuroscience, (Co-Principal Investigator)
- 39. Impact of Neutralizing Antibodies on Interferon Responsive Genes Highlights Biomarker Response, Biogen Idec, (Principal Investigator)
- 40. A Randomized, Double-Blind, Placebo-Controlled, Multi-center Study to Evaluate the Efficacy and Safety of Atorvastatin in Patients with Clinically Isolated Syndrome and High Risk of Conversion to Multiple Sclerosis, NIAID/ITN, (Principal Investigator)
- 41. A Multi-Center, Two Arm, Open Label Extension Study (to protocol NC_100) to Evaluate the Long Term Safety and Efficacy of Short-Term Induction Treatment with Mitoxantrone (Novantrone®) Preceding Treatment With Glatiramer Acetate (Compaxone®) vs. Chronic Treatment with Glatiramer Acetate Alone in Relapsing Forms of Multiple Sclerosis, Teva Neuroscience (Lead Investigator)
- 42. A Phase I, Double-blind, Placebo-controlled Study Evaluating the Safety and Pharmacology of Single Dose Subcutaneously Administration of a Human Monoclonal Antibody to IL-12 (CNTO 1275) in Patients with Relapsing Forms of Multiple Sclerosis (Principal Investigator)
- 43. A 24-Week, Randomized, Double-Blind, Parallel-Group, Placebo-Controlled, Dose Finding, Safety, Tolerability, and Efficacy Study of the Human Anti-IL-12 Antibody ABT-874 in Subjects With Multiple Sclerosis With a 24-Week Double-Blind, Active Extension Phase
- 44. Double-Blind, Placebo-Controlled, 20-Week, Parallel Group Study to Evaluate Safety, Tolerability and Double-Blind, Placebo-Controlled, 21-Week, Parallel Group Study to Evaluate Safety and Efficacy of Oral Fampridine-SR (10 mg B.I.D.) in Subjects with Multiple Sclerosis
- 45. A Double-Blind, Placebo-Controlled, Multicenter Study to Assess the Safety and Efficacy of AVP-923 (Dextromethorphan/Quinidine) in the Treatment of Pseudobulbar Affect in Patients with Multiple Sclerosis
- 46. A Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Safety, Tolerability and Efficacy of NBI-5788 in Patients with Relapsing Multiple Sclerosis
- 47. A Randomized, Double-blind, Placebo-controlled, Parallel group, Dose-ranging Study to Investigate the MRI Efficacy and the Safety of Three Months Administration of SB-683699 (150-1200mg twice daily) in Subjects with Relapsing Multiple Sclerosis
- 48. An open-label study of leukocyte counts in the cerebrospinal fluid and blood of subjects with relapsing remitting multiple sclerosis following treatment with firategrast
- 49. A Multi-Center, Randomized, Blinded, Parallel-Group Study of AVONEX® Compared with AVONEX® in Combination with Oral Methotrexate, Intravenous Methylprednisolone, or Both in Subjects with Relapsing-Remitting Multiple Sclerosis Who Have Breakthrough Disease on AVONEX® Monotherapy
- 50. Phase I Trial of Immunotherapy with BHT-3009 Alone or Combined with Atorvastatin in Patients with Multiple Sclerosis
- 51. An Open-Label, Multicenter Study to Assess the Safety of AVP-923 Dextromethorphan/Quinidine) in the Treatment of Pseudobulbar Affect (Principal Investigator)

- 52. An open-label and drug interaction study of Natalizumab in combination with interferon-beta (Avonex®) in patients with multiple sclerosis.
- 53. A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Multicenter Study to Determine the Safety and Efficacy of Natalizumab in Subjects with Relapsing-Remitting Multiple Sclerosis (Principal Investigator)
- 54. A Phase II, Randomized, Double-Blind, Placebo Controlled Study to Evaluate the Preliminary Efficacy, Pharmacokinetics and Immunogenicity of BMS-188667 Administered To Subjects with Relapsing-Remitting Multiple Sclerosis (Principal Investigator)
- 55. A 10 Year Open-Label Extension Study to Evaluate the Safety of Copaxone and To Monitor the Neurologic Course of Disease in Multiple Sclerosis Patients Treated With Copaxone (Principal Investigator
- 56. A Two-Arm, Cross-Over Design, Two Dose, Dose Escalation, Safety and Tolerability Study of Oral Interferon Beta-1a (Avonex) in Multiple Sclerosis (Lead Investigator)
- 57. An Open-Label, Randomized, Multi-Center, Comparative, Parallel Group Study Of Rebif 44 Mcg
 Administered Once Per Week By Intramuscular Injection In The Treatment Of Relapsing Remitting
 Multiple Sclerosis (Principal Investigator)
- 58. An Open-Label, Randomized, Multi-Center, Comparative Parallel Group Study of Rebif Compared with Avonex in Relapsing-Remitting Multiple Sclerosis (Principal Investigator) Characterization of Human Schwann Cell Lines In Vitro Safety and Viability Studies (Co-Investigator)
- 59. Phase I Trial of Autologous Schwann Cell Transplantation in MS as a Myelin Repair Strategy in MS Patients (Lead Investigator)
- 60. An Open-Label, Single-Arm, Cross-over, Frequent MRI Study of Simvastatin as a Therapy for Multiple Sclerosis (Lead Investigator)
- 61. A Multi-National, Multi-Center, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy,
 Tolerability, and Safety of Glatiramer Acetate for Injection in Primary Progressive Multiple Sclerosis
 Patients (Principal Investigator)
- 62. Randomized, Double Blind, Placebo-Controlled Study to Compare the Effects of Different Dose Regimens of IGIV-Chromatography (IGIV-C), 10% Treatment on Relapsed Rater in Patients with Multiple Sclerosis (Principal Investigator)
- 63. An Open-Label Safety Extension Study of Avonex (Interferon Beta-1a Treatment in Subjects Who Completed Biogen Studies C95-812, C96-823, or C97-830 (Principal Investigator)
- 64. A Randomized, Double Blind, Placebo-Controlled Study to Evaluate the Efficacy of Avonex in the Treatment of Secondary Progressive Multiple Sclerosis (Principal Investigator)
- 65. An Open-Label, Randomized, Multi-Center, Comparative, Parallel Group Study of Rebif 44 mcg
 Administered Three Times Per Week by Subcutaneous Injection, Compared with Avonex 30 mcg
 Administered Once Per Week by Intramuscular Injection in the Treatment of Relapsing-Remitting
 Multiple Sclerosis (Principal Investigator)

- 66. A Randomized, Multi-Center, Double-Blind, Placebo-Controlled Safety, Tolerability And Dose Evaluation Study of Intravenous Antegren (Natalizumab) At Two Dose Levels Using Magnetic Resonance Imaging In Subjects With Multiple Sclerosis (Principal Investigator)
- 67. A Multi-National, Multi-Center, Randomized, Double-Blind, Placebo-Controlled Study To Evaluate The Efficacy, Tolerability, And Safety Of Two Doses (5 Mg And 50 Mg) Of Glatiramer Acetate Orally Administered In Relapsing Remitting Multiple Sclerosis Patient (Principal Investigator)
- 68. A Randomized, Parallel-Group, Double-Blind, Placebo-Controlled Study Comparing the Safety, Tolerance and Efficacy of RTX (Resiniferatoxin) Topical Solution in Patients With Detrusor Hyperreflexia (Investigator)
- 69. Performance Scale Validation Study (Principal Investigator)
- 70. Symptom Inventory Validation Study (Principal Investigator)
- 71. The Effects of Betaseron on Quality of Life in MS -A Q- TWiST Evaluation (Principal Investigator)
- 72. A Double-Blind, Placebo-Controlled, Multi-center Study of Oral Myelin (Myloral) in the Treatment of Early Relapsing- Remitting MS (Principal Investigator)
- 73. A Phase II, Double-Masked, Placebo-Controlled Study to Evaluate the Safety and Efficacy of Two Doses of Betaseron in Patients with Secondary Progressive Multiple Sclerosis (Principal Investigator)
- 74. A Multi-Center, Open-Label, Long-term Study to Evaluate the Safety of Tizanidine for Spasticity Due to MS (Principal Investigator)
- 75. A Double Blind, Placebo Controlled Trial of Total Lymphoidal Irradiation in Multiple Sclerosis (Principal Investigator)
- 76. A Double Blind, Placebo Controlled Trial of Tizanidine as an Anti-Spastic Therapy in Multiple Sclerosis (Principal Investigator)
- 77. A Double Blind, Placebo Controlled Phase II Trial of 4-AP in MS (Principal Investigator)
- 78. A Pharmacodynamic Study of Tizanidine in MS (Principal Investigator)
- 79. Open Trial of Tizanidine in Multiple Sclerosis (Principal Investigator)
- 80. A Double Blind, Placebo-Controlled, Dose-Determination, Safety, Tolerability and Efficacy Study of Intravenous Antegren in Patients with Multiple Sclerosis during an Acute Exacerbation (Principal Investigator)
- 81. A Phase II Study of Hu23F2G in Acute Exacerbations of Multiple Sclerosis (Principal Investigator)
- 82. An Open-Label Study to Assess the Long-Term Safety of Zanaflex (tizanidine HCL) in Patients Treated with 28 to 36 mg/day (Principal Investigator)
- 83. An Open Label Dose Proportionality Study to Assess the Pharmacokinetics of Escalating Doses of Fampridine (4-Aminopyridine) in Subjects with Multiple Sclerosis (Principal Investigator)
- 84. An Open-Label Protocol to Assess the Steady State Pharmacokinetics of orally Administered Fampridine (4-Aminopyridine) in Subjects with Multiple Sclerosis (Principal Investigator)
- 85. An Open-Label, Safety and Pharmacokinetic Drug Interaction Study of Intravenous Antegren and Intramuscular Interferon beta-1a in Subjects with Multiple Sclerosis (Principal Investigator)
- 86. The Prevalence of Neutralizing Antibodies in Patients Treated with Betaseron or Avonex (Principal Investigator)

- 87. Factors Related to Non-Adherence to Treatment with Disease-Modifying Drugs in Multiple Sclerosis (Co-Investigator)
- 88. A Double Blind, Placebo Controlled Multi-Center Trial of Copolymer-1 in Relapsing Multiple Sclerosis (Principal Investigator)
- Cost-Benefit and Cost-Effectiveness Analysis of Interferon Beta-1a Therapies for Multiple Sclerosis (Lead Investigator)
- 90. Randomized Multicenter Trial of Intravenous Natalizumab in Acute MS Relapses: Clinic and MRI Effects (Lead Investigator)
- 91. CS 0777-A-U102, Daiichi Sankyo Pharma Development Vollmer (PI)

 This project assessed the safety and tolerability of oral CS-0777 administered for 12 weeks in patients with MS.
- 92. Duloxetine in patients with central neuropathic pain. Lilly Research Laboratories Vollmer (PI)

 This project assesses the efficacy of duloxetine 60 mg once daily (QD) compared with placebo on the reduction of pain severity as measured by the weekly mean of the daily 24-hour average pain scores in patients with central neuropathic pain in MS.
- 93. HP 184: Nerispiroline, Sanofi Aventis US, Inc. Vollmer (PI)
- 94. This project assesses the activity of nerispirdine in imporving the ability to walk in persons with MS.
- 95. Consortium of Multiple Sclerosis Centers, NARCOMS Vollmer (PI)
- 96. The project is directed toward continuing the NARCOMS registry for persons with MS. IPX056-B09-01, Impax Vollmer (PI)
- 97. A study with IPX056 in subjects with spasticity associated with multiple sclerosis
- 98. MS-LAQ, TEVA Neuroscience (BRAVO) Vollmer (PI) This project assesses the efficacy, safety, and tolerability of laquinimod over placebo in a double-blind design and of a reference arm of Interferon β -1a (Avonex®) in a rater-blinded design and to perform a comparative benefit/risk assessment between oral laquinimod and injectable Interferon β -1a (Avonex®).
- Disability-Specific Symptom Inventory Short Forms to Improve MS Outcome Assessment
 Vollmer (co-investigator)
 Department of Defense, U.S. Army Medical Research Acquisition Activity (subcontract to DeltaQuest Foundation, Inc)
- 100. ELND002-MS103, Elan Pharm Vollmer (PI)

 To determine the safety and tolerability of ELND002 including the identification of dose-limiting toxicity (ies) and determination of the maximum tolerated dose in patients with multiple sclerosis.
- 101. CAMMS32400507, Genzyme Vollmer (PI)

 This project compares two annual cycles of IV low-and-high-dose Alemtuzumab to three-times weekly subcutaneous interferon beta 1a (Rebif) in patients with relapsing remitting multiple sclerosis
- 102. MS-LAQ-302E, TEVA Neuroscience (extension) Vollmer (PI) 12/01/2009-11/30/2012

- This project is an extension of the MS-LAQ-302 (BRAVO) study to evaluate the long-term safety, tolerability and effect on disease course of daily oral laquinimod 0.6 mg in subjects with relapsing multiple sclerosis
- 103. 101-MS-402 TYGRIS: TYSABRI, Biogen Idec, Inc. Vollmer (PI) 11/13/2008-11/12/2011 This project assesses the incidence and pattern of serious infections, malignancies, and other serious adverse events (SAEs) in patients with MS treated with TYSABRI® (natalizumab).
- 104. 101JC401, Biogen Idec Vollmer (PI) 05/01/2010-4/30/2013

 JVC Antibody Program in Patients with Relapsing Multiple Sclerosis Receiving or Considering

 Treatment with Tysabri®: STRATIFY-1
- 105. 09MS201 Biogen Idec Vollmer (PI) 06/01/2010-05/31-15 To evaluate the safety and tolerability of BG00012 administered in combination with IFN β or GA in subjects with remitting-relapsing multiple sclerosis. EXPLORE
- 106. ONO-4641 POU006, Ono Pharmaceutical Co Vollmer (PI) 01/2010-04/30/2013

 This project is a flexible-dose titration study of the safety and tolerability of ONO-4641 in patients with a relapsing form of multiple sclerosis
- 107. Acorda Vollmer (PI) 6/1/13—5/31/16
 A double-blind, placebo-controlled, single ascending intravenous infusion study of rHIgM22 in patients with MS
- 108. ONO-4641POU007 (Extension) Ono Pharmaceutical Vollmer (PI) 03/01/2011-2/28/2014

 To evaluate continuing safety and efficacy of ONO-4641 in patients who have completed an initial 26week study (ONO-4641POU006)
- 109. Sergeant-JCV-02. Janssen Research & Development. Vollmer (PI) 8/27/12—2/26/15 This is a study to evaluate potential virological and immunological markers for the identification of MS patients at increased risk of developing PML during continued treatment with natalizumab
- 110. 12-0237 Avanir Pharmaceuticals Vollmer (PI) 4/30/12-4/19/15

 This is a study to assess the safety and efficacy of 3 dose levels of dextromethorphan and quinidine in the treatment of central neuropathic pain in patients with MS
- 111. Vaccinex Vollmer (PI) 5/21/13—5/20/16

 A Phase1, multi-center, randomized, double-blind, placebo-controlled, ascending single dose study of the safety, tolerability, and pharmacokinetics of intravenous VX15/2503 in patients with MS
- 112. Medimmune Vollmer (PI) 9/25/12—9/24/15
 A phase1 randomized study of MEDI-551 in subjects with relapsing forms of MS
- 113. 101JC402, Biogen Idec Vollmer (PI) 07/01/2010-1/28/16

 JCV Antibody Program in Patients with Relapsing Multiple Sclerosis Receiving or Considering

 Treatment with Tysabri®: STRATIFY-2
- 114. 10-1143, Gateway II Teva Vollmer (PI) 10/1/2011-3-31-2016
 Randomized study comparing rituximab induction therapy followed by glatiramer acetate to glatiramer acetate monotherapy in RRMS
- 115. ONO0461POU007 (Extension) Ono Pharm. Vollmer (PI) 3/1/11—2/28/17

To evaluate continuing safety and efficacy of ONO-4641 in patients who have completed an initial 26-week study (ONO-4641POU006)

116. IM22-MS-1004 Acorda Vollmer (PI) 7/15/13—7/14/16
A double-blind, placebo-controlled, single ascending intravenous infusion study in patients with multiple sclerosis.

14. Bibliography—Peer Reviewed Journal Articles

- 1. Barbour RV DS, **Vollmer TL**, Harris JD. Pyrolysis of Utah tar sands Products and Kinetics. Fuels. 1977; 56:359-366.
- 2. **Vollmer TL**, Conley FK. Effect of cyclophosphamide on survival of mice and incidence of metastatic tumor following intravenous and intracardial inoculation of tumor cells. Cancer Res. Sep 1984; 44(9):3902-3906.
- 3. **Vollmer TL**, Waldor MK, Steinman L, Conley FK. Depletion of T-4+ lymphocytes with monoclonal antibody reactivates toxoplasmosis in the central nervous system: a model of superinfection in AIDS. J Immunol. Jun 1 1987; 138(11):3737-3741.
- 4. Redmond DE Jr SD, Naftolin F, Roth R, Bunney BS, Leranth C, Robbins R, Kier L, **Vollmer TL**, Levine RJ, Genel M, Zonana H. Ethics of Research Using Human Fetal Tissue. New England Journal of Medicine. 1989; 321:1609.
- 5. Redmond DE, Jr., Leranth C, Spencer DD, Robbins R, **Vollmer T**, Kim JH, Roth RH, Dwork AJ, Naftolin F. Fetal neural graft survival. Lancet. Sep 29 1990; 336(8718):820-822.
- 6. **Vollmer TL**, Brass LM, Waxman SG. Lhermitte's sign in a patient with herpes zoster. J Neurol Sci. Dec 1991; 106(2):153-157.
- 7. Rice CL, **Vollmer TL**, Bigland-Ritchie B. Neuromuscular responses of patients with multiple sclerosis. Muscle Nerve. Oct 1992; 15(10):1123-1132.
- 8. Spencer DD, Robbins RJ, Naftolin F, Marek KL, **Vollmer T**, Leranth C, Roth RH, Price LH, Gjedde A, Bunney BS, et al. Unilateral transplantation of human fetal mesencephalic tissue into the caudate nucleus of patients with Parkinson's disease. N Engl J Med. Nov 26 1992; 327(22):1541-1548.
- 9. Goldstein JM, Azizi SA, Booss J, **Vollmer TL**. Human immunodeficiency virus-associated motor axonal polyradiculoneuropathy. Arch Neurol. Dec 1993; 50(12):1316-1319.
- Redmond DE, Jr., Robbins RJ, Naftolin F, Marek KL, Vollmer TL, Leranth C, Roth RH, Price LH, Gjedde A, Bunney BS, et al. Cellular replacement of dopamine deficit in Parkinson's disease using human fetal mesencephalic tissue: preliminary results in four patients. Res Publ Assoc Res Nerv Ment Dis. 1993; 71:325-359.
- 11. **Vollmer TL**, Guarnaccia J, Harrington W, Pacia SV, Petroff OA. Idiopathic granulomatous angiitis of the central nervous system. Diagnostic challenges. Arch Neurol. Sep 1993; 50(9):925-930.
- 12. Goldstein JM, Waxman SG, **Vollmer TL**, Lang B, Johnston I, Newsom-Davis J. Subacute cerebellar degeneration and Lambert-Eaton myasthenic syndrome associated with antibodies to voltage-gated

- calcium channels: differential effect of immunosuppressive therapy on central and peripheral defects. J Neurol Neurosurg Psychiatry. Sep 1994; 57(9):1138-1139.
- 13. Miller A BD, Ritvo P, Stuart W, **Vollmer T**. The neurologist's perspective: what do we know and where do we go? Journal of Neurorehabilitation. 1994; 8: 105-111.
- 14. Smith C, Birnbaum G, Carter JL, Greenstein J, Lublin FD, Baumel B, Hsu CY, Murphy F, Reader AT, Schapiro RT, Sibley WA, Stazio A, Trotter JL, **Vollmer TL**, Walshe TM. Tizanidine treatment of spasticity caused by multiple sclerosis: results of a double-blind, placebo-controlled trial. US Tizanidine Study Group. Neurology. Nov 1994; 44(11 Suppl 9):S34-42; discussion S42-33.
- 15. Weinberg DA, Lesser RL, **Vollmer TL**. Ocular myasthenia: a protean disorder. Surv Ophthalmol. Nov-Dec 1994; 39(3):169-210.
- 16. Coulthard-Morris L, **Vollmer T**. Multiple sclerosis fatigue: classification and treatmeth options. Multiple Sclerosis. 1995; 2:2-6.
- 17. Johnson KP, Brooks BR, Cohen JA, Ford CC, Goldstein J, Lisak RP, Myers LW, Panitch HS, Rose JW, Schiffer RB, Vollmer TL, Weiner LP, Wolinsky JS. Copolymer 1 reduces relapse rate and improves disability in relapsing-remitting multiple sclerosis: results of a phase III multicenter, double-blind placebo-controlled trial. The Copolymer 1 Multiple Sclerosis Study Group. Neurology. Jul 1995; 45(7):1268-1276.
- 18. Sass KJ, Buchanan CP, Westerveld M, Marek KL, Farhi A, Robbins RJ, Naftolin F, **Vollmer TL**, Leranth C, Roth RH, et al. General cognitive ability following unilateral and bilateral fetal ventral mesencephalic tissue transplantation for treatment of Parkinson's disease. Arch Neurol. Jul 1995; 52(7):680-686.
- 19. **Vollmer TL**. A neurologist's perspective on enhanced MRI of multiple sclerosis. MRI Perspectives. 1995; 2:1-3.
- 20. **Vollmer TL**, Gaiser C, Dell'Oca RL, Porteus M, Steinman L, Stevens DA. Coccidioidal antigen reactive CD4+ T-lymphocytes in the cerebrospinal fluid in coccidioides immitis meningitis. J Med Vet Mycol. Jan-Feb 1995; 33(1):43-48.
- 21. Maravilla KR, Vollmer TL. The current view of MRI in multiple sclerosis. MRI Perspectives. 1996; 3:1-3.
- 22. **Vollmer T**. Multiple sclerosis: new approaches to immunotherapy. The Neuroscientist. 1996; 2:127-136.
- 23. Cook SD, Devereux C, Troiano R, Wolansky L, Guarnaccia J, Haffty B, Bansil S, Goldstein J, Sheffet A, Zito G, Jotkowitz A, Boos J, Dowling P, Rohowsky-Kochan C, Volmer T. Modified total lymphoid irradiation and low dose corticosteroids in progressive multiple sclerosis. J Neurol Sci. Nov 25 1997; 152(2):172-181.
- 24. Nance PW, Sheremata WA, Lynch SG, **Vollmer T**, Hudson S, Francis GS, O'Connor P, Cohen JA, Schapiro RT, Whitham R, Mass MK, Lindsey JW, Shellenberger K. Relationship of the antispasticity effect of tizanidine to plasma concentration in patients with multiple sclerosis. Arch Neurol. Jun 1997; 54(6):731-736.
- 25. Schwartz CE, Coulthard-Morris L, Cole B, **Vollmer T**. The quality-of-life effects of interferon beta-1b in multiple sclerosis. An extended Q-TWiST analysis. Arch Neurol. Dec 1997; 54(12):1475-1480.

- 26. Johnson KP, Brooks BR, Cohen JA, Ford CC, Goldstein J, Lisak RP, Myers LW, Panitch HS, Rose JW, Schiffer RB, **Vollmer T**, Weiner LP, Wolinsky JS. Extended use of glatiramer acetate (Copaxone) is well tolerated and maintains its clinical effect on multiple sclerosis relapse rate and degree of disability. Copolymer 1 Multiple Sclerosis Study Group. Neurology. Mar 1998; 50(3):701-708.
- 27. Schwartz CE, **Vollmer T**, Lee H. Reliability and validity of two self-report measures of impairment and disability for MS. North American Research Consortium on Multiple Sclerosis Outcomes Study Group. Neurology. Jan 1 1999; 52(1):63-70.
- 28. Sheremata WA, **Vollmer TL**, Stone LA, Willmer-Hulme AJ, Koller M. A safety and pharmacokinetic study of intravenous natalizumab in patients with MS. Neurology. Mar 23 1999; 52(5):1072-1074.
- 29. **Vollmer TL** NW, Stanton S, Hadjimichael O. The NARCOMS patient registry: a resource for investigators. International Journal of MS Care. 1999; 1:12-15.
- 30. Johnson KP, Brooks BR, Ford CC, Goodman A, Guarnaccia J, Lisak RP, Myers LW, Panitch HS, Pruitt A, Rose JW, Kachuck N, Wolinsky JS. Sustained clinical benefits of glatiramer acetate in relapsing multiple sclerosis patients observed for 6 years. Copolymer 1 Multiple Sclerosis Study Group (including **Vollmer TL**). Mult Scler. Aug 2000; 6(4):255-266.
- 31. Minagar A SW, **Vollmer TL**, Willmer-Hulme AJ, Koller M. Reduction of relapses in multiple sclerosis after anti-alpha4 integrin antibody (natalizumab). International Journal of MS Care. 2000; 2(1):1-6.
- 32. **Vollmer TL**. Use of MRI technology in determining prognosis and tracking therapeutic benefit in multiple sclerosis. International Journal of MS Care. 2000; 2(2).
- 33. Fraser C, Hadjimichael O, **Vollmer T**. Predictors of adherence to Copaxone therapy in individuals with relapsing-remitting multiple sclerosis. J Neurosci Nurs. Oct 2001; 33(5):231-239.
- 34. Kohama I, Lankford KL, Preiningerova J, White FA, **Vollmer TL**, Kocsis JD. Transplantation of cryopreserved adult human Schwann cells enhances axonal conduction in demyelinated spinal cord. J Neurosci. Feb 1 2001; 21(3):944-950.
- 35. Goodman AD BA, Cohen JA, Cross AH, Katz M, Rizzo MA, **Vollmer TL**. Placebo-controlled double-blinded dose ranging study of fampridine-SR in multiple sclerosis. Multiple Sclerosis Clinical and Laboratory Research. September 2002 2002; 8(1:S97):308.
- 36. Markovic-Plese S PA, Cortez A, **Vollmer TL**. Therapeutic potential of statins in relapsing-remitting multiple sclerosis. Mutliple Sclerosis Clinical and Laboratory Research. September 2002 2002; 8(1:S127):340.
- 37. Marrie R CJ, Hadjimichael O, **Vollmer TL**. Use of alternative providers in multiple sclerosis. Multiple Sclerosis Clinical and Laboratory Research. September, 2002 2002; 8(1):63.
- 38. Preiningerova J DZ, Cannistraci C, Sun H, **Vollmer TL**. Computer assisted volumetric analysis of gadolinium enhancement in multiple sclerosis. Mutliple Sclerosis Clinical and Laboratory Research. September, 2002 2002; 8(1:S97):245.
- 39. Rizzo M HO, Buenconsejo J, Preiningerova J, **Vollmer TL**. Spasticity in MS patients in the NARCOMS registry: prevalence, severity and treatmeth patterns using oral agens and/or intrathecal baclofen. Multiple Sclerosis Clinical and Laboratory Research. September, 2002 2002; 8(1:S80):191.

- 40. **Vollmer T**. (Guest Editor) Introduction: A single topic issue on multiple sclerosis. J of Rehabil Res Dev. 2002; 39(2).
- 41. **Vollmer TL**, Hadjimichael O, J. B. Quality of life and cost of illness in mitoxantrone treated multiple sclerosis patients. Multiple Sclerosis Clinical and Laboratory Research. September, 2002 2002; 8(1:s78):185.
- 42. **Vollmer TL**, Preiningerova J, Markovic-Plese S, Rizzo M, Cutter G. A phase IIB study of oral interferon beta-1a at two doses in relapsing remitting multiple sclerosis using MRI, clinical and immunological measures. Multiple Sclerosis Clinical and Laboratory Research. September, 2002 2002; 8(1:S71):163.
- 43. **Vollmer TL**, Hadjimichael O, Preiningerova J, Ni W, Buenconsejo J. Disability and treatment patterns of multiple sclerosis patients in United States: a comparison of veterans and nonveterans. J Rehabil Res Dev. Mar-Apr 2002; 39(2):163-174.
- 44. Fraser C, Hadjimichael O, **Vollmer T**. Predictors of adherence to glatiramer acetate therapy in individuals with self-reported progressive forms of multiple sclerosis. J Neurosci Nurs. Jun 2003; 35(3):163-170.
- 45. Marrie RA, Hadjimichael O, **Vollmer T**. Predictors of alternative medicine use by multiple sclerosis patients. Mult Scler. Oct 2003; 9(5):461-466.
- 46. The Transverse Myelitis Consortium Working Group (including **Vollmer T**). Proposed diagnostic criteria and nosology of acute transverse myelitis. Neurology. Feb 25 2003; 60(4):730-731; author reply 730-731.
- 47. Fraser C, Morgante L, Hadjimichael O, **Vollmer T**. A prospective study of adherence to glatiramer acetate in individuals with multiple sclerosis. J Neurosci Nurs. Jun 2004; 36(3):120-129.
- 48. O'Connor PW, Goodman A, Willmer-Hulme AJ, Libonati MA, Metz L, Murray RS, Sheremata WA, Vollmer TL, Stone LA. Randomized multicenter trial of natalizumab in acute MS relapses: clinical and MRI effects. Neurology. Jun 8 2004; 62(11):2038-2043.
- 49. Rizzo MA, Hadjimichael OC, Preiningerova J, **Vollmer TL**. Prevalence and treatment of spasticity reported by multiple sclerosis patients. Mult Scler. Oct 2004; 10(5):589-595.
- 50. **Vollmer T**, Key L, Durkalski V, Tyor W, Corboy J, Markovic-Plese S, Preiningerova J, Rizzo M, Singh I. Oral simvastatin treatment in relapsing-remitting multiple sclerosis. Lancet. May 15 2004; 363(9421):1607-1608.
- 51. Vollmer TL SI. Author's reply for statins in multiple sclerosis. The Lancet. July 2004 2004; 364:412-413.
- 52. **Vollmer TL**, Phillips JT, Goodman AD, Agius MA, Libonati MA, Giacchino JL, Grundy JS. An open-label safety and drug interaction study of natalizumab (Antegren) in combination with interferon-beta (Avonex) in patients with multiple sclerosis. Mult Scler. Oct 2004; 10(5):511-520.
- 53. Ding Z, Preiningerova J, Cannistraci CJ, **Vollmer TL**, Gore JC, Anderson AW. Quantification of multiple sclerosis lesion load and brain tissue volumetry using multiparameter MRI: methodology and reproducibility. Magn Reson Imaging. Apr 2005; 23(3):445-452.
- 54. Hadjimichael O, Cutter G, Tyry T, **Vollmer T**. Are untreated MS patients representative of historical controls or what do they say about trial recruitment? Neurology. 2005; March 2005(Suppl 1):S36.005.

- 55. Khan M, **Vollmer T**, Singh A. Lovastatin augments the survival and differentiation of oligodendrocyte progenitors in animal model of multiple sclerosis. Mult Scler. September 2005 2005; 11(Supplement 1):P212.
- 56. Liu R LA, Bai X, Jee Y, Price M. Campagnolo D, Christadoss P, **Vollmer T**, Van Kaer L, Shi F. Cooperation of iNKT cells and CD4+CD25+ treg cells in the prevention of autoimmune myasthenia. Neurology. 2006 March 14; 66((5 Suppl 2)):A306.
- 57. Lo AC, Hadjimichael O, **Vollmer TL**. Treatment patterns of multiple sclerosis patients: a comparison of veterans and non-veterans using the NARCOMS registry. Mult Scler. Feb 2005; 11(1):33-40.
- 58. Marrie RA, Cutter G, Tyry T, Hadjimichael O, Campagnolo D, **Vollmer T**. Validation of the NARCOMS registry: fatigue assessment. Mult Scler. Oct 2005; 11(5):583-584.
- 59. Marrie RA, Cutter G, Tyry T, Hadjimichael O, Campagnolo D, **Vollmer T**. Changes in the ascertainment of multiple sclerosis. Neurology. Oct 11 2005; 65(7):1066-1070.
- 60. Marrie RA, Cutter G, Tyry T, Hadjimichael O, **Vollmer T**. Validation of the NARCOMS Registry: pain assessment. Mult Scler. Jun 2005; 11(3):338-342.
- 61. Paintlia AS, Paintlia MK, Khan M, **Vollmer T**, Singh AK, Singh I. HMG-CoA reductase inhibitor augments survival and differentiation of oligodendrocyte progenitors in animal model of multiple sclerosis. FASEB J. Sep 2005; 19(11):1407-1421.
- 62. Sheremata WA, Minagar A, Alexander JS, **Vollmer T**. The role of alpha-4 integrin in the aetiology of multiple sclerosis: current knowledge and therapeutic implications. CNS Drugs. 2005; 19(11):909-922.
- 63. **Vollmer TL**, Liu R, Price M, Rhodes S, La Cava A, Shi FD. Differential effects of IL-21 during initiation and progression of autoimmunity against neuroantigen. J Immunol. Mar 1 2005; 174(5):2696-2701.
- 64. Kasper LH, Everitt D, Leist TP, Ryan KA, Mascelli MA, Johnson K, Raychaudhuri A, **Vollmer T**. A phase I trial of an interleukin-12/23 monoclonal antibody in relapsing multiple sclerosis. Curr Med Res Opin. Sep 2006; 22(9):1671-1678.
- 65. Liu R, Van Kaer L, La Cava A, Price M, Campagnolo DI, Collins M, Young DA, **Vollmer TL**, Shi FD. Autoreactive T cells mediate NK cell degeneration in autoimmune disease. J Immunol. May 1 2006; 176(9):5247-5254.
- 66. Marrie R, Cutter G, Tyry T, **Vollmer T**, Campagnolo D. NARCOMS validation study. Neurology. 2006; 66(5 Suppl 2):A226.
- 67. Marrie RA, Cutter G, Tyry T, **Vollmer T**, Campagnolo D. Does multiple sclerosis-associated disability differ between races? Neurology. Apr 25 2006; 66(8):1235-1240.
- 68. Panitch HS, Thisted RA, Smith RA, Wynn DR, Wymer JP, Achiron A, **Vollmer TL**, Mandler RN, Dietrich DW, Fletcher M, Pope LE, Berg JE, Miller A. Randomized, controlled trial of dextromethorphan/quinidine for pseudobulbar affect in multiple sclerosis. Ann Neurol. May 2006; 59(5):780-787.
- 69. Peng X, Jin J, Giri S, Montes M, Sujkowski D, Tang Y, Smrtka J, **Vollmer T**, Singh I, Markovic-Plese S. Immunomodulatory effects of 3-hydroxy-3-methylglutaryl coenzyme-A reductase inhibitors, potential therapy for relapsing remitting multiple sclerosis. J Neuroimmunol. Sep 2006; 178(1-2):130-139.

- 70. Tyor WR IS, **Vollmer T**, Key L, Corboy J, Markovic-Plese S, Preningerova J, Durkalski V, Rizzo M. The use of statins in multiple sclerosis. International Journal of MS Care. 2006; 8:10-12.
- 71. Jee Y LR, Bai X, Campagnolo D, Shi F, **Vollmer T**. Do Th2 cells mediate the effects of glatiramer acetate in experimental autoimmune encephalomyelitis? Int Immunol. 2006 April; 18(4):537-544.
- 72. **Vollmer T**, LaPierre Y, Weiner L, Oger J, Bar-Or A, Arnold D, Campagnolo D, Barkas W, Antel J, Kachuck N. Garren H, Gianettttoni J, Steinman L, Valone F. Phase I/II trial of MBP encoding DNA plasmid (BHT-3009) alone or combined with atorvastatin for treatment of multiple sclerosis. Neurology. 2006 Mar 14; 66((5 Suppl 2)):A306.
- 73. Liu R, La Cava A, Bai XF, Jee Y, Price M, Campagnolo DI, Christadoss P, **Vollmer TL**, Van Kaer L, Shi FD. Cooperation of invariant NKT cells and CD4+CD25+ T regulatory cells in the prevention of autoimmune myasthenia. J Immunol. Dec 15 2005; 175(12):7898-7904.
- 74. Paintlia A PM, Singh A, **Vollmer T**, Singh I. Combination therapy with Lovastatin and 5-aminoimidazole-4-carboxamide-1-beta-d-ribofuranoside: approach for neuroprotection and inhibition of neurodegeneration in multiple sclerosis. Neurology. 2006 March 14; 66((5 Suppl 2)):A303.
- 75. Coyle PK, Halper J, Johnson KP, Kalb R, Lublin F, Marrow T, Panitch H, Rabouls T, **Vollmer T**. Relapses matter: the costs & consequences of multiple sclerosis relapses. J Neurol Sci. May 15 2007; 256 Suppl 1:S1-4.
- 76. Goodman AD, Cohen JA, Cross A, **Vollmer T**, Rizzo M, Cohen R, Marinucci L, Blight AR. Fampridine-SR in multiple sclerosis: a randomized, double-blind, placebo-controlled, dose-ranging study. Mult Scler. Apr 2007; 13(3):357-368.
- 77. Hadjimichael O, Kerns RD, Rizzo MA, Cutter G, **Vollmer T**. Persistent pain and uncomfortable sensations in persons with multiple sclerosis. Pain. Jan 2007; 127(1-2):35-41.
- 78. Marrie RA, Cutter G, Tyry T, Campagnolo D, **Vollmer T**. Validation of the NARCOMS registry: diagnosis. Mult Scler. Jul 2007; 13(6):770-775.
- 79. Marrie RA, Cutter G, Tyry T, **Vollmer T**, Campagnolo D. Disparities in the management of multiple sclerosis-related bladder symptoms. Neurology. Jun 5 2007; 68(23):1971-1978.
- 80. Schwartz EI, Smilenov LB, Price MA, Osredkar T, Baker RA, Ghosh S, Shi FD, **Vollmer TL**, Lencinas A, Stearns DM, Gorospe M, Kruman, II. Cell cycle activation in postmitotic neurons is essential for DNA repair. Cell Cycle. Feb 1 2007; 6(3):318-329.
- 81. **Vollmer T**. The natural history of relapses in multiple sclerosis. J Neurol Sci. May 15 2007; 256 Suppl 1:S5-13.
- 82. Arnold DL, Campagnolo D, Panitch H, Bar-Or A, Dunn J, Freedman MS, Gazda SK, **Vollmer T**. Glatiramer acetate after mitoxantrone induction improves MRI markers of lesion volume and permanent tissue injury in MS. J Neurol. Oct 2008;255(10):1473-1478.
- 83. Bomprezzi R SM, **Vollmer TL**. Acute axonal polyneuropathy combined with acute disseminated encephalomyelitis: case report. Barrow Quarlery. 2008; 24(2):21-23.
- 84. Devitt M, Foley FW, Miller RJ, Zemon V, Halper J, Campagnolo D, **Vollmer T**. Use of single screening question from NARCOMS to detect severe depression in multiple sclerosis. International Journal of MS Care. 2008; 10(1):11-13.

- 85. Hadjimichael O, **Vollmer T**, Oleen-Burkey M. Fatigue characteristics in multiple sclerosis: the North American Research Committee on Multiple Sclerosis (NARCOMS) survey. Health Qual Life Outcomes. 2008; 6:100.
- 86. Hauser SL, Waubant E, Arnold DL, **Vollmer TL**, Antel J, Fox RJ, Bar-Or A, Panzara M, Sarkar N, Agarwal S, Langer-Gould A, Smith CH. B-cell depletion with rituximab in relapsing-remitting multiple sclerosis. N Engl J Med. Feb 14 2008; 358(7):676-688.
- 87. Julian LJ, Vella L, Vollmer T, Hadjimichael O, Mohr DC. Employment in multiple sclerosis. Exiting and re-entering the work force. J Neurol. Sep 2008; 255(9):1354-1360.
- 88. Marrie R, Horwitz R, Cutter G, Tyry T, Campagnolo D, **Vollmer T**. Comorbidity, socioeconomic status and multiple sclerosis. Mult Scler. Sep 2008; 14(8):1091-1098.
- 89. Marrie RA, Cutter G, Tyry T, **Vollmer T**, Campagnolo D. Validation of the NARCOMS registry: depression assessment. International Journal of MS Care. 2008; 10(3):84-84.
- 90. **Vollmer T**, Panitch H, Bar-Or A, Dunn J, Freedman MS, Gazda SK, Campagnolo D, Deutsch F, Arnold DL. Glatiramer acetate after induction therapy with mitoxantrone in relapsing multiple sclerosis. Mult Scler. Jun 2008; 14(5):663-670.
- 91. Zhao CB, Coons SW, Cui M, Shi FD, **Vollmer TL**, Ma CY, Kuniyoshi SM, Shi J. A new EAE model of brain demyelination induced by intracerebroventricular pertussis toxin. Biochem Biophys Res Commun. May 23 2008; 370(1):16-21.
- 92. Bar-Or A, Oger J, Gibbs E, Niino M, Aziz T, Renoux C, Alatab S, Shi FD, Campagnolo D, Jalili F, Rhodes S, Yamashita T, Fan B, Freedman MS, Panitch H, Arnold DL, **Vollmer T**. Serial combination therapy: is immune modulation in multiple sclerosis enhanced by initial immune suppression? Mult Scler. Aug 2009; 15(8):959-964.
- 93. Buchanan RJ, Chakravorty BJ, Tyry T, Hatcher W, **Vollmer T**. Age-related comparisons of people with multiple sclerosis: demographic, disease, and treatment characteristics. NeuroRehabilitation. 2009; 25(4):271-278.
- 94. Hawker K, O'Connor P, Freedman MS, Calabresi PA, Antel J, Simon J, Hauser S, Waubant E, **Vollmer T**, Panitch H, Zhang J, Chin P, Smith CH. Rituximab in patients with primary progressive multiple sclerosis: Results of a randomized double-blind placebo-controlled multicenter trial. Ann Neurol. Oct 2009; 66(4):460-471.
- 95. Marrie R, Horwitz R, Cutter G, Tyry T, Campagnolo D, **Vollmer T**. High frequency of adverse health behaviors in multiple sclerosis. Mult Scler. Jan 2009; 15(1):105-113.
- 96. Marrie RA CG, Tyry T, Campagnolo D, **Vollmer T**. Effect of physical comorbidities on risk of depression in multiple sclerosis. International Journal of MS Care. 2009; 11(4):161-165.
- 97. Marrie RA, Cutter G, Tyry T, **Vollmer T**. Bladder care for veterans with MS differ by treatment location. International Journal of MS sCare. 2009; 11:91-97.
- 98. Marrie RA, Cutter G, Tyry T, Campagnolo D, **Vollmer T**. Smoking status over two years in patients with multiple sclerosis. Neuroepidemiology. 2009; 32(1):72-79.
- 99. Marrie RA, Cutter G, Tyry T, **Vollmer T**. A cross-sectional study of bone health in multiple sclerosis. Neurology. Oct 27 2009; 73(17):1394-1398.

- 100. Marrie RA, Horwitz R, Cutter G, Tyry T, Campagnolo D, **Vollmer T**. Comorbidity delays diagnosis and increases disability at diagnosis in MS. Neurology. Jan 13 2009; 72(2):117-124.
- 101. Marrie RA, Horwitz R, Cutter G, Tyry T, Campagnolo D, **Vollmer, TL**. The burden of mental comorbidity in multiple sclerosis: frequent, underdiagnosed, and undertreated. Mult Scler. Mar 2009; 15(3):385-392.
- 102. Motl RW, Schwartz CE, **Vollmer T**. Continued validation of the Symptom Inventory in multiple sclerosis. J Neurol Sci. Oct 15 2009; 285(1-2):134-136.
- 103. Shi FD, Piao WH, Kuo YP, Campagnolo DI, **Vollmer TL**, Lukas RJ. Nicotinic attenuation of central nervous system inflammation and autoimmunity. J Immunol. Feb 1 2009; 182(3):1730-1739.
- 104. Tu JL, Zhao CB, **Vollmer T**, Coons S, Lin HJ, Marsh S, Treiman DM, Shi J. APOE 4 polymorphism results in early cognitive deficits in an EAE model. Biochem Biophys Res Commun. Jul 10 2009; 384(4):466-470.
- 105. **Vollmer T**, Blight AR, Henney HR, 3rd. Steady-state pharmacokinetics and tolerability of orally administered fampridine sustained-release 10-mg tablets in patients with multiple sclerosis: a 2-week, open-label, follow-up study. Clin Ther. Oct 2009; 31(10):2215-2223.
- 106. **Vollmer T**, Henney HR, 3rd. Pharmacokinetics and tolerability of single escalating doses of fampridine sustained-release tablets in patients with multiple sclerosis: a Phase I-II, open-label trial. Clin Ther. Oct 2009; 31(10):2206-2214.
- 107. Buchanan RJ, Minden SL, Chakrovorty BJ, Hatcher W. Tyry T, **Vollmer T**. A pilot study of young adults with multiple sclerosis: Demographic, disease, treatment and psychosocial characteristics. Disabil Health J Oct: 3(4):262-70. Epub 2009 Nov 26.
- 108. Bandari DS, **Vollmer TL**, Khatri BO, Tyry T. Assessing quality of life in patiaents with multiple sclerosis. International Journal of MS Care. 2010; 12(1):34-40.
- 109. Bomprezzi R, Pati S, Chansakul C, **Vollmer T**. A case of neurosarcoidosis successfully treated with rituximab. Neurology. Aug 10 2010; 75(6):568-570.
- 110. Kala M, Rhodes SN, Piao WH, Shi FD, Campagnolo DI, **Vollmer TL**. B cells from glatiramer acetate-treated mice suppress experimental autoimmune encephalomyelitis. Exp Neurol. Jan 2010; 221(1):136-145.
- 111. Marrie RA, Horwitz RI, Cutter G, Tyry T, **Vollmer T**. Association between comorbidity and clinical characteristics of MS. Acta Neurol Scand. Sep 29 2010 124:2 135-41.
- 112. Marrie RA, Rudick R, Horwitz R, Cutter G, Tyry T, Campagnolo D, **Vollmer T**. Vascular comorbidity is associated with more rapid disability progression in multiple sclerosis. Neurology. Mar 30 2010; 74(13):1041-1047.
- 113. Salter AR, Cutter GR, Tyry T, Marrie RA, **Vollmer T**. Impact of loss of mobility on instrumental activities of daily living and socioeconomic status in patients with MS. Curr Med Res Opin. Feb 2010; 26(2):493-500.
- 114. **Vollmer T**, Stewart T, Baxter N. Mitoxantrone and cytotoxic drugs' mechanisms of action. Neurology. Jan 5 2010; 74 Suppl 1:S41-46.

- 115. Wynn D, Kaufman M, Montalban X, **Vollmer T**, Simon J, Elkins J, O'Neill G, Neyer L, Sheridan J, Wang C, Fong A, Rose JW. Daclizumab in active relapsing multiple sclerosis (CHOICE study): a phase 2, randomised, double-blind, placebo-controlled, add-on trial with interferon beta. Lancet Neurol. Apr 2010; 9(4):381-390.
- 116. Goodman AD, Brown TR, Edward KR, Krupp LB, Schapiro RT, Cohen R, Marinucci LN, Blight AR on behalf of the MSF204 Investigators (**Vollmer TL**). A phase 3 trial of extended release oral dalfampridine in multiple sclerosis. Ann Neurol Oct 2010;68:494-502
- 117. Chang J, Campagnolo D, **Vollmer TL**, Bomprezzi R. Demyelinating disease and polyvalent human papilloma virus vaccination. J Neurol Neurosurg Psychiatry. Published online Oct 9 2010. Doi: 10.1136/jnnp.2010.214924.
- 118. Buchanan RJ, Zuniga MA, Carrillo-Zuniga G, Chakrovorty BJ, Tyry T, Moreau RL, Huang C, **Vollmer T**. Comparisons of Latinos, African Americans and Caucasians with multiple sclerosis. Ethnicity and Disease 2010; 20 autumn: 451-457.
- 119. Marrie RA, Rudick R, Norwitz R, Cutter G, Tyry T, Campagnolo D, **Vollmer T**. Vascular comorbidity is associated with more rapid disability progression in multiple sclerosis. Neurology 2010 74:13 1041-7
- 120. Marrie RA, Horwitz R, Cutter G, Tyry T, **Vollmer T**. Smokers with MS are more likely to report comorbid autoimmune diseases. Neuroepidemiology 2011;36:85-90 (doi: 10.1159/000323948)
- 121. Bomprezzi R, Postevka E, Campagnolo D, **Vollmer TL**. A review of cases of neuromyelitis optica. Neurologist 2011 March; 17(2):98-104.
- 122. **Vollmer T**, Wynn D, Alam S, Valdes J. A phase 2, 24-week, randomized, placebo-controlled, double-blind study examining the efficacy and safety of an anti-interleukin-12 and-23 monoclonal antibody in patients with relasping-remitting or secondary-progressive multiple sclersois. 2011 Multiple Sclerosis Journal February 17(2) 181--191
- 123. Miravalle A, Hendin B, **Vollmer TL**, Mrinalini K. Glatiramer acetate in the reduction of relapse frequency in multiple sclerosis. Clinical Medicine Insights: Therapeutics. 2011:3 151—158
- 124. Motl RW, McAuley E, Wynn D, **Vollmer T**. Lifestyle physical activity and walking impairment over time in relapsing-remitting multiple sclerosis: results from a panel study. Am J. Phys. Med. Rehabil May 2011(90;5);372—379
- 125. Hao J, Campagnolo D. Liu R, Piao W, Shi S, Hu B, Xiang R, Zhou Q, **Vollmer T**, VanKaer L, LaCava A, Shi FD. Interleukin-2/InterleukinL 2 antibody therapy induces target organ natural killer cells that inhibit central nervous system inflammation. Published online 18 MAR 2011 Annals of Neurology, 69: n/a. doi: 10. 1002/ana.22339
- 126. Schwartz CE, Sprangers MA, Oort FJ, Ahmed S, Bode R, Li Y, **Vollmer T**. Response shift in patients with multiple sclerosis: an application of three statistical techniques. Qual Life Res, 2011 20:10 1561-72.
- 127. Buchanan RJ, Zuniga MA, Carrillo-Zuniga G, Chakravorty BJ, Tyry T, Moreau RL, **Vollmer T**. A pilot study of Latinos with multiple sclerosis: demographic, disease, mental health and psychosocial characteristics. Journal of Social Work in Disability & Rehabilitation, Nov 30, 2011, 10:4, 211-231

- 128. Shi J, Tu JL, Gale, SD, Baxter L, **Vollmer TL**, Campagnolo DI, Tyry TM, Zhuang Y, Kuniyoshi SM. APOE epsilon4 is associated with exacerbation of cognitive decline in patients with multiple sclerosis. Cogn Behav Neurol 2011 24:3 128—33.
- 129. Kala M, Miravalle A, **Vollmer, T**, Recent insights into the mechanism of action of glateramer acetate.

 J Neuroimmunology 2011 235:1-2, 9-17
- 130. Bomprezzi, R, Schafer R, Reese V, Misra A, **Vollmer TL**, Kala M. Glatiramer acetate-specific antibody Titres in patients with relapsing/remitting multiple sclerosis and in experimental autoimmunte encephalitis. Scan J. Immunol. 2011 74:3 219-26.
- 131. Schowinksi J, Corboy J, **Vollmer T**, Kleinschmidt-DeMasters BK. Natalizumab-associated complication? First case of peripheral T cell lymphoma. 2012 Acta Neuropathol 2012 123:5 751-752 0.1007/s00401-012-0967-7
- 132. Waubant E, Pelletier D, Mass M, Cohen J, Kita M, Cross A, Bar-Or A, **Vollmer T**, Racke M, Stuve O, Schwid S, Goodman A, Kachuck N, Preiningerova J, Weinstock-Guttman B, Calabresi P, Miller A, Mokhtarani M, Ikle D, Murphy S, Kopetski H, Ding L, Rosenberg E, ITN020AI Study Management team Spencer C, Zamvil SS. Randomized controlled study of Atorvastatin in clinically isolated syndrome: the STAyCIS study. 2012. Neurology. 78:15 1171-8 DOI:10.1212/WNL.0b013e31824f7dd
- 133. Moberly JB, Ford DM, Zahir H, Chen S, Mochizuki T, Truitt KE, **Vollmer T**. Pharmacological effects of CS-0777, a selective sphingosine 1-phosphate receptor-1 modulator: Results from a 12-week, openlabel pilot study in multiple sclerosis patients. Published online ahead of printing in J. Neuroimmunology (2012), doi:10.1016/j.jneuroim.2012.03.007.
- 134. Schwartz CE, Benedit R, Snook E, **Vollmer T**, Quaranto B. Cognitive reserve and patient reported outcomes in multiple sclerosis. Publiched on line in Multiple Sclerosis Journal, 30 April 2012, DO:10.1177/1352458512444914
- 135. **Vollmer TL**, Benedict R, Bennett S, Motl RW, White AT, Bombardier CH, Hebert JR. Exercise as prescriptive therapy in multiple sclerosis. International Journal of MS Care 2012 14:S3 2-14.
- 136. Kleinschmidt-DeMasters BK, Miravalle A, Schowinsky J, Corboy J, **Vollmer T**. Update on PML and PML-IRIS Occurring in Multiple Sclerosis Patients Treated With Natalizumab. J Neuropathol Exp Neurol 2012 71:7 July 2012 604-617.
- 137. Schwartz CE, Bode RK, Quaranto BR, **Vollmer TL**. The symptom inventory disability-specific short forms for multiple sclerosis: Construct validity and responsiveness, and interpretation. Archives of Physical Medicine and Rehabilitation, Sept. 2012 93:1617-1628.e1
- 138. Schwartz CE, Bode RK, **Vollmer T**. The symptom inventory disability-specific short forms for multiple sclerosis: Reliability and factor structure. Archives of Physical Medicine and Rehabilitation Sept. 2012 93: 1629-1636.e2
- 139. Schwartz CE, Snook E, Quaranto B, Benedict RH, **Vollmer T**. Cognitive reserve and patient-reported outcomes in multiple sclerosis. Multiple Sclerosis Jan. 2013 19:1 87-105
- 140. Schwartz CE, Quaranto BR, Healy BC, Benedict RHB, **Vollmer T**. Altruism and health outcomes in Multiple Sclerosis: The effect of cognitive reserve. The Journal of Positive Psychology: Dedicated to furthering Research and promoting good practice, March, 2013 8:2, 144-152

- 141. Campbell J, McQueen R, Miravalle A, Corboy J, Vollmer T, Nair, K. Comparative effectiveness of early natalizumab treatment in JC virus negative relapsing-remitting multiple sclerosis. American Journal of Managed Care. 2013;19(4):278-285
- 142. Salter AR, Tyry T, **Vollmer T**, Cutter GR, Marrie RA. "Seeing" in NARCOMS: a look at vision-related quality of life in the NARCOMS registry. Multiple Sclerosis June 2013 19:7 953-60
- 143. Schwart CE, Quaranto BS, Healy BC, Benedict RH, **Vollmer TL**. Cognitive reserve and symptom experience in multiple sclerosis: A buffer to disability progression over time? Archives of Physical Medicine and Rehabilitation Oct. 2013 94:10 1971-1981 e1
- 144. Schwartz, CE, Quaranto BR, Rapkin BD, Healy BC, **Vollmer T** and Sprangers MAG. Fluctuations in appraisal over time in the context of stable versus non-stable health. Quality of Life Research DOI 10.1007/s1113601304710 published online July 13, 2013
- 145. Schwartz CE, Snook E, Quaranto B, Benedict RH, Rapkin BD, **Vollmer T**. Cognitive reserve and appraisal in multiple sclerosis. Mult Scler Relat Disord. 2013; 2(1):36-44. doi:10.1016/j.msard.2012.07.006
- 146. Brueck W, Gold R, Lund B, Oreja-Guevara C, Prat A, Oreja-Guevara O, Prat A, Spencer CM, Steinman L, Tintore M, Vollmer T, Weber MS, Weiner LP, Ziemssen T, Zamvil S. Therapeutic Decisions in Multiple Sclerosis: Moving Beyond Efficacy. JAMA Neurology, Aug 5, 2013 DOI 10.1001/jamaneurol.2013.3510
- 147. Foley, FW, Zemon V, Campagnolo D, Marrie, RA, Cutter, G, Tyry T, Beier M, Farrell E, **Vollmer T**, Schairer L. The Multiple sclerosis intimacy and sexuality Questionnaire—re-validation and development of a 15-item version with a large US sample. Multiple Sclerosis Aug 2013 19:9 1197-203
- 148. **Vollmer, TL**, Robinson MJ, Risser RC, Malcolm SK. A Randomized, Double-blind, Placebo-controlled Trial of Duloxetine for the Treatment of Central Neuropathic Pain in Patients with Multiple Sclerosis. Pain Practice, Oct 24, 2013 DOI 10.1111/papr.12127
- 149. Campbell JD, Ghushchyan V, McQueen RB, Cahoon-Metzger S, Livingston T, **Vollmer T**, Corboy J, Miravalle A, Schreiner T, Porter V, Nair K. Burden of Multiple Sclerosis on Direct, Indirect Costs and Quality of Life: National US Estimates. Multiple Sclerosis and Related Disorders 2014:3(2) 227-36. DOI:10.1016/j.msard.2013.09.004 http://dx.doi.org/10.1016/j.msard.2013.09.004
- 150. Brueck, W, **Vollmer T** et.al Oral laquinimod for MS-bringing the brain into focus. Accepted for publication in Nature Reviews Neurology November 26, 2013; doi:10.1038/nmeurol.2013.234
- 151. Zhang C, Zhai H, Yan Y, Hao J, Li M, Jin W, Su N, **Vollmer T**, and Shi F. Glatiramer acetate ameliorates experimental autoimmune neuritis. Immunology and Cell Biology Feb 1, 2014; doi:10.1038/icb.2013.81
- 152. **Vollmer TL**, Stalla-Bourdillon A, Robinson M. Teriflunomide in Routine Clinical Practice: Design of the Teri-PRO Study. [CMSC abstract CG01]. Int J MS Care. 2013;15(suppl 3):37
- 153. Jackson LJ, Selva S, Niedzielko T, **Vollmer T** (2014) B Cell Receptor Recognition of Glatiramer Acetate is Required for Efficacy through Antigen Presentation and Cytokine Production. J Clin Cell Immunolog: 185.doi: 10.417212155-9899.1000185

- 154. **Vollmer TL**, Sorensen PS, Selmaj K, Zipp F, Havrdova E, Cohen JA, Sasson N, Gilgun-Sherki Y, Arnold DL on behalf of the BRAVO Study Group. A Randomized Placebo-Controlled Phase III Trial of Oral Laquinimod for Multiple Sclerosis. J Neurol 261:4 773—83. April, 2014 DOI 10.1007/s00415-014-7264-4.
- 155. Calabresi PA, Radue E, Goodin D, Jeffery D, Rammohan K, Reder AT, **Vollmer T**, Agius MA, Kappos L, Stites T, Li B, Cappiello L, von Rosenstiel P, Lublin FD. Safety and efficacy of fingolimod in patients with relapsing-remitting multiple sclerosis (FREEDOMS II): a double-blind, randomized, placebocontrolled, phase 3 trial. The Lancet Neurology vol 13. 545-556. June, 2014
- 156. McQueen, RB, Livingston T, **Vollmer T**, Corboy J, Buckley B, Allen RR, Nair K. Campbell JD. Increased relapse activity for multiple sclerosis natalizumab users who become nonpersistent: a retrospective study. J Manag Care Spec Pharm 21:3 210-8b March, 2015.
- 157. McQueen, RB, Nair KV, **Vollmer TL**, Campbell JD. (2015): Incorporating real-world clinical practice in multiple sclerosis economic evaluations. Exp Rev of Pharmacoeconomics & Outcomes Research. http://dx.doi.org/10.14737167.2015.1081060
- 158. **Vollmer T**, Huynh L, Kelley C, Galebach P, Signorovitch J, DiBernardo A, Sasane R. Relationship between brain volume loss and cognitive outcomes among patients with multiple sclerosis: a systematic literature review and meta-analysis. Neurol. Sci. 2015/11/04. 1—15.
- 159. **Vollmer T**, Signorovitch J, Huynh L, Galebach P, Kelley C, DiBernardo A, Sasane R. The natural history of brain volume loss among patients with multiple sclerosis: a systematic literature review and meta-analysis. J Neurol Sci 357:1-2; 8—18 Oct. 2015
- 160. Ziemssen, T, Derfuss T, deStefano N, Giovannoni G, Palavra F, Tomic, D, **Vollmer T**, Schippling S. Optimizing treatment success in multiple sclerosis. Published online by J Neurol, Dec 24, 2015. ISSN 0340-5354. DOI 10.1007/s00415-015-7986. 1—13.
- 161. Phillips G, Guo S, Bender R, Havrdova E, Proskorovsky I, **Vollmer T**. Assessing the impact of multiple sclerosis disease activity and diclizumab HYP treatment on patient-reported outcomes: Results from the SELECT trial. Mult Scler and Rel Disord 6 (2016) 66-72
- 162. Giovannoni G, Butzkueven H, Dhib-Jalbut S, et al. Brain health: time matters in multiple sclerosis. Mult Scler Relat Disord. 2016; 9 Suppl 1:S5-S48. doi:10.1016/j.msard.2016.07.003
- 163. Radue EW, Sprenger T, **Vollmer T**, Giovannoni G, Gold R, Havrdova E, Selmaj K, Stefoski D, You X, and Elkins J. Daclizumab high-yield process reduced the evolution of new gadolinium-enhancing lesions to T1 black holes in patients with relapsing-remitting multiple sclerosis. Eur J Neurol 2016 Feb;23(2):412-5
- 164. Bacci ED, Wyrwich KW, Phillips GA, **Vollmer T**, Guo S. Analysis of the psychometric properties of the Multiple Sclerosis Impact Scale-29 (MSIS-29) in relapsing-remitting multiple sclerosis using classical and modern test theory. Mult. scler. j., exp. transl. clin. 2016; 2:2055217316673235. doi:10.1177/2055217316673235
- 165. Sorensen PS, Comi G, **Vollmer TL**, Montalban X, Kappos L, Dadon Y, Gorfine T, Margalit M, Sasson N, Rubinchick S, Knappertz V. Laquinimod safety profile: pooled analyses from the ALLEGRO and

- BRAVO trials. [published online ahead of printing, March 7, 2016 doi:10.7224.2073.2015-024] Int J MS Care
- 166. Ke X, Navaratnam P, Sasane R, Eisenberg D, Friedman HS, Tulsi BB, Vollmer T. Determinants of High Cost in Multiple Sclerosis Patients: A Claims and Chart Review Study. Cur Med Res & Opin DOI: 10.1080/03007995.2016.1192529. Published online May 20, 2016
- 167. Calkwood J, Vollmer T, Fox RJ, Zhang R, Novas M, Sheikh SI, Viglietta V. Safety and Tolerability of Delayed Release Dimethyl Fumarate (DMF) when Administered in Combinaton w Interferon Beta or Glatiramer Acetate in Relapsing-Remitting MS. Int J of MS Care. 2016;18:138-146
- 168. **Vollmer TL**, McCarthy M. Autoimmune Encephalitis: A More Treatable Tragedy if Diagnosed Early. Neurology 2016 May 3;86(18): 1655-6
- 169. Ke X, Navaratnam P, Sasane R, Eisenberg Lawrence DF, Friedman HS, Tulsi BB, **Vollmer T**. Determinants of high cost in multiple sclerosis patients: a claims and chart review study. Current Medical Research and Opinion (2016). DOI: 10.1080/03007995.2016.1192529. http://dx.doi.org/10.1080/03007995.2016/1192529
- 170. Liu Y, **Vollmer T**, Havrdova E, Riester K, Lee A, Phillips G, Wang P, Sabatella G. Impact of daclizumab high-yield process versus interferon beta-1a on patient-reported outcomes in relapsing-remitting multiple sclerosis. Mult Scler and Rel Dis. Jan. 2017;11: 18—24
- 171. Kenneth L. Tyler, Timothy L. Vollmer. To PLEX or Not to PLEX in Natalizaumab-associated PML. Neurology. January 2017.
- 172. Beseler C, **Vollmer T**, Graner M, Yu X. The complex relationship between oligoclonal bands, lymphocytes in the cerebrospinal fluid, and immunoglobulin G antibodies in multiple sclerosis: Indication of serum contribution. PLoS ONE. 2017; 12(10):e0186842. doi:10.1371/journal.pone.0186842
- 173. Hebert JR, Corboy JR, **Vollmer T**, Forster JE, Schenkman M. Efficacy of Balance and Eye-Movement Exercises for Persons With Multiple Sclerosis (BEEMS). Neurology. 2018; 90(9):e797-e807. doi:10.1212/WNL.00000000000000013
- 174. Kuerten S, Jackson L, Kaye J, **Vollmer T**. Impact of Glatiramer Acetate on B Cell-Medicated Pathogenesis of Multiple Sclerosis. CNS Drugs ISSN 1172-7047 DOI: 10.1007/s40263-018-0567-8 October 2018
- 175. Jeremy Hobart, Amy Bowen, George Pepper, Harriet Crofts, Lucy Eberhard, Thomas Berger, Alexey Boyko, Cavit Boz, Helmut Butzkueven, Elisabeth Gulowsen Celius, Jelena Drulovic, José Flores, Dana Horáková, Christine Lebrun-Frénay, Ruth Ann Marrie, James Overell, Fredrik Piehl, Peter Vestergaard Rasmussen, Maria José Sá, Carmen-Adella Sîrbu, Eli Skromne, Øivind Torkildsen, Vincent van Pesch, **Timothy Vollmer**, Magd Zakaria, Tjalf Ziemssen and Gavin Giovannoni. International consensus on quality standards for brain health-focused care in Multiple Sclerosis.Multiple Sclerosis Journal 1–10 DOI: 10.1177/1352458518809326

- 176. Justin M. Honce, Kavita V Nair, Stefan Sillau, Brooke Valdez, Augusto Miravalle, Enrique Alvarez, Teri L. Schreiner, John R. Corboy, and **Timothy L. Vollmer**. Rituximab vs Placebo Induction Prior to Glatiramer Acetate Monotherapy in Multiple Sclerosis.NEUROLOGY MS ID#: NEUROLOGY/2018/910778
- 177. Brandi L. Vollmer, Kavita V. Nair, Stefan Sillau, John R. Corboy, **Timothy Vollmer**, Enrique Alvarez. Natalizumab versus fingolimod and dimethyl fumarate in multiple sclerosis treatment. December 2018 doi.org/10.1002/acn3.700 Annals of Clinical and Translational Neurology
- 178. Isaiah Kletenik, Enrique Alvarez, Justin M Honce, Brooke Valdez, **Timothy L Vollmer** and Luis D Medina. Subjective cognitive concern in multiple sclerosis is associated with reduced thalamic and cortical gray matter volumes. Multiple Sclerosis Journal—Experimental, Translational and Clinical. January-March 2019, 1–9 DOI: 10.1177/2055217319827618
- 179. Justin M. Honce, Kavita V Nair, Stefan Sillau, and **Timothy L. Vollmer**. Rituximab vs Placebo Induction Prior to Glatiramer Acetate Monotherapy in Multiple Sclerosis. Neurology® 2019;92:1. doi:10.1212/WNL.00000000000006916
- 180. Wolf AB, Ryerson LZ, Pandey K, McGettigan BM, **Vollmer T**, Corboy JR, Alvarez E. Rituximab-induced serum sickness in multiple sclerosis patients. Mult Scler Relat Disord. 2019 Sep 17;36:101402. doi: 10.1016/j.msard.2019.101402. [Epub ahead of print] PMID: 31542710
- 181. Vollmer B, Ontaneda D, Bandyopadhyay A, Cohn S, Nair K, Sillau S, Bermel RA, Corboy JR, Fox RJ, Vollmer T, Cohen JA, Alvarez E, Hersh CM. Discontinuation and comparative effectiveness of dimethyl fumarate and fingolimod in 2 centers. Neurol Clin Pract. 2018 Aug;8(4):292-301. doi: 10.1212/CPJ.000000000000487.
- 182. Vollmer B, Honce JM, Sillau S, Corboy JR, **Vollmer T**, Nair K, Alvarez E. The impact of very short transition times on switching from Natalizumab to Fingolimod on imaging and clinical effectiveness outcomes in multiple sclerosis. J Neurol Sci. 2018 Jul 15;390:89-93. doi: 10.1016/j.jns.2018.04.021. Epub 2018 Apr 13.

14.1 Bibliography--Peer Reviewed Publications—In-press/Accepted for Publication

- 1. Bacci E, Phyllis G, **Vollmer T**, Guo S. Analysis of the Psychometric Properties of the Multiple Sclerosis Impact Scale-29 (MSIS-29) in Relapsing-Remitting Multiple Sclerosis using Classical and Modern Test Theory. Submitted to Multiple Sclerosis Journal March 28, 2016.
- 2. Foley J, Nair K, **Vollmer T**, Stephenson JJ, Niecko T, Agarwal SS, Watson C. Long-term natalizumab treatment is associated with sustained improvements in quality of life in patients with multiple sclerosis. Submitted to Health and Quality of Life Outcome.
- 3. Butzkueven H, Dhib-Jalbut S, Hobart J, Kobelt G, Pepper G, Sormani, M, Thalheim C, Traboulsee A, Giovannoni G, **Vollmer T**. Brain health: time matters in multiple sclerosis. Submitted to Multiple Sclerosis and Related Disorders. June, 2016

14.2 Bibliography--Book Chapters

- 1. **Vollmer TL**. Waxman SG. Multiple Sclerosis and Other Demyelinating Disorders. In Neurology. Ed. R. Rosenberg. Raven Press. 1991.
- 2. Vollmer TL. Waxman SG. Demyelinating Disorders of the Central Nervous System. In Neurologic Emergencies. Ed. WJ Weiner. JB Lippincott & Co. 1992. Redmond DE. Robbins RJ. Raftolin F. Marek KL. Vollmer TL. Leranth C. Roth RH. Price LH. Gjedde A. Bunney BS. Sass KJ. Elsworth JD. Kier EL. Makuch R. Hoffer PB. Spencer DD. Cellular Replacement Strategy to Restore Dopamine Deficit In Parkinson's Disease Using Grafts of Fetal Mesencephalic Tissue: Preliminary Results In Four Patients. In Molecular and Cellular Approaches to the Treatment of Neurological Disease. Ed. S.G. Waxman. Raven Press. 1994.
- 3. **Vollmer TL**. Waxman SG. Demyelinating Disorders of the Central Nervous System. In Neurology. Ed. R. Rosenberg. Raven Press. 1997.
- 4. **Vollmer TL** P1-22 Multiple Sclerosis: The Disease and Its Diagnosis. In Multiple Sclerosis in Clinical Practice. Ed. S. van den Noort and N. Holland. Demos Medical Publishing. 1999.
- 5. **Vollmer TL**. Preiningerova J. Waxman SG. Multiple Sclerosis. In Encyclopedia of Life Sciences, http://www.els.net, London: Nature Publishing Group. 2002.
- 6. Okuda DT, **Vollmer TL**. Primary Angiitis of the Central Nervous System. MR Imaging in White Matter Diseases of the Brain and Spinal Cord (Medical Radiology/Diagnostic Imaging). Editors: M. Filippi, N DeStefano, V Dousset, and JC McGowan (2006).
- 7. Campagnolo D, **Vollmer T**, Shi F, Scott D, Williamson S. eMedicine Journal, January 9, 2006;7:1 (Sections 1 –12). Submitted.
- 8. Shi F, Campagnolo D, **Vollmer T**. Immune Therapy for Multiple Sclerosis: Altered Peptide Ligands and Statins. MS Handbook. Ed: S. Cook. Accepted.
- Preiningerova J, Bomprezzi R, Vollmer T L, Waxman SG (June 2009) Multiple Sclerosis in: Encyclopedia of Life Sciences (ELS). John Wiley & Sons, Ltd: Chichester.
 DOI:10,1002/9780470015902.a0000192.pub2. http://www.els.net
- 10. Kirshblum S, Campagnolo DI. **Vollmer T**, Contributor. Multiple Sclerosis. Spinal Cord Medicine. Ed. R. Hurley. Lippincott Williams & Wilkins. 2011.

14.3 Bibliography--Abstracts and other presentations

- 1. **Vollmer TL**. Tausch G. Porteus M. Lim M. Steinman L. Antigen specific proliferation of T cells from the cerebrospinal fluid of patients with fungal meningitis. Presented at the 6th International Congress of Immunology, 1986. (In Abstracts from the 6th International Congress of Immunology, 1986, p. 711.)
- 2. Young R. **Vollmer TL**. Farr K. Sena M. Genetic control of susceptibility to acute and persistent infection in trigeminal ganglia by herpes simplex virus. Presented at the American Academy of Neurology 38th Annual Meeting, New Orleans, LA, 1986. (Abstract published in Neurology, 36, Suppl. 1, 1986, p. 222.)

- 3. Young R. **Vollmer TL**. Farr K. Sena M. Genetic control of susceptibility to acute and persistent infection in trigeminal ganglia by herpes simplex virus. Presented at the American Academy of Neurology 38th Annual Meeting, New Orleans, LA, 1986. (Abstract published in Neurology, 36, Suppl. 1, 1986, p. 222.)
- 4. Gjedde A. Leger G. Guttman M. Kuwabara H. Diksic M. Spencer DD. Naftolin F. Robbins RJ. Roth RH. Bunney B. Fatigue in multple sclerosis patients. Presented at the 19th Annual Meeting of the Society for Neuroscience, Phoenix, AZ, 1989. (Abstract published in Society for Neuroscience Abstracts, 15, 1989, p. 932.)
- 5. Ellsworth JD. Redmond DE Jr. Spencer DD. **Vollmer TL**. Marek KL. Naftolin F. Robbins RJ. Leranth C. Kier EL. Bunney BS. Roth RH. CSF HVA in Parkinsonian patients after fetal mesencephalic tissue implants into caudate nucleus. Presented at the American Academy of Neurology 44th Annual Meeting, San Diego, CA, 1992. (Abstract published in Neurology, 42, Suppl. 3, 1992, p. 283.)
- Redmond DE Jr. Marek KL. Spencer DD. Natfolin F. Robbins RJ. Bunney BS. Leranth C. Vollmer TL. Fahri AE. Ashby AMC. Lawrence MS. Serrano CC. Levy LL. Kier EL. Elsworth JD. Roth RH. Changes in motor performance after unilateral caudate implantation of fetal mesencephalic tissue. Presented at the American Academy of Neurology 44th Annual Meeting, San Diego, CA, 1992. (Abstract published in Neurology, 42, Suppl. 3, 1992, p. 198.)
- 7. Marek KL. Spencer DD. Naftolin F. Robbins RJ. Roth RH. Bunney BS. Leranth C. **Vollmer TL**. Fahri AE. Serrano CC. Levy L. Sass KJ. Price LH. Redmond DE Jr. Clinical effects of implantation of the caudate nucleus with fetal mesencephalic tissue in four Parkinsonian patients. Presented at the American Academy of Neurology 44th Annual Meeting, San Diego, CA, 1992. (Abstract published in Neurology, 42, Suppl. 3, 1992, p. 197.)
- 8. Spencer DD. Naftolin F. Robbins RJ. Roth RH. Bunney BS. Leranth C. **Vollmer TL**. Price LH. Kier EL. Marek KL. Gjedde A. Fahri AE. Redmond DE Jr. Effects of human fetal tissue grafts in four Parkinsonian patients. Presented at the American Academy of Neurology 44th Annual Meeting, San Diego, CA, 1992. (Abstract published in Neurology, 42, Suppl. 3, 1992, p. 197.)
- 9. Klotz KL. Goldstein JM. Booss J. Lee J. **Vollmer TL**. Trafficking of immune cells into CNS: Sequence of phenotypes. Presented at the American Academy of Neurology 4
- Goldstein JM. Klotz K. Booss J. Vollmer TL. A mouse model of CNS inflammation: The role of adhesion molecules. Presented at the American Academy of Neurology 44th Annual Meeting, San Diego, CA, 1992. (Abstract published in Neurology, 42, Suppl. 3, 1992. p. 325.)
- 11. **Vollmer TL**. Dalton J. Klotz K. Goldstein JM. Astrocyte-lymphocyte binding: The role of immune cytokines and ICAM-1. Presented at the American Academy of Neurology 44th Annual Meeting, San Diego, CA, 1992. (Abstract published in Neurology, 42, Suppl. 3, 1992, p. 158.)
- 12. Lee JH. **Vollmer TL**. Ransom BR. Extracellular pH and epileptiform activity in rat hippocampal slices. Presented at the 23rd Annual Meeting of the Society for Neuroscience, Washington, DC, 1993. (In Society for Neuroscience Abstracts, 19, Part 3, 1993, p. 1870.)
- Vollmer TL. Shellenberger MK. U.S. Tizanidine MS Study Group. Efficacy and safety of tizanidine for reduction of spasticity in multiple sclerosis. Presented at the American Academy of Neurology 46th Annual Meeting, Washington, DC, 1994. (Abstract published in Neurology, 44, 1994, p. A375.)

- 14. Cook SD. Newark NJ. Bansil S. Boos J. Devereau C. Haffty B. Goldstein JM. Guarnaccia J. Rohowsky-Kochan C. Sheffet A. Troiano R. Vollmer TL. Wolansky L. Zito G. Total lymphoid irradiation (TLI) and Low-Dose Prednisone (LDP) in progressive multiple sclerosis (PMS). Presented at the American Academy of Neurology 47th Annual Meeting, Seattle, WA, 1995. (Abstract published in Neurology, 45, Suppl. 4, 1995, p. A417.)
- 15. Schwartz C. **Vollmer TL**. Zeng Q. North American Research Consortium on Multiple Sclerosis. New outcome measures for multiple sclerosis clinical research: The symptom inventory and the performance scales. Presented at the American Academy of Neurology 48th Annual Meeting, San Francisco, CA, 1996. (Abstract published in Neurology, 46, Suppl. to #2, 1996, p. A321.)
- 16. Sheremata WA. **Vollmer TL**. Stone LA. Willmer-Hulme AJ. Koller ME. A placebo-controlled, safety, tolerability, dose escalation, PK study of various doses of intravenous Antegren in patients with multiple sclerosis. Presented at the American Academy of Neurology 50th Annual Meeting, Minneapolis, MN, 1998. (Abstract published in Neurology, 50, Suppl. 4, 1998, pp. A63-A64.)
- 17. Bever CT Jr. Koller M. Hulme A. Walicke P. Vollmer TL. Sheremata W. Johnson K. Inter-rater variability in the scoring of the Scripps Neurological Rating Scale and the Expanded Disability Status Scale: Improvement with training. Presented at the 123rd Annual Meeting of the American Neurological Association, Montreal, Quebec, Canada, 1998. (Abstract published in the Program of the Annual Meeting, 1998.)
- 18. **Vollmer TL**. Safety and tolerability of glatiramer acetate for injection (formerly known as Copolymer-1) in the treatment of multiple sclerosis patients previously treated with interferon beta-1b. Presented at the 123rd Annual Meeting of the American Neurological Association, Montreal, Quebec, Canada, 1998. (Abstract published in the Program of the Annual Meeting, 1998.)
- 19. Guarnaccia JB. Vollmer TL. Combination treatment regimens using interferon beta and immunosuppressive/ cytotoxic drugs in patients with multiple sclerosis. Presented at the 123rd Annual Meeting of the American Neurological Association, Montreal, Quebec, Canada, 1998. (Abstract published in the Program of the Annual Meeting, 1998, and in Annuals of Neurology, 44, 1998, p. W250.)
- 20. Sheremata WA. Minagar A. Hulme A. Koller M. **Vollmer T**. Reduction of relapses in multiple sclerosis after natalizumab (Antegren) treatment. Presented at the 123rd Annual Meeting of the American Neurological Association, Montreal, Quebec, Canada, 1998. (Abstract published in the Program of the Annual Meeting, 1998.)
- 21. Preiningerova J. Miyazaki T. Yu RK. Adelson K. Anderson A. Pukdaman N. **Vollmer TL**. The potential role of antibodies against glycosphinogolipids in axonal loss in multiple sclerosis. Presented at the American Academy of Neurology 51st Annual Meeting, Toronto, Ontario, Canada, 1999. (Abstract published in Neurology, 52, Suppl. 2, 1999, p. A399.)
- 22. Hadjimichael O. **Vollmer TL**. Adherence to injection therapy in multiple sclerosis: Patient survey. Presented at the American Academy of Neurology 51st Annual Meeting, Toronto, Ontario, Canada, 1999. (Abstract published in Neurology, 52, Suppl. 2, 1999, p. A549.)

- 23. Vollmer TL. Ni W. Hadjimichael O. Auld E. A study by the North American Research Consortium on Multiple Sclerosis (NARCOMS) of patients with multiple sclerosis in the Veterans Healthcare Administration (VHA) compared to the non-VHA population. Presented at the Rehabilitation In Multiple Sclerosis-Consortium of Multiple Sclerosis Centers (RIMS-CMSC) Joint Symposium, Basel, Switzerland, 1999. (Abstract published in Multiple Sclerosis, 5, Suppl. 1, 1999, p. S130.)
- 24. Vollmer TL. Ni W. Hadjimichael O. The North American Research Committee on Multiple Sclerosis Patient Registry: A progress report. Presented at the 15th Congress of the European Committee for Treatment and Research in Multiple Sclerosis / 4th Annual Meeting of America's Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS / ACTRIMS 99), Basel, Switzerland, 1999. (Abstract published in Multiple Sclerosis, 5, Suppl. 1, 1999, p. S74.)
- 25. **Vollmer TL**. Hadjimichael O. Ni W. The cause of non-adherence to disease-course altering therapies: A comparative study. Presented at the 15th Congress of the European Committee for Treatment and Research in Multiple Sclerosis/ 4th Annual Meeting of America's Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS/ACTRIMS 99), Basel, Switzerland, 1999. (Abstract published in Multiple Sclerosis, 5, Suppl. 1, 1999, p. S97.)
- 26. **Vollmer TL**. Ni W. Hadjimichael O. Why are eligible patients with multiple sclerosis not on treatment with interferon beta or glatiramer acetate: Risk factors for non-treatment. Presented at the American Neurological Association 124th Annual Meeting, Seattle, WA, 1999. (Abstract published in Annuals of the 124th Annual Meeting of the American Neurological Association, 1999, p. 35.)
- 27. **Vollmer TL**. Ni W. Hadjimichael O. Utilization patterns of immunological therapies among VA patients with multiple sclerosis. Presented at the American Neurological Association 124th Annual Meeting, Seattle, WA, 1999. (Abstract published in Annals of the 124th Annual Meeting of the American Neurological Association, October 1999, p. 51.)
- 28. Cook SD. Quiniess JR. Jotkowitz A. Neutralizing Antibody Study Group. Neutralizing antibodies (Nab's) to beta interferons in patients with multiple sclerosis. Presented at the American Academy of Neurology 52nd Annual Meeting, San Diego, CA, 2000. (Abstract published in Neurology, 54, Suppl. 3, 2000, p. A234.)
- 29. **Vollmer TL**. Ni W. Hadjimichael O. Multiple sclerosis treatment patterns at the end of the 20th century. Presented at the Consortium of Multiple Sclerosis Centers (CMSC) Annual Meeting, Halifax, Canada, June 2000. (Abstract published online [www.mscare.org] in the International Journal of MS Care, 2(2), 2000.)
- 30. Fraser C, Hadjimichael O, **Vollmer T**. Predictors of adherence to Copaxone therapy in individuals with relapsing-remitting multiple sclerosis. Presented at Consortium of Multiple Sclerosis Centers (CMSC) Annual Meeting in Halifax, Canada, June 2000. (Abstract published online [www.mscare.org] in the International Journal of MS Care, 2(2), 2000.)
- 31. **Vollmer TL**. Hadjimichael O. Ni W. Effect of race in the treatment of multiple sclerosis. Presented at the Consortium of Multiple Sclerosis Centers (CMSC) Annual Meeting, Halifax, Canada, June 2000. (Abstract published online [www.mscare.org] in the International Journal of MS Care, 2(2), 2000.)

- 32. Fraser C, Hadjimichael O, **Vollmer T**. Predictors of adherence to Copaxone therapy in individuals with relapsing-remitting multiple sclerosis. J Neurosci Nurs 2001; 33:231-239.
- 33. **Vollmer TL**. Ni W. Hadjimichael O. Subtypes of multiple sclerosis: Biological factors and progression of disease. Presented at the 53rd Annual Meeting of the American Academy of Neurology, Philadelphia, PA, May 2001. (Abstract published in Neurology, 56, Suppl. 3, 2001, pp. A194-195.)
- 34. Ni W. Hadjimichael O. **Vollmer TL**. Rizzo M. Pain syndromes in multiple sclerosis: Severity, impact on quality of life, and treatment patterns. Presented at the 53rd Annual Meeting of the American Academy of Neurology, Philadelphia, PA, May 2001. (Abstract published in Neurology, 56, Suppl. 3, 2001, p. A98.)
- 35. **Vollmer TL**. Ni W. Hadjimichael O. Rizzo M. Biological factors and subtypes of multiple sclerosis. Presented at the Consortium of Multiple Sclerosis Centers (CMSC) Annual Meeting, Fort Worth, TX, May 2001. (Abstract published in the International Journal of MS Care, 3, 2001, p. 51.)
- 36. **Vollmer TL**. Ni W. Hadjimichael O. Rizzo M. Disability and handicap in multiple sclerosis and their effect on employment. Presented at the Consortium of Multiple Sclerosis Centers (CMSC) Annual Meeting, Fort Worth, TX, May 2001. (Abstract published in the International Journal of MS Care, 3, 2001, p. 51.)
- 37. Ni W. Hadjimichael O. Rizzo M. **Vollmer TL**. The impact of childbirth on the progression of disability in multiple sclerosis. Presented at the Consortium of Multiple Sclerosis Centers (CMSC) Annual Meeting, Fort Worth, TX, May 2001. (Abstract published in the International Journal of MS Care, 3, 2001, p. 39.)
- 38. Preiningerova J, Ding Z, Cannistraci C, Sun H, **Vollmer T**, Anderson A. Computer Assisted Volumetric Analysis of Gadolinium Enhancement in Mulitple Sclerosis (P245). Presented at the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), Baltimore, MD, September 2002.
- 39. Goodman A, Blight A, Cohen J, Cross A, Katz M, Rizzo M, **Vollmer T**. Placebo-Controlled Double-Blinded Dose Ranging Study of Fampridine-SR in Multiple Sclerosis (P308). Presented at the Presented at the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), Baltimore, MD, September 2002.
- 40. Markovic-Plese S, Powell A, Cortez A, **Vollmer T**. Therapeutic Potential of Statins in Relapsing-Remitting Multiple Sclerosis (P340). Presented at the Presented at the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), Baltimore, MD, September 2002
- 41. Goodman AD, Blight A, Cohen J, Cross A, Katz M, Rizzo MA, **Vollmer TL**. Placebo-controlled Double-Blinded Dose Ranging Study of Fampridine-SR in Multiple Sclerosis. ECTRIMS 2002
- 42. Goodman AD, Blight A, Cohen J, Cross A, Katz M, Rizzo MA, **Vollmer TL**. Placebo-controlled Double-Blinded Dose Ranging Study of Fampridine-SR in Multiple Sclerosis. AAN 2002
- 43. Rizzo M, Hadjimichael O, Buenconsejo J, Preiningerova J, Vollmer T. Spasticity in MS Patients in the NARCOMS Registry: Prevalence, Severity and Treatment Patterns Using Oral Agents And/Or Intrathecal Baclofen (P191). Presented at the Presented at the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), Baltimore, MD, September 2002.

- 44. **Vollmer TL**, Hadjimichael O, Buenconsejo J. Quality of Life and Cost of Illness in Mitoxantrone Treated Multiple Sclerosis Patients (P185). Presented at the Presented at the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), Baltimore, MD, September 2002.
- 45. **Vollmer TL**, Preiningerova J, Markovic-Plese S, Rizzo M, Cugger G. A Phase IIB Study of Oral Interferon Beta-1A At Two Doses in Relapsing Remitting Multiple Sclerosis Using MRI, Clinical and Immunologic Measures (P163). Presented at the Presented at the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), Baltimore, MD, September 2002.
- 46. Marrie R, Cohen J, Hadjimichael O, **Vollmer T**. Use of Alternative Providers in Multiple Sclerosis (P63). Presented at the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), Baltimore, MD, September 2002.
- 47. Goodman A, Cohen J, **Vollmer T**, Cohen R, Katz M, Blight A, Fampridine-SR Study Group. Safety and Efficacy of Fampridine-SR inMultiple Sclerosis Patients: a Phase 2 Trial. Presented at the Consortium of Multiple Sclerosis Centers (CMSC), Toronto, Canada, June 2004.
- 48. Kasper L, Everitt D, Leist T, Ryan K, Mascelli M, Cusmano C, Johnson K, Hartnett H, Bauman T, Fadul C, Chanon-Smith J, Markovic S, **Vollmer, T**. Therapeutic Intervention of Multiple Sclerosis with an IL-12/23p40 Antagonist: A Phase I Clinical Trail. Presented at the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), Vienna, Austria, October 2004.
- 49. **Vollmer T**, Wymer J, Smith R, Pope L. A Randomized Trial of AVP-923 for Treatment of Pain in Multiple Sclerosis. Presented at the Consortium of Multiple Sclerosis Centers, Orlando, FL. June 2005.
- 50. Liu R, Van Kaer L, LaCava A, Price M, Campagnolo D, Collins M, Young D, **Vollmer T**, Shi F. Autoreactive T cells mediate NK cell degeneration in autoimmune disease.
- 51. Bar-Or A, Jalili F, Niino M, Bodner C, Antel J, Shi F, Price M, Rhodes S, **Vollmer T**, Gianettoni J, Valone F, Steinman L, Garren H. Antigen-specific Immune Changes with MBP Encoding DNA Plasmid (BHT-3009) alone or Combined with Atorvastatin Multiple Sclerosis Patients. Submitted
- 52. Bar-Or A, Jalili F, Niino M, Bodner C, Antel J, Shi F, Price M, Rhodes S, **Vollmer T**, Gianettoni J, Valone F, Steinman L, Garren H. Antigen-specific immunomodulation in multiple sclerosis patients treated with MBP encoding DNA plasmid (BHT-3009) alone or combined with atorvastatin. Submitted
- 53. Liu R, LaCava A, Pollard M, Price M, Rhdoes S, Vollmr T, Sarvetnick N, Shi F. Impaired Neuroantigen Priming Determines Resistance to the Induction of Autoimunity in MyD88-Deficient Mice. Accepted AAN 2005 Meeting, Miami Beach, FL
- 54. Liu R, Pollard M, LaCava A, Price M, Rhodes S, Campagnolo D, **Vollmer T**, VanKear L, Shi F. Treatment of a B-Cell Mediated Autoimmune Disease, Myasthenia Gravis in Mice by Activation of Natural Killer T (NKT) Cells. Accepted AAN 2005 Meeting, Miami Beach, FL
- 55. **Vollmer T**, Lapierre Y, Weiner L, Oger J, Bar-Or A, Arnold D, Barkas W, Antel J, Kachuck N, Garren H, Gianettoni J, Steinman L, Valone F; Clinical trial of a MBP encoding DNA plasmid (BHT-3009) alone or combined with atorvastatin for treatment of multiple sclerosis. Accepted ECTRIMS/ACTRIMS 2005 meeting, Thessaloniki, Greece.
- 56. **Vollmer T**, Panitch H, Dunn S, Lublin F, O'Connor P, Bar-Or A, Freedman M, Hendin B, Gazda S, Campagnolo D, Shi F. Induction treatment with mitoxantrone (Novantrone®) preceding treatment

- with glatiramer acetate (Copaxone®), a multi-centre, randomised, two-arm, open-label study in RRMS patients. Accepted ECTRIMS/ACTRIMS 2005 meeting, Thessaloniki, Greece.
- 57. Bar-Or A, Jalili F, Niino M, Bodner C, Antel J, Shi F, Price M, Rhodes S, **Vollmer T**, Gianettoni J, Valone F, Steinman L, Garren H. Antigen-specific Immune Changes with MBP Encoding DNA Plasmid (BHT-3009) alone or Combined with Atorvastatin Multiple Sclerosis Patients. Submitted.
- 58. Garren H, Antel J, Bar-Or A, Bodner C, Campagnolo D, Gianettoni J, Jahili F, Kachuck N, Lapierre Y, Nino M, Oger J, Price M, Rhodes S, Shi F, Valone F, **Vollmer T**, Weiner L, Steinman L. Phase I/II trial of a MBP encoding DNA plasmid (BHT-3009) alone or combined with atorvastatin for treatment of multiple sclerosis. European Neurological Society 2006 Annual Meeting; Lausanne, Switzerland.
- 59. Garren H, Antel J, Bar-Or A, Bdner C, Campagnolo D, Gianettoni J, Jalili F, Kachuck N, Lapierre Y, Niino M, Oger J, Price M, Rhodes S, Robinson W, Shi F, Valone F, **Vollmer T**, Steinman L. Phase I/II trial of a MBP encoding DNA plasmid (BHT-3009) alone or combined with atorvastatin for treatment of MS. International Society of Neuroimmunology 2006 Annual Meeting; Nagoya, Japan.
- 60. Hadjimichael, O., Kerns, R., Rizzo M., **Vollmer T**. (2007). Persistent pain and uncomfortable sensations in persons with multiple sclerosis. Pain, 127, 1-2, 35-41
- 61. Bar-Or A, Gibbs E, Niino M, Aziz T, Alatab S, Shi F, Campagnolo D, Jalili F, Rhodes S, Yamashita T, Fan B, Freedman M, Panitch H, Arnold D, **Vollmer T**, Oger J. Tracking in vivo immune modulation in MS patients treated with Glatiramer Acetate (GA) alone, or with GA preceded by Mitoxantrone, provides novel insights into the mode of action of therapeutic strategies that combine immune suppression and immune deviation. Neurology 2007 March 20:68(12); S1.
- 62. Hauser S, Waubant E, Arnold D, **Vollmer T**, Antel J, Fox R, Bar-Or A, Sarkar N, Langer-Gould A, Panzara M, Smith C. A phase II randomized, placebo-controlled multicenter trial of rituximab in adults with relapsing remitting multiple sclerosis (RRMS). Neurology 2007 March 20:68(12); S1.
- 63. Cutter G, Yadavalli R, Marrie R, Tyry T, Campagnolo D, Bullock B, **Vollmer T**. Changes in the sex ratio over time in multiple sclerosis. Neurology 2007 March 20:68(12); S1.
- 64. Bullock B, Tyry T, Cutter G, Marrie R, **Vollmer T**, Campagnolo D. Birthplace variation among US residents with MS. Neurology 2007 March 20:68(12); S1.
- 65. Marrie R, Cutter G, Tyry T, **Vollmer T**, Campagnolo D. Patients with multiple sclerosis smoke more than the general population. Neurology 2007 March 20:68(12); S1.
- 66. Bullock B, Tyry T, Cutter G, Marrie R, **Vollmer T**, Campagnolo D. Seasonal patterns of birth in NARCOMS MS registry. Neurology 2007 March 20:68(12); S1.
- 67. **Vollmer T**, Campagnolo D, Panitch H, Bar-Or A, Arnold D. Reductions in MRI disease activity and relapse rates in observed after induction of shortterm immunosuppression with mitoxantrone followed by long term glatiramer acetate (GA) are maintained at 24 months in patients with relapsing remitting multiple sclerosis (RRMS). Neurology 2007 March 20:68(12); S1.
- 68. Arnold D, Bar-Or A, Freedman M, Gazda S, Panitch H, **Vollmer T**. Reductions in Gd enhancing lesions observed with glatiramer acetate following a brief and low dose course of mitoxantrone in patients with relapsing remitting multiple sclerosis (RRMS) are paralleled by favorable effects on MRI markers of disease burden and black hole evolution. Neurology 2007 March 20:68(12); S1.

- 69. Foley F, Zemon V, Campagnolo D, Marrie RA, Cutter G, Tyry T, Devitt M, Miller T, Sipski M, and **Vollmer T**. (2007). Validation of the MS Intimacy and Sexuality Questionnaire in large national sample. Poster S33 Presented at the 21st Annual CMSC Meeting in Washington, DC, June, 2007. (Abstract published in International Journal of MS Care, 9, 2, 58-59.)
- 70. Foley F, Zemon V, Campagnolo D, Devitt M, Tyry T, Marrie RA, Cutter G, Sipski M, & **Vollmer T**. (2007). The Epidemiology of sexual dysfucntion in multiple sclerosis in the United States. Platform presentation P15 at the 21st Annual CMSC Meeting in Washington, DC, June 2007. (Abstract published in International Journal of MS Care, 9, 2, 47-48.)
- 71. Hadjimichael, O, **Vollmer, T**, Oleen-Burkey, M (2008). Fatigue characteristes in multiple sclerosis: the North American Research Committee on Multiple Sclerosis (NARCOMS) survey. Health and Quality of Life Outcomes, 6, 100.
- 72. Moberly J, Zahir H, Ford D, Truitt, KE, Carothers, TJ, Chen, S, Shi M, **Vollmer T** An adaptive multiple Ascending dose study using lymphocytes as a primary biomarker for early clinical evaluation of a S1P receptor Modulator for treatment of multiple sclerosis ACTRIMS 2009
- 73. Eckert B, Smith KW, Trisolini M, **Vollmer T** Prescription Medication use among MS adults on disease Modifying therapies. CMSC Abstract #2 January 22, 2009.
- 74. Eckert B, Smith KW, Trisolini M, **Vollmer T** Burden of Disease-Modifying therapy injections administration for MS caregivers. CMSC Abstract #1 January 22, 2009.
- 75. Tyry, T., **Vollmer, T.**, Davis, P., Marrie, R.A., Cutter, G., & Campagnolo, D. (2008) Natural history of MS Among patients treated with SC interferon B-1b. Poster S87 presented at the CMSC conference in Denver, May 2008. (Abstract published in International journal of MS Care, 10, S1, 38.) MS caregivers. CMSC Abstract #1 January 22, 2009.
- 76. Salter AS, Tyry T, Moreau R, Marrie RA, **Vollmer T**, Cutter, GR. (2010) Estimating the Probability of Employment Status Transitions and Exploration of Influential Factors. Poster presentation 2010 AAN Annual Meeting Toronto.
- 77. Moreau R, Salter A, Tyry T, Marrie RA, **Vollmer T**, Cutter GR. (2010) Hand Function, Mobility and Employment Status in the NARCOMS Registry. Abstract presented at the 2010 AAN annual meeting Toronto.
- 78. Volmer T, Bar-Or A, Campagnolo D, Panitch H, and Arnold D. (2010) Short-term Immunosuppression with Mitoxantrone Followed by Long-Term Glatiramer Acetate vs Glatiramer Acetate Alone: Results at 60 Months in Patients with Relapsing Multiple Sclerosis. Abstract,2010 American Academy of Neurology annual meeting, Toronto, Canada
- 79. Zahir H, Moberly JB, Ford D, Truitt KE, Bar-Or A, **Vollmer T**. (2010) Differential effects of a selective sphingosine1-phosphate receptor 1 (S1P1) Modulator (CS-0777) on circulating lymphocyte subsets in multiple sclerosis patients. Poster presentation 2010 AAN annual meeting.
- 80. Calabresi PA, Goodin D, Jeffrey D, Lublin FD, Rammohan K, Reder AT, **Vollmer T**, Stites T, Li B, Gottschalk R and Malhotra M on behalf of the FREEDOMS II Study Group. (2010) Oral fingolimod (FTY720) in relapsing-remitting multiple sclerosis: baselilne patient demographics and disease characteristics from a 2-year phase III trial (FREEDOMS II). Abstract/Poster presentation given at 2010

- AAN annual meeting, Toronto; also presented at the Annual CMSC Meeting, June, 2010, San Antonio, TX
- 81. Ramesh CN, **Vollmer T**, Bomprezzi R, Campagnolo D, Jacolik R. A relative deficiency in CD16+/Perforin + Lymphocytes (NK cells) in multiple sclerosis is corrected by glatiramer acetate (GA) treatment.

 Abstract given at ACTRIMS meeting San Antonio, TX June, 2010
- 82. Ramesh CN, **Vollmer TL**, Bomprezzi R, Campagnolo D and Jocolik R. Plasma visfatin elevation in multiple Sclerosis. Abstract given at ACTRIMS meeting, San Antonio, TX June, 2010
- 83. Marrie, RA, Cutter G, **Vollmer T**, and Tyry T. Physical Comorbidities Are Associated with an Increased Risk of Depression in Multiple Sclerosis. Abstract accepted, American Academy of Neurology Annual Meeting Toronto, Canada 2010.
- 84. Marrie RA, Cutter G, **Vollmer T**, and Tyry T. Comorbidity is Associated with Greater Decrements in Quality of Life over Two Years in MS. Abstract #264AAN10D1 American Academy of Neurology Annual Meeting Toronto, Canada 2010
- 85. Campagnolo, D, Bomprezzi R, **Vollmer T**. Recirculating phagocytes are a novel source of biomarkers for multiple sclerosis. Abstract C-99 accepted for presentation to the American Academy of Clinical Chemistry annual meeting in Anaheim, CA July, 2010
- 86. Schmidt H, Loud S, Venkatesan A, Goins J, Frohman E, Taylor S, Sadiq S, Puccio L, Thrower B, Iski E, Riskind P, Weaver J, Bomprezzi R, Bullock B, Kinkel RP, Konkel S, Racke M, McGowan J, Vollmer T, Edward S, Steinman L, Lebus D, Greenberg B. The Accelerated Cure Project Biorepository—enabling the discovery of biomarkers in MS and other demyelinating diseases. Poster P963 presented at The Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS) 15th Annual conference of Rehabilitation in MS October 12—16, 2010, Gothenburg, Sweden.
- 87. Salter AR, Cofield SS, **Vollmer T**, Cutter GR. Timing of birth in United States-born multiple sclerosis population. Poster P617 presented at The Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS) 15th Annual conference of Rehabilitation in MS October 12—16, 2010, Gothenburg, Sweden.
- 88. "Return to ECTRIMS: Updates from ECTRIMS for Treatment and Research in MS" to area Neurologists, Denver, Colorado February 23, 2011.
- 89. **Vollmer, TL**, Tyry, T, Salter A, Cutter G, Marrie R. Is trigeminal neuralgia more prevalent in certain groups of multiple sclerosis patients? Poster presentation to the AAN Annual meeting, Honolulu, HI April, 2011.
- Fox R, Salter A, Alster JM, Cutter G, Dawson NV, Johnson S, Miller D, Tyry T, Vollmer T, Wells B, Kattan M. Do multiple sclerosis patients understand Risk? Survey results from the NARCOMS Registry.
 Poster presentation at the AAN annual meeting, Honolulu, Hawaii, April, 2011
- 91. Moreau RL, Salter AR, Marrie R, Tyry T, Cutter G, **Vollmer T**. Comorbidities, smoking habits, and their connection with secondhand smoke. Poster presentation to the AAN annual meeting, Honolulu, Hawaii, April, 2011

- 92. Miller D, Alster JM, Cutter G, Dawson NV, Johnson S, Kattan M, Salter A, Tyry T, Wells B, Vollmer T, Fox R. Patient preferences for information seeking and decision resources: survey results from the NARCOMS registry. Poster presentation to the AAN annual meeting, Honolulu, Hawaii, April, 2011
- 93. Fox R, Salter A, Alster JM Dawson NV, Johnson S, Kattan M, Miller D, Tyry T, Wells B, Vollmer T, Cutter G. Risk tolerance in MS patients: survey results from the NARCOMS registry. Poster presentation to the AAN annual meeting Honolulu, Hawaii, April, 2011
- 94. **Vollmer TL**, Robinson MR, Risser RC, Malcolm SK, Carlson JL. A randomized, double-blind, placebo-controlled trial of duloxetine for the treatment of central neuropathic pain associated with multiple sclerosis. 5th Joint triennial congress of the European and Americas Committees for Treatment and Research in Multiple Sclerosis Amsterdam, The Netherlands, 19.10.2011 22.10.2011
- 95. **Vollmer TL**, Sorensen PS, Arnold DL on behalf of the BRAVO Study Group. A Placebo-Controlled and Active Comparator Phase III Trial (BRAVO) for Relapsing-Remitting Multiple Sclerosis. Poster presented at the Annual ECTRIMS (European Committee for Treatment and Research in Multiple Sclerosis) annual meeting, Amsterdam, The Netherlands on October 22, 2011.
- 96. Nayak R, **Vollmer T**, Bomprezzi R, Jacolik R. A circulating biomarker for the therapeutic response in multiple sclerosis. Poster presentation ECTRIMS (European Committee for Treatment and Research in Multiple Sclerosis) annual meeting in Amsterdam, The Netherlands October 21, 201
- 97. Schowinsky J, Corboy J, **Vollmer T**, Keinschmidt-Demaster BK. Natalizumab-associated T cell complications: first case of peripheral T cell lymphoma and second case of PML-IRIS and clonal T cell production. Poster and abstract presented at the 101st Annual meeting of the United States and Canadian Academy of Pathology in Vancouver, British Columbia, Canada March 17-23, 2012
- 98. **Vollmer T**, Comi G, Sorensen PS, Arnold D, Filippi M, Statinova O, Kobys t, Becker E, Jeffrey D, Montalban X, Kappos L, Boyko A, Selmaj K, Zipp F, Havrdova E, Cohen J. Clinical efficacy of laquinimod for the treatment of multiple Sclerosis; pooled analyses from the ALLEGRO and BRAVO Phase III trials. Poster and abstract presented at the 64th Annual American Academy of Neurology meeting, New Orleans, LA April 24, 2012
- 99. Comi G, **Vollmer T**, Sorensen PS, Arnold D, Filippi M, Statinov O, Kobys T, Becker E, Jeffrey D, Montalban X, Kappos L, Boyko A, Selmaj K, Zipp F, Havrdova E, Cohen J. Pooled analyses from the ALLEGRO and BRAVO trials on the safety and tolerability of laquinimod as a multiple sclerosis treatment. Abstract and poster presented at the 64th Annual American Academy of Neurology Meeting, New Orleans, LA April 25, 2012.
- 100. Campbell J, McQueen RB, Corboy J, **Vollmer T**, Nair K. New versus old: long-term comparative effectiveness research projections for disease modifying therapies in relapsing-remitting multiple sclerosis. Abstract and poster presented at 64th Annual American Academy of Neurology meeting, New Orleans, LA April 26, 2012.
- 101. **Vollmer TL**, Selmaj KW. Bar-Or A, Zipp F. A double-blind, placebo-controlled, phase2, 26-week DreaMS trial of a selective S1P receptor agnonists ONO 4641 in patients with relapsing-remitting multiple sclerosis. Abstract and poster presentation at the 64th Annual American Academy of Neurology meeting, New Orleans, LA, April 25, 2012

- 102. Calabresi PA, Radue EW, Goodin D, Jeffrey D, Rammohan K, Reder AT, **Vollmer T**, Agius MA, Kappos L, Li G, Cappiello L, Malhotra M, von Rosenstiel P, Lublin FD. Efficacy and safety of fingolimod in patients with relapsing remitting multiple sclerosis (RRMS): Results from an aadditional 24-month double-blind, placebo-controlled study (FREEDOMS II Study)" Abstract presented at platform presentation at the 64th Annual American Academy of Neurology meeting, New Orleans, LA. April, 2012
- 103. Schreiner T, Corboy J, Bennett J, Miravalle A, **Vollmer T**. Comparing rituximab induction followed by glatiramer acetate to glatiramer acetate alone in patients with MS. Poster and abstract presented at the annual Consortium of MS Centers meeting in San Diego, CA May, 2012.
- 104. **Vollmer T**, Goodin D, Jeffrey D, Kappos L, Radue E-W, Reder AT, Agius MA, Cappiello L, Stiles T, Li B, Mahotra M, von Rosensteil P, Calabresi PA. Effect of fingolimod on severe relapses, healthcare utilization and relapse recovery in patients with relapsing-remitting multiple sclerosis: Results from the phase 3 FREEDOMS II study. Abstract and poster presented at the 28th Congress of the European Committee for the Treatment and Research in Multiple Sclerosis (ECTRIMS), October 10-13, 2012, Lyon, France
- 105. Zipp F, **Vollmer TL**, Selmaj KW, Bar-Or A on behalf of the DreaMS Study Group. Efficacy and safety of the S1P receptor agonist ONO-4641 in patients with relapsing-remitting multiple sclerosis: results of a 26-week, double-blind, placebo-controlled, phase II trial (DreaMS). Abstract and poster presented at the 28th Congress of the European Committee for the Treatment and Research in Multiple Sclerosis (ECTRIMS), October 10-13, 2012, Lyon, France
- 106. Calabresi PA, Goodin D, Jeffrey D, Kappos L, Lublin FD, Rammohan K, Reder AT, **Vollmer T**, Agius MA, Cappiello L, Stites T, Li BB, Malhotra M, von Rosensteil P, Radue E.-W. Efficacy and safety of fingolimod versus placebo: primary outcomes from the phase 3 FREEDOMS II study in patients with relapsing-remitting multiple sclerosis. Abstract presented at the 28th Congress of the European Committee for the Treatment and Research in Multiple Sclerosis (ECTRIMS), October 10-13, 2012, Lyon, France
- 107. Quaranto BR, Healy BC, **Vollmer TL**, Benedict RHB, Schwartz CE. Cognitive reserve and symptom experience in multiple scerosis: a buffer to disability progression over time? Abstract presented at the 28th Congress of the European Committee for the Treatment and Research in Multiple Sclerosis (ECTRIMS), October 10-13, 2012, Lyon, France
- 108. Radue E.-W, Goodin D, Jeffrey D, Kappos L, Lublin FD, Rammahan K, Reder AT, **Vollmer T**, Agius MA, Cappiello L, Stites T, Li BB, Malhotra M, von Rosenstiel P, Calabresi PA. Fingolimod reduces magnetic resonance imaging inflammatory lesion activity versus placebo in patients with relapsing-remitting multiple sclerosis: results from the phase 3 FREDDOMS study. Abstract presented at the 28th Congress of the European Committee for the Treatment and Research in Multiple Sclerosis (ECTRIMS), October 10-13, 2012, Lyon, France
- 109. **Vollmer T**, Jeffrey D, Goodin D, Kappos L, Lublin F, Radue EW, Rammohan K, Reder A, Agius M, Stites T, Li B, Cappiello L, von Rosenstiel P, Calabresi P. Long-term Safety of Fingolimod in Patients with Relapsing-remitting Multiple Sclerosis: Results from Phase 3 FREEDOMS II Extension Study. Abstract (#1030) and poster presented at the AAN Annual meeting in San Diego, CA March, 2013

- 110. **Vollmer TL**, Arnold D, Cohen J, Coles A, Confavreau C, Fox E, Hartung H, Havrdova E, Selmaj K, Weiner H, Twyman C, Miller T, Lake S, Margolin D, Panzara M, Compston A. Alemtuzumab Reduces MS Disease Activity in Active Relapsing-Remitting Multiple Sclerosis in Patients Who had Disease Activity on Prior therapy. Abstract accepted for presentation to the American Academy of Neurology annual meeting in San Diego, CA March, 2013
- 111. **Vollmer TL**, Havrdova E, Krzysztof S, Elkins J, Hass S, Guo S, Proskorovsky I. Daclizumab High-Yield Process Treatment Reduced the Impact of Multiple Sclerosis Relapse on Health-Related Quality of Life (Results of the SELECT trial). Abstract and poster presented at the American Academy of Neurology Annual meeting in San Diego, CA, March, 2013
- 112. **Vollmer TL**, Chen D, Nance P, Ellenbogen A, Flitman S, Garrison J, Huddleston J, Huffman C, Mayadev A, Patel N, Patton J, Thrower B, Lissin D. An ongoing Randomized, Double-blind, Placebo-controlled Efficacy and Safety Study of Arbaclofen Placarbil in Subjects with Spasticity Due to Multiple Sclerosis. Abstract and poster presented at the American Academy of Neurology annual meeting in San Diego, CA, March, 2013
- 113. Campbell JD, Ghushchyan V, McQueen RB, Cahoon-Metzger S, Livingston T, **Vollmer T**, Corboy J. Miravalle A, Schreiner T, Nair, K. Direct Costs, Indirect Costs, and Quality of Life Burden of Multiple Sclerosis: National U.S. Estimates. Abstract and poster presented at the American Academy of Neurology annual meeting in San Diego, CA, March, 2013.
- 114. Bar-Or A, Zipp F, Krysztof S, Due B, **Vollmer TL**, The Effect of the Sphingosine 1-Phosphate Receptor Agonist ONO-461 On Circulating Lymphocytes in Patients with Relapsing Remitting Multiple Sclerosis: Results from the Phase 1 DreaMS Trial. Abstract and poster presented at the American Academy of Neurology annual meeting, San Diego, CA March, 2013
- 115. Goodin D, Jeffery D, Kappos L, Lublin F, Radu EW, Rammohan K, Reder A, **Vollmer TL**, Agius M, Stites T, Li B, Cappiello L, von Rosenstiel P, Calabresi P. Fingolimod Reduces Annualized Relapse Rate in Patients with Relapsing-Remitting Multiple Sclerosis: FREEDOMS II Study Subgroup Analysis. Abstract and Poster presented at the American Academy of Neurology annual meeting, San Diego, CA March, 2013
- 116. Selmaj K, Zipp F, **Vollmer T**, Bar-Or A, Due B, VanBeek, J, Thangavelu K. An exploratory analysis of magnetic resonance imaging outcomes in the DreaMS trial: a double-blilnd, placebo-controlled, Phase 2, 26-week trial of a selective sphingosine 1-phosphate receptor agonist ONO-4641 in patients with relapsing-remitting multiple sclerosis. Poster presented at the American Academy of Neurology annual meeting, San Diego, CA March, 2013
- 117. **Vollmer TL**, Stalla-Bourdillo A, Robinson M. Teriflunomide in Routine Clinical Practice: Design of the Teri-PRO Study. Abstract presented to the 27th Annual meeting of the CMSC and the 5th Cooperative Meeting of the CMSC-ACTRIMS, Orlando, FL May, 2013
- 118. **Vollmer T**, Radue E-W, Vermersch P, von Rosensteil P, Putzki N, Meinel M, Sfikas N, Merschhemke M, Freedman M. Clinical and magnetic resonance imaging (MRI) disease activity after fingolimod discontinuation. Abstract presented at ECTRIMS annual meeting, October, 2013 Copenhagen, Denmark.

- 119. Bar-Or A, Zipp F, **Vollmer T**, Due B, Thangavelu K, Johnson J, Selmaj K on behalf of the DreaMS study investigators. Safety of ONO-461 in patients with relapsing-remitting multiple sclerosis: results from the 6-month interim analysis of the DreaMS extension study. Abstract number 1015 presented at ECTRIMS annual meeting October, 2013 Copenhagen, Denmark.
- 120. Selmaj K, Zipp F, **Vollmer T**, Bar-Or A, Due B, Fisher TZ, Thangavelu K on behalf of the DreaMS study investigators. Effect of ONO-4641 a potent, oral, elective sphingosine-1-phosphate receptor-1 and -5 agonist, on MRI outcomes in patients with relapsing-remitting multiple sclerosis: subgroup analysis from the Phase II DreaMS study. Abstract number 941 presented at ECTRIMS annual meeting, October, 2013 in Copenhagen, Denmark
- 121. **Vollmer T**, Zipp F, Bar-Or A, Due B, Thangavelu K, Fisher TZ, Selmaj K on behalf of the DreaMS study investigators. Magnetic resonance imaging measures of efficacy in patients with multiple sclerosis receiving ONO-4641, a sphingosine-1-phosphate receptor-1 and -5 agonist: interim results from an extension of the DreaMS study. Abstract number 954 presented at ECTRIMS annual meeting October, 2013 Copenhagen, Denmark
- 122. Reder AT, Jeffery D, Goodin D, Kappos L, Lublin FD, Radue EW, Rammohan K, **Vollmer T**, Agius MA, Stites T, Li B, Cappiello L. von Rosenstein P, Calabresi PA. Long-term efficacy of fingolimod in patients with relapsing-remitting multiple sclerosis: Results from the phase 3 FREEDOMS II extension study. Abstract presented at ECTRIMS annual meeting October, 2013, Copenhagen, Denmark
- 123. **Vollmer T**, Sorensen P.S., Selmaj K., Zipp F, Havrdova E, Cohen J, Sidi Y, Gordine T, Arnold D for the BRAVO Study Group. Results of switching to laquinimod in the open-label extension phase of the BRAVO Study. Abstract No. 566 and poster presented at the 29th Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), and the 18th Annual Conference of Rehabilitation in MS (RIMS) Copenhagen, Denmark October, 2013
- 124. Somani MP, Cutter G, Comi G, **Vollmer T**, Sorensen PS, Lakani D, Sasson N, Knappertz V. Evaluating the relationship between laquinimod's effects on relapse and disability progression. Abstract No. 585 and poster presented at ECTRIMS annual meeting October, 2013, Copenhagen, Denmark
- 125. Sorensen PS, Cutter G, **Vollmer T**, Comi G, Ladkani D, Sasson N. Knappertz V. The risk of disability progression is associated with multiple sclerosis functional composite (MSFC) scores in the laquinimod phase 3 trials. Abstract No. 608 and poster presented at the 29th Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), and the 18th Annual Conference of Rehabilitation in MS (RIMS) Copenhagen, Denmark October, 2013.
- 126. **Vollmer T**, Montalban X, Comi G, Ziemssen T, Boyko A, Vermersch P, Sasson N, Gorfine T, Knappertz V, Filippi M. Multicentre, randomized, placebo-controlled study to evaluate the efficacy and tolerability fo two doses of oral laquinimod (0.6 mg/day and 1.2 mg/day) for the treatment of patients with relapsing remitting multiple sclerosis. Abstract No. 576 and poster presented at the 29th Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), and the 18th Annual Conference of Rehabilitation in MS (RIMS) Copenhagen, Denmark October, 2013.
- 127. Comi G, **Vollmer T**, Cutter G, Sasson N, Ladkani D, Gorfine T. Disease progression in relapse-free patients treated with laquinimod. Abstract No. 1044 and poster presented at the 29th Congress of the

- European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), and the 18th Annual Conference of Rehabilitation in MS (RIMS) Copenhagen, Denmark October, 2013.
- 128. Cutter G, Comi G, **Vollmer T**, Ladkani D, Sasson N. Knappertz V. Baysian analysis of laquinimod's effect on relapses and disability. Abstract No. 609 and poster presented at the 29th Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), and the 18th Annual Conference of Rehabilitation in MS (RIMS) Copenhagen, Denmark October, 2013.
- 129. Eisenberg, DF, Navaratnum P, Ke X, Ramey N, Friedman H, Agashivala N, Sasane R, Vollmer T. Clinical characteristcs associated with high cost MS patients using claims and medical records data, stratified by cost. Abstract #2481 presented at the Consortium of MS Centers/ACTRIMS Annual Meeting, Dallas, Texas, May, 2014
- 130. Calkwood J, Viglietta V, **Vollmer T**, Zhang R, Novas M, Sheikh S, Fox RJ. Delayed-Release Dimethyl Fumerate as Add-on Therapy to Beta Interferon or Glatiramer Acetate in Relapsing-Remitting MS: Safety and Tolerability. Abstract presented at the CMSC/ACTRIMS Annual Meeting, Dallas, Texas, May, 2014
- 131. Viglietta V, **Vollmer T**, Zhang R, Novas M, Sheikh S, Fox R. Abstract number 3189 Safety and tolerability of Delayed-Release Dimethyl Fumerate Administered as Add-On Therapy to Beta Interferons or Glatiramer Acetate in Relapsing-Remitting Multiple Sclerosis (RRMS) Patients. Accepted for platform presentation (S4.002) and INS Data Bliz (17-2.003)sessions at the annual American Academy of Neurology Annual Meeting, Philadelphia, PA 2014
- 132. **Vollmer T**, Foley J, Nair K, Sstephenson J, Niecko T, Agarwal S, Watson C. Abstract number 1587 and Poster P7.210 Impact of Natalizumab Treatment for Multiple Sclerosis on Patient-Reported Physical Functioning over 3 Years in US Clinical Practice presented at the annual American Academy of Neurology Annual Meeting, Philadelphia, PA 2014.
- 133. Foley J. Nair K, Stephenson J, **Vollmer T**, Niecko T, Agarwal S, Watson C. Abstract number 1515 Patient-Reported Psychological Functioning in Natalizumab-Treated Patients with Multiple Sclerosis in US Clinical Practice abstract and poster (P4.183) presented at the annual American Academy of Neurology Annual Meeting, Philadelphia, PA 2014.
- 134. Bar-Or A, **Vollmer T**, et.al Abstract number 1015 Effect of Ceralifimod (ONO-4641) a Sphingosine-1 Phosphate Receptor-1 and -5 Agonist, on Magnetic Resonance Imaging Outcomes in Patients with Multiple Sclerosis: Interim Results from the Extension of the DreaMS Study abstract and poster (Poster P3.161) presented at the annual American Academy of Neurology Annual Meeting, Philadelphia, PA 2014.
- 135. Comi G, **Vollmer T**, et.al. Abstract number 3285 Mediation of the Effect of Laquinimod on Disability Progression in Relapsing-Remitting Multiple Sclerosis (RMMS) (Poster P3-195) presented at the annual American Academy of Neurology Annual Meeting, Philadelphia, PA 2014.
- 136. McQueen RB, **Vollmer T**, et.al Abstract number 1316 Changes in Natalizumab Treatment Patterns and Association with Relapse Outcomes: A Retrospective Stud. Abstract and poster P7-227 presented at the annual American Academy of Neurology Annual Meeting, Philadelphia, PA 2014.

- 137. McQueen RB, Box-Buckley B, Livingston T, **Vollmer T**, Corboy J, Nair K, Campbell J. Changes in natalizumab Real-World Treatment Patterns and Association with Relapse Outcomes: A Retrospective Study. Abstract and poster presented at the Academy of Managed Care Pharmacy Annual Meeting & Expo in Tampa, FL April 1-4, 2014
- 138. Campbell J, McQueen RB, Cox-Buckley B, Livingston T, **Vollmer T**, Corboy J, Nair K. Retrospective Real-World four-year Study of Natalizumab Initiators: Persistence Versus Non-Persistence Impact on Relapses and Associated Costs. Abstract and poster presented at the CMSC Annual meeting in Dallas, Texas, May, 2014.
- 139. Campbell J, McQueen RB, Cox-Buckley B, Livingston T, **Vollmer T**, Corboy J, Nair K. Retrospective Real-World Four-Year Study of Natalizumab Initiators: Persistence vs. Non-Persistence Impact on Relapses and Associated Costs. Poster and abstract presented at the Academy of Managed Care Pharmacy 26th Annual Meeting & Expo in Tampa, FLA April, 2014.
- 140. McQueen RB, Nair K, **Vollmer T**, Campbell J. Aggressive natalizumab treatment for JC virus-negative relapsing-remitting multiple sclerosis? Cost-effectiveness of risk-line versus second-line natalizumamb treatment. Poster presented at the 19th Annual ISPOR International meeting in Montreal, QC, Canada June 2, 2014
- 141. **Vollmer T**, et.al. Clinical Characteristics Associated with High cost MS Patients Using Claims and Medical Records Data, Stratified by Cost. Abstract and Poster presented at the CMSC Annual meeting in Dallas, TX, May, 2014.
- 142. Nayak R, **Vollmer T**, Bomprezzi R, Jacolik R. (P4.128) Recirculating Phagocytes are a Novel Source of Biomarkers for Brain Injury, Poster and abstract presented at the annual meeting of the American Academy of Neurology, Philadelphia, PA April, 2014
- 143. Yu X, Dennis K, Pointon T, **Vollmer T**. (P4.135) Reduced level of Sialylated IgG Antibody in the CSF of Patients with Multiple Sclerosis. Poster and abstracted presented at the annual meeting of the American Academy of Neurology, Philadelphia, PA April, 2014
- 144. Comi G, Montalban X, Ziemssen T, Boyko A, Vermersch P, Filippi M, Rachmilewits T, Gorfine T, Sasson N. Knappertz V, **Vollmer T**. Baseline Characteristics of Patients Enrolled in CONCERTO-A Study of 0.6 and 1.5 mg/day Oral Laquinimod for Relapsing-remitting Multiple Sclerosis. Abstract presented at the annual ECTRIMS meeting in Boston, MA 2014
- 145. Comi G, **Vollmer T**, Kappos L, Montalban X, Sasson N, Gorfine T, Knapperz V. (P070) Laquinimod Disability Progression Effects are Maintained with Increasingly Rigorous Confirmation Time Intervals.. Poster presentation at the 2014 Joint ACTRIMS-ECTRIMS meeting in Boston, MA September, 2014
- 146. **Vollmer T**, Comi G, Cutter G, Giovannoni G, Steinerman J, Sasson N. Gorfine T, Knappertz V. Ambulation benefit with laquinimod in patients with worsening MS (EDSS over 3) is consistent with reduction in confirmed disability progression. Poster accepted for presentation at the 2014 Joint ACTRIMS-ECTRIMS meeting in Boston, MA Sept., 2014
- 147. **Vollmer T**, Dadon Y, Sisi Y, Ladkani D, Gorfine T, Sorensen P. (P054) Switching From Interferon B-1a IM to Laquinimod: Safety and Efficacy Results from the BRAVO Study Extension. Poster presentation at the 2014 Joint ACTRIMS-ECTRIMS meeting in Boston, MA Sept., 2014

- 148. **Vollmer T**, Comi G, Kappos L, Montalban X, Cutter G, Steinerman J, Sasson N, Gorfine T, Knappertz V. (P062) Clinical Efficacy of Laquinimod 0.6 mg Once-Daily in Worsening Relapsing-Remitting Multiple Sclerosis (Defined by baseline EDSS over three). Poster presentation at the 2014 Joint ACTRIMS-ECTRIMS meeting in Boston, MA Sept., 2014
- 149. **Vollmer T**, Comi G, Sorensen P, Sasson N, Gorfine T, Knappertz V. (P071) Temporal Pattern of Laboratory Changes with Laquinimod Treatment. Poster presentation at the 2014 Joint ACTRIMS-ECTRIMS meeting in Boston, MA Sept., 2014
- 150. Sormani M, **Vollmer T**, Comi G, Sidi Y, Steinerman J, Gorfine T, Knappertz V. (P069) Laquinimod Effect on Confirmed Disability Progression: Minimal Mediation by Relapse or T2 Lesions Reduction. Poster presentation at the 2014 Joint ACTRIMS-ECTRIMS meeting in Boston, MA Sept., 2014
- 151. Comi, G, **Vollmer T**, Kappos D, Montalban X, Gorfine T, Sasson N, Knappertz V. (P061) Consistent Effect of Laquinimod on Relapse-Related and Disability Progression-Related Endpoints. Poster presentation at the 2014 Joint ACTRIMS-ECTRIMS meeting in Boston, MA Sept., 2014
- 152. Nakamura K, **Vollmer T**, Gorfine T, Knappertz V, Arnold D. (P041) Effect of Laquinimod on Gray Matter and White Matter Atrophy in Relapsing-Remitting Multiple Sclerosis: Analysis of the BRAVO Phase III Trial. Poster presentation at the 2014 Joint ACTRIMS-ECTRIMS meeting in Boston, MA Sept., 2014
- 153. Ying L, **Vollmer T**, Havrdova E, Riester K, Lee A, Phillips G, Elkins J. Treatment with Daclilzumab HYP Improved Disease-Specific Patient-Reported Outcomes vs. Interferon Beta-1a in Multiple Sclerosis in the Phase 3 DECIDE Trial. Poster P7.209 Presented at the 2015 Annual AAN Meeting, April 23, 2015 Washington, D.C.
- 154. Comi G, **Vollmer T**, Montalban X, Ziemessen T, Boyko A, Vermersch P, Rachmilewitz, T, Sasson N, Gorfine T, Knappertz V Rocca M, Filippi M. Baseline characteristics of patients enrolled in CONCERTO a study of 0.6 and 1.2 mg/day oral laquinimod for relapsing-remitting multiple sclerosis. Poster P7.216 Presented at the Annual AAN meeting April 23, 2015 Washington, D.C.
- 155. Seibert J, Blackburn J, Vollmer B, Bennett J, Corboy J, Miravalle A, Schreiner T, **Vollmer T**, Alvarez E. Safety, Tolerability, and Efficacy of Rituximab in the Treatment of Multiple Sclerosis: 285 Patients Treated in a Single Center. Poster P3.262 Presented at the Annual AAN meeting April 21, 2015 Washington, D.C.
- 156. Vollmer, B, Seibert J, Sillou S, Dowdle P, Corboy J, **Vollmer T**, Nair K, Alvarez E. Comparison of Fingolimod and Dimethyl Fumarate in the Treatment of Multiple Sclerosis: One Year Experience. Poster P3.244 Presented at the Annual AAN meeting April 21, 2015 Washington, D.C.
- 157. McQueen R, Livingstone T, **Vollmer T**, Corboy J, Nair, K, Campbell J. Decreased Relapse Activity for those who switch to Natalizumab from Alternative Disease Modifying Therapies: An Observational Study. Poster P3.272 Presented at the Annual AAN meeting April 21, 2015 Washington, D.C.
- 158. Alvarez, E, Vollmer B, Blackburn J, Corboy J, **Vollmer T** Sillau S, Nair K, Seibert J. Effectiveness of Switching to Rituximab over Fingolimod or Dimethyl Fumarate after Natalizumab in Preventing Disease Activity in Multiple Sclerosis. Poster P3.288 Presented at the Annual AAN meeting April 21, 2015 Washington, D.C.

- 159. Barkhof F, Giovannoni G, Hartung HP, Cree B, Uccelli A, Sormani MP, Krieger S, Uitehaag B, **Vollmer T**, Montalban X, Steinerman J, Sasson N, Gorfine T, Knappertz V. ARPEGGIO: A randomized, placebocontrolled study to evaluate oral laquinimod in patients with primary progressive multiple sclerosis (PPMS). Poster B7.210 Presented at the Annual AAN meeting April 23, 2015 Washington, D.C.
- 160. Jeffery D, **Vollmer T**, Ritter S, Verdun Di Cantogno E, Piani Meier D, Radue E-W. The Effect of MRI Inflammatory Activity and Age on the Association of Brain Volume Loss with Disability Progression: Per-Quartile Subgroup Analysis. Abstract accepted for presentation at the annual ECTRIMS meeting, October, 2015 Barcelona, Spain.
- 161. Turner B, **Vollmer T**, Havrdova E, Lynch S, Wray S, Ford C, Wang P, Liu Y, Elkins J, Castro-Borrero W. Daclizumab HYP reduced psychological impact of multiple sclerosis versus intermuscular interferon Beta-1A in the DECIDE trial. Abstract/poster presented at the annual ECTRIMS meeting, October, 2015, Barcelona, Spain.
- 162. Miravalle A, Honce J, Alvarez E, Nair K, Vollmer B, Sillau S, Corboy J, **Vollmer T**. Does Long-Term Natalizumab (NTZ) Therapy Normalize Brain Atrophy Rates and Quality of Life (QOL) in Relapsing Remitting Multiple Sclerosis (RRMS)? A longitudinal study using whole brain, neocortical and subcortical atrophy rates and patient reported outcomes (PROs). Interim analysis. Abstract and poster presented at the 31st Congress of the European Committee for Treatment and Research in Multiple Sclerosis, Barcelona, Spain, October, 2015
- 163. Alvarez E, Seibert J, Vollmer B, Blackburn J, Strobel M, Freeman J. Sillau S. Honce J. Bennet JL, Miravalle A, Schreiner T, Corboy J, **Vollmer T**, Nair K. Assessing the efficacy, tolerability, and safety of rituximab for the treatment of multiple sclerosis: experience im 313 patients at a large academic center. Abstract and poster presented at the 31st ECTRIMS, Barcelona, Spain, October, 2015
- 164. Vollmer, BL, Nair K, Sillau SH, Strobel M, Robinson L, Corboy J, **Vollmer T**, Alvarez E. Comparison of fingolimod and dimethyl fumarate in the treatment of multiple sclerosis: one year experience.

 Abstract and poster presented at the 31st ECTRIMS, Barcelona, Spain, October, 2015
- 165. Giovannoni G, Butzkueven H, Dhib-Jalbut S, Hobart J, Kobelt G, Pepper G, Sormani MP, Thalheim C, Traboulsee A, **Vollmer T**. Time matters in multiple sclerosis—international consensus recommendations on diagnosis, management and access to treatment. Poster P1273 and abstract submitted for presentation at the 31st ECTRIMS, Barcelona, Spain, October, 2015
- 166. **Vollmer TL**, Yuval D, Sidi Y, Ladkani D, Gorfine T, Sorensen PS. Switching from Interferon β -1a I.M. to Laquinimod: Safety and Efficacy Results from the BRAVO Study Extension. Poster P054 and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 167. J.M. Honce, K.V. Nair, S. Sillau, A. Miravalle, B. Vollmer, T. Vollmer, J. Corboy, E. Alvarez. Evaluating the relationship between brain volume and patient reported outcomes using clinical and imaging parameters collected in the routine care of MS patients. Poster and abstract presented at the 31st ECTRIMS, Barcelona, Spain, October, 2015
- 168. **Vollmer T**, Comi G, Cutter G, Giovannoni G, Steinerman J, Sasson N. Gorfine T, Knappertz V. Ambulation benefit with laquinimod in patients with worsening MS (EDSS over 3) is consistent with

- reduction in confirmed disability progression. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 169. **Vollmer T**, Signorovitch J, Huynh L, Galebach P, Kelley C, DiBernardo A, Sasane R. The natural history of brain volume loss among patients with multiple sclerosis: A systematic literature review and meta-analysis. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 170. F. Zipp, T Vollmer, A Bar-Or, B Due, K. Thangavelu, TZ Fischer, K. Selmaj on behalf of the DreaMS Study Investigators. Relapse rates in patients with multiple sclerosis receiving ONO-4641, a sphingosine-1-phosphate receptor-1 and -5 agonist: interim results from an extension of the DreaMS study. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 171. A.T. Reder, D. Jeffery, D. Goodin, L Kappos, FD Lublin, E-W Radue, K. Rammohan, T. Vollmer, M.A. Agius, T. Stites, B. Li, L. Cappiello, P von Rosenstein, P.A. Calabresi. Long-term efficacy of fingolimod in patients with relapsing remitting multiple sclerosis: results from the phase 3 FREEDOMS II extension study. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 172. T. Vollmer, F Zipp, A Bar-Or, k. Thangavelu, T.Z. Fischer, K. Selmaj, on behalf of the DreaMS study investigators. Magnetic resonance imaging measures of efficacy in patients with multiple sclerosis receiving ONO-4641, a sphingosine-1-phosphate receptor-1 and -5 agonist: interim results from an extension of the DreaMS study. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 173. Timothy L. Vollmer, Giancarlo Comi, Ludwig Kappos, Xavier Montalban, Gary Cutter, Joshua R. Steinerman, Nissim Sasson, Tali Gorfine, Volker Knappertz. Clinical efficacy of laquinimod 0.6mg oncedaily in worsening relapsing-remitting multiple sclerosis defined by baseline EDSS over 3. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 174. **Vollmer T**, Comi G, Sorensen P, Sannon N, Gorfine T, Knappertz V. Temporal Pattern of Laboratory Changes with Laquinimod Treatment. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 175. A Bar-Or, T Vollmer, B Due, K. Thangavelu, J Johnson, K Selmaj on behalf of the DreaMS study investigators. Safety of ONO-4641 in patients with relapsing remitting multiple sclerosis: results from a six-month interim analysis of the DreaMS extension study. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 176. T Vollmer, EW Radue, P Bermersch, P von Rosenstiel, N Putzki, M Meinel, N Sfikas, M. Merschhemke and MS Freedman. Clinical and magnetic resonance imaging (MRI) disease activity after fingolimod discontinuation. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 177. K Selmaj, F Zipp, T Vollmer, A Bar-Or, B Due, TZ Fischer, K Thangevelu on behalf of the DreaMS study investigators. Effect of ONO-4641, a potent, oral, selective sphingosine-1-phosphate receptor-1 and -5 agonist, on MRI outcomes in patients with relapsing remitting multiple sclerosis: subgroup analyses from the phase 2 DreaMS study. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015

- 178. Miravalle A, Smith D, **Vollmer T**, Corboy J, Bennett J. Schreiner T, Alvarez E. Berk J. Michas-Martin A, Cerdan-Trevino, M. Flynn B. Stein A, Valdez B, Jenkins, K. Rocky Mountain MS Center at University of Colorado Anschutz Medical Campus, Aurora, Co, USA. Improving bladder care for patients with multiple sclerosis. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 179. Miravalle, A, Smith, D, Honce, J. Alvarez E, Nair, KV, Sillau S, Vollmer B, Corboy J, Vollmer T. Rocky Mountain MS Center at University of Colorado Anschutz Medical Campus, Aurora, Co, USA Does Long-Term Natalizumab (NTZ) Therapy Normalize Brain Atrophy Rates and Quality of Life (QOL) in Relapsing-Remitting Multiple Sclerosis (RRMS)? A Longitudinal Study Using Whole Brain, Neocortical and Subcortical Atrophy Rates and Patient Reported Outcomes (PROs). Interim Analysis. Poster and abstract presented at the 31st ECTRIMS meeting, Barcelona, Spain, October, 2015
- 180. Smith D, Stein A, Miravalle A, Schreiner T, Corboy J, **Vollmer T**, Alvarez E. Central NervousSystem Neurosarcoidosis Experience at a Large Academic Center. Poster and abstract submitted for presentation at the Americas Association of Sarcoidosis and Other Granulomatous Disorders 9AASOG) conference, September 23—25, 2015 University of Colorado Anschutz Medical Campus, Aurora, Colorado.
- 181. Giovannoni G, Butzkueven H, Dhib-Jalbut S, Hobart J, Kobelt G, Pepper G, Sormani MP, Thalheim C, Traboulsee A, **Vollmer T**. Time matters in multiple sclerosis-international consensus policy recommendations on diagnosis, management and treatment access. Poster and abstract accepted for presentation at the Annual meeting of the American Academy of Neurology, Vancouver, BC, Canada April, 2016
- 182. Douglas J, Meier DP, Tomic D, Haring D, **Vollmer T**. MRI parameters as predictors of long-term disease outcome over 8 years in RRMS patients. Abstract and poster submitted for presentation to the European Academy of Neurology annual meeting, Copenhagen, Denmark, May, 2016
- 183. Giovannoni G, Butzkueven H, Dhib-Jalbut S, Hobart J, Kobelt G, Pepper G, Sormani MP, Thalheim C, Traboulsee A, **Vollmer T**. Time matters in multiple sclerosis-international consensus policy recommendations on diagnosis, management and treatment access. Poster and abstract accepted for presentation at the annual meeting of the Middle East and North Africa Committee for Treatment and Research in Multiple Sclerosis (MENACTRIMS) Congress in Amman, Jordan, March, 2016
- 184. **Vollmer TL**, Comi G, Kappos L, Montalban X, Cutter G, Steinerman J, Sasson N, Gorfine T, Knappertz V. Clinical efficacy of laquinimod 0.6 mg once daily in the treatment of worsening relapsing-remitting multiple sclerosis (baseline EDSS >3). P3.051 Poster and abstract accepted for presentation at the annual meeting of the American Academy of Neurology, April, 2016, Vancouver, Canada.
- 185. Alvarez E, Vollmer B, Sillau S, Nair K, Corboy J, **Vollmer T**, Honce J. The impact of very short transition times on switching from tysabri to gilenya on imaging and clinical effectiveness outcomes. P2.110. Poster and abstract accepted for presentation at the Annual Meeting of the American Academy of Neurology, Apri, 2016 Vancouver, BC, Canada
- 186. Comi G, **Vollmer TL**, Kappos L, Montalban X, Sannon Nissim, Gorfine T, Knappertz V. Laquinimod Disability Progression Effects are maintained with Increasingly Rigorous Confirmation Time Intervals.

- P3.069 Poster and abstract accepted for presentation at the Annual Meeting of the American Academy of Neurology, April, 2016 Vancouver, BC, Canada
- 187. Comi G, **Vollmer TL**, Lublin FD, Dadon Y, Gorfine T, Davis MD, Soelber Sorensen P, Knappertz V. Long-Term Follow-up of Laquinimod 0.6 mg in Patients with Relapsing-Remitting Multiple Sclerosis 2. P3.087 Poster and abstract abstract accepted for presentation at the Annual Meeting of the American Academy of Neurology, April, 2016 Vancouver, BC, Canada
- 188. Ontaneda D, Vollmer B, Sillau S, Cohn S, Nair K. Bermel R, **Vollmer T**, Fox R, Corboy J. Cohen J. Hersh C, Alvarez E. Comparative Efficacy and Discontinuation of Fingolimod and Dimethyl Fumarate in Two Large Academic Medical Centers. P3.109 Poster and abstract abstract accepted for presentation at the Annual Meeting of the American Academy of Neurology, April, 2016 Vancouver, BC, Canada
- 189. Costello K, Giovannon G, Butzkueven H, Dhib-Jalbut S, Hobart J. Kobelt G, Shift G, Sormani M, Thalheim C, Trabloulsee A, **Vollmer T**. Brain health: Time matters in multiple sclerosis—developmental process and objectives of international consensus policy recommendations. Accepted for poster presentation at the 2016 Consortium of Multiple Sclerosis Centers Annual Meeting, Maryland.
- 190. Carroll W, Giovannon G, Butzkueven H, Dhib-Jalbut S, Hobart J. Kobelt G, Shift G, Sormani M, Thalheim C, Trabloulsee A, **Vollmer T**. Brain health: Time matters in multiple sclerosis—developmental process and objectives of international consensus policy recommendations. Abstract accepted for presentation at the Australian & New Zealand Association of Neurologists (ANZAN) Annual Scientific Meeting May, 2016 Perth, Australia.
- 191. Douglas J, Meier DP, Tomic D, Haring D, **Vollmer T**. MRI parameters as predictors of long-term disease outcome over 8 years in RRMS patients. Abstract and poster accepted for presentation at the Annual Meeting of the American Academy of Neurology, Vancouver, BC, Canada, April, 2016.
- 192. Harlow D, Blauth K, Saul K, Selva S, Niedzielko T, Jackson L, Macklin W, **Vollmer T**. B Lymphocytes from MS Patients Induce CNS Pathology in Murine Brain Slice Model. Poster P5.321 presented at the Annual Meeting of the American Academy of Neurology, April, 2016, Vancouver, BC, Canada.
- 193. Smith D, Bennett J, Miravalle A, Schreiner T, Corboy J, **Vollmer T**, Alvarez E, Blackburn J. Reclassification of a Large NMO Patient Cohort Using the 2015 NMO Spectrum Disorder Criteria. Poster P6.153 presented at the Annual Meeting of the American Academy of Neurology, April, 2016, Vancouver, BC, Canada
- 194. Honce J, Nair K, Hoyt B, Sillau S, Wedeman B, Engebretson E, Vollmer B, Johnson K, Tenenbaum N, Herrera V, Siconolfi L, Miravalle A, Bennett J, Corboy J, **Vollmer T**, Alvarez E. Comparison of Baseline Characteristics of Glatiramer Acetate vs. Fingolimod in Multiple Sclerosis Patients on Brain Volume, Cognition and Neuro-QOL Outcomes: Preliminary Analysis of a Longitudinal Observational Study. Poster P6.170 presented at the Annual Meeting of the American Academy of Neurology, April, 2016, Vancouver, BC, Canada.
- 195. Kim CH, Vollmer B, Campbell J, Corboy J, **Vollmer T**, Nair KV. Comparing the increase in the cose of drug prices among multiple sclerosis drugs: Anticipated vs. market prices between 2010—2015. Abstract presented at the 32nd meeting of the International Conference on Pharacoepidemilogy & Therapeutic Risk Management (ICPE), Augusto, 2016, Dublin Ireland

- 196. J Haas, T Vollmer, D Jeffery, DP Meier, B Stadler S Ritter, J Cohen, HP Hartung. Impact of continuous fingolimod therapy and switching to fingolimod on relapse severity in patients with relapsing-remitting multiple sclerosis. Abstract and poster presented at the 32ns Congress of the European Committee for Treatment and Research in MS (ECTRIMS), London, UK, September, 2016
- 197. Honce JH, Nair KV, Sillau S, Valdez B, Torok I, Miravalle A, Alvarez E, Schreiner T, Bennett JL, Corboy JR, **Vollmer TL**. Comparing Rituximab Induction Therapy Followed by Glatiramer Acetate Therapy to Glatiramer Acetate Monotherapy in MS Patients on Clinical Imaging Outcomes. Poster presented at the ECTRIMS annual meeting, London, September, 2016.
- 198. Vollmer BL, Nair K. Sillau SH, Corboy J, **Vollmer TL**, Alvarez E. Comparison of Fingolimod and Dimethyl Fumarate in the Treatment of Multiple Sclerosis: Two Year Experience. Poster presented at the ECTRIMS annual meeting, London, September, 2016
- 199. Vollmer BL, Chong KG, Campbell J. Corboy J. **Vollmer T**, Nair K. Evaluating the increase in the cost of Multiple Sclerosis drugs in the United States between 2010 and 2015. Market price vs Inflation based analysis. Poster presented at the ECTRIMS annual meeting, London, September, 2016
- 200. Leech J, Sillau S, Valdez B, Vollmer T, Alvarez E, Medina L. Treatment satisfaction and illness perception in MS patients. Abstract accepted for presentation at the Annual Meeting of the American Academy of Neurology, Los Angeles, CA, April, 2018
- 201. Zanganeh N, Selva S, Nair K, Machtinger J, Vollmer T, Alvarez, E. Cytokine changes induced by antiCD20 Infusions: A Comparison of Rituximab Versus Ocrelizumab. Abstract accepted for presentation at the Annual Meeting of the American Academy of Neurology, Los Angeles, CA, April, 2018
- 202. Alvarez E, Nair K, Weinkle L, Craig J, Hoyt B, Sillau S, Engebretson E, Schurr B, Corboy J, Vollmer T, Honce J. Comparison of 12 month changes in Brain Volume among Long Term Users of Natalizumab versus Healthy Controls in Multiple Sclerosis: Year one Analysis of a Two-Year Longitudinal Observational Study. Abstract accepted for presentation at the Annual Meeting of the American Academy of Neurology, Los Angeles, CA, April, 2018
- 203. Vollmer B, Nair K, Sillau S, Corboy J, **Vollmer T**, Alvarez E. Comparison of Rituximab vs Fingolimod, Dimethyl Fumarateand Natalizumab in the Treatment of Multiple Sclerosis: Two Year Experience. Abstract and poster presented at the Annual Meeting of the American Academy of Neurology, Los Angeles, CA, April, 2018 and also at ECTRIMS 2018 held in Berlin Germany
- 204. Hersh C, Vollmer B, Bandyopadhyay A, Cohn S, Nair K, Sillau S, Bermel R, Corboy J, Fox R, **Vollmer T**, Cohen J, Ontaneda D, Alvarez E. Comparative Effectiveness and Discontinuation of Dimethyl Fumarate and Fingolimod in Two Large Academic Medical Centers at 24-Month Follow-Up: Sub-Group Analyses. Abstract accepted for presentation at the Annual Meeting of the American Academy of Neurology, Los Angeles, CA, April 2018
- 205. Giovannoni G, Barkhof F, Hartung HP, Cree B, Krieger S, Montalban X, Sormani MP, Uccelli A, Uitdehaag B, **Vollmer T**, Reshef A, Li T, Feldman P, Tansy A, Steinerman J. ARPEGGIO: A Placebo-Conrolled Trial of Oral Laquinimod in Primary Progressive Multiple Sclerosis. Abstract accepted for presentation at the Annual Meeting of the American Academy of Neurology, Los Angeles, CA, April 2018

- 206. Hobart J, Butzkueven H, Haartsen J, **Vollmer T**, Ziemssen T, Lane T, Giovannoni G. Timely Intervention, Monitoring and Education MATTERS in Multiple Sclerosis (TIME MATTERS in MS): developing a globally applicable quality improvement tool. Abstract for consideration to be presented at ECTRIMS, October 2018
- 207. Hartung HP, Brochet B, Patti F, Buffels R, Wei W, **Vollmer T**. Baseline characteristics of the ENSEMBLE study population: a Phase IIIb open-label, single-arm study to evaluate the effectiveness and safety of Ocrelizumab in patients with early-stage relapsing-remitting Mutiple Sclerosis. Abstract for consideration to be presented at ECTRIMS, October 2018
- 208. Ian Shelton, Nassim Zanganeh, Sean Selva, Stefan Sillau, Kavita V Nair, **Timothy Vollmer**, Enrique Alvarez. Characterizing Cytokine Changes Before and After Ocrelizumab Infusions and Their Contribution to Infusion Related Reactions. Poster presentation at ECTRIMS 2018 held in Berlin, Germany.
- 209. Jeremy Hobart, Helmut Butzkueven, Jodi Haartsen, **Timothy Vollmer**, Tjalf Ziemssen, Thirusha Lane and Gavin Giovannoni. Timely Intervention, Monitoring and Education MATTERS in Multiple Sclerosis (TIME MATTERS in MS): developing a globally applicable quality improvement tool. Poster presentation at ECTRIMS 2018 held in Berlin, Germany.
- 210. W. Carroll1, B. Brochet, F. Patti, R. Buffels, W. Wei, **T. Vollmer**, H.P. Hartung. Baseline Characteristics of the ENSEMBLE Study Population: A Phase IIIb Open-Label, Single-Arm Study to Evaluate the Effectiveness and Safety of Ocrelizumab in Patients with Early-Stage Relapsing-Remitting Multiple Sclerosis. Abstract presentation at PACTRIMS 2018 held in Sydney, Australia.
- 211. E. Alvarez, K. Nair, I. Shelton, N. Zanganeh, S. Sillau, J. Corboy, **T. Vollmer**. Evaluating the Tolerability and Safety Profile of Switching from Rituximab to Ocrelizumab: Infusion Related Reactions in Relapsing Forms of Multiple Sclerosis. Poster presentation at ECTRIMS 2018 held in Berlin, Germany
- 212. I. Shelton, N. Zanganeh, S. Selva, S. Sillau, K. Nair, **T. Vollmer**, E. Alvarez. Characterizing Cytokine Changes Before and After Ocrelizumab Infusions and Their Contribution to Infusion Related Reactions. Poster presentation at ECTRIMS 2018 held in Berlin, Germany
- 213. J. Honce, K. Nair, B. Hoyt, S. Sillau, J. Corboy, **T. Vollmer**, E. Alvarez. Comparison of 24 Month Changes in Brain Volume among Long Term Users of Fingolimod versus Glatiramer Acetate in Patients with Multiple Sclerosis. Poster presentation at ECTRIMS 2018 held in Berlin, Germany
- 214. Corey Ford, MD, Jeffrey Cohen, Andrew Goodman, John Lindsey, Robert Lisak, Christopher Luzzio, Amy Pruitt, John Rose, Horea Rus, **Timothy Vollmer**, Jerry Wolinsky, Jessica Alexander, Ofra Barnett-Griness, Svetlana Rubinchick, Yafit Stark. Twenty-Five Years of Continuous Treatment of Multiple Sclerosis with Branded Glatiramer Acetate: Long-Term Clinical Results of the US Open-Label Extension Study. Poster presentation at ECTRIMS 2018 held in Berlin, Germany
- 215. Design of a Study to Evaluate the Safety of Administering Ocrelizumab per a Shorter Infusion Protocol in Patients With Primary Progressive Multiple Sclerosis and Relapsing Multiple Sclerosis. **T Vollmer**, E Alvarez, KV Nair, J Cohen, A Boster, D Masterman, A Pradhan, J Pei, M Yang, A Bobbala, B Moss. Presented at the 26th Annual Meeting of the European Charcot Foundation (ECF); 15–17 November 2018; Baveno, Italy

- 216. Evaluation of Shorter Infusion Times with Ocrelizumab in Patients with Relapsing-Remitting Multiple Sclerosis. **Timothy Vollmer**, Enrique Alvarez, Kavita Nair, Jeffrey A Cohen, Aaron Boster, Ashish Pradhan, Bruno Musch, Xiaoye Ma, Jinglan Pei, Ming Yang, Brandon Moss, Bianca Weinstock-Guttman, and Robert Bermel. Abstract presented at the 2019 CMSC Annual Meeting, Seattle WA.
- 217. Higher Efficacy Therapies Appear to have a Disproportionately Larger Effect in Younger Patients with Multiple Sclerosis. Vollmer, Brandi; Nair, Kavita; Sillau, Stefan; Vollmer, Timothy; Corboy, John; Alvarez, Enrique. Poster presentation at AAN 2019 in Philadelphia, PA
- 218. Evaluation of shorter infusion times with ocrelizumab in patients with relapsing-remitting multiple sclerosis. **Vollmer, Timothy**; Alvarez, Enrique; Nair, Kavita; Cohen, Jeffrey; Boster, Aaron; Masterman, Donna; Pradhan, Ashish; Musch, Bruno; Ma, Xiaoye; Pei, Jinglan; Moss, Brandon; Weinstock-Guttman, Bianca; Bermel, Robert. Poster presentation at AAN 2019 in Philadelphia, PA
- 219. Ocrelizumab Safety and Effectiveness in the One Year Treatment of Multiple Sclerosis Compared to Other Disease Modifying Therapies. Alimohamadi, Sahar; Vollmer, Brandi; Nair, Kavita; Sillau, Stefan; Corboy, John; Vollmer, Timothy; Alvarez, Enrique. Poster presentation at AAN 2019 in Philadelphia, PA
- 220. Characteristics of Patients Switching from Anti-CD20 Therapy to Natalizumab in the Treatment of Multiple Sclerosis. Vollmer, Brandi; Nair, Kavita; Corboy, John; **Vollmer, Timothy**; Alvarez, Enrique. Poster presentation at AAN 2019 in Philadelphia, PA
- 221. Evaluating the Tolerability and Safety of Switching from Rituximab to Ocrelizumab: Infusion Related Reactions in Relapsing Forms of Multiple Sclerosis. Alvarez, Enrique; Nair, Kavita; Shelton, Ian; Selva, Sean; Voge, Natalie; Zanganeh, Nassim; Sillau, Stefan; Vollmer, Timothy. Poster presentation at AAN 2019 in Philadelphia, PA
- 222. Discontinuation and Comparative Effectiveness of Dimethyl Fumarate and Fingolimod in Two Large Academic Medical Centers at 36-month Follow-Up. Hersh, Carrie; Vollmer, Brandi; Harris, Haleigh; Nair, Kavita; Bermel, Robert; Corboy, John; Fox, Robert; Vollmer, Timothy; Cohen, Jeffrey; Ontaneda, Daniel; Alvarez, Enrique. Poster presentation at AAN 2019 in Philadelphia, PA
- 223. Magnetic Resonance Imaging Measures as Prognostic Parameters for Physical and Cognitive Outcomes up to 8 Years in Patients with Relapsing Forms of Multiple Sclerosis. **Vollmer, Timothy**; Häring, Dieter A.; Piani Meier, Daniela; Tomic, Davorka; Sprenger, Till; Jeffery, Douglas. Poster presentation at AAN 2019 in Philadelphia, PA
- 224. Safety results for administering ocrelizumab per a shorter infusion protocol in patients with primary progressive and relapsing multiple sclerosis. T. Vollmer, E. Alvarez, K. V. Nair, J. Cohen, A. Boster, J. Katz, G. Pardo J. Pei, P. Raut, S. Merchant, A. Bobbala, A. Pradhan, B. Moss. Abstract for consideration to be presented at ECTRIMS, October 2019
- 225. Higher efficacy therapies appear to have a disproportionately larger effect in younger patients. Vollmer B, Nair K, Sillau S, Corboy J, **Vollmer T**, Alvarez E. Presentation at ECTRIMS 2019 in Stockholm, Sweden
- 226. Characterizing Cytokine Changes Before and After Ocrelizumab Infusions and Their Contribution to Infusion Related Reactions. Alvarez E, Nair K, Shelton I, Sillau S, Selva S, **Vollmer T**. Poster presentation at ECTRIMS 2019 in Stockholm, Sweden

- 227. Ocrelizumab real-world safety and effectiveness in the one year treatment of multiple sclerosis compared to other disease modifying therapies. Vollmer B, Nair K, Sillau S, Corboy J, **Vollmer T**, Alvarez E Poster presentation at ECTRIMS 2019 in Stockholm, Sweden
- 228. Tolerability and Safety of Switching from Rituximab to Ocrelizumab: Evaluating Factors Associated with Infusion Related Reactions. Alvarez E, Nair K, Shelton I, Sillau S, **Vollmer T**. Poster presentation at ECTRIMS 2019 in Stockholm, Sweden
- 229. Serum Neurofilament Levels in Long Term Rituximab Treated Multiple Sclerosis Patients: Are We Over or Under Treating? Alvarez E, Nair K, Ritchie A, Shelton I, Gendelman S, Sillau S, Owens G, **Vollmer T**Poster presentation at ECTRIMS 2019 in Stockholm, Sweden
- 230. Safety results for administering ocrelizumab per a shorter infusion protocol in patients with primary progressive and relapsing multiple sclerosis. **Vollmer T**, Alvarez E, Nair K, Cohen J, Boster A, Katz J, Pardo G, Pei J, Raut P, Merchant S, Bobbala A, Pradhan A, Moss B. Poster presentation at ECTRIMS 2019 in Stockholm, Sweden
- 231. Physicians' perspectives on the identification and diagnosis of secondary progressive multiple sclerosis during the clinical encounter. **Vollmer T**, Alvarez E, Nair K, Gorritz M, Maloney H, Ding Y, Golan T, Bartolome L, Wade RL, 2, Kumar R, Su W, Russo P. Poster presentation at ECTRIMS 2019 in Stockholm, Sweden

14.4 Bibliography—Non peer reviewed publications

- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 1999. 18(2):2
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 1999. 18(3):2.
- **Vollmer TL**. Mitoxantrone: A New Treatment for Multiple Sclerosis. Multiple Sclerosis Quarterly Report. 1999. 18(4):1, 3-5
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 1999. 18(4):2
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2000. 19(1):2.
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2000. 19(4):2.
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2000. 19(3):2.
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2000. 19(2):2.
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2001. 20(4):2.
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2001. 20(2):2.
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2001. 20(1):2.
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2001. 20(3):2.
- **Vollmer TL**. The Changing Definition of Multiple Sclerosis. Multiple Sclerosis Quarterly Report. 2001. 20(3):24-25.
- **Vollmer TL**. Ethical Considerations of Clinical Trials in Multiple Sclerosis Treatment. Multiple Sclerosis Quarterly Report. 2001. 20(3):21-23.
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2002. 21(1):2.
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2002. 21(2):2

Timothy L. Vollmer, M.D. Page **56** of **56**

- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2002. 21(3):2
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2002. 21(4):2.
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2003. 22(1):2
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2003. 22(2):2.
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2003. 22(3):2
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2003. 22(4):2
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2004. 23(1):2
- Vollmer TL. Letter from the Editor. Multiple Sclerosis Quarterly Report. 2004. 23(2):2

15. Patents Held

Nicotinic Attenuation of CNS Inflammation and Autoimmunity. US Patent #8,841,329 B2
 Issued September 23, 2014