Curriculum vitae Marinella Clerico

Personal details

Born in Mondovì (CN), Italy
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Education

2006-2010 - PhD in Biomedical Sciences and Oncology, University of Turin, Italy
2001-2006 – Residency in Neurology, University of Turin, Italy
1995-2001 – Medical degree, University of Turin, Italy
1989-1994 – High school degree, Liceo Scientifico G.B. Vasco, Mondovì (CN), Italy

Professional experiences and current position

2019-today – Neurology Unit chief, head of SSD Specialistic Neurological Pathologies, University Hospital San Luigi Gonzaga, Orbassano (TO), Italy

2018-today – Associate Professor of Neurology (MED/26), Department of Clinical and Biological Sciences, University of Turin, Italy

2012- 2018 – Assistant Professor of Neurology (MED/26), Department of Clinical and Biological Sciences, University of Turin, Italy

2010-2012 - Post-Doctoral Fellowship, Department of Clinical and Biological Sciences, University of Turin, Italy. University Scholarship aimed at the development of a specific project entitled "Serial evaluation of patients suffering from a clinical episode suggestive of multiple sclerosis. one year follow-up "

2010 – Hospital scholarship aimed at the development of a specific research project entitled "Management of patients suffering from complicated Parkinson's disease". University Division of Neurology of the San Luigi Gonzaga University Hospital of Orbassano (TO), Italy

2009 - Freelance consultant in Neurologist within the Project "PSYCHO-PEDAGOGICAL SUPPORT PATH IN MULTIPLE SCLEROSIS", aimed at supporting families with children in one parent has multiple sclerosis. University of Turin, Department of Clinical and Biological Sciences, Italy.

2005 - Visiting Fellow at the Multiple Sclerosis Center at UCSF, University of California - San Francisco. Supervisor: Prof. Douglas Goodin

Participation to Directive Boards of Scientific Societies and/or Institutions

2021 - today - President of the scientific committee of the Biobank of the Regional Reference Center for Multiple Sclerosis (BB CRESM) of the A.O.U. San Luigi Gonzaga, for the purposes of: managing the collection, cryopreservation, use and distribution of biological samples and associated data from healthy subjects and from subjects affected by Multiple Sclerosis or other neurological or autoimmune diseases, in scope of carrying out Current and Finalized Research programs

2021 – today - Referent for the Department of Clinical and Biological Sciences for the elaboration of the agreement between UniTO and the Telefono Rosa Piemonte Association.

2020 – today - Participation as a member of the scientific committee of MEDIMAY COMMUNICATION S.R.L. and member of the editorial board of the quarterly "SMile: Multiple Sclerosis - Information Literature and evidence"

2020 – today - Member of the Editorial Board of "Frontiers in Neurology" as guest editor

2020 – today - Referent for the Department of Clinical and Biological Sciences for the inclusion of students with disabilities.

2020 – today – Member of the scientific board of the Digital Academy of MS - DAMS Project

2020 – 2022 - Member of the "PE Lab - Public Engagement Laboratory"

2020 – to date – Member of the awareness campaign towards Multiple Sclerosis "Scacco Matto". National campaign with organizer Novartis S.p.A. in collaboration with Weber Shandwick S.r.l. and the Italian Multiple Sclerosis Association (AISM).

2020 - Realization of the 2020 MS Campaign - Workshop - During the workshop the main steps of the MS Stories project were retraced, a communication campaign aimed at telling real stories of people with MS, whose extraordinary nature is linked to the spirit with which they faced the disease.

2019 – 2022 - Member of the board of "third mission" of the Department Department of Clinical and Biological Sciences, University of Turin, Orbassano (TO)

2019 – today – Member of the scientific board of Raising Italian Researchers in MS (RIRe.MS)"

2019 – 2021 - Member of the research commission of the Department of Clinical and Biological Sciences, University of Turin.

2018 – today - Referent of the "Task force against all discrimination" established within the Department of Clinical and Biological Sciences, which undertakes to monitor gender inequalities and racism within the Department of Clinical and Biological Sciences of the University of Turin.

2016 – today - Member of the Scientific Committee of the Master in "Autisms: pathways, diagnostic-therapeutic and intervention strategies. The purpose of the Master is represented by the training of professionals of different initial training, who in a multidisciplinary perspective learn knowledge and methodological and operational skills in this regard to the tools of therapeutic intervention with autistic subjects, according to national and international guidelines and according to national and regional legislation

2012 - Participation in the editorial board of the SMart magazine

2010 – today - Participation in the editorial board of the Serono Foundation website (https://www.fondazioneserono.org/) as "Content Editor" and "Editorial Manager" of the "Psychological Aspects in MS" area for the section of the site " The specialist's corner "

2010 – today - Referee in the process for the allocation of funding of the annual FISM Research Call, evaluating the validity and scientific relevance of some projects, as well as their translatability into concrete benefits for people with multiple sclerosis.

2004 – today - Affiliation to the group and editorial member of "Cochrane Multiple Sclerosis and Rare Diseases of the CNS"

2002 – today - Affiliation to the Italian Society of Neurology

Honors

2022 - Attendant to the "International Women's Day"
on the official invitation of the President of the Italian Republic Sergio Mattarella, Palazzo del Quirinale, Rome, Italy

2021 - Winner of the 2021 "Talented women" Award assigned by the "Cenacle of Culture and Sciences"; Locri, Italy

2020 - Winner of the 2020 call of the Italian Society of Neurology Foundation (SIN) with the REHABILITY

NEURO project: home telerehabilitation of the subject with Multiple Sclerosis

2017 - Winner of the "call for creative community" of the Turin innovation center "Open Incet" which operates in the field of technology transfer

Teaching activity

Professor at Medicine and Surgery, School of Medicine, University of Turin, pole of the San Luigi Gonzaga University Hospital of Orbassano (TO) San Luigi:
Academic Year 2013-2014: 8 hours (1 CFU) within the integrated course of NEUROLOGICAL AND BEHAVIORAL SCIENCES; A.A. 2014-2015: 14 hours within the integrated course of NEUROLOGICAL AND BEHAVIORAL SCIENCES; A.A. 2015-2016: 8 hours (1 CFU) within the integrated course NEUROLOGICAL AND PSYCHIATRIC SCIENCES - NEUROLOGY module; A.A. 2016-2017: 8 hours (1 CFU) in the course of NEUROLOGICAL AND BEHAVIORAL SCIENCES-NEUROLOGY module; A.A. 2017-2018: 8 hours (1 CFU) within the course of NEUROLOGICAL AND PSYCHIATRIC SCIENCES-NEUROLOGY module; Academic year: 2018-2019/ 2019-2020: 16 hours (2 CFU) in the course of NEUROLOGICAL SCIENCES - NEUROLOGY module; AY 2020-2023 (-in progress): 16 hours (2 CFU) in the Neurology course;

Professor at the Nursing of the School of Medicine of the University of Turin, pole of the San Luigi Gonzaga University Hospital of Orbassano (TO) San Luigi: 20 hours (1.2 CFU) as part of the integrated course Clinical Nursing in the area of chronicity and disability (Module of Neurology and Neurorehabilitation) from the A.Y. 2013-2014 to the 2016-2017 academic year; 30 hours (2 CFU) within the integrated course Clinical Nursing in the area of chronicity and disability from A.Y. 2017-2018 to date;

Professor at Psychiatric Rehabilitation Techniques of the School of Medicine of the University of Turin, pole of the San Luigi Gonzaga University Hospital in Orbassano (TO) San Luigi: 12 hours (1 CFU) in the context of the Introduction to Rehabilitation Sciences course for the A.Y. 2016-2017 and from A.Y. 2018-2019 to date;

Professor at Rehabilitation Sciences of the Health Professions of the School of Medicine of the University of Turin, pole of the San Luigi Gonzaga University Hospital of Orbassano (TO) San Luigi: 10 hours (1CFU) in the context the teaching of NEUROLOGY (CLINICAL AND ORGANIZATIONAL PROCESSES IN REHABILITATION) from the 2018-2019 academic year to date;

Professor at Motor Education Sciences and adapted activities of the University of Turin: 16 hours (2 CFU) within the course Medical disciplines for adapted activities II from the A.Y. 2014-2015 to date;

Professor at yhe School of Specialization in Neurology of the University of Turin for the teaching of Neuroimmune Diseases: 14 hours (2CFU) for the 2017-2018/2018-2019 academic years: 7 hours (1 CFU) from the 2019- 2020 to date;

Professor at the School of Specialization in Medical Oncology of the University of Turin for the teaching of Neurology in Oncology: 7 hours (1 CFU) from the 2018-2019 academic year to date;

Professor at Psychiatric Rehabilitation Techniques of the School of Medicine of the University of Turin, pole of the San Luigi Gonzaga University Hospital in Orbassano (TO) San Luigi: 12 hours (4 credits) in the context of the Psychiatrist and Neuromotor Rehabilitation course AA 2021-2022;

Professor at Medicine and Surgery of the School of Medicine of the University of Turin, pole of the San Luigi Gonzaga University Hospital of Orbassano (TO) San Luigi: 5 hours (0.5 CFU) in the scope of the ADE course Paraneoplastic Neurological Diseases; AY 2013-2014;

Professor at Medicine and Surgery of the School of Medicine of the University of Turin, pole of the San Luigi Gonzaga University Hospital of Orbassano (TO) San Luigi: AY 2013-2014: 5 hours (0, 5 credits) within the ADE course Neurological Complications of Internal Medicine; 10 hours (1 CFU) within the ADE Neurological Complications of Internal Medicine course; AY 2015-2016 to date

Professor at Medicine and Surgery of the School of Medicine of the University of Turin, pole of the San Luigi

Gonzaga University Hospital of Orbassano (TO) San Luigi: 10 hours (1 CFU) within the ADE course The Neuroimmunology of Neurological Diseases; AY 2018-2019 and AY 2019-2020

2017-2018 - Member of the Academic Board of the PhD School "Doctorate in Biomedical Sciences and Oncology", University of Turin

2010 - Teaching and research assignment at the Iranian University of "Isphahan University of Medical Sciences" in the context of the twinning between the University of Turin and Isphahan University. from

Research main topics

Multiple Sclerosis, digital health, Family Functioning, gut microbiota, Parkinson, Alzheimer

 Main projects as PI:

2022 – today – PI of the non-profit observational study: "Impact of environmental pollution on the onset and alterations of the immune system in subjects with multiple sclerosis".

2020 – today - PI of the non-profit observational study: "Family Functioning Multiple Sclerosis"

2019 – today - PI of the non-profit observational study: "Multiple sclerosis: multidisciplinary and integrated approach to treatment". from 11-02-2019 to today

2019 – today - PI of the non-profit observational study: "Implication of the intestinal microbiota and alterations of the immune system during therapy with dimethyl fumarate in multiple sclerosis"

2019 – today - PI of the non-profit observational study: "Reconstitution of the immune system after treatment with cladribine: any implication of the intestinal microbiota".

2019 – today - PI of the non-profit observational study: "Clinical quantitative, immunological and intestinal microbiota evaluation in patients with multiple sclerosis and who perform adapted physical activity.

2018 – 2019 – "Immuno-suppression and reconstitution of the immune system after treatment with alemtuzumab - Follow-up study at the 5th and 6th year, protocol version n. GZ-2015-11394 of 2015".

2018 – 2019 - Non-pharmacological spontaneous observational retrospective study: "Project for the evaluation of the use of information on the previous type and duration of anti-Parkinson therapy for the differential diagnosis between Parkinson's disease and parkinsonism".

2017 – today - "Benefit 15 long-term follow-up study of the BENEFIT and BENEFIT follow-up studies.

2017 – 2019 - "24-month placebo-controlled, double-blind, parallel group study to evaluate the efficacy and safety of E2609 in subjects with early stage Alzheimer's disease"

2016 – 2018 - Clinical coordinator in "Intestinal microbiota and metagenomic diversity in the development of Multiple Sclerosis" presented by Dr. Simona Rolla, funded by the Italian Multiple Sclerosis Federation - FISM 2016 Call (project code 2016 / R / 24).

2016 – 2018 - "BIIT0315 Observational study, multicentre, comparison arm, phase IV, lasting 48 weeks, to evaluate the longitudinal improvement of sleep quality in patients diagnosed with RRMS".

2016 – today – Coordinator of the "ITALIAN SCLEROSIS MULTIPLE REGISTER - SM001 REGISTER AND SM002 REGISTER".

2016 – 2020 – PI of the multicenter clinical study "Longitudinal observational study in patients with relapsing-remitting multiple sclerosis (RRMS) after 24 administrations of Natalizumab.

Bibliometry (*www.scopus.com*)

Total number of publications in peer-review journals 95 (Scopus)
Total number of citations 2.751 (Scopus) H index 30 (Scopus)

publications

1. Scandurra C, Rosa L, Carotenuto A, Moccia M, Arena S, Ianniello A, et al. Sexual Dysfunction in People with Multiple Sclerosis: The Role of Disease Severity, Illness Perception, and Depression. Journal of Clinical Medicine 2023;12. https://doi.org/10.3390/jcm12062215.

2. Sormani MP, Schiavetti I, Landi D, Carmisciano L, De Rossi N, Cordioli C, et al. SARS-CoV-2 serology after COVID-19 in multiple sclerosis: An international cohort study. Multiple Sclerosis Journal 2022;28:1034–40. https://doi.org/10.1177/13524585211035318.

3. Sormani MP, Schiavetti I, Inglese M, Carmisciano L, Laroni A, Lapucci C, et al. Breakthrough SARS-CoV-2 infections after COVID-19 mRNA vaccination in MS patients on disease modifying therapies during the Delta and the Omicron waves in Italy. EBioMedicine 2022;80. https://doi.org/10.1016/j.ebiom.2022.104042.

4. Schiavetti I, Cordioli C, Stromillo ML, Teresa Ferrò M, Laroni A, Cocco E, et al. Breakthrough SARS-CoV-2 infections in MS patients on disease-modifying therapies. Multiple Sclerosis Journal 2022;28:2106–11. https://doi.org/10.1177/13524585221102918.

5. Schiavetti I, Carmisciano L, Ponzano M, Cordioli C, Cocco E, Marfia GA, et al. Signs and symptoms of COVID-19 in patients with multiple sclerosis. European Journal of Neurology 2022;29:3728–36. https://doi.org/10.1111/ene.15554.

6. Russo CV, Saccà F, Frau J, Annovazzi P, Signoriello E, Bonavita S, et al. A real-world study of alemtuzumab in a cohort of Italian patients. European Journal of Neurology 2022;29:257–66. https://doi.org/10.1111/ene.15121.

7. Rolla S, De Mercanti SF, Bardina V, Maglione A, Taverna D, Novelli F, et al. Long-Term Effects of Alemtuzumab on CD4+ Lymphocytes in Multiple Sclerosis Patients: A 72-Month Follow-Up. Frontiers in Immunology 2022;13. https://doi.org/10.3389/fimmu.2022.818325.

8. Ponzano M, Schiavetti I, Bergamaschi R, Pisoni E, Bellavia A, Mallucci G, et al. The impact of PM2.5, PM10 and NO2 on Covid-19 severity in a sample of patients with multiple sclerosis: A case-control study. Multiple Sclerosis and Related Disorders 2022;68. https://doi.org/10.1016/j.msard.2022.104243.

9. Passaponti S, Ermini L, Acconci G, Severi FM, Romagnoli R, Cutrupi S, et al. Rank-Rankl-Opg Axis in Multiple Sclerosis: The Contribution of Placenta. Cells 2022;11. https://doi.org/10.3390/cells11081357.

10. Miele G, Lavorgna L, De Mercanti SF, Iudicello M, Abbadessa G, Matta M, et al. Source of medical information and behavioral seeking patterns in patients affected with Friedreich's ataxia and their caregivers: a survey study. Neurological Sciences 2022;43:3223–9. https://doi.org/10.1007/s10072-021-05738-6.

11. Maglione A, Morra M, Meroni R, Matta M, Clerico M, Rolla S. Humoral response after the booster dose of anti-SARS-CoV-2 vaccine in multiple sclerosis patients treated with high-efficacy therapies. Multiple Sclerosis and Related Disorders 2022;61. https://doi.org/10.1016/j.msard.2022.103776.

12. Lavorgna L, Iaffaldano P, Abbadessa G, Lanzillo R, Esposito S, Ippolito D, et al. Disability assessment using Google Maps. Neurological Sciences 2022;43:1007–14. https://doi.org/10.1007/s10072-021-05389-7.

13. Lavorgna L, Iaffaldano P, Abbadessa G, Lanzillo R, Esposito S, Ippolito D, et al. Correction to: Disability assessment using Google Maps (Neurological Sciences, (2022), 43, 2, (1007-1014), 10.1007/s10072-021-05389-7). Neurological Sciences 2022;43:1481. https://doi.org/10.1007/s10072-021-

[05707-z](https://doi.org/10.1007/...05707-z).

14. Landi D, Bovis F, Grimaldi A, Annovazzi PO, Bertolotto A, Bianchi A, et al. Exposure to natalizumab throughout pregnancy: effectiveness and safety in an Italian cohort of women with multiple sclerosis. Journal of Neurology, Neurosurgery and Psychiatry 2022;93:1306–16. https://doi.org/10.1136/jnnp-2022-329657.

15. Di Filippo M, Cordioli C, Malucchi S, Annovazzi P, Cavalla P, Clerici VT, et al. mRNA COVID-19 vaccines do not increase the short-term risk of clinical relapses in multiple sclerosis. Journal of Neurology, Neurosurgery and Psychiatry 2022;93:448–50. https://doi.org/10.1136/jnnp-2021-327200.

16. Chisari CG, Comi G, Filippi M, Paolicelli D, Iaffaldano P, Zaffaroni M, et al. PML risk is the main factor driving the choice of discontinuing natalizumab in a large multiple sclerosis population: results from an Italian multicenter retrospective study. Journal of Neurology 2022;269:933–44. https://doi.org/10.1007/s00415-021-10676-6.

17. Bergamaschi R, Ponzano M, Schiavetti I, Carmisciano L, Cordioli C, Filippi M, et al. The effect of air pollution on COVID-19 severity in a sample of patients with multiple sclerosis. European Journal of Neurology 2022;29:535–42. https://doi.org/10.1111/ene.15167.

18. Bergamaschi R, Beghi E, Bosetti C, Ponzio M, Santucci C, Lepore V, et al. Do patients' and referral centers' characteristics influence multiple sclerosis phenotypes? Results from the Italian multiple sclerosis and related disorders register. Neurological Sciences 2022;43:5459–69. https://doi.org/10.1007/s10072-022-06169-7.

19. Abbadessa G, Brigo F, Clerico M, De Mercanti S, Trojsi F, Tedeschi G, et al. Digital therapeutics in neurology. Journal of Neurology 2022;269:1209–24. https://doi.org/10.1007/s00415-021-10608-4.

20. Sormani MP, Schiavetti I, Carmisciano L, Inglese M, Laroni A, Lapucci C, et al. Effect of SARS-CoV-2 mRNA vaccination in MS patients treated with disease modifying therapies. EBioMedicine 2021;72. https://doi.org/10.1016/j.ebiom.2021.103581.

21. Sormani MP, De Rossi N, Schiavetti I, Carmisciano L, Cordioli C, Moiola L, et al. Disease-Modifying Therapies and Coronavirus Disease 2019 Severity in Multiple Sclerosis. Annals of Neurology 2021;89:780–9. https://doi.org/10.1002/ana.26028.

22. Ricciardi D, Casagrande S, Iodice F, Orlando B, Trojsi F, Cirillo G, et al. Myasthenia gravis and telemedicine: a lesson from COVID-19 pandemic. Neurological Sciences 2021;42:4889–92. https://doi.org/10.1007/s10072-021-05566-8.

23. Maglione A, Zuccalà M, Tosi M, Clerico M, Rolla S. Host genetics and gut microbiome: Perspectives for multiple sclerosis. Genes 2021;12. https://doi.org/10.3390/genes12081181.

24. Lepore V, Bosetti C, Santucci C, Iaffaldano P, Trojano M, Mosconi P, et al. Detection of disability worsening in relapsing-remitting multiple sclerosis patients: a real-world roving Expanded Disability Status Scale reference analysis from the Italian Multiple Sclerosis Register. European Journal of Neurology 2021;28:567–78. https://doi.org/10.1111/ene.14589.

25. Lavorgna L, Brigo F, Esposito S, Abbadessa G, Sparaco M, Lanzillo R, et al. Public engagement and neurology: An update. Brain Sciences 2021;11. https://doi.org/10.3390/brainsci11040429.

26. Iodice F, Romoli M, Giometto B, Clerico M, Tedeschi G, Bonavita S, et al. Stroke and digital technology: a wake-up call from COVID-19 pandemic. Neurological Sciences 2021;42:805–9. https://doi.org/10.1007/s10072-020-04993-3.

27. Di Tella M, Perutelli V, Miele G, Lavorgna L, Bonavita S, De Mercanti SF, et al. Family functioning and multiple sclerosis: Study protocol of a multicentric italian project. Frontiers in Psychology 2021;12. https://doi.org/10.3389/fpsyg.2021.668010.

28. Di Tella M, Clerico M, Castelli L. Associations between socioemotional alterations, quality of life, and social functioning in multiple sclerosis: A scoping review. Current Psychology 2021. https://doi.org/10.1007/s12144-021-02387-y.

29. De Mercanti SF, Vercellino M, Bosa C, Alteno A, Schillaci V, Clerico M, et al. Case Report: Covid-19 in Multiple Sclerosis Patients Treated With Ocrelizumab: A Case Series. Frontiers in Neurology 2021;12. https://doi.org/10.3389/fneur.2021.691616.

30. De Mercanti SF, Signori A, Cordioli C, Signoriello E, Lus G, Bonavita S, et al. MRI activity and extended interval of Natalizumab dosing regimen: a multicentre Italian study. Journal of the Neurological Sciences 2021;424. https://doi.org/10.1016/j.jns.2021.117385.

31. Carandini T, Mancini M, Bogdan I, Rae CL, Barritt AW, Clerico M, et al. In vivo evidence of functional disconnection between brainstem monoaminergic nuclei and brain networks in multiple sclerosis. Multiple Sclerosis and Related Disorders 2021;56. https://doi.org/10.1016/j.msard.2021.103224.

32. Calvo-Barreiro L, Clerico M, Espejo C. Correcting gut dysbiosis can ameliorate inflammation and promote remyelination in multiple sclerosis – Yes. Multiple Sclerosis Journal 2021;27:1161–2. https://doi.org/10.1177/13524585211016723.

33. Brigo F, Ponzano M, Sormani MP, Clerico M, Abbadessa G, Cossu G, et al. Digital work engagement among Italian neurologists. Therapeutic Advances in Chronic Disease 2021;12. https://doi.org/10.1177/20406223211029616.

34. Bombaci A, Abbadessa G, Trojsi F, Leocani L, Bonavita S, Lavorgna L, et al. Telemedicine for management of patients with amyotrophic lateral sclerosis through COVID-19 tail. Neurological Sciences 2021;42:9–13. https://doi.org/10.1007/s10072-020-04783-x.

35. Abbadessa G, Lavorgna L, Miele G, Mignone A, Signoriello E, Lus G, et al. Assessment of multiple sclerosis disability progression using a wearable biosensor: A pilot study. Journal of Clinical Medicine 2021;10:1–8. https://doi.org/10.3390/jcm10061160.

36. Signori A, Saccà F, Lanzillo R, Maniscalco GT, Signoriello E, Repice AM, et al. Cladribine vs other drugs in MS: Merging randomized trial with real-life data. Neurology(R) Neuroimmunology & Neuroinflammation 2020;7. https://doi.org/10.1212/NXI.0000000000000878.

37. Rolla S, Maglione A, De Mercanti SF, Clerico M. The Meaning of Immune Reconstitution after Alemtuzumab Therapy in Multiple Sclerosis. Cells 2020;9. https://doi.org/10.3390/cells9061396.

38. Pernice S, Follia L, Maglione A, Pennisi M, Pappalardo F, Novelli F, et al. Computational modeling of the immune response in multiple sclerosis using epimod framework. BMC Bioinformatics 2020;21. https://doi.org/10.1186/s12859-020-03823-9.

39. Maniscalco GT, Saccà F, Lanzillo R, Annovazzi P, Baroncini D, Binello E, et al. First therapy choice in newly diagnosed Multiple Sclerosis patients: A multicenter Italian study. Multiple Sclerosis and Related Disorders 2020;42. https://doi.org/10.1016/j.msard.2020.102059.

40. Lavorgna L, Di Tella M, Miele G, De Mercanti SF, Streito LM, Perutelli V, et al. Online Validation of a Battery of Questionnaires for the Assessment of Family Functioning and Related Factors. Frontiers in Psychology 2020;11. https://doi.org/10.3389/fpsyg.2020.00771.

41. Lavorgna L, Brigo F, Abbadessa G, Bucello S, Clerico M, Cocco E, et al. The Use of Social Media and Digital Devices Among Italian Neurologists. Frontiers in Neurology 2020;11. https://doi.org/10.3389/fneur.2020.00583.

42. Krysko KM, Graves JS, Dobson R, Altintas A, Amato MP, Bernard J, et al. Sex effects across the lifespan in women with multiple sclerosis. Therapeutic Advances in Neurological Disorders 2020;13. https://doi.org/10.1177/1756286420936166.

43. De Mercanti SF, Gned D, Matta M, Iudicello M, Franchin E, Clerico M. Atypical Multiple Sclerosis Lesions or Progressive Multifocal Leukoencephalopathy Lesions: That Is the Question. Journal of Investigative Medicine High Impact Case Reports 2020;8. https://doi.org/10.1177/2324709620939802.

44. Clerico M, De Mercanti SF, Signori A, Iudicello M, Cordioli C, Signoriello E, et al. Extending the Interval of Natalizumab Dosing: Is Efficacy Preserved? Neurotherapeutics 2020;17:200–7. https://doi.org/10.1007/s13311-019-00776-7.

45. Wolfe GI, Kaminski HJ, Aban IB, Minisman G, Kuo H-C, Marx A, et al. Long-term effect of thymectomy plus prednisone versus prednisone alone in patients with non-thymomatous myasthenia gravis: 2-year extension of the MGTX randomised trial. The Lancet Neurology 2019;18:259–68. https://doi.org/10.1016/S1474-4422(18)30392-2.

46. Trojano M, Bergamaschi R, Amato MP, Comi G, Ghezzi A, Lepore V, et al. The Italian multiple sclerosis register. Neurological Sciences 2019;40:155–65. https://doi.org/10.1007/s10072-018-3610-0.

47. Saccà F, Lanzillo R, Signori A, Maniscalco GT, Signoriello E, Lo Fermo S, et al. Determinants of therapy switch in multiple sclerosis treatment-naïve patients: A real-life study. Multiple Sclerosis Journal 2019;25:1263–72. https://doi.org/10.1177/1352458518790390.

48. Moglia C, Calvo A, Grassano M, Canosa A, Manera U, D'ovidio F, et al. Early weight loss in amyotrophic lateral sclerosis: Outcome relevance and clinical correlates in a population-based cohort. Journal of Neurology, Neurosurgery and Psychiatry 2019;90:666–73. https://doi.org/10.1136/jnnp-2018-319611.

49. Maglione A, Rolla S, De Mercanti SF, Cutrupi S, Clerico M. The adaptive immune system in multiple sclerosis: An estrogen-mediated point of view. Cells 2019;8. https://doi.org/10.3390/cells8101280.

50. Lavorgna L, Esposito S, Lanzillo R, Sparaco M, Ippolito D, Cocco E, et al. Factors interfering with parenthood decision-making in an Italian sample of people with multiple sclerosis: an exploratory online survey. Journal of Neurology 2019;266:707–16. https://doi.org/10.1007/s00415-019-09193-4.

51. Lavie C, Rollot F, Durand-Dubief F, Marignier R, Ionescu I, Casey R, et al. Neuraxial analgesia is not associated with an increased risk of post-partum relapses in MS. Multiple Sclerosis Journal 2019;25:591–600. https://doi.org/10.1177/1352458518763080.

52. Iannello A, Rolla S, Maglione A, Ferrero G, Bardina V, Inaudi I, et al. Pregnancy epigenetic signature in T helper 17 and T regulatory cells in multiple sclerosis. Frontiers in Immunology 2019;10. https://doi.org/10.3389/fimmu.2018.03075.

53. Frau J, Saccà F, Signori A, Baroncini D, Fenu G, Annovazzi P, et al. Outcomes after fingolimod to alemtuzumab treatment shift in relapsing–remitting MS patients: a multicentre cohort study. Journal of Neurology 2019;266:2440–6. https://doi.org/10.1007/s00415-019-09424-8.

54. Abbadessa G, Lavorgna L, Cirillo G, Clerico M, Todisco V, Cirillo M, et al. Right phrenic nerve palsy following transcatheter radiofrequency current atrial fibrillation ablation: Case report. Journal of International Medical Research 2019;47:3438–43. https://doi.org/10.1177/0300060519849267.

55. Lavorgna L, De Stefano M, Sparaco M, Moccia M, Abbadessa G, Montella P, et al. Fake news, influencers and health-related professional participation on the Web: A pilot study on a social-network of people with Multiple Sclerosis. Multiple Sclerosis and Related Disorders 2018;25:175–8. https://doi.org/10.1016/j.msard.2018.07.046.

56. Lavorgna L, Brigo F, Moccia M, Leocani L, Lanzillo R, Clerico M, et al. e-Health and multiple sclerosis: An update. Multiple Sclerosis Journal 2018;24:1657–64. https://doi.org/10.1177/1352458518799629.

57. Scarpazza C, De Rossi N, Moiola L, Gerevini S, Cosottini M, Capra R, et al. The still under-

investigated role of cognitive deficits in PML diagnosis. Multiple Sclerosis and Demyelinating Disorders 2017;2. https://doi.org/10.1186/s40893-016-0018-7.

58. Rolla S, De Mercanti SF, Bardina V, Horakova D, Habek M, Adamec I, et al. Lack of CD4 + T cell percent decrease in alemtuzumab-treated multiple sclerosis patients with persistent relapses. Journal of Neuroimmunology 2017;313:89–91. https://doi.org/10.1016/j.jneuroim.2017.10.009.

59. Laroni A, Signori A, Maniscalco GT, Lanzillo R, Russo CV, Binello E, et al. Assessing association of comorbidities with treatment choice and persistence in MS: A real-life multicenter study. Neurology 2017;89:2222–9. https://doi.org/10.1212/WNL.0000000000004686.

60. Filippini G, Del Giovane C, Clerico M, Beiki O, Mattoscio M, Piazza F, et al. Treatment with disease-modifying drugs for people with a first clinical attack suggestive of multiple sclerosis. Cochrane Database of Systematic Reviews 2017;2017. https://doi.org/10.1002/14651858.CD012200.pub2.

61. Clerico M, De Mercanti S, Artusi CA, Durelli L, Naismith RT. Active CMV infection in two patients with multiple sclerosis treated with alemtuzumab. Multiple Sclerosis 2017;23:874–6. https://doi.org/10.1177/1352458516688350.

62. Clerico M, Artusi CA, Di Liberto A, Rolla S, Bardina V, Barbero P, et al. Natalizumab in multiple sclerosis: Long-term management. International Journal of Molecular Sciences 2017;18. https://doi.org/10.3390/ijms18050940.

63. Clerico M, Artusi CA, Di Liberto A, Rolla S, Bardina V, Barbero P, et al. Long-term safety evaluation of natalizumab for the treatment of multiple sclerosis. Expert Opinion on Drug Safety 2017;16:963–72. https://doi.org/10.1080/14740338.2017.1346082.

64. Lugaresi A, De Robertis F, Clerico M, Brescia Morra V, Centonze D, Borghesan S, et al. Long-term adherence of patients with relapsing-remitting multiple sclerosis to subcutaneous self-injections of interferon β-1a using an electronic device: the RIVER study. Expert Opinion on Drug Delivery 2016;13:931–5. https://doi.org/10.1517/17425247.2016.1148029.

65. Filippini G, Clerico M, Beiki O, Mattoscio M, Piazza F, Del Giovane C, et al. Treatment with disease modifying drugs for people with a first clinical attack suggestive of multiple sclerosis. Cochrane Database of Systematic Reviews 2016;2016. https://doi.org/10.1002/14651858.CD012200.

66. Calvo A, Canosa A, Bertuzzo D, Cugnasco P, Solero L, Clerico M, et al. Influence of cigarette smoking on ALS outcome: A population-based study. Journal of Neurology, Neurosurgery and Psychiatry 2016;87:1229–33. https://doi.org/10.1136/jnnp-2016-313793.

67. Barbero P, Busso M, Artusi CA, De Mercanti S, Tinivella M, Veltri A, et al. Ultrasound-guided botulinum toxin-a injections: A method of treating sialorrhea. Journal of Visualized Experiments 2016;2016. https://doi.org/10.3791/54606.

68. Barbero P, Busso M, Tinivella M, Artusi CA, De Mercanti S, Cucci A, et al. Long-term follow-up of ultrasound-guided botulinum toxin-A injections for sialorrhea in neurological dysphagia. Journal of Neurology 2015;262:2662–7. https://doi.org/10.1007/s00415-015-7894-1.

69. Soragni E, Miao W, Iudicello M, Jacoby D, De Mercanti S, Clerico M, et al. Epigenetic Therapy for Friedreich ataxia. Annals of Neurology 2014;76:489–508. https://doi.org/10.1002/ana.24260.

70. Rolla S, Bardina V, De Mercanti S, Quaglino P, De Palma R, Gned D, et al. Th22 cells are expanded in multiple sclerosis and are resistant to IFN-β. Journal of Leukocyte Biology 2014;96:1155–64. https://doi.org/10.1189/jlb.5A0813-463RR.

71. Clerico M, Schiavetti I, De Mercanti SF, Piazza F, Gned D, Morra VB, et al. Treatment of relapsing-remitting multiple sclerosis after 24 doses of natalizumab: Evidence from an italian spontaneous, prospective, and observational study (the TY-STOP study). JAMA Neurology 2014;71:954–60. https://doi.org/10.1001/jamaneurol.2014.1200.

72. Chiò A, Calvo A, Bovio G, Canosa A, Bertuzzo D, Galmozzi F, et al. Amyotrophic lateral sclerosis outcome measures and the role of albumin and creatinine: A population-based study. JAMA Neurology 2014;71:1134–42. https://doi.org/10.1001/jamaneurol.2014.1129.

73. Lugaresi A, Florio C, Brescia-Morra V, Cottone S, Bellantonio P, Clerico M, et al. Patient adherence to and tolerability of self-administered interferon β-1a using an electronic autoinjection device: A multicentre, open-label, phase IV study. BMC Neurology 2012;12. https://doi.org/10.1186/1471-2377-12-7.

74. Conti L, De Palma R, Rolla S, Boselli D, Rodolico G, Kaur S, et al. Th17 cells in multiple sclerosis express higher levels of JAK2, which increases their surface expression of IFN-γR2. Journal of Immunology 2012;188:1011–8. https://doi.org/10.4049/jimmunol.1004013.

75. Cucci A, Barbero P, Clerico M, Ferrero B, Versino E, Contessa G, et al. Pro-inflammatory cytokine and chemokine mRNA blood level in multiple sclerosis is related to treatment response and interferon-beta dose. Journal of Neuroimmunology 2010;226:150–7. https://doi.org/10.1016/j.jneuroim.2010.05.038.

76. Trojano M, Pellegrini F, Paolicelli D, Fuiani A, Zimatore GB, Tortorella C, et al. Real-life impact of early interferonβ therapy in relapsing multiple sclerosis. Annals of Neurology 2009;66:513–20. https://doi.org/10.1002/ana.21757.

77. Trojano M, Pellegrini F, Paolicelli D, Fuiani A, Zimatore GB, Tortorella C, et al. Post-marketing of disease modifying drugs in multiple sclerosis: An exploratory analysis of gender effect in interferon beta treatment. Journal of the Neurological Sciences 2009;286:109–13. https://doi.org/10.1016/j.jns.2009.06.036.

78. Durelli L, Conti L, Clerico M, Boselli D, Contessa G, Ripellino P, et al. T-helper 17 cells expand in multiple sclerosis and are inhibited by interferon-β. Annals of Neurology 2009;65:499–509. https://doi.org/10.1002/ana.21652.

79. Durelli L, Barbero P, Cucci A, Ferrero B, Ricci A, Contessa G, et al. Neutralizing antibodies in multiple sclerosis patients treated with 375 μg interferon-β-1b. Expert Opinion on Biological Therapy 2009;9:387–97. https://doi.org/10.1517/14712590902762781.

80. Citterio A, Beghi E, Millul A, Evoli A, Mantegazza R, Antozzi C, et al. Risk factors for tumor occurrence in patients with myasthenia gravis. Journal of Neurology 2009;256:1221–7. https://doi.org/10.1007/s00415-009-5091-9.

81. Durelli L, Barbero P, Bergui M, Versino E, Bassano MA, Verdun E, et al. The OPTimization of Interferon for MS study: 375 μg interferon beta-1b in suboptimal responders. Journal of Neurology 2008;255:1315–23. https://doi.org/10.1007/s00415-008-0879-6.

82. Durelli L, Barbero P, Bergui M, Versino E, Bassano MA, Verdun E, et al. MRI activity and neutralising antibody as predictors of response to interferon β treatment in multiple sclerosis. Journal of Neurology, Neurosurgery and Psychiatry 2008;79:646–51. https://doi.org/10.1136/jnnp.2007.130229.

83. Clerico M, Rivoiro C, Contessa G, Viglietti D, Durelli L. The therapy of multiple sclerosis with immune-modulating or immunosuppressive drug. A critical evaluation based upon evidence based parameters and published systematic reviews. Clinical Neurology and Neurosurgery 2008;110:878–85. https://doi.org/10.1016/j.clineuro.2007.10.020.

84. Clerico M, Faggiano F, Palace J, Rice G, Tintorè M, Durelli L. Recombinant interferon beta or glatiramer acetate for delaying conversion of the first demyelinating event to multiple sclerosis. Cochrane Database of Systematic Reviews 2008. https://doi.org/10.1002/14651858.CD005278.pub3.

85. Clerico M, Contessa G, Durelli L. Interferon-β1a for the treatment of multiple sclerosis. Expert Opinion on Biological Therapy 2007;7:535–42. https://doi.org/10.1517/14712598.7.4.535.

86. Clerico M, Barbero P, Contessa G, Ferrero C, Durelli L. Adherence to interferon-beta treatment and results of therapy switching. Journal of the Neurological Sciences 2007;259:104–8. https://doi.org/10.1016/j.jns.2006.05.075.

87. Durelli L, Barbero P, Clerico M. A randomized study of two interferon-beta treatments in relapsing-remitting multiple sclerosis [1]. Neurology 2006;67:2264. https://doi.org/10.1212/01.wnl.0000252724.67789.1e.

88. Barbero P, Bergui M, Versino E, Ricci A, Zhong JJ, Ferrero B, et al. Every-other-day interferon beta-1b versus once-weekly interferon beta-1a for multiple sclerosis (INCOMIN Trial) II: Analysis of MRI responses to treatment and correlation with NAb. Multiple Sclerosis 2006;12:72–6. https://doi.org/10.1191/135248506ms1247oa.

89. Limmroth V, Putzki N, Durelli L, Clerico M, Barbero P. High-dose, frequently administered interferon beta [1] (multiple letters). Journal of the Neurological Sciences 2005;231:95–6. https://doi.org/10.1016/j.jns.2004.10.020.

90. Durelli L, Clerico M. The importance of maintaining effective therapy in multiple sclerosis. Journal of Neurology 2005;252:iii38–43. https://doi.org/10.1007/s00415-005-2016-0.

91. Clerico M, Durelli L, Haas J. Comparison of immunomodulatory treatments for multiple sclerosis [1] (multiple letters). European Journal of Neurology 2005;12:915. https://doi.org/10.1111/j.1468-1331.2005.01372.x.

92. Barbero P, Verdun E, Bergui M, Pipieri A, Clerico M, Cucci A, et al. High-dose, frequently administered interferon beta therapy for relapsing-remitting multiple sclerosis must be maintained over the long term: The interferon beta dose-reduction study. Journal of the Neurological Sciences 2004;222:13–9. https://doi.org/10.1016/j.jns.2004.03.023.

93. Verdun E, Isoardo G, Oggero A, Ferrero B, Ghezzi A, Montanari E, et al. Autoantibodies in multiple sclerosis patients before and during IFN-β1b treatment: Are they correlated with the occurrence of autoimmune diseases? Journal of Interferon and Cytokine Research 2002;22:245–55. https://doi.org/10.1089/107999002753536220.

94. Durelli L, Oggero A, Verdun E, Isoardo GL, Barbero P, Bergamasco B, et al. Thyroid function and anti-thyroid antibodies in MS patients screened for interferon treatment. A multicenter study. Journal of the Neurological Sciences 2001;193:17–22. https://doi.org/10.1016/S0022-510X(01)00637-2.

95. Durelli L, Ferrero B, Oggero A, Verdun E, Ghezzi A, Montanari E, et al. Liver and thyroid function and autoimmunity during interferon-β1b treatment for MS. Neurology 2001;57:1363–70. https://doi.org/10.1212/WNL.57.8.1363.

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Orbassano, 12/04/2023   _____ _