

Weekly New Publications List

Week commencing 16/05/2022

MND research is a fast-paced area, with new research and results being undertaken and published every day. Here we aim to keep up to date with the latest publications. Please click on the titles of the publications to find out more information about each one.



Disclaimer: *Please note that information provided in this publications list has come from NCBI using the search parameters of 'als, amyotrophic lateral sclerosis' and publication date from 16/05/2022-22/05/2022. This may not be exhaustive list of all publications released in this week. Not all publications will be available to read for free as this is dependent on the researchers and funders to list it as open access. These publications are not written by the MND Association, but we may have funded some of the research, this will be stated in the publication.*



This symbol is used to highlight that there is further information about this publication through our other channels, such as our research blog. We will always link to these next to this symbol.

1. [A phase I/IIa clinical trial of autologous hematopoietic stem cell transplantation in amyotrophic lateral sclerosis.](#)
Lunetta C, Lizio A, Cabona C, Gerardi F, Sansone VA, Corbo M, Scialò C, Angelucci E, Gualandi F, Marengo P, Grillo G, Cairoli R, Cesana C, Saccardi R, Melazzini MG, Mancardi G, Caponnetto C.
J Neurol. 2022 May 21. doi: 10.1007/s00415-022-11185-w. Online ahead of print.
PMID: 35596795
2. [Rummeliibacillus suwonensis: First Time Isolation from Human Feces by Culturomics.](#)
Quaranta G, Mandrioli J, Bibbò S, Guarnaccia A, Fancello G, Simonini C, Amedei A, Niccolai E, Nannini G, Cammarota G, Sanguinetti M, Masucci L.
Curr Microbiol. 2022 May 20;79(7):197. doi: 10.1007/s00284-022-02806-8.
PMID: 35595837
3. [Bidirectional Mendelian randomization to explore the causal relationships between Sleep traits, Parkinson's disease and Amyotrophic lateral sclerosis.](#)
Di H, Zhu Y, Xia W, Meng X, Zhang M, Xu M, Feng J, Tian Q, He Y, Cao S, Lu Z.
Sleep Med. 2022 Apr 19;96:42-49. doi: 10.1016/j.sleep.2022.03.024. Online ahead of print.
PMID: 35594779
4. [Genetic and pharmacological PARP inhibition reduces axonal degeneration in C. elegans models of ALS.](#)
Tossing G, Livernoche R, Maios C, Bretonneau C, Labarre A, Parker JA.
Hum Mol Genet. 2022 May 20:ddac116. doi: 10.1093/hmg/ddac116. Online ahead of print.
PMID: 35594544
5. [Mild motor impairment as prodromal state in amyotrophic lateral sclerosis: a new diagnostic entity.](#)
Benatar M, Granit V, Andersen PM, Grignon AL, McHutchison C, Cosentino S, Malaspina A, Wu J.
Brain. 2022 May 20:awac185. doi: 10.1093/brain/awac185. Online ahead of print.
PMID: 35594156
6. [Iron-sensitive MR imaging of the primary motor cortex to differentiate hereditary spastic paraplegia from other motor neuron diseases.](#)
Cosottini M, Donatelli G, Ricca I, Bianchi F, Frosini D, Montano V, Migaletto G, Del Prete E, Tessa A, Cecchi P, D'Amelio C, Siciliano G, Mancuso M, Santorelli FM.
Eur Radiol. 2022 May 20. doi: 10.1007/s00330-022-08865-6. Online ahead of print.
PMID: 35593959

7. [Associations of self-reported occupational exposures and settings to ALS: a case-control study.](#)
Goutman SA, Boss J, Godwin C, Mukherjee B, Feldman EL, Batterman SA. *Int Arch Occup Environ Health*. 2022 May 20. doi: 10.1007/s00420-022-01874-4. Online ahead of print.
PMID: 35593931
8. [Treatment for sialorrhea \(excessive saliva\) in people with motor neuron disease/amyotrophic lateral sclerosis.](#)
James E, Ellis C, Brassington R, Sathasivam S, Young CA. *Cochrane Database Syst Rev*. 2022 May 20;5(5):CD006981. doi: 10.1002/14651858.CD006981.pub3.
PMID: 35593746 **Free PMC article.** Review.
9. [Neuroimmune Crosstalk Between the Peripheral and the Central Immune System in Amyotrophic Lateral Sclerosis.](#)
Yu W, He J, Cai X, Yu Z, Zou Z, Fan D. *Front Aging Neurosci*. 2022 May 3;14:890958. doi: 10.3389/fnagi.2022.890958. eCollection 2022.
PMID: 35592701 **Free PMC article.** Review.
10. [Preclinical evaluation of WVE-004, an investigational stereopure oligonucleotide for the treatment of C9orf72-associated ALS or FTD.](#)
Liu Y, Andreucci A, Iwamoto N, Yin Y, Yang H, Liu F, Bulychhev A, Hu XS, Lin X, Lamore S, Patil S, Mohapatra S, Purcell-Estabrook E, Taborn K, Dale E, Vargeese C. *Mol Ther Nucleic Acids*. 2022 Apr 20;28:558-570. doi: 10.1016/j.omtn.2022.04.007. eCollection 2022 Jun 14.
PMID: 35592494 **Free PMC article.**
11. [Integrating functional genomics with genetics to understand the biology of ALS and FTD.](#)
Cruchaga C. *Med (N Y)*. 2022 Apr 8;3(4):226-227. doi: 10.1016/j.medj.2022.03.008.
PMID: 35590152
12. [Poly\(GR\) and poly\(GA\) in cerebrospinal fluid as potential biomarkers for C9ORF72-ALS/FTD.](#)
Krishnan G, Raitcheva D, Bartlett D, Prudencio M, McKenna-Yasek DM, Douthwright C, Oskarsson BE, Ladha S, King OD, Barmada SJ, Miller TM, Bowser R, Watts JK, Petrucelli L, Brown RH, Kankel MW, Gao FB. *Nat Commun*. 2022 May 19;13(1):2799. doi: 10.1038/s41467-022-30387-4.
PMID: 35589711
13. [Ribosome inhibition by C9ORF72-ALS/FTD-associated poly-PR and poly-GR proteins revealed by cryo-EM.](#)

- Loveland AB, Svidritskiy E, Susorov D, Lee S, Park A, Zvornicanin S, Demo G, Gao FB, Korostelev AA.
Nat Commun. 2022 May 19;13(1):2776. doi: 10.1038/s41467-022-30418-0.
PMID: 35589706
14. [Sleep, Pain, and Neurodegeneration: A Mendelian Randomization Study.](#)
Grover S, Sharma M; International Age-related Macular Degeneration Genomics Consortium (IAMDGC).
Front Neurol. 2022 May 2;13:765321. doi: 10.3389/fneur.2022.765321.
eCollection 2022.
PMID: 35585838 **Free PMC article.**
 15. [Utility of the ALSFRS-R for Predicting ALS and Comorbid Disease Neuropathology: The Veterans Affairs Biorepository Brain Bank.](#)
Colvin LE, Foster ZW, Stein TD, Thakore-James M, Salajegheh MK, Carr K, Spencer KR, Abdul Rauf N, Adams L, Averill JG, Walker SE, Robey I, Alvarez VE, Huber BR, McKee AC, Kowall NW, Brady CB.
Muscle Nerve. 2022 May 18. doi: 10.1002/mus.27635. Online ahead of print.
PMID: 35585776
 16. [Efficacy and safety of Lenzumestrocel \(Neuronata-R® inj.\) in patients with amyotrophic lateral sclerosis \(ALSUMMIT study\): study protocol for a multicentre, randomized, double-blind, parallel-group, sham procedure-controlled, phase III trial.](#)
Nam JY, Lee TY, Kim K, Chun S, Kim MS, Shin JH, Sung JJ, Kim BJ, Kim BJ, Oh KW, Kim KS, Kim SH.
Trials. 2022 May 18;23(1):415. doi: 10.1186/s13063-022-06327-4.
PMID: 35585556
 17. [Design of a Randomized, Placebo-Controlled, Phase 3 Trial of Tofersen Initiated in Clinically Presymptomatic SOD1 Variant Carriers: the ATLAS Study.](#)
Benatar M, Wu J, Andersen PM, Bucelli RC, Andrews JA, Otto M, Farahany NA, Harrington EA, Chen W, Mitchell AA, Ferguson T, Chew S, Gedney L, Oakley S, Heo J, Chary S, Fanning L, Graham D, Sun P, Liu Y, Wong J, Fradette S.
Neurotherapeutics. 2022 May 18. doi: 10.1007/s13311-022-01237-4. Online ahead of print.
PMID: 35585374
 18. [Accumulation of misfolded SOD1 outlines distinct patterns of motor neuron pathology and death during disease progression in a SOD1^{G93A} mouse model of amyotrophic lateral sclerosis.](#)
Salvany S, Casanovas A, Piedrafita L, Gras S, Calderó J, Esquerda JE.
Brain Pathol. 2022 May 18. doi: 10.1111/bpa.13078. Online ahead of print.
PMID: 35584812

19. [Distribution Changes of Neural Precursor Cells in the Brain Stem of Tg\(SOD1*G93A\)1Gur Mice.](#)
Shen X, Tang C, Kang Q, Zhu Y, Xu S, Jiang J, Xu R.
Neurodegener Dis. 2022 May 18. doi: 10.1159/000525124. Online ahead of print.
PMID: 35584655
20. [Alterations in metabolic biomarkers and their potential role in amyotrophic lateral sclerosis.](#)
Li JY, Cui LY, Sun XH, Shen DC, Yang XZ, Liu Q, Liu MS.
Ann Clin Transl Neurol. 2022 May 18. doi: 10.1002/acn3.51580. Online ahead of print.
PMID: 35584112
21. [Heat shock protein Grp78/BiP/HspA5 binds directly to TDP-43 and mitigates toxicity associated with disease pathology.](#)
François-Moutal L, Scott DD, Ambrose AJ, Zerio CJ, Rodriguez-Sanchez M, Dissanayake K, May DG, Carlson JM, Barbieri E, Moutal A, Roux KJ, Shorter J, Khanna R, Barmada SJ, McGurk L, Khanna M.
Sci Rep. 2022 May 17;12(1):8140. doi: 10.1038/s41598-022-12191-8.
PMID: 35581326 **Free PMC article.**
22. [Nuclear RNA transcript levels modulate nucleocytoplasmic distribution of ALS/FTD-associated protein FUS.](#)
Tsai YL, Mu YC, Manley JL.
Sci Rep. 2022 May 17;12(1):8180. doi: 10.1038/s41598-022-12098-4.
PMID: 35581240 **Free PMC article.**
23. [Development of an endogenously myc-tagged TARDBP \(TDP-43\) zebrafish model using the CRISPR/Cas9 system and homology directed repair.](#)
Petel Légaré V, Rampal CJ, Gurberg TJN, Harji ZA, Allard-Chamard X, Rodríguez EC, Armstrong GAB.
Comp Biochem Physiol B Biochem Mol Biol. 2022 May 14;261:110756. doi: 10.1016/j.cbpb.2022.110756. Online ahead of print.
PMID: 35580804
24. [Can We Treat Neurodegenerative Proteinopathies by Enhancing Protein Degradation?](#)
Engelender S, Stefanis L, Oddo S, Bellucci A.
Mov Disord. 2022 May 17. doi: 10.1002/mds.29058. Online ahead of print.
PMID: 35579450
25. [Hastening the Diagnosis of Amyotrophic Lateral Sclerosis.](#)
Mitsumoto H, Kasarskis EJ, Simmons Z.
Neurology. 2022 May 16;10.1212/WNL.0000000000200799. doi: 10.1212/WNL.0000000000200799. Online ahead of print.
PMID: 35577578

26. [Effect of sodium phenylbutyrate/taurursodiol on tracheostomy/ventilation-free survival and hospitalisation in amyotrophic lateral sclerosis: long-term results from the CENTAUR trial.](#)
Paganoni S, Hendrix S, Dickson SP, Knowlton N, Berry JD, Elliott MA, Maiser S, Karam C, Caress JB, Owegi MA, Quick A, Wymer J, Goutman SA, Heitzman D, Heiman-Patterson TD, Jackson C, Quinn C, Rothstein JD, Kasarskis EJ, Katz J, Jenkins L, Ladha SS, Miller TM, Scelsa SN, Vu TH, Fournier C, Johnson KM, Swenson A, Goyal N, Pattee GL, Babu S, Chase M, Dagostino D, Hall M, Kittle G, Eydinov M, Ostrow J, Pothier L, Randall R, Shefner JM, Sherman AV, Tustison E, Vigneswaran P, Yu H, Cohen J, Klee J, Tanzi R, Gilbert W, Yeramian P, Cudkowicz M.
J Neurol Neurosurg Psychiatry. 2022 May 16:jnnp-2022-329024. doi: 10.1136/jnnp-2022-329024. Online ahead of print.
PMID: 35577511
27. [Genetic epidemiology of amyotrophic lateral sclerosis in Norway - a 2-year population based study.](#)
Olsen CG, Busk ØL, Aanjesen TN, Alstadhaug KB, Bjørnå IK, Braathen GJ, Breivik KL, Demic N, Flemmen HØ, Hallerstig E, HogenEsch I, Holla ØL, Jøntvedt AB, Kampman MT, Kleveland G, Kvernmo HB, Ljøstad U, Maniaol A, Morsund ÅH, Nakken O, Novy C, Rekand T, Schlüter K, Schuler S, Tveten K, Tysnes OB, Holmøy T, Høyer H.
Neuroepidemiology. 2022 May 16. doi: 10.1159/000525091. Online ahead of print.
PMID: 35576897
28. [A molecular view of amyotrophic lateral sclerosis through the lens of interaction network modules.](#)
Jensen KH, Stalder AK, Wernersson R, Roloff-Handschin TC, Hansen DH, Groenen PMA.
PLoS One. 2022 May 16;17(5):e0268159. doi: 10.1371/journal.pone.0268159. eCollection 2022.
PMID: 35576218 **Free PMC article.**
29. [The Interplay Between Autophagy and RNA Homeostasis: Implications for Amyotrophic Lateral Sclerosis and Frontotemporal Dementia.](#)
Houghton OH, Mizielinska S, Gomez-Suaga P.
Front Cell Dev Biol. 2022 Apr 28;10:838402. doi: 10.3389/fcell.2022.838402. eCollection 2022.
PMID: 35573690 **Free PMC article.** Review.
30. [DNA Damage, Defective DNA Repair, and Neurodegeneration in Amyotrophic Lateral Sclerosis.](#)
Konopka A, Atkin JD.

Front Aging Neurosci. 2022 Apr 27;14:786420. doi: 10.3389/fnagi.2022.786420. eCollection 2022.
PMID: 35572138 **Free PMC article.** Review.

31. [What Do We Know About Medical Cannabis in Neurological Disorders and What Are the Next Steps?](#)

Lacroix C, Alleman-Brimault I, Zalta A, Rouby F, Cassé-Perrot C, Jouve E, Attolini L, Guilhaumou R, Micallef J, Blin O.
Front Pharmacol. 2022 Apr 27;13:883987. doi: 10.3389/fphar.2022.883987. eCollection 2022.
PMID: 35571129 **Free PMC article.** Review.

32. [Arabic adaptation of the Edinburgh cognitive and behavioural Amyotrophic lateral sclerosis screen \(ECAS-AR\).](#)

Kacem I, Abida Y, Ferchichi W, Mrabet S, Sghaier I, Gharbi A, Souissi A, Nasri A, Gargouri A, Ben Djebara M, Gouider R.
Rev Neurol (Paris). 2022 May 12:S0035-3787(22)00556-2. doi: 10.1016/j.neurol.2021.12.015. Online ahead of print.
PMID: 35570063

33. [Effects of Long-term Hybrid Assistive Limb Use on Gait in Patients with Amyotrophic Lateral Sclerosis.](#)

Morioka H, Murata K, Sugisawa T, Shibukawa M, Ebina J, Sawada M, Hanashiro S, Nagasawa J, Yanagihashi M, Hirayama T, Uchi M, Kawabe K, Ebihara S, Murakami Y, Nakajima T, Kano O.
Intern Med. 2022;61(10):1479-1484. doi: 10.2169/internalmedicine.8030-21. Epub 2022 May 15.
PMID: 35569927

34. [Dimethyl fumarate: A review of preclinical efficacy in models of neurodegenerative diseases.](#)

Majkutewicz I.
Eur J Pharmacol. 2022 May 12:175025. doi: 10.1016/j.ejphar.2022.175025. Online ahead of print.
PMID: 35569547 Review.

35. [Tensor electrical impedance myography identifies bulbar disease progression in amyotrophic lateral sclerosis.](#)

Schooling CN, Healey TJ, McDonough HE, French SJ, McDermott CJ, Shaw PJ, Kadiramanathan V, Alix JJP.
Clin Neurophysiol. 2022 May 5;139:69-75. doi: 10.1016/j.clinph.2022.04.015. Online ahead of print.
PMID: 35569295

36. [Slow motor neurons resist pathological TDP-43 and mediate motor recovery in the rNLS8 model of amyotrophic lateral sclerosis.](#)

Hur SK, Hunter M, Dominique MA, Farag M, Cotton-Samuel D, Khan T, Trojanowski JQ, Spiller KJ, Lee VM.
Acta Neuropathol Commun. 2022 May 14;10(1):75. doi: 10.1186/s40478-022-01373-0.
PMID: 35568882 **Free PMC article.**

37. [Regulatory Approval in ALS; When Is a Single Study Enough?](#)
Cudkowicz ME, Shefner JM.
Ann Neurol. 2022 Jun;91(6):737-739. doi: 10.1002/ana.26371. Epub 2022 Apr 28.
PMID: 35478359 No abstract available.
38. [TDP-43-associated atrophy in brains with and without frontotemporal lobar degeneration.](#)
Buciuc M, Martin PR, Tosakulwong N, Murray ME, Petrucelli L, Senjem ML, Sychalla AJ, Knopman DS, Boeve BF, Petersen RC, Parisi JE, Reichard RR, Dickson DW, Jack CR Jr, Whitwell JL, Josephs KA.
Neuroimage Clin. 2022;34:102954. doi: 10.1016/j.nicl.2022.102954. Epub 2022 Feb 4.
PMID: 35168140 **Free PMC article.**
39. [Diagnosing ALS: the Gold Coast criteria and the role of EMG.](#)
Turner MR; UK MND Clinical Studies Group.
Pract Neurol. 2022 Jun;22(3):176-178. doi: 10.1136/practneurol-2021-003256. Epub 2022 Jan 6.
PMID: 34992096 No abstract available.
40. [Mapping cortical disease-burden at individual-level in frontotemporal dementia: implications for clinical care and pharmacological trials.](#)
McKenna MC, Tahedl M, Lope J, Chipika RH, Li Hi Shing S, Doherty MA, Hengeveld JC, Vajda A, McLaughlin RL, Hardiman O, Hutchinson S, Bede P.
Brain Imaging Behav. 2022 Jun;16(3):1196-1207. doi: 10.1007/s11682-021-00523-7. Epub 2021 Dec 9.
PMID: 34882275 **Free PMC article.**