***Supplementary File***

**An Introduction to Therapeutic Approaches to Vascular Cognitive Impairment.**

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**Supplementary Table S1. Current Clinical Trials on ct.gov. Listed by start date.**

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| --- | --- | --- | --- | --- | --- | --- |
| Year begun | NCT # | Phase | Interventions | Condition, disease state | Age range (y) | Sponsor/Collaborators |
|  |  |  |  |  |  |  |
| 2021 | NCT03360019 | NA | Device: Activlink insole | Dementia, Vascular/AD/LBD  | 21-85 | University of Florida/NIA/Aster Labs, Inc |
| 2021 | NCT04315337 | NA | Behavioral: Virtual Kitchen Training | AD//MCI/Dementia/Dementia, Vascular | 65+ | Temple University, Philadelphia, PA |
| 2021 | NCT04334408 | Phase 2 | Drug: Freman-ezumab (CGRP antagonist) | CADASIL/Migraine | 18-70 | Mayo Clinic, Jacksonville, FL |
| 2021 | NCT04753970 | 1/2 | Drug: Cilostazol | Cerebral Small Vessel Diseases/CADASIL | 18+ | Mayo Clinic, Jacksonville, FL |
| 2021 | NCT04337255 | NA | Other: MIND Diet | Cognitive Decline/Dementia, Vascular/AD/Dementia/Stroke | 60-80 | Rush Medical Center/Univ of Chicago/Advocate Hospital System/NIA |
| 2021 | NCT04798989 | Phase 2 | Drug: CY6463 | AD With Vascular Pathology | 65+ | Cyclerion Therapeutics, Cambridge, MA |
| 2021 | NCT04165213 | NA | Behavioral: COPE online training | FTD/Dementia/Multi-Infarct Dementia/Vascular Dementia/Mixed Dementia/AD/LBD | 21-100 | Univ of Pennsylvania/Drexel Univ/Thomas Jefferson University |
| 2021 | NCT04828434 | NA | Other: Virtual Individual Cognitive Stimulation Therapy | Dementia/Dementia, Vascular/Dementia, Mixed/LBD/Dementia, Multi-Infarct/FTD | 18 + | University College, London/The University of Hong Kong |
| 2021 | NCT04550975 | NA | Other: Advanced Cognitive Stimulation Therapy | Dementia, Vascular/Dementia, Mixed/LBD/Dementia Frontal/AD | 18 + | University College, London, UK |
| 2020 | NCT04567745 | Phase 1 | Diagnostic: Retinal fundus photography | MCI/AD/Vascular Dementia | 18 + | Mayo Clinic/Eyenuk, Inc. |
| 2020 | NCT04658823 | Phase 2 | HOV-12020 (Palm tocotrienols complex) | CADASIL | 45- 75 | Hopital Lariboisiere APHP, Paris, France |
| 2020 | NCT04109963 | Phase 2 | Device: Remote ischemic conditioning | Vascular Dementia/Cerebral Small Vessel Diseases/Vascular Cognitive Impairment | 60- 85 | Univ of Calgary/Canadian Institutes of Health Research (CIHR)/Canadian Consortium on Neurodegeneration in Aging |
| 2020 | NCT04313582 | NA | Behavioral: SmartPrompt smartphone App | Dementia/Dementia, Vascular/AD/Dementia, Mixed/MCI | 18 + | Temple University, Philadelphia, PA |
| 2020 | NCT04248270 | 1/2 | Drug: 18F-PM-PBB3 | AD/Vascular Dementia/Dementia | 20- 75 | Chang Gung Memorial Hospital, Taiwan |
| 2020 | NCT04498962 | NA | Drug: Danzhu Fuyuan Granule | Chronic Stable Angina/Vascular Dementia/Idiopathic Membranous Nephropathy | 18- 70 | Jingqing Hu/ Academy of Chinese Medical Sciences |
| 2020 | NCT04428112 | NA | Behavioral: Building Better Caregivers Workshop | Depression/AD/Dementia, Vascular/Dementia Frontal/LBD/Dementia, Mixed/PD Dementia/Dementia, HIV/FTD/Dementia, Multi-Infarct | 18 + | University of California, San Francisco/NIA |
| 2020 | NCT04552041 | 3 | Drug: Prospecta | Vascular Dementia | 60-85 | Materia Medica Holding; Northern State Medical University, Arkhangelsk, Russian Federation |
| 2020 | NCT04555629 | NA | Other: Advanced Cognitive Stimulation Therapy | Dementia/Dementia, Vascular/Dementia, Mixed/LBD/Dementia Frontal/AD | 18 + | University College, London/ Univ of Hong Kong |
| 2019 | NCT03907748 | NA | Other: Music Intervention | Dementia/Dementia, Vascular/LBD/Dementia,Mixed/AD/Behavioural and Psychiatric Symptoms of Dementia/Depression | 18 +  | Anglia Ruskin University, Cambridge, UK |
| 2019 | NCT03804229 | Phase 3 | Drug: Butyl-phthalide | Vascular Dementia | 50- 75 | Capital Medical University, Beijing, China /CSPC-NBP Pharmaceutical Co. |
| 2019 | NCT04335994 | NA | Device: poly-somnography/Sleep Apnea Test | Obstructive Sleep Apnea/AD/Vascular Dementia/MCI/PD Dementia/LBD/Mixed Dementia | Any | Sunnybrook Health Sciences Centre/Unity Health Toronto, Canada |
| 2019 | NCT04635540 | NA | Behavioral: Educational Brochure | Neuro-Degenerative Disease/Dementia/Caregiver Burnout/AD/Fronto-temporal Lobar Degeneration/PD/Vascular Dementia | 30- 95 | University Health Network, Toronto, Canada |
| 2019 | NCT03789760 | Phase 3 | Drug: SaiLuo-Tong  | Vascular Dementia | 40- 75 | Shineway Pharmaceutical Co.,Ltd/ Xuan Wu Hospital of Capital Medical University, Beijing, China |
| 2019 | NCT03891277 | Phase 2 | Drug: Ferrous succinate | Vascular Cognitive Impairment/Dementia, Vascular/Iron-deficiency/Cerebral Infarction/TIA | 18- 80 | Beijing Tiantan Hospital, China |
| 2018 | NCT03724136 | NA | Procedure: Intravenous Bone Marrow Stem Cell (BMSC) Fraction/ Intranasal Topical Bone Marrow Stem Cell (BMSC) Fraction | AD/Vascular Dementia/LBD/Dementia, Mixed/PD Dementia/Chronic Traumatic Encephalopathy/Huntington's Dementia/Wernicke Korsakoff Syndrome/Traumatic Brain Injury/Dementia, Multi-Infarct/Autism/Autism Spectrum Disorder/ /CADASIL/Limbic-predominant Age-related TDP-43 Encephalopathy (LATE) | 18 + | MD Stem Cells, Westport, Connecticut, United States/MD Stem Cells, Coral Springs, Florida, United States/Fakeeh University Hospital, Dubai, United Arab Emirates |
| 2018 | NCT04309253 | Phase 2 | Drug: PMPBB3/Drug: AV45 | Vascular Cognitive Impairment/AD/FTD | 20 + | Chang Gung Memorial Hospital, Taoyuan, Guishan, Taiwan |
| 2018 | NCT03986424 | Phase 3 | Drug: Akatinol Memantine | Vascular Dementia | 50- 85 | Merz Pharmaceuticals GmbH/LLC Merz Pharma, Russia/ Federal State Mental Health Research Center, Moscow |
| 2018 | NCT03783754 | NA | Drug: telmisartan, amlodipine,indapamide combination | Stroke/Cerebral Small Vessel Diseases/Intracerebral Hemorrhage/Vascular Dementia/Hypertension | 18 + | The George Institute/University of Sydney, Australia/ Liverpool Hospital, New South Wales, Australia |
| 2018 | NCT03550131 | NA | Behavioral: Innovations in Dementia Empowerment and Action (IDEA)/ Reducing Disabilities in AD (RDAD) | AD/Dementia/MCI/PD Dementia/LBD/Vascular Dementia | 50 + | University of Washington, Seattle, WA |
| 2018 | NCT03306979 | Phase 2 | Drug: N-acetylcysteine | Vascular Cognitive Impairment no Dementia | 55- 80 | Sunnybrook Health Sciences Centre, Canada |
| 2018 | NCT04095962 | NA | Other: Exercise | Dementia/AD/Vascular Dementia/Neurocognitive Disorders | 60 + | Universidade do Porto, Porto, Portugal |
| 2018 | NCT04840173 | NA | Behavioral: Music | AD (Including Subtypes)/Depressive Symptoms | Any | MJHS Inst for Innovation in Palliative Care/Alzheimer's Assoc/ Menorah Center for Nursing and Rehabilitation, Brooklyn, NY |
| 2017 | NCT04572477 | Phase 2 | Drug: [18F]THK-5351/ [18F]AV-45 | Post-stroke Dementia, Vascular MCI | 50- 85 | Chang Gung Memorial Hospital, Taoyuan, Guishan, Taiwan |
| 2017 | NCT03076671 | NA | Behavioral: Palliative Care | PD/LBD/Supranuclear Palsy, Progressive/Vascular PD/Multiple System Atrophy/Corticobasal Degeneration/AD/FTD/Primary Progressive Aphasia/Vascular Dementia | 18- 105 | Univ of Colorado, Denver/National Institute of Nursing Research (NINR)/University of California, San Francisco |
| 2017 | NCT02817074 | NA | Behavioral: MIND Diet | Cognitive Decline/Dementia/AD/Vascular Dementia | 65- 84 | Rush Medical Center/Harvard School of Public Health/Brigham and Women's Hospital/NIA |
| 2016 | NCT02795052 | NA | Procedure: Intravenous BMSC/ Intranasal BMSC | Multiple Neurologic Disorders including:Stroke/Traumatic Brain Injury/CADASIL/ Cerebral Hemorrhage/Diabetic Neuropathies | 18 + | MD Stem Cells, Westport, CT/Fakeeh University Hospital, Dubai, UAE |
| 2016 | NCT03682185 | Phase 3 | Behavioral: Attention-Control Condition/Timed Activity Intervention | Dementia/AD/ /Circadian Rhythm Sleep Disorder/Insomnia/ /MCI/FTD/Neurocognitive Disorders/Vascular Dementia | 18- 110 | University of Pennsylvania, Philadelphia, PA |
| 2016 | NCT02669394 | NA | Behavioralexercise training | Transient Ischemic Attack/Vascular Cognitive Impairment/Subcortical Vascular Dementia | 55 + | University of British Columbia, Vancouver, Canada |
| 2015 | NCT04287738 | NA | Behavioral: Navigated Care | Dementia/AD/Dementia, Vascular/LBD/Frontotemporal Lobar Degeneration/Memory Disorders | 18 + | UCSF/University of Nebraska/NIA/Centers for Medicare and Medicaid Services |
| 2014 | NCT02147652 | NA | Other: Personal-ized music | AD/Vascular Dementia | 60- 90 | University Health Network, Toronto, Canada |
| 2014 | NCT01953705 | Phase 2 | Drug: Omega-3 PUFA | Age Related Cognitive Decline/AD/Vascular Dementia/Endothelial Dysfunction/Executive Dysfunction | 75 + | Oregon Health and Science University, Portland, OR/NIA  |
| 2014 | NCT02264899 | NA | Other: in Memento-VASCOD | AD/AD-related Disorders | 50 + | University Hospital, Bordeaux/Ministry for Health and Solidarity, France |
| 2014 | NCT03741543 | NA | Other: 12-week health promotion course | Dementia/AD/Vascular Dementia | 65 + | Helse Stavanger HF/Dam Foundation/Nasjonalforeningen for folkehelsen |
| 2008 | NCT00950430 | Phase 4 | Drug: C-11 PiB/F-18 FDG/18-F-AV-1451 | AD/DLB/FTD/Vascular Dementia | 30- 100 | Mayo Clinic, Rochester, Minnesota |
| 2007 | NCT00457769 | Phase 1 | Drug: Donepezil, memory training | Stroke/Vascular Dementia/Memory Deficits | 18 + | Kessler Foundation, West Orange, NJ/Pfizer |

Source: <https://clinicaltrials.gov/> accessed 22 April 2021. 45 Studies were found with these search criteria: (Recruiting OR Not yet recruiting OR Active OR not recruiting OR Enrolling by invitation Studies) AND (Interventional Studies) AND (Dementia, Vascular) AND (Adult OR Older Adult (age 18+)).  **Abbreviations.** AD: Alzheimer’s dementia; FTD: Frontotemporal Dementia; LBD: Dementia With Lewy Bodies ; MCI: mild cognitive impairment; NA: Not applicable; NIA: National Institute on Aging; PD: Parkinson’s Disease.