

## **Supplementary material 3: Reference**

- Agostini, S., Mancuso, R., Baglio, F., et al. High avidity HSV-1 antibodies correlate with absence of amnestic Mild Cognitive Impairment conversion to Alzheimer's disease [J].*Brain Behav Immun*,2016, 58: 254-260.
- Annerbo, S., Wahlgren, L. O., & Lökk, J. The significance of thyroid-stimulating hormone and homocysteine in the development of Alzheimer's disease in mild cognitive impairment: a 6-year follow-up study [J].*Am J Alzheimers Dis Other Demen*,2006, 21(3): 182-188.
- Ansari, A., Maffioletti, E., Milanesi, E., et al. miR-146a and miR-181a are involved in the progression of mild cognitive impairment to Alzheimer's disease [J].*Neurobiology of aging*,2019, 82: 102-109.
- Apostolova, L. G., Hwang, K. S., Avila, D., et al. Brain amyloidosis ascertainment from cognitive, imaging, and peripheral blood protein measures [J].*Neurology*,2015, 84(7): 729-737.
- Baldeiras, I., Santana, I., Proença, M. T., et al. Oxidative damage and progression to Alzheimer's disease in patients with mild cognitive impairment [J].*Journal of Alzheimer's disease*,2010, 21(4): 1165-1177.
- Benussi, L., Ghidoni, R., Dal Piaz, F., et al. The level of 24-Hydroxycholesteryl Esters is an Early Marker of Alzheimer's Disease [J].*Journal of Alzheimer's disease*,2017, 56(2): 825-833.
- Blasko, I., Jellinger, K., Kemmler, G., et al. Conversion from cognitive health to mild cognitive impairment and Alzheimer's disease: prediction by plasma amyloid beta 42, medial temporal lobe atrophy and homocysteine [J].*Neurobiol Aging*,2008, 29(1): 1-11.
- Blazhenets, G., Frings, L., Ma, Y., et al. Validation of the Alzheimer Disease Dementia Conversion-Related Pattern as an ATN Biomarker of Neurodegeneration [J].*Neurology*,2021, 96(9): e1358-e1368.
- Buerger, K., Uspenskaya, O., Hartmann, O., et al. Prediction of Alzheimer's disease using midregional proadrenomedullin and midregional proatrial natriuretic peptide: a retrospective analysis of 134 patients with mild cognitive impairment [J].*J Clin Psychiatry*,2011, 72(4): 556-563.
- Cammarata, S., Borghi, R., Giliberto, L., et al. Amyloid-beta(42) Plasma Levels are Elevated in Amnestic Mild Cognitive Impairment [J].*Journal of alzheimers disease*,2009, 18(2): 267-271.
- Cao, C., Loewenstein, D. A., Lin, X., et al. High blood caffeine levels in mci linked to lack of progression to dementia [J].*Journal of Alzheimer's disease*,2012, 30(3): 559-572.
- Chen, T. B., Lai, Y. H., Ke, T. L., et al. Changes in Plasma Amyloid and Tau in a Longitudinal Study of Normal Aging, Mild Cognitive Impairment, and Alzheimer's Disease [J].*Dementia and Geriatric Cognitive Disorders*,2020, 48(3-4): 180-195.
- Cheng, Y. W., Chiu, M. J., Chen, Y. F., et al. The contribution of vascular risk factors in neurodegenerative disorders: From mild cognitive impairment to Alzheimer's disease [J].*Alzheimer's Research and Therapy*,2020, 12(1): 91.
- Cicognola, C., Janelidze, S., Hertz, J., et al. Plasma glial fibrillary acidic protein detects Alzheimer pathology and predicts future conversion to Alzheimer dementia in patients with mild cognitive impairment [J].*Alzheimers Res Ther*,2021, 13(1): 68.
- Cullen, N. C., Leuzy, A., Palmqvist, S., et al. Individualized prognosis of cognitive decline and dementia in mild cognitive impairment based on plasma biomarker combinations [J].*Nat Aging*,2021, 1(1): 114-123.

- Darmanté, N., Tabatabaei-Jafari, H., & Cherbuin, N. Combination of plasma neurofilament light chain and mini-mental state examination score predicts progression from mild cognitive impairment to alzheimer's disease within 5 years [J].*Journal of Alzheimer's disease*,2021, 82(3): 951-964.
- Diniz, B. S., Teixeira, A. L., Ojopi, E. B., et al. Higher serum sTNFR1 level predicts conversion from mild cognitive impairment to Alzheimer's disease [J].*J Alzheimers Dis*,2010, 22(4): 1305-1311.
- Faura, J., Bustamante, A., Penalba, A., et al. CCL23: A Chemokine Associated with Progression from Mild Cognitive Impairment to Alzheimer's Disease [J].*Journal of Alzheimer's disease*,2020, 73(4): 1585-1595.
- Fei, M., Jianghua, W., Rujuan, M., et al. The relationship of plasma A $\beta$  levels to dementia in aging individuals with mild cognitive impairment [J].*Journal of the Neurological Sciences*,2011, 305(1-2): 92-96.
- Fernandes, A., Tábuas-Pereira, M., Duro, D., et al. C-reactive protein as a predictor of mild cognitive impairment conversion into Alzheimer's disease dementia [J].*Exp Gerontol*,2020, 138: 111004.
- Forlenza, O. V., Miranda, A. S., Guimar, I., et al. Decreased Neurotrophic Support is Associated with Cognitive Decline in Non-Demented Subjects [J].*J Alzheimers Dis*,2015, 46(2): 423-429.
- Gattaz, W. F., Talib, L. L., Schaeffer, E. L., et al. Low platelet iPLA<sub>2</sub> activity predicts conversion from mild cognitive impairment to Alzheimer's disease: a 4-year follow-up study [J].*J Neural Transm (Vienna)*,2014, 121(2): 193-200.
- Ghidoni, R., Benussi, L., Glionna, M., et al. Plasma cystatin c and risk of developing Alzheimer's disease in subjects with mild cognitive impairment [J].*Journal of Alzheimer's disease*,2010, 22(3): 985-991.
- Giannisis, A., Al-Grety, A., Carlsson, H., et al. Plasma apolipoprotein E levels in longitudinally followed patients with mild cognitive impairment and Alzheimer's disease [J].*Alzheimers Res Ther*,2022, 14(1): 115.
- Graham, S. F., Chevallier, O. P., Elliott, C. T., et al. Untargeted metabolomic analysis of human plasma indicates differentially affected polyamine and L-arginine metabolism in mild cognitive impairment subjects converting to Alzheimer's disease [J].*PLoS ONE*,2015, 10(3): e0119452.
- Guo, L. H., Alexopoulos, P., Wagenpfeil, S., et al. Plasma proteomics for the identification of Alzheimer disease [J].*Alzheimer Dis Assoc Disord*,2013, 27(4): 337-342.
- Hakobyan, S., Harding, K., Aiyaz, M., et al. Complement Biomarkers as Predictors of Disease Progression in Alzheimer's Disease [J].*J Alzheimers Dis*,2016, 54(2): 707-716.
- Hanon, O., Vidal, J. S., Lehmann, S., et al. Plasma amyloid beta predicts conversion to dementia in subjects with mild cognitive impairment: The BALTAZAR study [J].*Alzheimer's and Dementia*,2022, 18(12): 2537-2550.
- Hansson, O., Zetterberg, H., Buchhave, P., et al. Association between CSF biomarkers and incipient Alzheimer's disease in patients with mild cognitive impairment: A follow-up study [J].*Lancet Neurology*,2006, 5(3): 228-234.
- Hansson, O., Zetterberg, H., Vanmechelen, E., et al. Evaluation of plasma A $\beta$ 40 and A $\beta$ 42 as predictors of conversion to Alzheimer's disease in patients with mild cognitive impairment [J].*Neurobiology of aging*,2010, 31(3): 357-367.
- Janelidze, S., Bali, D., Ashton, N. J., et al. Head-to-head comparison of 10 plasma phospho-tau assays in prodromal Alzheimer's disease [J].*Brain*,2023, 146(4): 1592-1601.

- Janelidze, S., Mattsson, N., Palmqvist, S., et al. Plasma P-tau181 in Alzheimer's disease: relationship to other biomarkers, differential diagnosis, neuropathology and longitudinal progression to Alzheimer's dementia [J]. *Nat Med*, 2020, 26(3): 379-386.
- Jongbloed, W., Van Dijk, K. D., Mulder, S. D., et al. Clusterin Levels in Plasma Predict Cognitive Decline and Progression to Alzheimer's Disease [J]. *Journal of Alzheimer's disease*, 2015, 46(4): 1103-1110.
- Karikari, T. K., Benedet, A. L., Ashton, N. J., et al. Diagnostic performance and prediction of clinical progression of plasma phospho-tau181 in the Alzheimer's Disease Neuroimaging Initiative [J]. *Mol Psychiatry*, 2021, 26(2): 429-442.
- Kiddle, S. J., Sattlecker, M., Proitsi, P., et al. Candidate blood proteome markers of Alzheimer's disease onset and progression: A systematic review and replication study [J]. *Journal of Alzheimer's disease*, 2014, 38(3): 515-531.
- Kivisäkk, P., Carlyle, B. C., Sweeney, T., et al. Plasma biomarkers for diagnosis of Alzheimer's disease and prediction of cognitive decline in individuals with mild cognitive impairment [J]. *Frontiers in Neurology*, 2023, 14: 1069411.
- Kivisäkk, P., Magdamo, C., Trombetta, B. A., et al. Plasma biomarkers for prognosis of cognitive decline in patients with mild cognitive impairment [J]. *Brain communications*, 2022, 4(4): fcac155.
- Kwon, H. S., Kim, J. Y., Koh, S. H., et al. Predicting cognitive stage transition using p-tau181, Centiloid, and other measures [J]. *Alzheimers Dement*, 2023, doi: 10.1002/alz.13054.
- Lee, E. H., Kwon, H. S., Koh, S. H., et al. Serum neurofilament light chain level as a predictor of cognitive stage transition [J]. *Alzheimer's Research and Therapy*, 2022, 14(1): 6.
- Lehallier, B., Essioux, L., Gayan, J., et al. Combined plasma and cerebrospinal fluid signature for the prediction of midterm progression from mild cognitive impairment to Alzheimer disease [J]. *JAMA neurology*, 2016, 73(2): 203-212.
- Lehmann, S., Schraen-Maschke, S., Vidal, J. S., et al. Plasma phosphorylated tau 181 predicts amyloid status and conversion to dementia stage dependent on renal function [J]. *Journal of neurology, neurosurgery and psychiatry*, 2023, 94(6): 411-419.
- Lim, N. S., Swanson, C. R., Cherng, H. R., et al. Plasma EGF and cognitive decline in Parkinson's disease and Alzheimer's disease [J]. *Annals of Clinical and Translational Neurology*, 2016, 3(5): 346-355.
- Liu, S., Pan, J., Tang, K., et al. Alpha 1-antichymotrypsin may be a biomarker for the progression of amnestic mild cognitive impairment [J]. *Acta Neurologica Belgica*, 2021, 121(2): 451-464.
- Lopez, O. L., Chang, Y., Ives, D. G., et al. Blood amyloid levels and risk of dementia in the Ginkgo Evaluation of Memory Study (GEMS): A longitudinal analysis [J]. *Alzheimers & Dementia*, 2019, 15(8): 1029-1038.
- Lopez, O. L., Kuller, L. H., Mehta, P. D., et al. Plasma amyloid levels and the risk of AD in normal subjects in the Cardiovascular Health Study [J]. *Neurology*, 2008, 70(19 PART 1): 1664-1671.
- Lui, J. K., Laws, S. M., Li, Q.-X., et al. Plasma Amyloid-beta as a Biomarker in Alzheimer's Disease: The AIBL Study of Aging [J]. *Journal of alzheimers disease*, 2010, 20(4): 1233-1242.
- Maruyama, M., Matsui, T., Tanji, H., et al. Cerebrospinal fluid tau protein and periventricular white matter lesions in patients with mild cognitive impairment: implications for 2 major pathways [J]. *Arch Neurol*, 2004, 61(5): 716-720.
- Mielke, M. M., Hagen, C. E., Wennberg, A. M. V., et al. Association of plasma total tau level with cognitive decline and risk of mild cognitive impairment or dementia in the Mayo Clinic study on aging [J]. *JAMA neurology*, 2017, 74(9): 1073-1080.

- Monacelli, F., Borghi, R., Cammarata, S., et al. Amnestic mild cognitive impairment and conversion to alzheimer's disease: Insulin resistance and glycoxidation as early biomarker clusters [J].Journal of Alzheimer's disease,2015, 45(1): 89-95.
- Morgan, A. R., Touchard, S., Leckey, C., et al. Inflammatory biomarkers in Alzheimer's disease plasma [J].Alzheimer's and Dementia,2019, 15(6): 776-787.
- Nho, K., Kueider-Paisley, A., Arnold, M., et al. Serum metabolites associated with brain amyloid beta deposition, cognition and dementia progression [J].Brain communications,2021, 3(3): fcab139.
- Orešić, M., Hyötyläinen, T., Herukka, S. K., et al. Metabolome in progression to Alzheimer's disease [J].Translational psychiatry,2011, 1(12): e57.
- Palmqvist, S., Stomrud, E., Cullen, N., et al. An accurate fully automated panel of plasma biomarkers for Alzheimer's disease [J].Alzheimer's and Dementia,2023, 19(4): 1204-1215.
- Palmqvist, S., Tideman, P., Cullen, N., et al. Prediction of future Alzheimer's disease dementia using plasma phospho-tau combined with other accessible measures [J].Nat Med,2021, 27(6): 1034-1042.
- Pérez-Grijalba, V., Romero, J., Pesini, P., et al. Plasma A $\beta$ 42/40 Ratio Detects Early Stages of Alzheimer's Disease and Correlates with CSF and Neuroimaging Biomarkers in the AB255 Study [J].Journal of prevention of alzheimer's disease,2019, 6(1): 34-41.
- Pichet Binette, A., Palmqvist, S., Bali, D., et al. Combining plasma phospho-tau and accessible measures to evaluate progression to Alzheimer's dementia in mild cognitive impairment patients [J].Alzheimers Res Ther,2022, 14(1): 46.
- Prodan, C. I., Ross, E. D., Stoner, J. A., et al. Coated-platelet levels and progression from mild cognitive impairment to Alzheimer disease [J].Neurology,2011, 76(3): 247-252.
- Romero-Sevilla, R., López-Espuela, F., Fuentes, J. M., et al. Role of Inflammatory Cytokines in the Conversion of Mild Cognitive Impairment to Dementia: A Prospective Study [J].Curr Alzheimer Res,2022, 19(1): 68-75.
- Sato, K., Mano, T., Ihara, R., et al. Lower Serum Calcium as a Potentially Associated Factor for Conversion of Mild Cognitive Impairment to Early Alzheimer's Disease in the Japanese Alzheimer's Disease Neuroimaging Initiative [J].J Alzheimers Dis,2019, 68(2): 777-788.
- Shen, X.-N., Li, J.-Q., Wang, H.-F., et al. Plasma amyloid, tau, and neurodegeneration biomarker profiles predict Alzheimer's disease pathology and clinical progression in older adults without dementia [J].Alzheimer's & dementia (Amsterdam, Netherlands),2020, 12(1): e12104-e12104.
- Shen, X. N., Huang, Y. Y., Chen, S. D., et al. Plasma phosphorylated-tau181 as a predictive biomarker for Alzheimer's amyloid, tau and FDG PET status [J].Translational psychiatry,2021, 11(1): 585.
- Shen, Y., Wang, H., Sun, Q., et al. Increased Plasma Beta-Secretase 1 May Predict Conversion to Alzheimer's Disease Dementia in Individuals With Mild Cognitive Impairment [J].Biological Psychiatry,2018, 83(5): 447-455.
- Shi, L., Winchester, L. M., Liu, B. Y., et al. Dickkopf-1 Overexpression in vitro Nominates Candidate Blood Biomarkers Relating to Alzheimer's Disease Pathology [J].Journal of alzheimers disease,2020, 77(3): 1353-1368.
- Shi, L., Xu, J., Green, R., et al. Multiomics profiling of human plasma and cerebrospinal fluid reveals ATN-derived networks and highlights causal links in Alzheimer's disease [J].Alzheimer's and Dementia,2023, doi: 10.1002/alz.12961.

- Silva-Spínola, A., Lima, M., Leitão, M. J., et al. Blood biomarkers in mild cognitive impairment patients: Relationship between analytes and progression to Alzheimer disease dementia [J]. *Eur J Neurol*, 2023, 30(6): 1565-1573.
- Simrén, J., Leuzy, A., Karikari, T. K., et al. The diagnostic and prognostic capabilities of plasma biomarkers in Alzheimer's disease [J]. *Alzheimer's and Dementia*, 2021, 17(7): 1145-1156.
- Slot, R. E., Van Harten, A. C., Kester, M. I., et al. Apolipoprotein A1 in Cerebrospinal Fluid and Plasma and Progression to Alzheimer's Disease in Non-Demented Elderly [J]. *J Alzheimers Dis*, 2017, 56(2): 687-697.
- Squitti, R., Ghidoni, R., Siotto, M., et al. Value of serum nonceruloplasmin copper for prediction of mild cognitive impairment conversion to Alzheimer disease [J]. *Ann Neurol*, 2014, 75(4): 574-580.
- Storace, D., Cammarata, S., Borghi, R., et al. Elevation of beta-Amyloid 1-42 Autoantibodies in the Blood of Amnestic Patients With Mild Cognitive Impairment [J]. *Archives of neurology*, 2010, 67(7): 867-872.
- Sugarman, M. A., Zetterberg, H., Blennow, K., et al. A longitudinal examination of plasma neurofilament light and total tau for the clinical detection and monitoring of Alzheimer's disease [J]. *Neurobiology of aging*, 2020, 94: 60-70.
- Therriault, J., Benedet, A. L., Pascoal, T. A., et al. Association of plasma P-tau181 with memory decline in non-demented adults [J]. *Brain communications*, 2021, 3(3): fcab136.
- Tien, Y. T., Lee, W. J., Liao, Y. C., et al. Plasma Transthyretin as a Predictor of Amnestic Mild Cognitive Impairment Conversion to Dementia [J]. *Scientific reports*, 2019, 9(1): 18691.
- Toledo, J. B., Arnold, M., Kastenmüller, G., et al. Metabolic network failures in Alzheimer's disease: A biochemical road map [J]. *Alzheimer's and Dementia*, 2017, 13(9): 965-984.
- Toledo, J. B., Vanderstichele, H., Figurski, M., et al. Factors affecting A beta plasma levels and their utility as biomarkers in ADNI [J]. *Acta Neuropathologica*, 2011, 122(4): 401-413.
- van Harten, A. C., Jongbloed, W., Teunissen, C. E., et al. CSF ApoE predicts clinical progression in nondemented APOE $\epsilon$ 4 carriers [J]. *Neurobiology of aging*, 2017, 57: 186-194.
- Varma, V. R., Oommen, A. M., Varma, S., et al. Brain and blood metabolite signatures of pathology and progression in Alzheimer disease: A targeted metabolomics study [J]. *PLoS Medicine*, 2018, 15(1): e1002482.
- Vinceti, M., Urbano, T., Chiari, A., et al. Selenoprotein P concentrations and risk of progression from mild cognitive impairment to dementia [J]. *Scientific reports*, 2023, 13(1): 8792.
- Wang, C., Cui, Y., Yang, J., et al. Combining serum and urine biomarkers in the early diagnosis of mild cognitive impairment that evolves into Alzheimer's disease in patients with the apolipoprotein E  $\epsilon$ 4 genotype [J]. *Biomarkers*, 2015, 20(1): 84-88.
- Westin, K., Buchhave, P., Nielsen, H., et al. CCL2 is associated with a faster rate of cognitive decline during early stages of Alzheimer's disease [J]. *PLoS ONE*, 2012, 7(1): e30525.
- Westwood, S., Baird, A. L., Anand, S. N., et al. Validation of plasma proteomic biomarkers relating to brain amyloid burden in the EMIF-Alzheimer's disease multimodal biomarker discovery cohort [J]. *Journal of Alzheimer's disease*, 2020, 74(1): 213-225.
- Westwood, S., Baird, A. L., Hye, A., et al. Plasma Protein Biomarkers for the Prediction of CSF Amyloid and Tau and F-18 -Flutemetamol PET Scan Result [J]. *Frontiers in Aging Neuroscience*, 2018, 10: 409.

- Winston, C. N., Goetzl, E. J., Akers, J. C., et al. Prediction of conversion from mild cognitive impairment to dementia with neuronally derived blood exosome protein profile [J].*Alzheimers Dement (Amst)*,2016, 3: 63-72.
- Xiao, Z., Wu, W., Ma, X., et al. Plasma A $\beta$ 42/A $\beta$ 40 and p-tau181 Predict Long-Term Clinical Progression in a Cohort with Amnestic Mild Cognitive Impairment [J].*Clinical Chemistry*,2022, 68(12): 1552-1563.
- Xie, B., Liu, Z., Jiang, L., et al. Increased Serum miR-206 Level Predicts Conversion from Amnestic Mild Cognitive Impairment to Alzheimer's Disease: A 5-Year Follow-up Study [J].*J Alzheimers Dis*,2017, 55(2): 509-520.
- Yang, H., Lyutvinskiy, Y., Herukka, S. K., et al. Prognostic polypeptide blood plasma biomarkers of alzheimer's disease progression [J].*Journal of Alzheimer's disease*,2014, 40(3): 659-666.
- Zainaghi, I. A., Talib, L. L., Diniz, B. S., et al. Reduced platelet amyloid precursor protein ratio (APP ratio) predicts conversion from mild cognitive impairment to Alzheimer's disease [J].*Journal of Neural Transmission*,2012, 119(7): 815-819.
- Zhao, A., Jiao, Y., Ye, G., et al. Soluble TREM2 levels associate with conversion from mild cognitive impairment to Alzheimer's disease [J].*J Clin Invest*,2022, 132(24): e158708.
- Zhao, A., Li, Y., Yan, Y., et al. Increased prediction value of biomarker combinations for the conversion of mild cognitive impairment to Alzheimer's dementia [J].*Translational Neurodegeneration*,2020, 9(1): 30.
- Zuliani, G., Trentini, A., Brombo, G., et al. Serum beta-secretase 1 (BACE1) activity increases in patients with mild cognitive impairment [J].*J Neurochem*,2021, 159(3): 629-637.