**Supplementary Material**

Supplementary Table 1. A detailed summary of study characteristics included in the systematic review

| *Study* | *Study Design* | *Cohort(s)* | *Sample size* | *Tissue* | *Proposed blood biomarker(s)* | *Analytical technique* | *Statistics* | *Type of biomarker(s)* |
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| McGuinness et al., 2015 (1) | Longitudinal study (2-year follow-up) | | N = 182<br>MCI (97), CN (85) | Platelet | BACE1 | BMG Labtech FLUOstar OPTIMA | AUC=0.64 (p=0.04) | Prognostic |
| Burnham et al., 2016 (2) | Longitudinal study (54-month follow-up) | AIBL | N = 817<br>CN (585), MCI (74), AD (158)<br>Validation group: CN (227), MCI (11), AD (5) | Plasma | Aβ42 + CXCL13 + IgM-1 + IL-17 + PPY + VCAM-1 | Luminex human discovery 151MAP pane | Sn=80%; Sp=82%<br>Validation cohort: Sn=79%; Sp=76% | Diagnostic |
| Janelidze et al., 2016 (3) | CC | BioFINDER | N = 719<br>CN (274), SCD (174), MCI (214), AD (57) | Plasma | Aβ40, Aβ42 | Simoa platform | Aβ42: AUC (CSF) = 0.655, AUC (PET) = 0.604<br>Aβ42/Aβ40 ratio: AUC = 0.683, AUC (PET) = 0.621 | Diagnostic |
| Jammeh et al., 2016 (4) | CC | ADNI | N = 157<br>AD (106), CN (51) | Plasma | A1M + A2M + C3 + AAT + APOE + PPP | - | AUC=0.85, Sn=85.4%, Sp=78.6%, accuracy = 83.6% | Diagnostic |
| Yu et al., 2016 (5) | CC | | N = 90<br>AD (50), CN (40) | Serum | VEGF + sCD40L | Immunomagnetic beads assay | AUC=0.58 (95% CI: 0.775-0.941) | Diagnostic |
| Zheng et al., 2016 (6) | Longitudinal study (2-years follow-up) | | N = 254<br>CN (90), MCI-AD (76), MCI-MCI (88) | Serum | HCY + BDNF + APOEε4 | ELISA and microparticle-enzyme-immunoassay | Sn=85.0%, Sp=86.0%, PPV=0.93, NPV=0.73% | Predictive for early diagnosis |
| An et al., 2017 (7) | CC | | N = 171<br>AD (24), CN (29) | Plasma | Aβ oligomers | Multimer detection system | Sn=83.3%, Sp=90.0% | Diagnostic |

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| Goudey et al., 2017 (8) | | ADNI | N = 566<br>Training: MCI (198), AD (102), CN (58)<br>Validation: MCI (198), AD (10) | Plasma | Aβ42 + APOE + CgA + EOT3 + APOEε4 status | - | AUC=0.84, Sn=78%, Sp=0.73% | Predictive of CSF Aβ42 status |
| Janel et al., 2017 (9) | CC | | N = 140<br>Cohort (M): CN (20), AD (69)<br>Cohort (P): CN (25), AD (26) | Plasma | DYRK1A + BDNF + HCY | Solid-phase immobilized epitope-immunoassay, ELISA, and fluorimetric high-performance liquid chromatography | AUC=0.933; Sn=95.2%; Sp=88.9% | Diagnostic |
| Mattsson et al., 2017 (10) | Longitudinal study (6.5-years follow up) | ADNI | N = 570<br>CN (193), MCI (197), AD (180) | Plasma | NFL | Ultrasensitive single-molecule array (Simoa) platform | AUC=0.87 | Diagnostic and prognostic |
| Mohd Hasni et al., 2017 (11) | CC | | N = 78<br>AD (39), CN (39) | Serum | IL-13 + CXCL10 | Procarta Multiplex Cytokine and ELISA assay | AUC=1 (95% CI); Sp=100%; Sn=100% | Diagnostic |
| Pedrini et al., 2017 (12) | Longitudinal study (18- and 54-months follow-up) | AIBL | N = 665<br>18 months: CN (559), MCI (39), AD (67)<br>54 months: CN (528), MCI (51), AD (86) | Plasma | IL-10 + IL-12/23p40 | Multiplex assay panel | 18 months: AUC=0.802<br>54 months: AUC=0.805 | Early diagnosis |
| Popp et al., 2017 (13) | CC | | N = 120<br>CN (48), MCI (72) | Serum | bFGF + CRP + IL-16 + sFLT-1 + sICAM-1 + Tie-2 + VEGF-C + VEGF-D | V-Plex Neuroinflammation Panel 1 | AUC=0.89 (0.81 - 0.95) | Classification for AD pathology |
| Tateno et al., 2017 (14) | CC | | N = 117<br>ApoE4 (28), non-ApoE4 (89) | Plasma | Aβ42/Aβ40 + APOEε4 | Sandwich ELISA assay | APOEε4 (+): AUC=0.519, Sn=63.6%, Sp=52.9%<br>APOEε4 (-): AUC=0.648, | Diagnostic |

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| | | | | | | | Sn=92.9%, Sp=45.9%, PPV=44.1%, NPV=93.3% | |
| Wang et al., 2017 (15) | CC | | N = 61<br>AD (24), CN (37) | Plasma | Aβ oligomers | Multimer detection system | AUC=0.844, Sn=78.3%, Sp=86.5% | Diagnostic |
| Yu et al., 2017 (16) | CC | | N = 312<br>AD (156), CN (156) | Serum | IL-13 + IL-1α + CXCL10 + IL-3 + TNFα | Immunomagnetic beads assay | AUC=0.58 (95% CI: 0.775-0.941) | Diagnostic |
| Chen et al., 2018 (17) | CC | | N = 126<br>AD (96), CN (30) | Serum | APP + NCAM + Aβ40 + Aβ42 | ELISA assay | AUC=0.997, Sn=98.5 | Diagnostic and prognostic |
| Cheng et al., 2018 (18) | CC | | N = 199<br>AD (98), CN (101) | Plasma | BDNF + AGT + IGFBP-2 + OPN + cathepsin D + SAP + C4 + TTR | Luminex xMAP | AUC= 0.958, Sn=86.7%, Sp=88.1%, Accuracy=87.4% | Diagnostic |
| de Rojas et al., 2018 (19) | CC | FACEHBI | N = 200 | Plasma | Aβ42/Aβ40 | Sandwich ELISA assay | AUC=0.681, Sn=83%, Sp=59.1% | Predictive of amyloid PET |
| Eke et al., 2018 (20) | CC | ADNI | N = 166<br>AD (108), CN (58) | Plasma | A1M + A2M + C3 + IgM + TNC | - | AUC=0.89, Sn=86.5%, Sp=82.1%, Accuracy=85% | Diagnostic |
| Lewczuk et al., 2018 (21) | CC | | N = 140<br>MCI (25), AD (33), CN (41) | Plasma | NFL | Simoa assay | Age (-): AUC=0.853, Sn=84%, Sp=0.78%, accuracy=82%<br>Age (50-80): AUC=0.920, Sn=61%-91%, Sp=89%- 20%, accuracy=84%-80% | Diagnostic (nonspecific) |
| Mielke et al., 2018 (22) | CC | MCSA, ADRC | N = 269<br>CN (172), MCI (57), AD (40) | Plasma | p-tau181, p-tau181 + APOEε4+ | MSD | AUC (p-tau181) = 0.803<br>AUC (p-tau181 + APOEε4+) = 0.860 | Predictor of elevated brain Aβ |
| Nabers et al., 2018 (23) | Longitudinal study | BioFINDER, ESTHER | N = 385<br>BioFINDER:<br>PET+ (36), PET- (37) | Plasma | Aβ secondary structure | Vertex 70V FTIR-spectrometer | AUC (BioFINDER) = 0.78, Sn = 69%, Sp = 86% | Diagnostic |

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| | | | ESTHER:<br>AD (65), CN (247) | | | | AUC (ESTHER) = 0.80, Sn = 71%, Sp = 91% | |
| Nakamura et al., 2018 (24) | CC | NCGG, AIBL | NCGG = 121, AIBL = 252 | Plasma | Aβ42 + APP/Aβ42 + Aβ42/Aβ40 | Immunoprecipitation coupled with mass spectrometry | Discovery: AUC=0.967<br>Validation: AUC=0.941<br>Accuracy=90% | Predictive of amyloid PET |
| Shen et al., 2018 (25) | Longitudinal study (3-years follow-up) | | N = 224<br>Probable AD (75), MCI (96), ND (53) | Plasma | BACE1 | Synthetic fluorescence substrate ELISA and Western blot | Sn = 84%, Sp = 88% | Prognostic |
| Verberk et al., 2018 (26) | Longitudinal study (3 ± 2 years follow-up) | SCIENCe project and Amsterdam Dementia Cohort | N = 248 | Plasma | Aβ42/Aβ40 + APOEε4 status | Simoa Human Neurology 3-Plex A assay kit | AUC=0.83 (95% CI 0.77-0.89), Sn=76%, Sp=75% | Prescreener, diagnostic |
| Winston et al., 2018 (27) | CC | | N = 137<br>CN (76), MCI (61) | Exosomes | Aβ42, NRGN, SYP, SYT, and SYNPO | ELISA assay | Aβ42: Sn=80.6%<br>NRGN, SYP, SYT, and SYNPO: Sn=100% | Diagnostic |
| Agliardi et al., 2019 (28) | CC | | N = 42<br>AD (24), CN (17) | Exosomes | SNAP-25 | Western Blot and ELISA | AUC=0.82, Sn=87.5%, Sp=70.6% | Diagnostic |
| Baldacci et al., 2019 (29) | CC | | N = 78<br>Early AD (39), CN (39) | RBC | α-syn/Aβ, α-syn/tau | Immunoassays | AUC (α-syn/Aβ) = 0.76<br>AUC (α-syn/tau) = 0.72 | Diagnostic |
| Boccardi et al., 2019 (30) | CC | | N = 289<br>HC (87), MCI (73), AD (129) | Plasma | IFNa-2, IL-1, TNFa | | AUC = 0.6524 | Prognosis |
| Bram et al., 2019 (31) | CC | | N = 40<br>AD (20), CN (20) | Platelet | ADAM10 + BACE1 + PSEN1 | Western blot | AUC (ADAM10) = 0.9, Sn = 88.90%, Sp = 78.90%<br>AUC (PSEN1) = 0.80, Sn = 77.80%, Sp = 83.30% | Diagnostic |

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| | | | | | | | AUC (ADAM10 + BACE1 + PSEN1) = 0.9 | |
| Chatterjee et al., 2019 (32) | CC | KARVIAH | N = 95<br>SMC (72), CN (23) | Plasma | Aβ42/Aβ40 + APOEε4 status | Ultrasensitive Simoa assay | AUC=0.78 | Predictive of amyloid PET |
| Chen et al., 2019 (33) | CC | HABS, UCL, UCSD | N = 151<br>Discovery cohort:<br>CN (19), MCI (21), AD (25)<br>Validation cohort:<br>CN (41), MCI (22), AD (23) | Plasma | Tau | ELISA and Simoa assay | Discovery cohort:<br>MCI vs. Con: AUC=0.79<br>AD vs. Con: AUC=0.75<br>Validation cohort:<br>MCI vs. Con: AUC=0.88<br>AD vs. Con: AUC=0.96 | Diagnostic |
| Guzmán-Martínez et al., 2019 (34) | CC | FACEHBI | N = 51<br>AD (36), CN (15) | Platelet | Alz-tau® (HMW/LMW tau ratio) | SDS-PAGE and Western Blot | AUC=0.756, Sn=71.43%, Sp=69.23% | Diagnostic |
| Han et al., 2019 (35) | CC | KBASE | N = 407<br>CN (241), MCI (103), AD (63) | Plasma | AChE | ELISA and colorimetric assay | AChE + ApoE ε4: AUC=0.728-0.798<br>AChE activity + ApoE ε4: AUC=0.727-0.768 | Predictor of cerebral Aβ deposition in cognitively normal individuals |
| Iulita et al., 2019 (36) | Longitudinal study (3 years follow-up) | LEAD | N = 107<br>pAD (28), MCI (30), SMI (30), CN (19) | Plasma | Aβ40 + Aβ42 + MMP-1 + MMP-3 + IL-8 + IL-10 + TNF- α | Multi-Spot V-PLEX | pAD: AUC=0.732<br>MoCA decline: AUC= 0.751<br>CAMCOG decline: AUC= 0.844 | Diagnosis, prognosis |
| Jia et al., 2019 (37) | CC | | N = 298<br>Discovery stage: AD (28), aMCI (25), CN (29) | Exosomes | Aβ42 + T-tau + P-T181-tau | Neuronal-derived exosomes immunoprecipitation and ELISA | Discovery cohort: AUC=0.86-0.97<br>Validation cohort: AUC=0.85-0.98 | Predictive of CFS Ab42, T-tau, and P-T181-tau status |

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| | | | Validation stage: AD (73), aMCI (71), CN (72) | | | | | |
| Kapogiannis et al., 2019 (38) | Longitudinal study (2 years follow-up) | BLSA, JHADRC | N = 414<br>BLSA cohort: MCI to AD (128), CN (222)<br>JHADRC cohort: AD (35), CN (29) | nEV | nEV concentration + nEV mean diameter + nEV proteins (Ttau, p-tau181, p-tau231, pY-IRS-1, and pSer312-IRS-1) | Neuronal-enriched extracellular vesicles immunoprecipitacion and ELISA | BLSA cohort:<br>Training set (n=161): AUC=0.896, Sn=81.8%, Sp=85.8%<br>Validation set (n=80): AUC=0.80, Sn=55.6%, Sp=88.7%<br>JHADRC cohort:<br>Training set: AUC=0.989, Sn=100%, Sp=94.7%<br>Validation set: AUC=0.767, Sn=91.7%, Sp=60% | Diagnostic |
| Li et al., 2019 (39) | CC | | N = 84<br>AD (53), MCI (22), CN (9) | Plasma | Aβ42, Aβ40, T-tau | Simoa assay | Aβ42/Aβ40: AUC=0.77, Sn=82%, Sp=64% | Diagnostic |
| Liu et al., 2019 (40) | CC | Liu et al. | N = 63<br>CN (10), EMCI (26), LMCI (23), AD (4) | Serum | apoA-I + aC3/nC3 + TTR | Turbidimetric immunoassay and ELISA assay | AUC (apoA-I) = 0.77<br>AUC (aC3/nC3) = 0.79<br>AUC = 0.89, Sn=83%, Sp= 90% | MCI prognosis |
| Liu et al., 2019 (41) | Longitudinal study (2-year follow-up) | | N = 92 | Serum | ACT | ELISA and Western blot | AUC (6 months) = 0.688<br>AUC (12 months) = 0.839<br>AUC (24 months) = 0.887 | aMCI diagnosis |
| Meng et al., 2019 (42) | CC | | N = 58<br>AD (30), CN (28) | Plasma | Aβ oligomers | Multimer detection system | AUC=0.89, Sn=82.1%, Sp=90.0% | Diagnostic |

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| Morgan et al., 2019 (43) | CC | AddNeuroMed, EMIF-AD MBD, DCR | N = 1580<br>Discovery cohort:<br>CN (259), MCI (199), AD (262)<br>Replication cohorts:<br>AD (193), MCI (494), CN (600) | Plasma | FB + FH + sCR1, MCP1 + EOT1<br>sCR1 + MCP1 + EOT1<br>FB + FH + age | Singleplex and multiplex assay, ELISA and V-plex electrochemiluminescence immunoassay | AD vs. Con: AUC (discovery/replication cohort) =0.74/0.81<br>AD vs. MCI: AUC (discovery/replication cohort) =0.74/0.67<br>MCI to AD: AUC=0.71 | Diagnostic and prognostic |
| Nabers et al., 2019 (44) | CC | BioFINDER, ESTHER | N = 100<br>CN (61), AD (39) | Plasma | Aβ secondary structure | Spectrometry | BioFINDER: AUC=0.78, Sn=69%, Sp=86%<br>ESTHER: AUC=0.80, Sn=71%, Sp=91% | Diagnostic |
| Palmqvist et al., 2019 (45) | CC | BioFINDER and a German biomarker study for validation | N = 1079<br>CU, MCI, AD | Plasma | Ab42/Ab40, APOE+4 status, tau, NF-L | Elecsys immunoassays (Roche Diagnostics) | Cohort 1: 0.80–0.87;<br>Cohort 2: 0.86 | Predictive of CSF Ab status |
| Park et al., 2019 (46) | CC | | N = 76<br>CN (52), MCI (9), AD (15) | Plasma | T-tau/Aβ42 | Simoa assay and xMAP technology | AUC=0.89, Sn=80%, Sp=91.43% | Predictive of tau pathology |
| Park et al., 2019 (47) | CC | KBASE | N = 254<br>CN (107), MCI (107), AD (40) | Plasma | Set I: LGALS3BP + ACE + gal-3<br>Set II: POSTN + ACE + VE-cadherin<br>Proposed biomarkers: LGALS3BP, CDH5, ACE, POSTN | Mass spectrometry and ELISA | Set I: AUC (PiB- vs. PiB+) =0.871, Sn=79%, Sp=84%<br>Set II: AUC (for MCI) = 0.836, Sn=68%, Sp=90% | Predictive of Ab deposition |
| Pérez-Grijalba et al., 2019 (48) | CC | AB255 study | N = 59<br>CN (39), MCI (20) | Plasma | Aβ42/Aβ40 | ABtest kit | AUC=0.881, Sn=77.8%, Sp=87.5%, PPV=0.732, NPV=0.900 | Predictive of Ab PET, diagnostic |
| Perrotte et al., 2019 (49) | CC | | N = 95 | Plasma | ApoJ, Klotho, protein carbonyls, circulating-proteosome | Immunoblotting, ELISA | *MCI vs. Con:*<br>AUC (ApoJ) = 0.8804 | Diagnostic and prognostic |

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| | | | CN (24), MCI (24), AD (47) | | | | AUC (Klotho) = 0.8036<br>*AD vs. Con:*<br>AUC (ApoJ) = 0.8168<br>AUC (Klotho) = 0.7976<br>AUC (protein carbonyls) = 0.7528<br>AUC (circulating-proteosome activity) = 0.8440<br>*MCI vs. AD*:<br>AUC (protein carbonyls) = 0.7522<br>AUC (circulating-proteosome activity) = 0.8379 | |
| Schindler et al., 2019 (50) | CC | | N = 158 | Plasma | Aβ42/Aβ40 + APOEε4 status | Immunoprecipitation, Mass spectrometry | AUC=0.94 (95% CI 0.90–0.97) | Diagnostic |
| Schipke et al., 2019 (51) | CC | | N = 160<br>CN (79), AD (81) | Serum | BDNF + IGF-1 + VEGF + TGF-β 1 + MCP-1 + IL-18 | ELISA assays | AUC=0.94, Sn=76%, Sp=95%, Accuracy=85% | Diagnostic |
| Whelan et al., 2019 (52) | CC | BioFINDER | N = 843<br>Control Aβ- (415), Control Aβ+ (142), MCI- Aβ- (50), MCI-Aβ+ (75), AD (161) | Plasma | OSM, MMP9, HAGH, CD200, AXIN1, uPA | Olink™ ProSeek immunoassay | *AD vs. Con:*<br>AUC=0.94<br>*Prodromal AD vs. Con:*<br>AUC=0.78 | Diagnostic |
| Yao et al., 2019 (53) | CC | | N = 123<br>AD (54), CN (69) | Serum | GSN, BDNF, TIMP1, VLDLR, APLP2 | ELISA and Western blot for validation | AUC (VLDLR) = 0.932<br>AUC (TIMP1) = 0.903 | Diagnostic |
| Abate et al., 2020 (54) | CC | InveCe.Ab, PharmaCog/E-ADNI | InveCe.Ab: N = 264<br>PharmaCog/E-ADNI: N = 111 | Plasma | Unfolded p53 | - | AUC = 0.92 | Predictive |

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| Abe et al., 2020 (55) | Multicenter, CC | Abe et al. | N = 259<br>CN (100), MCI (60), and AD (99) | Serum | FBC + AHSG + FAC + PPC11 | BLOTCHIP® - MS analysis | *MCI vs. Con:* AUC=0.662, Sn=72%, Sp=59%<br>*MCI vs. AD:* AUC=0.672, Sn=77%, Sp=62%<br>*AD vs. Con:* AUC=0.804, Sn=87%, Sp=65% | Diagnostic |
| Barthélemy et al., 2020 (56) | CC | SILK | Discovery cohort = 58<br>Validation cohort = 92 | Plasma | p-tau-217, p-tau-181 | Immunopurification (IP)-LC-MS | p-tau-217:<br>AUC (discovery) = 0.99<br>AUC (validation) = 0.92<br>p-tau-181:<br>AUC (discovery) = 0.98<br>AUC (validation) = 0.75 | |
| Doecke et al., 2020 (57) | Longitudinal study (54 months follow-up) | AIBL | Month 18: n = 176<br>Month 36: n = 169<br>Month 54: n = 135 | Plasma | Aβ42/Aβ40 + APOEε4 | ELISA assays | AUC=0.88-0.913<br>AUC(HC)=0.808-0.898 | Diagnostic |
| Eke et al., 2020 (58) | CC | ADNI | N = 358<br>CN (58), MCI (198), AD (102) | Plasma | Aβ42 + CgA + EOT3 + APOEε4 | - | AUC=0.84, Sn=0.82, Sp=0.62, PPV=0.81, NPV=0.64 | Predictive of CSF Aβ42 |
| Ellegaard et al., 2020 (59) | CC | | N = 30<br>AD (10), MCI (10), CN (10) | Plasma | CLEC1B/CCL11 ratio in EVs<br>TGFa/CCL20 ratio in plasma | Proximity extension assay | AUC (CLEC1B/CCL11) = 0.95, 95% CI = 0.86–1, p = 0.001<br>AUC (TGFa/CCL20) = 0.96, 95% CI = 0.88–1, p = 0.001 | Diagnostic |

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| Feinkohl et al., 2020 (60) | CC | | N = 93<br>AD (44), CN (49) | Plasma | Aβ42/Aβ40 | ELISA assays | AUC=0.59, Sn=61.2%, Sp=63.6% | Diagnostic |
| Gao et al., 2020 (61) | CC | | N = 30<br>CN (10), MCI (10), AD (10) | Plasma, Serum | Aβ42/Aβ40 | Nanosheet-based sensor system | *aMCI vs. Con:*<br>AUC=0.83, Sn=70%, Sp=70%<br>*AD vs. Con:*<br>AUC=0.91, Sn=90%, 90%<br>*aMCI vs. AD:*<br>AUC=0.75, Sn=80%, Sp=60% | Diagnostic |
| Janelidze et al., 2020 (62) | CC | BioFINDER, Arizona Study of Aging and Neurodegenerative Disorders/Brain and Body Donation Program | Cohort 1: 182<br>Cohort 2: 344<br>Cohort 3: 63 | Plasma | Aβ42/Aβ40 + pTau181 | MSD, Elecsys fully-automated immunoassays, Simoa | AUC=0.84 (95% CI = 0.79-0.89) | Diagnostic |
| Karikari et al., 2020 (63) | CC | TRIAD, BioFINDER-2, primary care cohort referred from primary care physicians of the Canadian National Health Service | N=1131<br>TRIAD cohort: 226<br>BioFINDER-2 cohort: 763<br>Primary care cohort: 105 | Plasma | p-tau181 | Ultrasensitive blood immunoassay | AUC = 85.3%; 95% CI 81.4–89.2% | Diagnostic, prognosis |

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| | | for specialist care. | | | | | | |
| Palmqvist et al., 2020 (64) | CC | Arizona-based neuropathology cohort, Swedish BioFINDER-2 cohort, Colombian autosomal-dominant AD kindred | N = 1402 | Plasma | p-tau217 | Immunoassay | AUC = 0.89 and 0.96 | Diagnostic |
| Perrotte et al., 2020 (65) | CC | Recruited from the Memory Clinic of Sherbrooke | N = 60 | Plasma exosomes | p-tau181/t-tau ratio | Luminex assay | Control from AD [AUC of 0.823 ($p < 0.05$)<br>MCI from AD: AUC of 0.87 ($p < 0.05$) | Diagnostic, prognosis |
| Nam et al., 2020 (66) | Longitudinal study (4-year follow up) | | N = 76<br>CN (26), MCI (30), AD (20) | Serum, Exosomes | T-tau, p-Tau202, p-tau202/T-tau | ELISA assays and Western blot | *Serum:*<br>AUC (T-tau) = 0.675<br>AUC (p-tau202) = 0.5958<br>AUC (p-tau202/T-tau) = 0.5253<br>*Exosomes:*<br>AUC (T-tau) = 0.6434<br>AUC (p-tau202) = 0.7333<br>AUC (p-tau202/T-tau) = 0.6113 | Prognostic |

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| Sheu et al., 2020 (67) | CC | | N = 86<br>AD (32), CN (54) | Serum | AHI1 | Western blot and ELISA assays | AUC=0.7-0.82 | Diagnostic |
| Stockmann et al., 2020 (68) | Longitudinal study (6 years follow-up) | SCIENCE project and Amsterdam Dementia Cohort | N = 203 | Plasma | Aβ misfolding + Aβ42/Aβ40[a] | Immuno-infrared-sensor technology and SIMOA | AUC (Aβ misfolding) =0.94 (95% CI, 0.86-1.00; 6-year follow-up)<br>AUC (Aβ42/Aβ40) = 0.92 (95% CI, 0.82-1.00)<br>AUC (panel) = 0.99 (95% CI, 0.99-1.00) | Prognostic |
| Teuber-Hanselmann et al., 2020 (69) | Multi-centre trans-sectional | Teuber-Hanselmann | N = 237<br>MCI (21), mild-AD (98), CN (118) | Serum | KLK8 | ELISA assay | AUC(MCI)=0.94, Sn = 52.4%, Sp = 99.2%<br>AUC(AD)=0.83, Sn = 56.1%, Sp = 69.8% | Diagnostic |
| Verberk et al., 2020 (70) | CC | | N = 252<br>SCD, MCI, AD | Plasma | Ab42/Ab40, GFAP, NF-L | | Total (AUC): 0.88 (Sn = 0.82, Sp = 0.86)<br>Nondemented (AUC): 0.84 (Sn = 0.70, Sp = 0.86) | Prediction of amyloid PET status and disease monitoring |
| Wang et al., 2020 (71) | Pilot study, CC | Wang et al. | N = 30<br>MCI (10), AD (10), CN (10) | Plasma | AMPKα1 | ELISA assay | AUC = 0.8 (MCI), 0.74 (AD), 0.77 (MCI + AD)<br>Sn = 88.89% (MCI), 77.78% (AD), 83.33% (MCI + AD)<br>Sp = 70% (MCI, AD) | Diagnostic |
| Westwood et al., 2020 (72) | CC | EMIF-AD catalogue | N = 1866<br>HC, MCI, AD | Plasma | FCN2, CFI, C4, B2M, Cathepsin D, APOE+4, A1AT | Luminex xMAP, ELISA, and Meso Scale Discovery assays | AUC = 0.742, Sn = 0.682, Sp = 0.704 | Diagnostic |
| Youn et al., 2020 (73) | CC | | N = 104<br>AD (52), CN (52) | Plasma | Aβ oligomers | Multimer detection system | Sn=100%, Sp=92.31% | Diagnostic |
| Jia et al., 2020 (74) | Two-stage-sectional study, | | N = 739<br>Discovery stage: AD (28), aMCI (25), | Exosomes | GAP43 + Ng + SNAP-25 | ELISA assays | AUC=0.87-0.89 | Predictive |

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| | longitudinal study | CN (29); Validation stage: AD (73), aMCI (71), CN (72)<br>preclinical AD (160), CN (160)<br>mutation carriers (59), non-mutation carriers (62) |

[a]Age, gender, and the presence of APOEε4 allele were included as covariates

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