**Supplementary table 2.** Reasons for exclusion of full-text articles

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| **First author, publication date**  | **Reason for exclusion** |
| **Suemoto 2011 [1]** | Missing data: CIMT not reported. |
| **Zhong 2012 [2]** | Missing data: CIMT not reported. |
| **Wendell 2012 [3]** | No control group/missing data: CIMT not reported. |
| **Moon 2015 [4]** | No control group. |
| **Mergeani 2015 [5]** | No control group/missing data: CIMT not reported. |
| **Gustavsson 2020 [6]** | Missing data: CIMT not reported. |
| **Urbanova 2014 [7]** | Review. |
| **Gardener 2017 [8]** | Missing data: CIMT not reported. |
| **Oviedo 2018 [9]** | Missing data: CIMT not reported. |
| **Xiang 2017 [10]** | No control group. |
| **Fromm 2013 [11]** | No control group. |
| **Mworozi 2019 [12]** | Missing data: CIMT not reported. |
| **Lin 2020 [13]** | Missing data: CIMT not reported. |
| **Del Brutto 2020 [14]** | Missing data: CIMT not reported. |
| **Silvestriani 2009 [15]** | No control group. |
| **Wang 2016 [16]** | Missing data: CIMT not reported. |
| **Camarda 2018 [17]** | Missing data: CIMT not reported. |
| **Carcaillon 2015 [18]** | Missing data: CIMT not reported. |
| **Komulainen 2007 [19]** | Missing data: CIMT not reported. |
| **Mason 2020 [20]** | Missing data: CIMT not reported. |
| **Johnston 2004 [21]** | Missing data: CIMT not reported. |
| **Weimar 2015 [22]** | Missing data: CIMT not reported. |

CIMT = Carotid intima-media thickness.

**References**

1. Suemoto CK, Nitrini R, Grinberg LT, Ferretti REL, Farfel JM, Leite REP, Menezes PR, Fregni F, Jacob-Filho W, Pasqualucci CA, Brazilian Aging Brain Study Group. Atherosclerosis and Dementia: A Cross-Sectional Study With Pathological Analysis of the Carotid Arteries. Stroke. 2011 Dec;42(12):3614–5.

2. Zhong W, Cruickshanks KJ, Schubert CR, Acher CW, Carlsson CM, Klein BEK, Klein R, Chappell RJ. Carotid atherosclerosis and 10-year changes in cognitive function. Atherosclerosis. 2012 Oct;224(2):506–10.

3. Wendell CR, Waldstein SR, Ferrucci L, O’Brien RJ, Strait JB, Zonderman AB. Carotid atherosclerosis and prospective risk of dementia. Stroke. 2012 Dec;43(12):3319–24.

4. Moon JH, Lim S, Han JW, Kim KM, Choi SH, Park KS, Kim KW, Jang HC. Carotid Intima-Media Thickness Is Associated With the Progression of Cognitive Impairment in Older Adults. Stroke. 2015 Apr;46(4):1024–30.

5. Mergeani AC, Antochi F, Rusu O, Ciobotaru A, Coclitu C, Bajenaru OA. Correlations of Cognitive Impairment with Circadian Blood Pressure Pattern and Intima-Media Thickness in Hypertensive Patients. Maedica (Bucur). 2015 Sep;10(4):325–30.

6. Gustavsson A-M, van Westen D, Stomrud E, Engström G, Nägga K, Hansson O. Midlife Atherosclerosis and Development of Alzheimer or Vascular Dementia. Ann Neurol. 2020 Jan;87(1):52–62.

7. Urbanova B, Tomek A, Mikulik R, Magerova H, Horinek D, Hort J. Neurosonological Examination: A Non-Invasive Approach for the Detection of Cerebrovascular Impairment in AD. Front Behav Neurosci. 2014;8:4.

8. Gardener H, Caunca MR, Dong C, Cheung YK, Elkind MSV, Sacco RL, Rundek T, Wright CB. Ultrasound Markers of Carotid Atherosclerosis and Cognition: The Northern Manhattan Study. Stroke. 2017 Jul;48(7):1855–61.

9. Oviedo DC, Lezcano H, Perez AR, Villarreal AE, Carreira MB, Isaza B, Wesley L, Grajales SA, Fernandez S, Frank A, Britton GB. Vascular biomarkers and ApoE4 expression in mild cognitive impairment and Alzheimer’s disease. AIMS Neurosci. 2018;5(2):148–61.

10. Xiang J. Carotid atherosclerosis promotes the progression of Alzheimer’s disease: A three-year prospective study. Exp Ther Med. 2017 Aug;14(2):1321–6.

11. Fromm A, Lundervold AJ, Moen G, Skulstad S, Thomassen L. A vascular approach to mild amnestic cognitive impairment: a pilot study. Acta Neurol Scand Suppl. 2013;(196):73–6.

12. Mworozi K, Ameda F, Byanyima RK, Nakasujja N. Carotid artery plaque detected on ultrasound is associated with impaired cognitive state in the elderly: A population-based study in Wakiso district, Uganda. J Clin Neurosci. 2019 Oct;68:194–200.

13. Lin H-F, Huang L-C, Chen C-K, Juo S-HH, Chen C-S. Carotid atherosclerosis among middle-aged individuals predicts cognition: A 10-year follow-up study. Atherosclerosis. 2020 Dec;314:27–32.

14. Del Brutto OH, Mera RM, Recalde BY, Del Brutto VJ. Carotid Intima-media Thickness, Cognitive Performance and Cognitive Decline in Stroke-free Middle-aged and Older Adults. The Atahualpa Project. J Stroke Cerebrovasc Dis. 2020 Feb;29(2):104576.

15. Silvestrini M, Gobbi B, Pasqualetti P, Bartolini M, Baruffaldi R, Lanciotti C, Cerqua R, Altamura C, Provinciali L, Vernieri F. Carotid atherosclerosis and cognitive decline in patients with Alzheimer’s disease. Neurobiol Aging. 2009 Aug;30(8):1177–83.

16. Wang A, Chen G, Su Z, Liu X, Yuan X, Jiang R, Cao Y, Chen S, Luo Y, Guo X, Wu S, Zhao X. Carotid intima-media thickness and cognitive function in a middle-aged and older adult community: a cross-sectional study. J Neurol. 2016 Oct;263(10):2097–104.

17. Camarda C, Pipia C, Azzarello D, Battaglini I, Romeo G, Chiodi M, Camarda R. Vascular Risk Factors, Vascular Diseases, and Imaging Findings in a Hospital-based Cohort of Mild Cognitive Impairment Types. Curr Alzheimer Res. 2018;15(7):679–90.

18. Carcaillon L, Plichart M, Zureik M, Rouaud O, Majed B, Ritchie K, Tzourio C, Dartigues J-F, Empana J-P. Carotid plaque as a predictor of dementia in older adults: the Three-City Study. Alzheimers Dement. 2015 Mar;11(3):239–48.

19. Komulainen P, Kivipelto M, Lakka TA, Hassinen M, Helkala E-L, Patja K, Nissinen A, Rauramaa R. Carotid intima-media thickness and cognitive function in elderly women: a population-based study. Neuroepidemiology. 2007;28(4):207–13.

20. Mason JR, Tenenbaum G, Jaime S, Roque N, Maharaj A, Figueroa A. Arterial Stiffness and Cardiorespiratory Fitness Are Associated With Cognitive Function in Older Adults. Behav Med. 2020 Oct 27;1–12.

21. Johnston SC, O’Meara ES, Manolio TA, Lefkowitz D, O’Leary DH, Goldstein S, Carlson MC, Fried LP, Longstreth WT. Cognitive impairment and decline are associated with carotid artery disease in patients without clinically evident cerebrovascular disease. Ann Intern Med. 2004 Feb 17;140(4):237–47.

22. on behalf the Heinz Nixdorf Recall Study Investigative Group, Weimar C, Winkler A, Dlugaj M, Lehmann N, Hennig F, Bauer M, Kröger K, Kälsch H, Mahabadi A-A, Dragano N, Moebus S, Hoffmann B, Jöckel K-H, Erbel R. Ankle-Brachial Index but Neither Intima Media Thickness Nor Coronary Artery Calcification is Associated With Mild Cognitive Impairment. JAD. 2015 Jul 24;47(2):433–42.