

Table S1: Syntax authors' searches in various databases.

| Database       | Search String   | N of Results |
|----------------|---|--------------|
| Scopus         | ALL ( "OBESITY" AND "COGNITIVE DECLINE" AND "DEMENTIA" AND "MILD COGNITIVE IMPAIRMENT" AND "ALZHEIMER'S DISEASE" AND "ARTIFICIAL INTELLIGENCE" AND "MACHINE LEARNING" )   | 52           |
| Pubmed         | ("Obesity"[All Fields] OR "Adiposity"[All Fields]) AND ("Mild cognitive impairment"[All Fields] OR "Cognitive decline"[All Fields] OR "Dementia"[All Fields]) AND ("Artificial intelligence"[All Fields] OR "Machine learning"[All Fields]) | 24           |
| Embase         | ('obesity'/exp OR adiposity) AND ((mild AND cognitive AND 'impairment'/exp OR cognitive) AND 'decline'/exp OR 'dementia'/exp) AND (artificial AND 'intelligence'/exp OR machine) AND 'learning'/exp   | 4            |
| Web of Science | TS=(obesity OR adipose tissue) AND TS=(mild cognitive impairment OR cognitive decline OR dementia) AND TS=(artificial intelligence OR machine learning)   | 25           |
| PsycInfo       | obesity AND Any Field: cognitive decline OR Any Field: dementia AND Abstract: machine learning OR Abstract:   | 94           |

|          |  |   |
|----------|--|---|
|          | artificial intelligence<br>AND Population Group:<br>Human AND Peer-<br>Reviewed Journals only  |   |
| Cochrane | OBESITY in Keyword<br>AND COGNITIVE<br>DECLINE in Keyword<br>OR DEMENTIA in<br>Keyword AND<br>ARTIFICIAL<br>INTELLIGENCE in<br>Keyword AND<br>MACHINE LEARNING<br>in Keyword | 1 |