



## Supplementary Material 2

### **A) QUADAS**

This tool comprises four domains: patient selection (includes description of patient selection and their detailed description), index test (refers to the index test and how it was used and interpreted; i.e. cognitive assessment scales), reference standard (describes the reference standard and how it was conducted and interpreted; i.e. dementia criteria) and flow and timing (refers to the interval and any interventions between the index and the reference standard, and/or the describes patients who did not receive/have the index tests or standard reference). Each domain is assessed in terms of risk of bias, and the first three domains are also assessed in terms of concerns regarding applicability. Signalling questions are included within the tool to help judge the extent of potential risk of bias and concerns regarding applicability. Each domain is rated in terms of 'low risk', 'high risk' or 'unclear'.

### **B) Signalling questions from QUADAS-2**

#### **Risk of bias**

##### Domain 1: Patient Selection

- 1.) Was a consecutive or random sample of patients enrolled?
- 2.) Was a case-control design avoided?
- 3.) Did the study avoid inappropriate exclusions?

##### Domain 2: Index test

- 1.) Were the index test results interpreted without knowledge of the results of the reference standard?
- 2.) If a threshold was used, was it prespecified?

##### Domain 3: Reference standard

- 1.) Is the reference standard likely to correctly classify the target condition?
- 2.) Were the reference standard results interpreted without knowledge of the results of the index test?

##### Domain 4: Flow and timing

- 1.) Was there an appropriate interval between the index test and reference standard?
- 2.) Did all patients receive the same reference standard?
- 3.) Were all patients included in the analysis?

#### **Concerns about applicability**

##### Domain 1: Patient selection

- 1.) Are there concerns that the included patients and setting do not match the review question?

##### Domain 2: Index test

- 1.) Are there concerns that the index test, its conduct, or its interpretation differ from the review question?

##### Domain 3: Reference standard

- 1.) Are there concerns that the target condition as defined by the reference standard does not match the question?

### Supplementary Material 3

*Cut-off scores and corresponding sensitivity and specificity data.*

Study	Cognitive screening tool	Cut-off score	Sensitivity	Specificity
Aguilar-Navarro et al. (2019) [1]	5WT	AD = <16/20 MCI = <18/20	89% 66%	98% 77%
Bezdicek et al. (2020) [2]	MoCA-CZ	PD-MCI versus PD-HC = 25.50/30 PD-MCI versus C= 24.50/30	73% 82%	76% 62%
Chaaya et al. (2016) [3]	A-RUDAS	Dementia =<22/30	83%	85%
Karunaratne et al. (2011) [4]	MoCA-S	24/30	98%	80%
Kaya et al. (2016) [5]	SLUMS-T	AD: 20/30 MCI: 23/30	84% 67%	88% 72%
Lakshminarayanan et al. (2022) [6]	ADAS-Cog	13/70	90%	89%
Manjavong et al. (2021) [7]	RUDAS-Thai	25/30	76%	78%
Nielsen et al. (2019) [8]	RUDAS - <i>clinical setting</i> RUDAS - <i>community setting</i>	<25/30 <22/30	80% -	90% -
Serrano et al. (2020) [9]	MoCA-A	Dementia = 26/30 MCI = 25/30	100% 85%	70% 70%
Statucka et al. (2021) [10]	DRS-2	Anglosphere = <139 International = <141	80% 82%	51% 40%
Torkpoor et al. (2022) [11]	RUDAS-S MMSE-S	<25/30 <23/30	92% 65%	60% 81%
Yoshida et al. (2012) [12]	ACE-R-J	Dementia = 82/83 MCI = 88/89	87% 99%	92% 99%

#### Supplementary Material 4

*Participant characteristics table; further breakdown of education (years) within immigrant population groups.*

<b>Author</b>	<b>Group (n)</b>	<b>Education, y [M(SD)]</b>	<b>Median</b>	<b>Range</b>
Celik et al. (2022) [13]	<b>TR-AD (24)</b>	8.13 (4.11)	7.0	0-16
	<b>TR-IM-AD (21)</b>	7.05 (4.44)	5.0	0-17
	<b>GER-AD (20)</b>	11.00 (4.09)	9.5	8-21
Statucka et al. (2021) [10]	<b>Anglosphere (497)</b>	14.57 (2.89)	Not reported	Not reported
	<b>International (217)</b>	14.72 (3.00)	Not reported	Not reported
Torkpoor et al. (2022) [11]	<b>Native Swedish (91)</b>	11.20 (3.6)	Not reported	6-20
	<b>International (36)</b>	9.20 (4.21)	Not reported	1-17

Anglosphere comprises predominantly English speaking (1<sup>st</sup> language) participants (96.2%) from Canada, UK, Ireland, and the USA; International comprises predominantly non-English speaking participants – in Statucka’s et al (2021) study [10], there were 79.4% international participants, primarily from Asia (47%) and Europe (28%), whereas in Torkpoor’s et al (2022) study [11] they contributed to 28.4% (16.6% from Europe and 11.8% from Africa, Asia, and South America). TR-AD, monolingual, non-immigrant Turkish patients with Alzheimer’s disease; TR-IM-AD, Turkish immigrants with Alzheimer’s disease; GER-AD, monolingual, non-immigrant German patients with Alzheimer’s disease

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