A Retrospective Study on Clinical Assessment of Cognitive Impairment in a Swedish Cohort: Is There Inequality Between Natives and Foreign-Born?

**Supplementary Table 1.** Information on country of origin and years in Sweden for the foreign-born patients.

| Foreign-born patients | Country of origin | Years in Sweden before first appointment at memory clinic |
|-----------------------|-------------------|--------------------------------------------------------|
| 1                     | Bosnia            | 22                                                     |
| 2                     | Denmark           | Missing information                                    |
| 3                     | Finland           | Missing information                                    |
| 4                     | Brazil            | 10                                                     |
| 5                     | Denmark           | 33                                                     |
| 6                     | Chile             | 35                                                     |
| 7                     | Thailand          | Missing information                                    |
| 8                     | Norway            | Missing information                                    |
| 9                     | Poland            | 29                                                     |
| 10                    | Poland            | 30                                                     |
| 11                    | Poland            | 23                                                     |
| 12                    | Iraq              | 8                                                      |
| 13                    | Bosnia            | 24                                                     |
| 14                    | Kosovo            | 26                                                     |
| 15                    | Belarus           | 25                                                     |
| 16                    | Kosovo            | 19                                                     |
| 17                    | Colombia          | 26                                                     |
| 18                    | Thailand          | 18                                                     |
| 19                    | Bosnia            | 25                                                     |
| 20                    | Bosnia            | 23                                                     |
| 21                    | Eritrea           | 35                                                     |
| 22                    | Former Yugoslavia | 55                                                     |
| 23                    | Cameroon          | 1                                                      |
| 24                    | Iran              | 33                                                     |
| 25                    | Kosovo            | 27                                                     |
| 26                    | Taiwan            | 52                                                     |
| 27                    | Lebanon           | 14                                                     |
| 28                    | Iran              | 34                                                     |
| 29                    | Iran              | 30                                                     |
| 30                    | Palestine         | 30                                                     |
| 31                    | Iraq              | Missing information                                    |
| 32                    | Poland            | 50                                                     |
| 33                    | Former Yugoslavia | 22                                                     |
| 34                    | Macedonia         | 47                                                     |
| 35                    | Chile             | 42                                                     |
| 36                    | Denmark           | 53                                                     |
**Supplementary Table 2.** Content and outcome of investigation in the subgroups.

|                               | Native n=91 | Other Scandinavian n=5 | Other European n=15 | Outside Europe n=16 |
|-------------------------------|-------------|-------------------------|---------------------|--------------------|
| Lumbar puncture, n (%)        | 54 (59%)    | 4 (80%)                 | 10 (67%)            | 12 (75%)           |
| Structural imaging, n (%)     | 89 (98%)    | 5 (100%)                | 15 (100%)           | 16 (100%)          |
| Dementia diagnosis, n (%)     | 42 (46%)    | 4 (80%)                 | 9 (60%)             | 8 (50%)            |
| Mean time to diagnosis, days (SD) | 159 (92)   | 178 (36)                | 150 (132)           | 191 (6)            |

Pearson Chi-square test was used on categorical variables, T-test was used on continuous variables. p-value<0.05 was considered statistically significant. No statistically significant differences were observed.
**Supplementary Table 3.** Type of established contact with healthcare and current medication at baseline in the subgroups.

|                                | Native n=91 | Other Scandinavia n=5 | Other European n=15 | Outside Europe n=16 |
|--------------------------------|-------------|------------------------|---------------------|---------------------|
| **Patient initiated contact, n (%)** | 50 (55%)    | 1 (20%)                | 6 (40%)            | 8 (50%)            |
| **Relatives initiated contact, n (%)** | 27 (30%)    | 3 (60%)                | 8 (53%)            | 7 (44%)            |
| **Health care personnel initiated contact, n (%)** | 14 (15%)    | 1 (20%)                | 1 (7%)             | 1 (6%)             |
| **Former contact with psychiatric clinic, n (%)** | 19 (21%)    | 1 (20%)                | 4 (27%)            | 2 (13%)            |
| **Already on neurological or psychiatric medicines at first appointment, n (%)** | 38 (42%)    | 2 (40%)                | 4 (27%)            | 4 (25%)            |

Pearson Chi-square test was used, *p*-value<0.05 was considered statistically significant. No statistically significant differences were observed.
**Supplementary Table 4.** Level of laboratory abnormalities.

|                          | Native n=39 | Foreign-born n=24 | p    |
|--------------------------|-------------|-------------------|------|
| **Level of laboratory abnormalities, mean (min-max)** | 0.74 (0-3)  | 0.33 (0-2)        | 0.057|

Mann-Whitney U test was used, $p$-value<0.05 was considered statistically significant.
**Supplementary Table 5.** Correlation between level of laboratory abnormalities and investigation findings.

|                | Native |   | Foreign-born |   |
|----------------|--------|---|--------------|---|
|                | n      | r_s | p            | n      | r_s | p    |
| MMSE           | 39     | 0.044 | 0.791  | 24     | -0.162 | 0.449 |
| CDT            | 38     | 0.055 | 0.742  | 21     | 0.167  | 0.469 |
| GDS            | 38     | -0.219 | 0.186  | 13     | -0.396 | 0.180 |
| FAQ            | 33     | 0.095 | 0.597  | 23     | 0.123  | 0.576 |
| GCA            | 26     | 0.314 | 0.118  | 19     | 0.134  | 0.584 |
| MTA            | 27     | 0.057 | 0.777  | 19     | 0.232  | 0.339 |
| Fazekas score  | 14     | -0.090 | 0.759  | 11     | 0.577  | 0.063 |

Spearman correlation was used, *p*-value<0.05 was considered statistically significant. MMSE, Mini-Mental State Examination; CDT, Clock Drawing Test; GDS, Geriatric Depression Scale; FAQ, Functional Activities Questionnaire; GCA, Global Cortical Atrophy; MTA, Medial Temporal lobe Atrophy.
Supplementary Table 6. Associations between being foreign-born and laboratory measures being on a level increasing the risk of dementia.

|                | OR     | CI 95%          | p    |
|----------------|--------|-----------------|------|
| TSH            | 0.445  | (0.048 - 4.157) | 0.478|
| Calcium        | 0.573  | (0.107 - 3.059) | 0.515|
| Homocysteine   | 0.405  | (0.119 - 1.382) | 0.149|
| Hemoglobin     | 0.440  | (0.149 - 1.296) | 0.136|

Binary logistic regression was used, p-value<0.05 was considered statistically significant. TSH, thyroid-stimulating hormone.
Supplementary Table 7. Other initiated treatments.

|                                      | Native n=91 | Foreign-born n=36 | p    |
|--------------------------------------|-------------|-------------------|------|
| Other treatment, n                   | 31 (34%)    | 13 (36%)          | 0.859|
| Antidepressants and mood stabilizers | 23          | 10                | 0.849|
| Antipsychotics                       | 3           | 2                 | 0.586|
| Benzodiazepines                      | 6           | 1                 | 0.335|
| Antiepileptics                       | 1           | 1                 | 0.516|
| Other sedatives and anxiolytics      | 4           | 1                 | 0.619|
| Treatment for Parkinson’s disease    | 3           | 0                 | 0.245|

Pearson Chi-square test was used, p-value<0.05 was considered statistically significant.
Supplementary Table 8. Treatment combinations in the two groups.

|                        | Native n=45 | Foreign-born n=15 |
|------------------------|-------------|-------------------|
| AChEIs, n (%)          | 12 (27%)    | 2 (13%)           |
| Memantine, n (%)       | 6 (13%)     | 5 (33%)           |
| AChEIs + Memantine, n (%) | 27 (60%)   | 8 (53%)           |

Pearson Chi-square test was used, $p$-value<0.05 was considered statistically significant. No statistically significant differences were observed.
**Supplementary Table 9.** Initiated treatment for dementia in the subgroups.

|                                | Native n=91 | Other Scandinavian n=5 | Other European n=15 | Outside Europe n=16 |
|--------------------------------|-------------|-------------------------|---------------------|---------------------|
| Treatment for dementia, n      | 45 (49%)    | 4 (80%)                 | 6 (40%)             | 5 (31%)             |
| Time from first appointment to treatment with AChEIs, days. Mean (min-max) | 167 (0-670) | 256 (0-769)            | 434 (250-605)*     | 75 (0-117)          |
| Time from first appointment to treatment with Memantine, days. Mean (min-max) | 293 (0-912) | 404 (174-796)          | 422 (150-677)      | 288 (126-590)       |

Pearson Chi-square test was used on categorical variables, T-test was used on continuous variables. p-value<0.05 was considered statistically significant. No statistically significant differences were observed, except for *p=0.003.
Supplementary Figure 1. Distribution of the foreign-born patients’ origin.
Supplementary Figure 2. Diagnosis for the patients not undergoing lumbar puncture.

AD, Alzheimer’s disease; VaD, vascular dementia; DLB, Lewy body dementia