**eTable 2. Positive and Negative Predictive Values For Single Item Tests**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Item | Percent ScreeningPositive (%) | PPVa | NPVb | Accuracy | AUCc | LRd | LR- |
| All Patients (n=201) |
| What is the day of the week? | 21 | 0.71 (0.55,0.84) | 0.92 (0.87,0.96) | 0.88 | 0.82 | 9.46 | 0.31 |
| Four digits backwards | 56 | 0.31 (0.23,0.41) | 0.92 (0.84,0.97) | 0.58 | 0.67 | 1.72 | 0.32 |
| Months backwards | 42 | 0.42 (0.31,0.53) | 0.94 (0.88,0.98) | 0.72 | 0.76 | 2.7 | 0.24 |
| Normal/MCI Patients (n=145) |
| What is the day of the week? | 10 | 0.64 (0.35,0.87) | 0.96 (0.91,0.99) | 0.93 | 0.8 | 16.84 | 0.37 |
| Four digits backwards | 52 | 0.15 (0.08,0.25) | 0.96 (0.88,0.99) | 0.54 | 0.65 | 1.61 | 0.42 |
| Months backwards | 33 | 0.21 (0.1,0.35) | 0.96 (0.9,0.99) | 0.71 | 0.71 | 2.46 | 0.4 |
| Dementia Patients (n=56) |
| What is the day of the week? | 50 | 0.75 (0.55,0.89) | 0.75 (0.55,0.89) | 0.75 | 0.75 | 3 | 0.33 |
| Four digits backwards | 66 | 0.65 (0.47,0.8) | 0.79 (0.54,0.94) | 0.7 | 0.7 | 1.85 | 0.27 |
| Months backwards | 64 | 0.69 (0.52,0.84) | 0.85 (0.62,0.97) | 0.75 | 0.75 | 2.27 | 0.18 |

a Positive Predictive Value, of individuals with a positive ultra-brief screening test, the proportion who have delirium by the reference standard

b Negative Predictive Value, of individuals with a negative ultra-brief screening test, the proportion who do NOT have delirium by the reference standard

c AUC: Area under the curve

d LR: Likelihood ratio

**eTable 3.** **Positive and Negative Predictive Values For Two Item Tests**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Test Item 1 | Test Item 2 | Percent ScreeningPositive (%) | PPVa | NPVb | Accuracy | AUCc | LRd | LR- |
|  | **All Patients (n=201)** |
| What is the day of the week? | **Months backwards** | 48 | 0.41(0.31,0.51) | 0.97(0.92,0.99) | 0.7 | 0.79 | 2.59 | 0.11 |
|  | **Four digits backwards** | 60 | 0.32(0.24,0.41) | 0.96(0.89,0.99) | 0.58 | 0.71 | 1.8 | 0.15 |
| Four digits backwards | **Months backwards** | 65 | 0.3 (0.22,0.38) | 0.96 (0.88,0.99) | 0.53 | 0.67 | 1.6 | 0.17 |
|  | **Normal/MCI Patients (n=145)** |
| What is the day of the week? | **Months backwards** | 36 | 0.23(0.12,0.36) | 0.98(0.92,1) | 0.7 | 0.77 | 2.74 | 0.21 |
| What is the day of the week? | **Four digits backwards** | 54 | 0.17 (0.09,0.27) | 0.99 (0.92,1) | 0.54 | 0.72 | 1.87 | 0.14 |
| Four digits backwards | **Months backwards** | 61 | 0.15 (0.08,0.24) | 0.98 (0.91,1) | 0.48 | 0.68 | 1.62 | 0.17 |
|  | **Dementia Patients (n=56)** |
| What is the day of the week? | **Months backwards** | 77 | 0.63(0.47,0.77) | 0.92(0.64,1) | 0.7 | 0.7 | 1.69 | 0.08 |
| What is the day of the week? | **Four digits backwards** | 77 | 0.6(0.44,0.75) | 0.85 (0.55,0.98) | 0.66 | 0.66 | 1.53 | 0.18 |
| Four digits backwards | **Months backwards** | 77 | 0.6(0.44,0.75) | 0.85 (0.55,0.98) | 0.66 | 0.66 | 1.53 | 0.18 |

a Positive Predictive Value, of individuals with a positive ultra-brief screening test, the proportion who have delirium by the reference standard

b Negative Predictive Value, of individuals with a negative ultra-brief screening test, the proportion who do NOT have delirium by the reference standard

c AUC: Area under the curve

d LR: Likelihood ratio