**Supplementary materials**
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**Supplementary Table 1- Very late-onset schizophrenia-like psychosis diagnostic codes**

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| ICD-10 codes 1997 onwards | Diagnostic classification system ICD-9 codes 1987-1996 | ICD-8 codes1969-1986 |
| F20.0: Paranoid schizophreniaF20.1: Disorganised schizophreniaF20.2: Catatonic schizophreniaF20.3: Undifferentiated schizophreniaF20.5: Residual schizophreniaF20.8: Other schizophreniaF20.9: Schizophrenia, unspecified F21: Schizotypal disorderF23: Brief psychotic disorderF24: Shared psychotic disorderF25: Schizoaffective disorderF28: Other psychotic disorder not due to a substance or known physiological conditionF29: Unspecified psychosis not due to a substance or known physiological condition | 295A: Schizophrenia, simple type 295B: Schizophrenia, disorganised type295C: Schizophrenia, catatonic type295D: Schizophrenia, paranoid type295E: Acute schizophrenic episode295F: Borderline schizophrenic condition295G: Chronic undifferentiated schizophrenia295H: Schizoaffective type295W: Other specified form of schizophrenia295X: Schizophrenia, unspecified297A: Paranoid state, simple297B: Delusional disorder297C: Paraphrenia297D: Induced psychosis297W: Other specified paranoid conditions297X: Paranoid condition, unspecified298C: Reactive state of confusion298E: Reactive paranoid psychosis298W: Other specified reactive psychosis298X: Reactive psychosis, unspecified | 295.0: Schizophrenia, simple type295.1: Schizophrenia, hebephrenic type295.2: Schizophrenia, catatonic type295.3: Schizophrenia, paranoid type295.4: Acute schizophrenic episode295.5: Latent schizophrenia295.6: Residual schizophrenia295.7: Schizoaffective type295.8: Other specified type of schizophrenia295.9: Unspecified schizophrenia 297.0: Paranoid state, simple297.1: Paranoia297.2: Paraphrenia297.3: Induced psychosis297.8: Other specified paranoid state297.9: Unspecified paranoid state298.2: Reactive confusion298.3: Acute paranoid reaction298.4: Psychogenic paranoid psychosis298.8: Other unspecified reactive psychosis298.9: Unspecified psychosis |

**Supplementary Table 2- Dementia diagnostic codes**

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| ICD-10 codes1997 onwards | Classification systemICD-9 1987-1996 | ICD-8 1969-1986 |
| F00.1: Late onset Alzheimer’s diseaseF00.2: Atypical/mixed Alzheimer’s diseaseF00.9: Unspecified Alzheimer’s diseaseF01: Vascular dementiaF02: Dementia in other diseases classified elsewhereF03: Unspecified dementiaG30: Alzheimer’s disease G31.1: Senile degeneration of brain, not elsewhere classifiedG31.8: Lewy body dementia | 290A: Senile dementia290B: Presenile dementia290E: Multi-infarct dementia290W: Other specified senile dementia290X: Dementia associated with aging, unspecified291C: Alcohol-related dementia294B: Dementia in somatic disease classified elsewhere331A: Presenile and senile Alzheimer’s degeneration331B: Pick’s disease | 290.0: Senile dementia, simple type290.1: Presenile dementia290.2: Senile dementia, depressed or paranoid type290.3: Senile dementia with acute confusional state290.4: Arteriosclerotic dementia290.8: Other senile and presenile organic psychotic conditions290.9: Unspecified senile and presenile organic psychotic conditions |

**Supplementary Table 3- Proportion of full cohort (N=3,077,366) with missing data on disposable income at age 60 or educational attainment, according to other characteristics**

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| --- | --- | --- |
| **Variable** | **Missing, N (%)** |  **χ2 p-value** |
| **Dementia** | 4,028 (2.94%) | p<.001 |
| No dementia | 158,318 (5.52%) |  |
| **VLOSLP** | 1,579 (9.00%) | p<.001 |
| No VLOSLP | 160,767 (5.38%) |  |
| **Sex** |   | p<.001 |
| Men | 92,819 (6.22%) |  |
| Women | 69,527 (4.59%) |  |
| **Familial liability of non-affective psychotic disorder** | 3,375 (4.80%) | p<.001 |
| No familial liability of non-affective psychotic disorder | 158,971 (5.41%) |  |
| **Region of birth** |  |  |
| Sweden | 106,933 (4.05%) | p<.001 |
| Finland | 7,182 (6.13%) |  |
| Other European | 21,486 (15.76%) |  |
| Other Nordic | 10,659 (18.94%) |  |
| Other | 16,086 (28.41%) |  |

**Supplementary Table 4- Assessment of proportional hazards assumption**

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| --- | --- |
| **Variable** | **Schoenfeld residuals test**a |
| **VLOSLP (ref: no VLOSLP)** | **χ2(1)=774.61, p<.001** |
| **Sex** |  |
| Female (ref: male) | χ2(1)=0.99, p=0.32 |
| **Familial liability of non-affective psychotic disorder (ref: none)** | χ2(1)=3.13, p=0.08 |
| **Educational attainment (ref: high school education)** |   |
| Pre-high school education | χ2(1)=0.21, p=0.65 |
| Post-high school education | χ2(1)=0.00, p=0.99 |
| **Disposable income at age 60 (ref: Quartile 4 (highest)** |  |
| Income quartile 3 | χ2(1)=3.34, p=0.07 |
| Income quartile 2 | χ2(1)=1.37, p=0.24 |
| Income quartile 1 (lowest) | χ2(1)=0.01, p=0.94 |
| **Region of birth (ref: Sweden)** |  |
| Finland | χ2(1)=1.18, p=0.28 |
| Other European | χ2(1)=0.08, p=0.78 |
| Other Nordic | χ2(1)=6.17, p=0.01 |
| Other | χ2(1)=0.16, p=0.69 |

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| --- | --- | --- | --- |
| **Variable** | **Comparison groupaHR, 95%CI** | **VLOSLP groupaHR, 95%CI** | **Likelihood ratio test p-value for interaction** |
| **Sex**  |  |  | P<.001 |
| Men  | Ref | Ref |  |
| Women | 1.10 (1.05 – 1.14) | 0.86 (0.79 – 0.92) |  |
| **Familial liability of non-affective psychotic disorder** | P=0.01 |
| No familial liability of psychotic disorder | Ref | Ref |  |
| Familial liability of psychotic disorder | 1.21 (1.09 – 1.35) | 0.94 (0.80 – 1.11) |  |
| **Educational attainment** | P<.001 |
| High school  | Ref | Ref |  |
| Pre-high school | 1.03 (0.99 – 1.08) | 0.80 (0.73 – 0.87) |  |
| Post-high school | 0.93 (0.86 – 0.99) | 0.98 (0.85 – 1.12) |  |

**Supplementary Table 5- Effect modification between very late-onset schizophrenia-like psychosis and sex, familial liability of non-affective psychotic disorder, and educational attainment**

aVLOSLP group, sex, education level, offspring non-affective psychotic disorder, disposable income at age 60, region of birth and matching variable

Supplementary Table 6- Comparison of distributions for baseline survivorship (model fit assessed via Akaike’s Information Criterion)

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| --- | --- |
| **Distribution** | **AICa** |
| Exponential | 106823.9 |
| Weibull | 106817.1 |
| Lognormal | 108391.8 |
| Loglogistic | 106858.9 |
| aAdjusted for: VLOSLP group, sex, education level, offspring non-affective psychotic disorder, disposable income at age 60, region of birth and matching variable. Lower AIC values indicated a better fit to the data |

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**Supplementary Table 7****- Cox regression mortality hazard ratios by very late-onset schizophrenia-like psychosis group**

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| **Variable** | **Mortality HR (95%CI) Adj1** | **Mortality HR(95%CI) Adj2**  |
| **VLOSLP (ref: no VLOSLP)** | 2.83 (2.77 – 2.89) | 2.85 (2.78 – 2.91) |
| **Adj 1:** Matching variable**Adj2:** VLOSLP group, sex, education level, offspring non-affective psychotic disorder, disposable income at age 60, region of birth and matching variable |