**Supplementary Information**

1. **Featured used for the predictions in the evaluated prediction models**

**Table 1: Features used in the evaluated psychosis prediction models**

|  |  |
| --- | --- |
| **Prediction Model** | **Features** |
| Lencz et al. 2006 | verbal memory, positive symptoms (SIPS) |
| Hengartner et al. 2017 | positive symptoms (SIPS), verbal IQ |
| Walder et al. 2013 | social adjustment in childhood (PAS), scholastic adjustment in childhood (PAS), functioning (GF), positive symptoms (SIPS), negative symptoms (SIPS), disorganized symptoms (SIPS) |
| Michel et al. 2014 | Both APS and COGDIS criteria, processing speed (Digit-Symbol test) |
| Malda et al. 2019 | sex, age, GRFD, APS, BLIPS, GAF, SIPS positive subscale, SIPS negative subscale |
| Metzler et al. 2016 | positive symptoms (PANSS), negative symptoms (PANSS), verbal IQ |
| NAPLS (Cannon et al. 2016) | age, first degree relative with psychotic illness, trauma history, global social functioning, undesirable life events, HVLT-R total raw score, BACS symbol coding raw score, sum of rescaled SIPS ratings for unusual thought content (P1) and suspiciousness (P2) |
| *Abbreviations*: APS: Attenuated Positive Symptoms, BACS: Brief Assessment of Cognition in Schizophrenia, BLIPS: Brief Limited Intermittent Symptoms, GAF: Global Assessment of Functioning, GRFD: Genetic Risk and Functional Deterioration, HVLT-R: Hopkins Verbal Learning Test – Revised, PANSS: Positive and Negative Symptoms Scale, PAS: Premorbid Adjustment Scale, SIPS: Structured Interview of Psychosis-Risk Syndromes |

1. **Social and Role Functioning Scale**

(according to: Cornblatt BA, Auther AM, Niendam T, Smith CW, Zinberg J, Bearden CE, Cannon TD. Preliminary findings for two new measures of social and role functioning in the prodromal phase of schizophrenia. Schizophr Bull. 2007 May;33(3):688-702. doi: 10.1093/schbul/sbm029. Epub 2007 Apr 17. PMID: 17440198; PMCID: PMC2526147)

|  |
| --- |
| **Social Functioning Scale** |
| **Score** | **Meaning** |
| 10 | Superior social/interpersonal functioning |
| 9 | Above average social/interpersonal functioning |
| 8 | Good social/interpersonal functioning |
| 7 | Mild problems in social/interpersonal functioning |
| 6 | Moderate impairments in social/interpersonal functioning |
| 5 | Serious impairment in social/interpersonal functioning |
| 4 | Major impairment in social and interpersonal functioning |
| 3 | Marginal ability to function socially |
| 2 | Inability to function socially |
| 1 | Extreme social isolation |

|  |
| --- |
| **Role Functioning Scale** |
| **Score** | **Meaning** |
| 10 | Superior role functioning |
| 9 | Above average role functioning |
| 8 | Good role functioning |
| 7 | Mild problems in role functioning |
| 6 | Moderate impairments in role functioning |
| 5 | Serious impairment in role functioning |
| 4 | Major impairment in role functioning |
| 3 | Marginal ability to function |
| 2 | Inability to function |
| 1 | Extreme role dysfunction |

1. **Performance measures used in the study**

True positive rate (TPR) = (True Positives) / (True Positives + False Negatives)

True negative rate (TNR) = (True Negatives) / (True Negatives + False Positives)

Positive predictive value (PPV) = (True Positives) / (True Positives + False Positives)

Negative predictive value (NPV) = (True Negatives) / True Negatives + False Negatives)

Accuracy (ACC) = (True Positives + True Negatives) / (True Positives + True Negatives + False Positives + False Negatives)

Balanced Accuracy (BAC) = (True Positive Rate + True Negative Rate) / 2