**Supplementary Information 2.** Power analysis for multiple logistic regressions

We have run a power analysis before the multiple logistic regressions to check whether we had recruited enough participants to include in the model the 6 predictors selected with the bivariate regression analyses, with sufficient power.

The power analysis was run with G\*Power 3 (Faul *et al.* 2007). We assume that the event rate (having a cognitive deficit) was 0.127. This rate was the prevalence found in our sample for the cognitive deficit with the validated classification criteria. We wanted to have a power of 0.8 to test for a significant odds ratio of 1.68, which corresponds to small effect size (Chen *et al.* 2010). The α-error was set to 0.05. The influence of covariates was taken into account with a correction factor depending on R². R² is the multiple correlation coefficient relating a specific covariate to the remaining covariates. To estimate this R², we run multiple regressions between any selected predictor (Bipolar Disorder type 1: BD1; history of psychosis; state subscale of the State-Trait Anxiety Inventory, form Y-A: SAI-Y-A; or antipsychotics) and all other selected predictors. The regressions were linear when the specific predictor was a continuous variable. The regressions were logistic when the specific predictor was a factor with two modalities. In this case, the R² was, in fact, a pseudo-R² and was estimated with the Nagelkerke procedure (Nagelkerke 1991). The R² were computed separately on the 50 imputed datasets.

The mean R² was 0.471 (SD 0.015) for BD1, 0.455 (SD 0.014) for history of psychosis; 0.024 (SD 0.002) for SAI-Y-A, and 0.047 (SD 0.008) for antipsychotics.

We included the biggest R² in the power analysis, which was the one obtained for the regression of BD1 on all other covariates, as the biggest R² would lead to the highest sample size. If N is the sample size considering the specific regressor alone, then the sample size in a setting with additional covariates is: N’ = N/(1 – R²).

With these parameters, we obtained a total sample size of 395, which was below the 476 participants actually recruited in this study.

**References**

**Chen H, Cohen P, Chen S** (2010). How big is a big odds ratio? Interpreting the magnitudes of odds ratios in epidemiological studies. *Communications in Statistics—Simulation and Computation®* **39**, 860–864.

**Faul F, Erdfelder E, Lang A-G, Buchner A** (2007). G\* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods* **39**, 175–191.

**Nagelkerke NJ** (1991). A note on a general definition of the coefficient of determination. *Biometrika* **78**, 691–692.