

Supplemental Table S1

Table S1: Visit schedule

Assessments	V0	V1*	V2 (week 6)**	V3 (week 12)***	V4 (week 24)****
Duration of visit	2 hours	10 min	1 hour	1 hour	1.5 hour
Psychiatric assessment and MINI	+				
Patient Characteristics	Age, gender, demographics, diet, smoking, drugs of abuse, alcohol, comorbidity, family history		Smoking, drugs, alcohol		Smoking, drugs, alcohol
Medication	Medication history (including inefficacy and side effects), treatment duration, dosages, current medication, family history of medication	Check current medication	Check current medication	Check current medication	Check current medication
Clinical Modulators	Long duration of illness episode, higher baseline severity, moderate to severe suicidal ideation, high level of anxiety	Re-assess clinical modulators such as suicidal ideation and anxiety levels	Re-assess clinical modulators such as suicidal ideation and anxiety levels	Re-assess clinical modulators such as suicidal ideation and anxiety levels	Re-assess clinical modulators such as suicidal ideation and anxiety levels
Somatic Measurements	Hip-waist circumference, height, weight, blood pressure, pulse, ECG		Hip-waist circumference, weight, blood pressure, pulse, ECG	Hip-waist circumference, weight, blood pressure, pulse	Hip-waist circumference, weight, blood pressure, pulse
Blood measurements	Genotyping, clinical chemistry, Therapeutic drug monitoring (TDM)		Clinical chemistry, Therapeutic drug monitoring (TDM)		

Questionnaires	SIGH-D, SIGH-A or PANSS (depending on diagnosis), FIBSER, UKU, EQ-5D-5L, FAST, RAS-DS		SIGH-D, SIGH-A or PANSS (depending on diagnosis), FIBSER, UKU, EQ-5D-5L, FAST, RAS-DS	SIGH-D, SIGH-A or PANSS (depending on diagnosis), FIBSER, UKU, EQ-5D-5L, FAST, RAS-DS	SIGH-D, SIGH-A or PANSS (depending on diagnosis), FIBSER, UKU, EQ-5D-5L, FAST, RAS-DS
IT data	Behapp app for passive monitoring: throughout the duration of the trial period.				

Note *max. four weeks after baseline. The estimated window for the follow up visits and the telephone call is $\pm$ **2

days, *** $\pm$ 5 days, **** $\pm$ 7 days, always in relation to visit V1 during which randomisation takes place.

randomisation visit (V1). Two weeks after V1, a brief phone call will be carried out to evaluate initial response to treatment and motivate the patient to continue taking the medication.

Supplemental Table S2

Table S2: Behapp as an integral part of the new PSY-PGx model of care

	
ICT Solution	Behapp
Type	Mobile App
Website	https://www.behapp.com/
Available languages	Google provided languages
Purpose	Data collection through passive monitoring of patients via app for patients
Functionalities/ Specifications	Smartphone application for assessment of typical and abnormal human behavioural phenotypes in their natural environment.
Innovation	A passive behavioural monitoring tool from which data has been successfully collected in a wide variety of brain disorders, including depression, schizophrenia, and Alzheimer's Disease.
Use in PSY-PGx	Endpoint measures will be used to develop an implementation strategy of pharmacogenetics-based personalised medicine in psychiatry at an international level.

Technology Readiness Level (TRL)	Currently: TRL 7 [57] Proof of concept data has been collected and analysed as part of IMI PRISM project. Initiated path forward to informally discuss a digital biomarker using this technology with the EMA innovative task force (ITF)
Previous tests	App has been applied in a variety of disease cohorts (Schizophrenia, Depression, and Alzheimer's disease) in a variety of national and EU funded projects (e.g., IMI PRISM, IMI ROADMAP, SMARD).