PSY-PGx

Do you experience difficulties with your current antidepressant or antipsychotic medication?

Then you might be a candidate for PSY-PGx!

- About 50-70% of patients with a mental illness experience side effects or lack of efficacy of their medications
- Certain genetic variants influence medication reactions including side effects
- Knowing a patient‘s genetic profile might help to fine-tune medication dose prescription

How fast does your body process medication?

Poor Metabolizer	Medication stays longer in the body	Increased risk for side effects
Intermediate Metabolizer	Medication stays longer in the body	Increased risk for side effects
Normal Metabolizer	Medication stays in the body for the average duration	
Ultrarapid Metabolizer	Medication stays shorter in the body	Increased risk for lower drug efficacy

- PSY-PGx is an international project funded by the European Union
- **Aim: To compare genetically informed medication prescription with prescription as usual**
- **Participants will receive adjusted dosing based on their individual genetic profile for:**
  - sertraline or escitalopram for patients with mood or anxiety disorders
  - aripiprazole or risperidone for patients with psychotic disorders

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 945151.

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PSY-PGx

Start → **End**

Week 0 | Week 2 | Week 6 | Week 12 | Week 24

Do you want to participate?

- Are you **18 - 64 years old**?
- Do you **own a smartphone that the study app can be installed** on? (smartphone released after 2015)
- Are you currently dealing with **one or more of the following disorders**?
  - Major depressive disorder, bipolar disorder (currently depressive)?
  - panic disorder, generalised anxiety disorder?
  - Schizophrenia, schizoaffective disorder?
- Did you **have to change medication for your condition** either due to side effects or the medication not having the desired effect **in the past**?
- Do you take **no more than 4 different kinds of psychiatric medication**?

How does the study work?

- Duration: **24 weeks, 5 total visits**
- Data gathered: **blood sample, ECG, current symptoms, medication, habits, wellbeing and side effects.**
- Two weeks after your first appointment, you will be **randomly assigned** to either receive **regular treatment** or your **dose** will be **adjusted according to your genetic profile**.
- For the study duration the scientific **BeHapp-App** will gather background information about your everyday life (e.g. location, daily usage).
- Get **information about your metabolizer status** at the end of the study!

Our DNA stores a blueprint of our body. Individual variations in DNA explain a part of the differences between people, including response to medication. In this study, we are mainly interested in variations in two genes that encode proteins found in the liver, named *CYP2C19* and *CYP2D6*.

What happens with your data?

The data we gather during this study will be fully protected according to the most recent **GDPR** and **ethical standards.**

Your data will be labelled with a **random code** so that your **identity is protected at all steps** of the process.

Interested? Contact: *Dr. Thomas G. Schulze: SchulzeT@upstate.edu*

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