

# Licensing Opportunity

## COMPANION TEST FOR SCHIZO – HIGH RISK

Schizophrenia is a debilitating psychiatric disorder involving a functional deficit in parvalbumin interneurons. Onset of the symptoms typically occurs in young adulthood, with ca. 1% of the world population affected. Neither a diagnostic kit, nor any biomarker associated classification of recommended therapy regimens exists in clinical practice; presently, diagnosis relies mainly on the assessment of clinical symptoms which tends to be subjective.

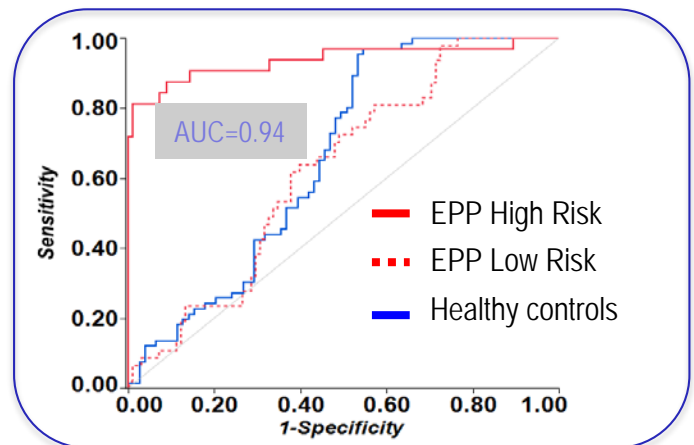
The invention of a specific biomarker assay represents a significant advancement for the diagnosis of high-risk subjects in the early phase of psychosis. It opens a path for the development of novel therapeutic schemes in order to treat selected subjects presenting initial symptoms efficiently in early stages of the disease. Preventive and therapeutic use of mitochondria-targeted antioxidants is proposed in this context.

### DESCRIPTION

The inventors describe that the combined detection in blood samples of specific exosomal biomarkers, allows to discriminate between patients with low and high risk of developing psychosis/ schizophrenia symptoms and major cognitive impairment (manuscript in preparation).

### STAGE OF DEVELOPMENT

Quantitative analytical data of plasma composition on clinical samples from patients with various degrees of psychotic symptoms were evaluated with the newly developed, laboratory-based test kit. Patients were recruited from the Treatment and Early Intervention in Psychosis Program (TIPP, Lausanne University Hospital- CHUV, Switzerland). With a rationale based on the known involvement of redox processes in mitochondrial diseases, clinical studies with FDA approved ubiquinone compounds are proposed



True positives vs. probability of false alarm. The diagnostic performance of the specific exosomal biomarkers methodology

### ADVANTAGES

Superior signal differentiation for reliable identification of high-risk psychotic disorders patients. Unprecedented reliability in patient selection, enabling cost-efficient focus on responders for successful clinical studies with mitochondria targeted ubiquinone compounds or novel drug candidates designed for optimal delivery and efficacy. With an initial focus on schizophrenia and already approved active agents, a clinical proof-of-concept study is rapidly within reach.

### INTELLECTUAL PROPERTY

Patent application EP19218841.5

“Methods for classification and treatment of psychotic disorder subjects”

Priority date: December 20<sup>th</sup>, 2019

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### COLLABORATION TYPE

PACTT offers to grant exclusive or non-exclusive license to industrial partners able to develop and commercialize the technology.

### REFERENCE

IDF 26/19