

MEETING ABSTRACT

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Personalized medicine in common mental disorders

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Scientific objectives

Mental disorders affect up to 40 % of all individuals living in Europe at least once a life time. Serious mental disorders with chronic or relapsing course like major depression bipolar disorder and schizophrenia are disabling and often disintegrating disorders. The early identification of subjects being at risk for serious mental disorders holds the promise of early intervention and better long-term outcomes. However, still reliable early indicators are largely missing to date. Like in dementia research major research initiatives need to be developed to address those urgent issues.

Technological approaches

New MRI imaging technique, genotyping, gene methylation analyses, metabolom analyses, validated questionnaires for the assessment of psychosocial risk factors.

Results interpretation

Advanced statistical modeling of brain imaging data, support vector machine approaches, systems integration of OMICS data; data mining approaches for risk marker identification.

Outlook and expert recommendations

The identification of peripheral risk indicators of severe mental diseases is probably limited to rare but highly penetrative genetic variants. Possibly gene-methylation patterns that emerge in the light of abuse and traumatization be constitute another source of valuable information. The non-invasive MRI imaging technologies might be very promising but still time consuming and expensive. Especially functional MRI studies are only feasible in specialist centers. The most promising approach

seems to create a set of specific markers throughout the different levels of information to integrate biological, psychosocial and structural information on each subject.

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