

<b>Project title:</b> A biological signature for the early differential diagnosis of psychosis: unveiling the differences between mood disorders and schizophrenia with multimodal machine learning techniques	
<b>Project ID:</b> PNRR-MCNT2-2023-12378015	
<b>CUP:</b> C83C24000190007	
<b>Description:</b> (1500 caratteri spazi inclusi)	
<p>Schizophrenia and mood disorders, as major depressive disorder and bipolar disorder, are among the most disabling diseases and pose important challenges for the differential diagnosis due to their possible overlapping symptomatology. The scientific literature supports the presence of a similar underlying genetic vulnerability for these disorders, shaped by interaction with environmental experiences. Among them, early-life adverse events are commonly reported by psychiatric patients and are associated to the disease-related brain abnormalities. On the other hand, early-life adverse experiences have been consistently associated to increased inflammation in psychiatric patients. However imaging, inflammatory, and genetic profiles of psychiatric subgroups have not been integrated in the clinical practice so far, due to the lack of information of their predicting value. In recent years, a growing body of computational techniques, including machine learning, has been rapidly implemented to address these issues.</p> <p>This project, funded by the Italian Ministry of Health under the PNRR program (M6/C2_CALL 2023; Project code: PNRR-MCNT2-2023-12378015), aims to develop new machine learning algorithms to integrate genetic, neuroimaging, inflammatory, and environmental data from a unique cohort of 1850 patients and 1000 controls recruited in 4 different Italian centers to predict the differential diagnosis between mood disorders and schizophrenia.</p>	
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<b>IRCCS Role Coordinator/ Partner:</b> Partner	
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<b>Website:</b> <a href="https://clinicaltrials.gov/study/NCT06515522">https://clinicaltrials.gov/study/NCT06515522</a>	