## ECNP Targeted Expert Meetings (TEMs) 27-28 August 2010, Amsterdam, The Netherlands

## Report on the TEM Psychotic Disorders and Antipsychotics Shitij Kapur, United Kingdom, coordinator

The last decade has seen an explosion in new information in three areas related to psychotic disorders and antipsychotics: genetics, cognition and early intervention. The purpose of this TEM was to take stock of these developments and identify the real advances and imminent challenges.

Patrick Sullivan opened with a lecture on genetics of schizophrenia and highlighted that while the previous decade had focussed on many case-control studies – with the emerging data from the Genome-Wide Association Studies and the findings of the new and replicable 'copy number variants' would likely over-write the findings from these earlier case-control studies. Dan Rujescu presented some of the latest findings with CNV related identifiable genes that can be plausibly linked to neurobiology, while Florence Thibaut exemplified potential translational opportunities based on genetic findings.

The section on cognition discussed the emerging preclinical, clinical and commercial interest in this field. Terry Goldberg opened by reviewing the history of cognition in schizophrenia, but also the blind alleys and the confounded results from inadequate designs. He communicated the impression that most current atypical antipsychotics had cognitive-enhancing effects. Dwight Dickinson showed how the vast array of schizophrenia deficits could be conceptualised as pointing to a major single underlying 'latent variable' and showed how it was becoming possible to link these to the emerging genetics. Daniel Umbricht showed evidence of electrophysiological deficits and discussed how these might be biomarkers for early drug development. While the genetics and imaging discussions highlighted the significant new knowledge and sophistication of technology, it was also acknowledged that both areas were not as yet ready for immediate clinical application.

Finally, it was in the area of early intervention that the meeting acknowledged true clinical advances. Philip McGuire provided evidence on the predictive power of the prodrome concept and the biological validation of the concept by demonstration of distinctive brain dysfunction. Peter Falkai demonstrated evidence that non-somatic interventions (exercise) were powerful modifiers and Merete Nordentoft demonstrated how large-scale intervention was possible and led to enduring changes even after the intervention was over.

The presentations were followed by active discussions and with the impression that while genetics and cognition demonstrated potential, early intervention and prodromal studies were changing care on the ground.