

general population.<sup>3</sup> Little is known though about the contribution of the PRS in the risk prediction in children at genetic risk.

Our group and others have shown that the risk trajectory of high-risk children (HR) born to an affected parent can be characterized by their risk endophenotypes, i.e. specific cognitive deficits and psychotic-like or mood-like experiences in childhood that flag the neurodevelopmental origin of the illness. Children at risk accumulate these risk endophenotypes along their developmental trajectory and this aggregation is a predictor of later transition to illness.<sup>4,5</sup>

We hypothesized that since the PRS is a reflection of the genomic liability to illness, it would consequently relate to risk endophenotypes and their aggregation in children at risk. Our objectives were to evaluate i) the power of PRS to discriminate children at risk from healthy controls and, ii) the association of SZ and BP PRS to early risk endophenotypes in these children.

**Methods:** The sample comprised 70 HR from the Eastern Quebec Kindred Study of multigenerational families densely affected by SZ and BD and 894 healthy controls from the CARTaGENE project. Whole genome SNP genotyping was performed from blood samples. Calculation of PRS was made according to our previous report.<sup>1</sup> All HR were characterized using 4 established risk indicators<sup>4</sup>: cognitive impairments, psychotic-like experiences, childhood non-psychotic Axis 1 DSM diagnoses and episodes of poor functioning. Stratification of the HR by the presence of childhood trauma was also performed.

**Results:** PRS distinguished HR from healthy controls ( $p < .05$ ). Significant associations of SZ PRS and risk endophenotypes were detected for psychotic-like experiences (relative risk  $RR=1.4$ ,  $p=.034$ ) and, when stratifying for trauma, for the speed of processing cognitive domain ( $p=.049$ ). Importantly, PRS was significantly higher in HR who aggregated psychotic-like experiences and axis 1 diagnoses ( $RR=3$ ,  $p=.01$ ), and a trend was detected with the aggregation of cognitive deficits, psychotic-like experiences and axis 1 diagnoses ( $p=.08$ ).

**Discussion:** PRS were associated with individual risk endophenotypes and with the aggregation of risk endophenotypes in children born to an affected parent. These results call for further study on the exact contribution to the childhood risk status of the genomic susceptibility indexed by PRS and the combination of risk endophenotypes. Considering that the clinically high-risk (CHR) status can be defined as a late phase of risk,<sup>6</sup> the accumulation of risk indicators in childhood, including PRS and risk endophenotypes, document this early life period as the optimal timing for early intervention approaches.

#### References:

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### F32. DIFFERENCES BETWEEN YOUTH AT CLINICAL HIGH-RISK FOR PSYCHOSIS WHO DO NOT TRANSITION TO PSYCHOSIS: THE NORTH AMERICAN PRODROME LONGITUDINAL STUDY (NAPLS-2)

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**Background:** In the clinical high risk (CHR) for psychosis literature, typically, the focus is on determining the risk of conversion to psychosis. However, between 70% and 85% of youth who meet CHR criteria do not develop psychosis during the follow-up period of the study in which they participate. The aim of this study is to focus on CHR youth who did not transition to psychosis and to determine whether there are differences amongst them.

**Methods:** The North American Prodrome Longitudinal Study (NAPLS-2) is an 8-site prospective, longitudinal study including 764 help-seeking youth, age 12–35, meeting criteria for a psychosis risk syndrome based on the Structured Interview for Psychosis-risk Syndromes (SIPS), and 279 healthy controls (HC). For this analysis, only youth who did not make a transition to psychosis and completed 2 years of follow-up ( $n=278$ , 154 males, 124 females; mean age 18.8) were included. At the 24-month final assessment, the sample was divided into 3 groups: 1) those in remission, determined by scores  $\leq 2$  on all 5 attenuated psychotic symptoms on the Scale of Psychosis-risk Symptoms (SOPS); 2) symptomatic, determined by still having a rating of 3–5 on any one of the 5 attenuated psychotic symptoms on the SOPS; 3) prodromal progression, determined by continuing to meet the Criteria of Psychosis-risk Syndromes (COPS). The groups were compared at baseline and at 24-month follow-up on: age, gender, the presence of a current and lifetime psychiatric diagnosis, and social and role functioning. The use of antipsychotic medication was examined across all assessments (baseline, 6-, 12-, 18- & 24 months) using Generalized Linear Models to examine differences among the 3 groups.

**Results:** Among the participants, 110 (39.57%) were in-remission, 93 (33.45%) symptomatic, and 75 (26.98%) prodromal progression. At baseline there were no significant differences in age, gender, social and role functioning, or SCID diagnoses except on current PTSD ( $p=.001$ ) with most cases in the prodromal progression group, and on current anxiety disorder ( $p \leq .0001$ ) with most cases in the symptomatic group. The prodromal progression had significantly higher ratings on unusual thought content compared to the in-remission group and significantly higher ratings on suspiciousness than the symptomatic group. At 24-month follow-up there were significant differences in negative symptoms ( $p \leq .0001$ ) between prodromal progression ( $M=9.19$ ), symptomatic ( $M=8.84$ ), and in remission ( $M=5.99$ ) groups; and social functioning ( $p \leq .005$ ;  $M=6.56$ ,  $M=6.68$ ,  $M=7.20$  respectively). Although the in-remission group had the highest ratings on social functioning these were significantly lower in social ( $M=7.20$ ) and role ( $M=6.68$ ) functioning than HC ( $M=8.73$ ,  $M=8.62$  respectively). The groups did not differ on their use of antipsychotics over the course of their 2 years in the study.

**Discussion:** There were very few differences on baseline measures amongst the different two-year outcome groups. At 2 years, even though those in remission had improved social and role functioning relative to the other 2 groups, they still had lower social and role functioning than HC.

### F33. MATERNAL AND PATERNAL CANNABIS USE DURING PREGNANCY AND RISK OF PSYCHOTIC SYMPTOMS IN THE OFFSPRING

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**Background:** Cannabis use has repeatedly been associated with psychotic symptoms, with persistent risks beyond the direct effects of exogenous cannabinoids. However, it remains unknown whether cannabis use during