***Title:*** **Increased impulsivity as a vulnerability marker for bipolar disorder: evidence from self-report and experimental measures in two high-risk populations**

*Background:* this interesting article focuses on the clinical and behavioral components of impulsivity in individuals at psychometric and genetic risk for impulsivity. The main finding is that both groups display elevated BIS and cognitive scores compared to their matched control groups. This suggests that these factors may be markers of vulnerability for BD. The topic is of primary relevance for the development of screening and prevention strategies targeting individuals who are at risk of developing BD. The following minor revisions are recommended:

Page 4, line 11: I would suggest that the authors mention what kind of errors and what kind of task was used to measure these errors (approx. line 11)

Page 8: did the 1567 participant complete an online version of the HPS? Or were they recruited at different study centers?

*Methods:* CGT task: the authors chose delay aversion because it disentangles impulsivity and risk taking. Could the authors explain why they assume that risk taking doesn’t have components of impulsivity? Did they explore other CGT variables such as quality of decision making, risk tasking and deliberation time?

SST: did the authors focus on reaction times or did they explore the number of errors too?

*Results:* could the authors comment (if relevant) on coefficients of correlations between HPS, BIS and cognitive scores in each group of participants? Were there age differences across groups and was age included or considered to be a potential covariate? Do the authors have measures of anxiety or depression or other important clinical scores that could provide additional information on the sample? This could be added in Table 1.

Page 14, second paragraph: the author end this paragraph with “this is in line with a study in BD patients…”. I would recommend that they add 1-2 sentences providing more details or critical appraisal to facilitate the understanding of their interpretation of the CGT findings.

Page 15: 1 or more references are in my opinion needed in the first paragraph (anywhere before line 10).

Discussion: The authors could also comment on 1. Why HPS scores differ so much between genetically and psychometrically at risk individuals 2. Would age/education/IQ differences make a difference in terms of risk taking and BIS?

Table 1: please provide \* or # to indicate significance. For instance, they are clear differences in HPS scores across groups. Additionally, if possible, a boxplot or graph representing the differences between groups would make the authors’ argument even stronger.