Author's response to reviews

Title: Patient characteristics associated with treatment initiation among paediatric patients with Attention-Deficit/Hyperactivity Disorder symptoms in a naturalistic setting in Central Europe and East Asia

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Version: 4 Date: 23 September 2014

Author's response to reviews: see over
Dear Editor-in-chief,

Re “Patient characteristics associated with treatment initiation among paediatric patients with Attention-Deficit/Hyperactivity Disorder symptoms in a naturalistic setting in Central Europe and East Asia” by Jihyung Hong et al

We thank the journal for the opportunity to improve our paper and hereby resubmit a revised version incorporating suggestions made by a reviewer. Our responses to a reviewer are followed in a next section.

Many thanks for your time and consideration.

Yours sincerely,
Jihyung Hong
Response to Reviewer 1’s comments

Reviewer’s report:
My recommendation that remains outstanding is in regard to table 3. It is important that a common set of the focal factors considered in the model are presented rather than solely those that meet statistical significance. Particularly as these findings are presented by region and at the moment there is no way to determine comparability between the regions for many of the factors considered. If there are factors which may a priori be specified as control factors rather than the focus of the analysis then these may be footnoted.

Presentation as a landscape table including a common set of factor definitions and odds ratio, confidence interval and p value for All, and each of the regions as columns would be a feasible and recommended presentation.

In these analyses it is important to also present the p value for the test of interaction illustrating whether there is statistical evidence that the odds ratios differ within regions so that these effects may be identified rather than those that could be explained by random variability in the estimates between regions. These analyses should also be commented on in the text where there is discussion of regional differences in the factors associated with treatment initiation.

We have now presented both significant and non-significant factors for the whole sample as well as for each region in Table 3.

As recommended, we have also presented the p-values for the interactions between each factor and region (in the last column in Table 3) from the models that included each specific factor, region, and their interaction term. These have been commented in the text (pages 10, 13 and 15). However, some readers could be confused with the interpretations of the p-values of these interaction terms. It is possible that the readers could wrongly interpret the p-values of >0.05 as the inappropriateness of subgroup analyses. We have thus added some cautionary notes as well in the text (page 10).

“The interactions between each factor and region were also examined to check whether the behaviour of the factors in treatment initiation, statistically significantly, differs by region. Each interaction model included region, each specific factor, and their interaction term. It should however be noted that the statistical significance of these interaction terms could be more meaningfully interpreted when the factors exhibit different directions of associations with treatment initiation in the regional subgroup analyses. In this case, the p-values of the interaction terms can indicate whether the different associations observed between regions are indeed statistically significant. Otherwise, their interpretations could be less straightforward. For instance, their interaction terms could appear to be non-significant when the behaviour of the factors in treatment initiation is similar between regions but the characteristics of the factors themselves still differ by region” [page 10: stat section]

“Notably, of these variables, being male and parental psychological distress exhibited different directions of odds ratios for treatment initiation in these regional subgroup analyses, and their interactions with region appeared to be statistically significant (0.034 for being male and <0.001 for parental psychological distress).” [page 13: result section]

“Although this variable could, in part, reflect the level of clinical severity of their affected child, it is not clear why this relationship was not observed in East Asia. In fact, parental psychological distress was inversely associated with treatment initiation in East Asia, although the association was not statistically significant (OR=0.64; 95% CI 0.38 – 1.09; p=0.103). The interaction between region and parental psychological distress, however, still appeared to be statistically significant (p<0.001).” [page 15: discussion section]