Olanzapine has poorer efficacy than risperidone for the treatment of the negative symptoms of schizophrenia

Sir,

Suresh Kumar et al. randomized patients with schizophrenia ($n = 71$) to receive either olanzapine (mean modal dose, 14.4 mg/day) or risperidone (mean modal dose, 5.5 mg/day) for 1 year. They reported that olanzapine was associated with significantly greater improvements in negative symptom ratings at all follow-up visits, that is, at months 3, 6, 9, and 12.

It appears that the authors have completely misinterpreted the findings that they present in Table 3 in their paper. Although negative symptom ratings were numerically
lower in the olanzapine group at each follow-up visit, the absolute change from baseline, which is what the authors studied in their statistical analysis, was actually greater in the risperidone group. This happened because the risperidone group had numerically more severe negative symptoms to begin with. The correct conclusion, therefore, is that olanzapine has poorer efficacy than risperidone for the treatment of the negative symptoms of schizophrenia, which is completely the opposite of what the authors stated in their title, abstract, results, discussion, and conclusions.

It is important that this error is recognized and recorded; else, it is likely that the paper will be highly cited to support a preference for olanzapine over risperidone for the attenuation of negative symptoms in the long-term management of schizophrenia.

The above notwithstanding, we do not believe that the new findings should be interpreted to support a preference for risperidone over olanzapine. This is because the negative symptom analysis was a part of the examination of many different outcome measures, and the statistical significance could have merely been a Type 1 error arising from the many statistical tests performed. In research, primary and secondary outcomes should be stated a priori, and greater emphasis should be laid on the former than on the latter. There was no indication whatsoever that the authors intended to study negative symptoms as their primary outcome.

As a final note, findings that are statistically significant are not necessarily clinically significant. In this study, the very small absolute differences for both negative symptoms and global ratings are an example in point.

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Conflicts of interest
There are no conflicts of interest.

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