## Determination of Premenstrual Symptom Exacerbations

TO THE EDITOR: In the April 2011 issue of the *Journal*, Dias et al. (1) classify bipolar women as having premenstrual exacerbation of symptoms based on retrospective questioning. The poor reliability of self-reported premenstrual mood change has been known for decades (2), and prospective measurement has become the standard (3).

Two unpublished analyses cast doubt on the validity of retrospective reports of premenstrual exacerbation in women with major depressive disorder. Kornstein et al. (4) analyzed data from a large multicenter treatment study of chronic depression in which women were asked, "Are you aware of regularly occurring worsening of your mood related to your menstrual cycle?" A subset of 97 women maintained a daily log of mood symptoms over one menstrual cycle prior to treatment. There was no association between the two types of reports: 27% of women with and 26% of women with no self-reported premenstrual exacerbation had prospectively confirmed premenstrual exacerbation on daily ratings. Harvey et al. (5) examined women in clinical trials of antidepressant efficacy. Premenstrual syndrome was reported by 18 of 27 women. When visit-to-visit changes in HAM-D scores were examined as a function of phase of the menstrual cycle at the time of rating, premenstrual exacerbation was apparent in 26% of the women. There was no association (r<sup>2</sup>=-0.002) between selfreported premenstrual syndrome and premenstrual exacerbation score.

It is challenging to collect the daily mood data that are considered the gold standard in studies of premenstrual mood change, leaving self-report as the measure clinicians have tended to use (4). Although retrospectively reported premenstrual exacerbation has been associated with a more symptomatic and relapse-prone phenotype in bipolar women (1) and longer duration of depressive episodes in women with major depression (4), it is not a valid measure of symptom worsening near the onset of menses.

Dias et al. (1) may be able to make an important contribution to the literature if the Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD) study called for the recording of dates of menses throughout the study, as was done in the Sequenced Treatment Alternatives to Relieve Depression study (STAR\*D). Only access to dates of menses will permit the placement of observed acute exacerbation of symptoms during the treatment of women with antidepressants (5) into the context of the menstrual cycle.

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Dr. Harvey has received an unrestricted educational grant from Pfizer. Dr. Kornstein has received research support from Boehringer-Ingelheim, Bristol-Myers Squibb, Eli Lilly, Forest Laboratories, NIMH, Novartis, Otsuka, Pfizer, Rexah, and Wyeth; is on the advisory board or has received honoraria from Bristol-Myers Squibb, Dey Pharma, Eli Lilly, PGxHealth, Pfizer, Rexahn, and Wyeth; and has received book royalties from Guilford Press.

*This letter (doi: 10.1176/appi.ajp.2011.11040605) was accepted for publication in June 2011.* 

## **Response to Harvey and Kornstein Letter**

To THE EDITOR: We thank Drs. Harvey and Kornstein for their comments about the approach to determining the presence of premenstrual mood changes.

We concur that prospective mood charting is the most valid way to establish the occurrence of premenstrual mood symptoms and that, in the absence of this approach, some women with affective disorders will misattribute changes in their mood that are unrelated to the menstrual cycle as premenstrual mood exacerbation. Studies of the validity of retrospective reporting have not been conducted in women with bipolar disorder who endorse premenstrual exacerbation of their underlying mood disorder. However, it is likely that some women with bipolar disorder who retrospectively endorse premenstrual mood exacerbation may not show premenstrual mood exacerbation when their moods are monitored prospectively. This is consistent with what has been observed in women with unipolar depression. Treatments targeting premenstrual mood exacerbation in women with affective illness should utilize prospective mood rating before initiating interventions directed at premenstrual mood exacerbation, especially when the intervention is circumscribed within the luteal phase of the menstrual cycle (e.g., intermittent dosing of a selective serotonin reuptake inhibitor) or involves a hormonal contraceptive therapy.

Data used to support the determination of premenstrual mood exacerbation in our Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD) analysis were limited to retrospective reporting of the pattern of mood exacerbation. While prospective mood rating was not available to more definitively establish the premenstrual mood exacerbation pattern, our classification was further supported by other correlative data. These supporting data included a strong association between premenstrual mood exacerbation status and the number of mood and physical symptoms endorsed on a separate itemized list. In addition, women classified as having premenstrual mood exacerbation were not more likely than those without it to be in the luteal phase when they completed the questionnaire describing their symptoms. This latter finding is important because it argues against a bias that