patients with panic disorder with no, mild, or moderate agoraphobic avoidance, cognitive therapy was superior to applied relaxation not only on measures of panic but also on measures of agoraphobic avoidance. In contrast, the LT study of exposure treatment found no specific effect of situational exposure on panic at *any* level of agoraphobic avoidance.

Corrections. Two statements in Marks *et al's* letters require correction. In their first letter (Marks *et al*, 1994) they state that situational exposure "eliminated 96% of panics" in the LT study. This is misleading as the 96% figure seems to come from an assessment carried out 35 weeks after the end of exposure therapy (43 week assessment) and based on only 61% of the initial sample. At the end of exposure therapy (8 weeks) the group receiving exposure and placebo showed a more modest 63% reduction in panic frequency. When commenting on our exclusion of severe agoraphobics in the current letter, Marks *et al* state that "most LT cases (were) severe". This is also misleading as their use of the term "severe" is different and less stringent than ours. They appear to be referring to the DSM–III category of "extensive phobic avoidance" whereas we were referring to the DSM–III–R category of "severe agoraphobia". Many cases meeting criteria for the former would be categorised in DSM–III–R as "moderate agoraphobia" not as "severe agoraphobia" and would therefore have been included in our study.

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Home-based versus in/out-patient care for people with serious mental illness

SIR: Marks *et al* (*BJP*, August 1994, 165, 179–194) mention in their discussion that "outcome was rather better with home care than in/out-patient care", whereas in the abstract they report that "outcome was superior with home-based care". There appears to be some uncertainty about the interpretation of the results, and we would like to offer some suggestions that we feel would facilitate interpretation of this important and carefully conducted study.

Analyses. The authors have identified 19 endpoints in the trial (number of admissions, days in hospital, GAS, BPRS, PSEtotal, PSEdah, PSEbso, PSEnsr, PSEnsn, patient's satisfaction, relative's satisfaction, SAS global, SAS social, SAS extended family, SAS parents, SAS daily living skills, SAS economic, SAS work and SAS marital). As no primary, pre-specified outcome has been identified, all 19 are of equal importance from the statistical point of view. For each outcome, separate significance testing is carried out at each of the three measurement points, so that the reader is presented with 55 tests in the main article, followed by another 255 in the appendix. P-values at the 10% significance level and over are reported "non-significant", and P-values <0.1 are apparently considered significant. This approach is problematic. First of all, presenting multiple P-values can only lead to a subjective conclusion, because it is impossible to decide how many of the 55 tests in the main article need to be "significant" in order for the trial to show superiority of home-based treatment over standard care. Fifteen (27%) of the tests were significant at the 5% level, but this still leaves 40 measurements where the confidence intervals include values that indicate that home-based care actually makes patients worse. Secondly, multiple conventional significance testing can seriously inflate the overall Type I error rate (false positive results), and the study protocol should specify in advance how the problem of multiple testing is going to be dealt with. One way to control P-values when all endpoints are analysed on equal terms is the Bonferroni correction. However, the Bonferroni correction becomes too conservative if the endpoints are correlated (as is clearly the case in this trial), and the modification proposed by Simes (1986) is more appropriate, as realistically the Type I error becomes <α (Pocock *et al*, 1987a). Applying the modified procedure by Simes to the data of Marks *et al* (only taking into account that there are 19 endpoints and ignoring the fact that further separate tests were carried out at each measurement point, and in five subgroups), reveals that of the 15 results significant at the 5% level, only 8 survive (15% of the total of 55). Thirdly, and most importantly, the plethora of significance testing is