

In observing the uneven quality of reporting on methods for allocation and blinding, as has occurred in publications of clinical trials, D.C. Bauer (8) an editor of a journal, mandated that the CONSORT guidelines for reporting clinical trials be used in his journal. The CONSORT guidelines (9) provide a reasonable list of parameters for including in publications relating to clinical trials.

Where side effects specifically associated with the study drug are known by the subjects or by clinical trial personnel, the presentation of these side effects can result in unintentional unblinding. Masking of these side effects can be undertaken, before the study, by using a placebo that causes the same type of side effects. As discussed in Chapter 7, an active placebo is a placebo with properties that mimic side effects such as dry mouth, or sweating, that might otherwise reveal that a subject is in the study drug group or placebo group (10,11). Another approach for preventing unblinding caused by known side effects of the study drug is shown by the following example. In a clinical trial on spironolactone, which produces the adverse drug reaction of

feminization (of male subjects), the investigators maintained blinding by mandating that this, and other, adverse events be represented by letters of the alphabet (12).

Unintentional unblinding can also occur where the study drug requires continual dose adjustments during the course of the trial. Thus, physicians who are compelled to adjust the doses of some subjects, but not of other subjects, may be able to guess that the adjusted subjects are in the study drug arm, and that nonadjusted subjects are in the placebo arm. This type of unblinding can be prevented by requiring some of the placebo subjects to have adjustments of placebo (13,14,15).

II. LOGISTICS OF KEEPING TRACK OF STUDY SUBJECTS

An excerpt from a Clinical Study Protocol on an anticancer drug provides concrete guidance on how to keep track of study subjects. Proper accounting of each study subjects was ensured by way of a number that identifies the

⁸Bauer DC. Randomized trial reporting in general endocrine journals: the good, the bad, and the ugly. *J. Clin. Endocrinol. Metab.* 2008;93:3733–4.

⁹Schulz KF, Altman DG, Moher D; CONSORT Group. CONSORT 2010 statement: updated guidelines for reporting parallel group randomised trials. *PLoS Med.* 2010;7(3):e1000251.

¹⁰Schulz KF, Chalmers I, Altman DG. The landscape and lexicon of blinding in randomized trials. *Ann. Intern. Med.* 2002;136:254–9.

¹¹Moncrieff J, Wessely S, Hardy R. Active placebos versus antidepressants for depression. *Cochrane database of systematic reviews*; 2004, Issue 1. Art. No.: CD003012. <http://dx.doi.org/10.1002/14651858.CD003012.pub2>.

¹²DeMets DL, Furbert CD, Friedman LM. *Data monitoring in clinical trials*. New York: Springer; 2006. p. 150–1.

¹³Hertzberg V, Chimowitz M, Lynn M, et al. Use of dose modification schedules is effective for blinding trials of warfarin: evidence from the WASID study. *Clin. Trials* 2008;5:25–30.

¹⁴Coumadin Aspirin Reinfarction Study (CARS) Investigators. Randomised double-blind trial of fixed low-dose warfarin with aspirin after myocardial infarction. *Lancet* 2008;350:389–96.

¹⁵Friedman LM, Furbert CD, DeMets DL. *Fundamentals of clinical trials*. 4th ed. New York: Springer; 2010. p. 123.