ucts, is desperately needed. It is clear that the market is demand driven and shows no signs of decreasing. It is time to accept the fact that even effective dehorning programs, combined with successful community- or government-based antipoaching controls such as those in Namibia, cannot eliminate the demand for rhino horn products. Thus, a sustainable market based on dehorning programs (with direct sales to Asian markets, eliminating middlemen) may provide the only long-term solution for the conservation of the world's remaining rhinos. Until such a solution can be found, the international conservation community must continue to support programs, such as those in Namibia, that include dehorning combined with antipoaching patrols and community-based conservation campaigns.

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Clinical Trials: Subgroup Analyses

We refer to Rachel Nowak's Special News Report article of 10 June, "Problems in clinical trials go far beyond misconduct" (p. 1538). While we agree with a number of points in this article, in particular, the need for more education of clinicians in the conduct and evaluation of clinical trials, we would like to set the record straight regarding the analysis of AIDS Clinical Trial Group (ACTG) 155 by Margaret Fischl and her collaborators. Nowak's article implies that the ACTG-155 team scanned through many different subgroups looking for a treatment difference. In fact, the only subgroups analyzed were those formed by pretreatment CD4 cell count and the three stratification factors (human immunodeficiency virus status, time on prior zidovudine, and *Pneumocystis carinii pneumonia* prophylaxis). The subgroup analysis by pretreatment CD4 cell count was planned and was first specified by the study chairs in June 1992, before the study's results were revealed to them in March 1993. Analysis by subgroups formed by the stratification factors was also planned before June 1992 and is common practice in clinical trials. Because of documented associations between pretreatment CD4 cell counts and treatment outcome, for example, the follow-up study of ACTG 019, which showed that the extent of benefit of zidovudine compared with that of a placebo depended on the pretreatment CD4 cell count, it is difficult to imagine interpreting the results of ACTG 155 without taking the pretreatment CD4 cell count into account. A trend analysis of ACTG 155 looked at the association between clinical progression and pretreatment CD4 cell count and showed lower progression rates for combination therapy relative to those for zidovudine therapy as the pretreatment CD4 cell count increased ($p = 0.027$), which is consistent with other published data.

The ACTG-155 team did not overstate the results of the trial, clearly indicating in presentations that no overall differences were noted among the three treatment groups. Data analyses were reviewed at multiple levels within the ACTG before public presentations. A major focus of the protest, as expressed to Fischl after her talk, was the slow progress toward effective therapy. We are well aware that there are some investigators who adopt the position that all subgroup analyses should be avoided, regardless of previous plans and corroborating information. In the view of many, including ourselves, researchers should maintain a conservative approach in the evaluation of their study. But they also need to thoroughly evaluate their data in light of the evolving literature, clearly specifying what was done and which findings should be viewed as exploratory.

We were disappointed that Nowak makes little distinction in her article between valid scientific debate and misconduct. This problem was compounded by the article's provocative text and title. Our study appears to have been selected for public criticism without an adequate determination of whether the criticism was valid.

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Response: My article did not simply imply that the Fischl team scanned treatment subgroups looking for statistical differences; it stated explicitly that, according to Stanley, the subgroup analyses were planned ahead of time. But it also clearly stated that some biostatisticians and AIDS activists were critical of the team's subgroup analyses and of the team's highlighting the results of one subgroup analysis at a presentation at last year's ninth international AIDS conference in Berlin. The article also explained that, rather than being completely out of bounds, subgroup analysis is acceptable under certain constraints; for example, to be valid the number of subgroups analyzed must be few, and the subgroups must be defined before the study begins. Even then, the evidential (as against the exploratory) value of such analyses is debatable.

I disagree with the charge that my article did not adequately distinguish "between valid scientific debate and misconduct." On the contrary, the article clearly differentiated between erroneous and merely debatable clinical trial design and analysis. Perhaps the confusion arises because I also reported the opinion of at least one clinical trialist—namely, Richard Peto of Oxford University—that making errors in clinical trial design and analysis through ignorance is tantamount to scientific misconduct because of the devastating consequences wrong results can have for public health.

—***Rachel Nowak***

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A Coincidental Move

As a not-young University of California (UC) faculty member, I found Marcia Barinaga's News & Comment article "Early retirement program cuts deep into UC faculties" (20 May, p. 1074) to give, on the whole, a fair portrayal of the difficulties and opportunities created at UC by the voluntary early retirement incentive program (VERIP). However, Barinaga's account links the decision of Nobel-laureate chemist Yuan T. Lee to leave Berkeley to head Academia Sinica in Taiwan with a quote from a UC San Diego administrator that top faculty would be enticed to "cash in on retirement and leave and go to some other institution." This characterization does not apply at all to Yuan Lee, who is a national hero in Taiwan. Taiwan's efforts to recruit him and his own commitment to return someday to lead his native land's endeavors in science and technology have been well known among Chinese-Americans for many years. When his predecessor, Ta-You Wu, decided to retire, it was natural that Yuan Lee should replace him as president of Academia Sinica. The timing of these events in Taiwan with the commencement of VERIP-3 at UC was a coincidence.

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