Correspondence

Reply to Colebunders and Caluwaerts

TO THE EDITOR—We thank Colebunders and Caluwaerts [1] for their interest in the recent analysis by The Antiretroviral Therapy in Low-Income Countries Collaboration of the International epidemiological Databases to Evaluate AIDS (IeDEA) and The ART Cohort Collaboration [2]. In this collaborative study, we compared the incidence rates of tuberculosis (TB) among patients receiving HAART in low-income and high-income countries. Colebunders and Caluwaerts ask whether the analysis included patients who were receiving treatment for TB at the start of HAART and argue that, if so, this might have biased the incidence rates of TB downward in lower-income countries and might have distorted the incidence-rate ratios during the first year of HAART.

As Caluwaerts and Colebunders [1] suspected, data on treatment for TB at the time of initiation of HAART were not available for all the cohorts from low-income countries. But note that, as we pointed out in our report [2], the main objective of the analysis was not to estimate absolute rates but was to compare relative changes in rates of TB during the first year of HAART in low-income and high-income settings. The incidence rates obtained in such an analysis of data from 15 different sites were a weighted average of site-specific rates, influenced by variation in background rates and diagnostic procedures, and are not applicable to any specific setting.

We repeated analyses for 9 low-income cohorts with data on previous treatment for TB, including 2050 patients who were not receiving treatment when HAART was started. Among these patients, the incidence of TB in the first year of HAART was 8.8 cases per 100 person-years (95% CI, 7.5-10.3 cases per 100 person-years), which is slightly higher than the 7.4 cases per 100 person-years (95% CI, 6.6-8.4 cases per 100 person-years) reported in the previously published analysis [2]. As predicted by Caluwaerts and Colebunders [1], this difference was more pronounced during the first 3 months of treatment: 13.9 cases per 100 person-years (95% CI, 11.0-17.6 cases per 100 person-years) in this analysis, compared with 10.7 cases per 100 person-years (95% CI, 8.9-12.9 cases per 100 person-years) in the original analysis. The decrease in the incidence rate during the first year of HAART was, however, similar for the 2 analyses. Compared with the rate for months 1–3, the rate ratio was 0.65 (95% CI, 0.44-0.96) for months 4-6 and was 0.39 (95% CI, 0.27-0.58) for months 7-12. The corresponding ratios from the original analysis were 0.70 (95% CI, 0.52-0.94) and 0.48 (95% CI, 0.36-0.64), respectively. Interestingly, the incidence-rate ratios from this analysis are somewhat closer to those reported for the high-income cohorts in the original analysis [2]. The sensitivity analysis prompted by the letter from Caluwaerts and Colebunders thus strengthens our conclusions that the reduction in rates of TB during the first year of HAART is similar in lowincome and high-income settings.

Acknowledgments

Potential conflicts of interest. M.W.G.B. and M.E.: no conflicts.

Martin W. G. Brinkhof and Matthias Egger

Department of Social and Preventive Medicine, University of Bern, Bern, Switzerland

References

- Colebunders R, Caluwaerts S. Determination of the incidence of tuberculosis in low-income countries. Clin Infect Dis 2008; 46:1482 (in this issue).
- 2. The Antiretroviral Therapy in Low-Income

Countries Collaboration of the International epidemiological Databases to Evaluate AIDS (IeDEA) and The ART Cohort Collaboration. Tuberculosis after initiation of antiretroviral therapy in low-income and high-income countries. Clin Infect Dis **2007**; 45:1518–21.

Reprints or correspondence: Dr. Martin W. G. Brinkhof, Dept. of Social and Preventive Medicine, University of Bern, Finkenhubelweg 11, CH-3012 Bern, Switzerland (brinkhof @ispm.unibe.ch).

Clinical Infectious Diseases 2008; 46:1482–3

© 2008 by the Infectious Diseases Society of America. All rights reserved. 1058-4838/2008/4609-0032\$15.00 DOI: 10.1086/587183