a full 14 days. Sequential therapy was less effective than has been reported in other trials, but a careful appraisal of the data shows that TT-14 was not remarkably better than ST; the number need to treat in favour of TT-14 was 18, with a wide 95% CI (9–175) suggesting uncertainty in the true estimate of effect.

In conclusion, caution should be exercised in the interpretation of these interesting but heterogeneous data. Carefully designed trials with documentation of resistance in individual patients and with a sufficiently large sample size from each country are necessary before any regimen can be determined as optimal in an individual Latin American country.

NV has been a consultant to Takeda, AstraZeneca, and Iromwood. LG and Dv declare that they have no conflicts of interest.

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In their multisite study, Robert Greenberg and colleagues attempted to identify a reliably effective treatment for Helicobacter pylori for use in Latin America. Each study site used locally available drugs and the regimens all contained clarithromycin or clarithromycin-metronidazole, despite the unacceptably low success of triple therapies elsewhere and a high expected prevalence of metronidazole resistance. The success of treatments for infectious diseases is mainly related to the absence of antimicrobial resistance and is predictable if one knows the pattern of resistance and the effect of resistance on the regimens tested.

Greenberg and colleagues report that traditional triple therapy was the best of the three clarithromycin-containing regimens tested. However, they did not identify a reliably effective regimen overall and even their best regimen provided unacceptably low treatment results at four of the seven sites (figure). The absence of susceptibility data also prevented Greenberg and colleagues from showing why their results were so poor. Although they believed that they could not afford to do susceptibility testing, they now admit that they could not afford not to.

Overall, the study was well done but poorly conceived, confirming the old adage: "there is no right way to do the wrong thing". Although Greenberg and colleagues’ conclusion that "standard 14-day triple-drug therapy is preferable to 5-day concomitant or 10-day sequential four-drug regimens as empirical therapy for H pylori infection in diverse Latin American populations" is literally true, we believe that it is irresponsible since, with one exception, the results were poor or unacceptably low.

That recommendation also ignored current data from Latin America on increasingly high rates of clarithromycin resistance. There was nothing useful to be gained by identifying the "best" of generally unacceptable therapies, and such "spin" on a failed study could potentially harm patients if followed blindly.

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Authors’ reply

Claire Slater and Alexander Ford note that all three treatments compared in our trial achieved eradication probabilities similar to those reported from previous community-based programmes of Helicobacter pylori screening and treatment and that the less-expensive concomitant regimen might be preferable to the more effective, but...