Attainment and Maintenance of Platelet Inhibition Through Standard Dosing of Abciximab in Patients Undergoing Percutaneous Coronary Intervention

To the Editor:

My colleagues and I previously evaluated the degree of platelet inhibition in patients having percutaneous coronary intervention who were given standard, weight-adjusted abciximab and who were monitored by the point-of-care rapid platelet function assay.1,2 The degree of platelet inhibition was assessed from blood samples obtained at baseline (before abciximab) and at 10 minutes and 1, 8, and 24 hours after abciximab bolus administration.2,3 Less than 80% platelet inhibition was observed after abciximab bolus in 6.3% and 14.1% of patients at 10 minutes and 8 hours, respectively.

These findings are entirely consistent with the observations of Steinhubl et al.,3 and they attest to both the diversity of abciximab-induced platelet inhibition, particularly during the period of intravenous infusion, and the reproducibility of the rapid platelet function assay testing technique across investigative centers. In addition, my group found that the degree of platelet inhibition provided by standard-dose abciximab was similar in diabetics and nondiabetics, men and women, smokers and nonsmokers, and across clinical syndromes (unstable angina versus stable angina versus recent myocardial infarction). This cumulative experience enhances the validity of Steinhubl et al’s report3 and expands the potential utility of this technique.

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Response

We would like to acknowledge the important work of Dr Kereiakes and his group in the evaluation of the rapid platelet function assay1; their article was published after the submission of our manuscript.2 As Dr Kereiakes points out, their results mirrored ours in finding that there is substantial interpatient variability in response to standard abciximab dosing, especially during the infusion period, as measured by the rapid platelet function assay. This variability does not seem to be predictable on the basis of any patient, clinical, or hematologic parameters. The clinical significance of this variability is being assessed in the GOLD (Assessing Ultegra [AU]) study, which was recently completed.

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