We agree with them that maximal ADP-induced platelet aggregation was quite high in our recent double-blind randomized study in which we compared the antiplatelet effects of a 150 mg daily clopidogrel maintenance dose. Although, light transmission aggregometry (LTA) is the gold standard to evaluate platelet function in response to agonists such as ADP, it is a poorly standardized method which makes it nearly impossible to compare absolute values obtained in different laboratories. Importantly, during the period of this double-blind randomized study, LTA was uniformly performed on a Chrono-log aggregometer as described in the methods section. Therefore, we believe that we describe an existing dose-response phenomenon. This is supported by the data that we obtained with the VerifyNow™ P2Y12 assay. These data also show that the level of platelet aggregation is significantly lower in patients treated with 150 mg per day than in those treated with 75 mg per day. Moreover, at least three other studies have shown that the antiplatelet effects of a 150 mg daily maintenance dose exceed those of a 75 mg daily maintenance dose. 3, 5, 8 Zhang and Balavenkatesh suggest that the sample size calculation may not be valid since values for platelet aggregation were higher than expected. Interestingly, the relative difference in ADP (5 μM)-induced platelet aggregation 30 days after percutaneous coronary intervention (31 %) amounted quite accurately to what we had assumed. 1A. Recalculating the sample size with the absolute values obtained actually increases the power of the study. Moreover, we believe that the sample size of our present study is far too small to allow conclusions on subgroups of patients (e.g., those who are females and those who have diabetes and peripheral artery disease). It should be mentioned, though, that just recently, Angiolillo et al. 1 showed that an increase of the daily maintenance dose of clopidogrel from 75 to 150 mg per day also results in a significant reduction of the level of platelet aggregation in diabetics with a poor response to clopidogrel.

References

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