evaluated pre-treatment with ticagrelor. So the only randomized trial to evaluate pre-treatment is the ACCOAST study, which showed harm and no benefit to the patients with pre-treatment.

Finally, despite the caveats of the CURE and CREDO trials, which favor pretreatment without really testing the hypothesis, when pooling the data from ACCOAST, CURE, and CREDO trials (N > 18,000), there was no decrease in mortality or ischemic events, but a significant 45% excess of major bleeding with thienopyridine pre-treatment (3). Both clopidogrel and pre-treatment are strategies of the past (4). However, we encourage Dr. Lozano to perform the study that he suggests in his conclusion.

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REFERENCES

1. Windecker S, Kolh P, Alfonso F, et al. 2014 ESC/EACTS guidelines on myocardial revascularization: the Task Force on Myocardial Revascularization of the European Society of Cardiology (ESC) and the European Association for Cardio-Thoracic Surgery (EACTS) developed with the special contribution of the European Association of Percutaneous Cardiovascular Interventions (EAPCI). Eur Heart J 2014;35:2541–619.

2. Collet JP, Silvain J, Bellemain-Appaix A, Montalescot G. Pretreatment with P2Y12 inhibitors in non-ST-segment-elevation acute coronary syndrome: an outdated and harmful strategy. Circulation 2014;130:1904–14.

3. Bellemain-Appaix A, Kerneis M, O'Connor SA, et al. Reappraisal of thienopyridine pretreatment in patients with non-ST elevation acute coronary syndrome: a systematic review and meta-analysis. BMJ 2014;349:g6269.

4. Rade JJ. Routine thienopyridine pretreatment for acute coronary syndrome without ST elevation: it is time to rethink an ageing strategy. BMJ 2014;349:g6282.

Not All NSTEMIs Are Created Equal

We commend the authors of the recently published ACCOAST-PCI (A Comparison of Prasugrel at the Time of Percutaneous Coronary Intervention or as Pre-treatment At the Time of Diagnosis in Patients with Non-ST-Elevation Myocardial Infarction) study (1) for their efforts. Despite being the largest randomized trial of pre-treatment with prasugrel in non-ST-segment elevation myocardial infarction (NSTEMI) patients, we have reservations that we detail as follows.

Risk stratification for adverse cardiac events is a key component of treating NSTEMI patients. In this trial, ~57% of patients presented with ischemic ST-segment changes and ~23% with a GRACE (Global Registry of Acute Coronary Events) score of more than 140. It would be interesting to know the event rates in these patients stratified according to whether they were pre-treated with prasugrel or not. Ischemic events are higher in patients with ischemic ST-segment changes and/or high GRACE score, which may warrant more aggressive therapy to improve outcomes (2).

The event rates for stent thrombosis were extremely low, <0.5%. Because the trial was not powered to show the differences between both strategies, no real conclusions can be drawn about stent thrombosis and the association with pre-treatment with prasugrel other than numerically there were fewer events in the pre-treatment group.

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REFERENCES

1. Montalescot G, Collet JP, Ecollan P, et al., for the ACCOAST Investigators. Effect of prasugrel pre-treatment strategy in patients undergoing percutaneous coronary intervention for NSTEMI: the ACCOAST-PCI study. J Am Coll Cardiol 2014;64:2563–71.

2. Amsterdam EA, Wenger NK, Brindis RG, et al. 2014 AHA/ACC Guideline For The Management Of Patients with Non-ST-Elevation Acute Coronary Syndromes: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol 2014;64:e139–228.

REPLY: Not All NSTEMIs Are Created Equal

To answer the comments of Dr. Nairooz and colleagues, we have performed additional analyses of the percutaneous coronary intervention subgroup that need to be examined with caution considering their post-hoc nature. Although it is possible to evaluate the individual risk of a patient presenting with a non-ST-segment elevation myocardial infarction according to well-known factors or scores, making the decision to pre-treat or not, according to this evaluation does not seem appropriate. The GRACE

(Global Registry of Acute Coronary Events) score, defined as high when more than 110, was not associated with lower rates of the primary endpoint at 30 days in patients who were pre-treated with prasugrel (15.66%) versus those who were not (14.08%, p value for interaction = 0.26). This was also confirmed when a GRACE score of more than 140 was considered (15.54 pre-treatment vs. 16.85 no pretreatment, p for interaction = 0.56). The analyses were also consistent according to the presence of ischemic abnormalities on the electrocardiogram (p for interaction = 0.74) or for the presence of ST-segment depression more than 1 mm (p for interaction = 0.97). The results were also consistent at 7 days for all these subgroups.

Stent thrombosis rates were indeed very low and not different between the 2 groups. These results are in line with the TRITON (Trial to Assess Improvement in Therapeutic Outcomes by Optimizing Platelet Inhibition with Prasugrel) results and confirm that prasugrel is a very effective drug to prevent stent thrombosis when administered in the catheterization laboratory. The current data on stent thrombosis support further the conclusions that prasugrel does not need to be administered before coronary angiography in NSTEMI patients.

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