

Reply to the Letter to the Editor for the Article Entitled “Effects of Door-to-Balloon Times on Outcomes in Taiwanese Patients Receiving Primary Percutaneous Coronary Intervention: A Report of Taiwan Acute Coronary Syndrome Full Spectrum Registry” Published in the Journal of Acta Cardiologica Sinica in 2015 (2015;31:215-225)

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The article entitled “Effects of Door-to-Balloon Times on Outcomes in Taiwanese Patients Receiving Primary Percutaneous Coronary Intervention: A Report of Taiwan Acute Coronary Syndrome Full Spectrum Registry” was published in the Journal of Acta Cardiologica Sinica in early 2015.¹ This is the first large-scale (> 1000 patients) domestic report which investigated whether or not increasingly lower door-to-balloon (DTB) time correspondingly improves clinical outcomes. One expert(s) wrote a Letter to the Editor and questioned whether the significant relationship between 1-year major adverse cardiac events and DTB time < 45 minutes was statistically adjusted by use of drug-eluting stent (DES). The letter also referenced our previous study to reinforce that the DES-treated group had fewer cardiovascular events as compared to the BMS (bare-metal stent)-treated group.² In fact, we selected all variables with a statistical trend or significance ($p < 0.15$), as listed in Ta-

ble 1 and 2, including stent type, for univariate analysis. The variable of stent type did not reach a statistical significance using univariate analysis. Importantly, it is necessary to highlight here that such statistical processing remains insufficient to exclude the potential effects of the different stent types on cardiovascular outcome.

In addition, the expert(s) shared data about a 5-year cohort study involving 951 patients with ST-segment elevation myocardial infarction (STEMI) showing that DTB time was strongly associated with annual mortality (1.001-1.004; $p < 0.001$). They suggest that DTB time is an important prognostic factor for annual mortality. Of course we will unquestionably review the entire available domestic data. On the other hand, the article concludes that DTB time is not a good determinant for 1-year cardiovascular outcome. It is consistent with the fact that current evidence remains conflicting about the association between mortality rate and DTB time.^{3,4} We believe that the impact of DTB time on clinical outcome, especially on long-term outcome, is very complicated due to numerous confounders. Irrespective of the impact of DTB time on long-term outcome, we have emphasized in our study that a D2B time must be aggressively shortened to minimize myocardial damage based upon the belief that “time is muscle” in STEMI patients. In other words, coronary interventionalists should expedite the process of revascularizing the infarct-related coronary artery without delay to most efficaciously

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manage patients with STEMI.

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