

**The strategic use of perfusion balloon**

[Purpose] The perfusion balloon (PB) device guarantees distal flow during balloon inflation, and its use was revived during 2008 in Japan. Although the package insert indicates that PB should be used for bail out use (BO), the device's design is attractive for strategic use (S).

[Methods] To determine how PB has been used at our institution, we examined 14 consecutive cases (14 lesions) in which PB was used between April 2011 and March 2015.

[Results] The S group included 9 (64.3%) patients and the BO group included 5 patients. Compared to the BO group, the S group exhibited trends towards having more acute coronary syndrome ( $p = 0.091$ ) and in-stent re-stenosis ( $p = 0.086$ ), and the usage of fewer balloons ( $p = 0.086$ ) and stents ( $p = 0.095$ ). None of the patient characteristics, lesion characteristics, or procedural success rates were significantly different between the two groups. The purpose for using PB in the S group was thrombus control (3 cases), prevention of perfusion injury (2 cases), guaranteeing distal flow during left main trunk inflation with a drug-coated balloon (2 cases), re-coil control (1 case), and wire orientation blocking the main vessel (1 case). We would like to present several of these cases at the CCT 2015 meeting.

[Conclusion] The strategic use of PB is common at our institution. This strategic use may decrease the use of excess balloons and stents, especially for cases of in-stent stenosis or stent thrombosis.