A Prospective, Randomized, Open-Label, Endpoint Study Exploring Platelet Response to Half-Dose Prasugrel and Ticagrelor in Patients with ACS: HOPE-TAILOR Study

Background: The optimal dose of new oral P2Y12-receptor platelet inhibitors such as prasugrel or ticagrelor, in East Asians with acute coronary syndrome (ACS), undergoing drug-eluting stent (DES) implantation, is unclear. We aim to investigate whether half-dose prasugrel or ticagrelor would be sufficient for long-term maintenance management in Korean patients following ACS compared with conventional dose. Method: 102 eligible patients were initially enrolled in HOPE-TAILOR trial, who had undergone DES implantation with one-month full-dose DAPT treatment; 100mg/qd aspirin plus prasugrel 10 mg/qd (n =32), ticagrelor 90 mg/bid (n =35), or clopidogrel 75 mg/qd (n=34), followed by half-dose prasugrel 5 mg/qd or ticagrelor 45 mg/bid for maintenance treatment, but without clopidogrel dose reduction. Study drug response was assessed at 1 month and 3 months with VerifyNow. Conclusion: Prasugrel 5 mg showed higher OPR rate, ticagrelor half-dose still exhibited lower percentage of OPR rate than clopidogrel. Half dose de-escalation strategy of new P2Y12 inhibitor increased OPR rate significantly.