

Supplementary Material Table 1

Comparisons of complications during ACH testing between 20 seconds' and 180 seconds' injection

| | ACH 180 seconds injection | ACH 30 seconds injection |
|---|---------------------------|--------------------------|
| Total number of patients | 2920 | 13933 |
| Bradycardia and/or transient atrioventricular block | 93 (3.2%) | 26 (0.18%)* |
| Ventricular fibrillation and/or tachycardia | 1 (0.04%) | 137 (0.98%)* |
| Transient paroxysmal atrial fibrillation | 4 (0.2%) | 116 (0.83%)* |
| Shock and/or hypotension | 3 (0.14%) | 1 (0.007%) |
| Myocardial infarction | 2 (0.07%) | 0 |
| Coronary artery dissection | 3 (0.14%) | 0 |
| Cather induced spasm (RCA) | 1 (0.03%) | 0 |
| Air embolism | 1 (0.03%) | 0 |
| Deep vein thrombosis | 1 (0.03%) | 0 |
| Access site bleeding | 3 (0.14%) | 0 |
| Cardiac tamponade | 0 | 1 (0.007%) |
| Required resuscitation | 3 (0.14%) | 0 |
| Death | 1 (0.03%) | 0 |

*: $p < 0.001$ vs. ACH 180 seconds injection
ACH = acetylcholine; RCA = right coronary artery.

Supplementary Material Figure 1

Vasoreactivity testing of acetylcholine for 3 minutes injection based on the ENCORE study

Infusion catheter was positioned in a proximal LAD/LCX

ACH 2mL/min for 3 min (total: 6 ml)

ACH dose: (1) 0.36 $\mu\text{g/ml}$, (2) 3.6 $\mu\text{g/ml}$, (3) 18 $\mu\text{g/ml}$

(1) 0.36 $\mu\text{g/mL}$ $\rightarrow 0.36 \times 2 \times 3 = 2.16 \mu\text{g}$ (2 μg)

(2) 3.6 $\mu\text{g/mL}$ $\rightarrow 3.6 \times 2 \times 3 = 21.6 \mu\text{g}$ (20 μg)

(3) 18 $\mu\text{g/mL}$ $\rightarrow 18 \times 2 \times 3 = 108 \mu\text{g}$ (100 μg)

Maximum ACH dose of LCA LAD+LCX = 100 μg + 100 μg = (200 μg)

ACH 3 minutes injection method of ACH

LCA: ACH 2/20/100/200 μg manually infused for 3 min

RCA: ACH 80 μg manually infused for 3 min

(ACH: acetylcholine, ENCORE: Evaluation of nifedipine and cerivastatin on recover of coronary endothelial dysfunction, LAD: left anterior descending artery, LCX: left circumflex artery, LCA: left coronary artery, RCA: right coronary artery)