BACKGROUND Both ischemic and hemorrhagic events after percutaneous coronary intervention (PCI) with drug-eluting stents (DES) contribute to risk of subsequent death. Yet, the impact of the timing of these events on subsequent mortality is less well understood.

METHODS ADAPT-DES was a large, prospective, multicenter registry designed to identify the predictors of stent thrombosis. Patients with successful PCI had assessment of platelet function and were followed for 2 years. Events occurring after PCI - definite or probable stent thrombosis (ST), myocardial infarction (MI) not related to ST, and major bleeding (MB) were classified as early (<30 days), late (31-365 days) or very late (>365 days). Death within 12 months of the events was analyzed by Kaplan-Meier techniques and a Cox regression multivariable model was constructed to analyze the relationship between each event - as a time-updated variable and mortality.

RESULTS Among 8,582 patients, 294 had MI not related to ST (3.4%), 75 had ST (0.9%), 691 had MB (8.1%) and 7,522 had no event (87.6%). The most frequent (45.2%) target vessel in stent lesion was ≤20 mm group, while RCA was the most frequent (41.1%) target vessel in stent lesion >60 mm group. Complex lesion type (B2+C) were 45.4%, 39.6%, 62.6% and 65.7% across the groups. Total number of lesions treated per patient were 1.7±1.6, 2.0±1.3, 2.6±1.4 and 3.5±1.9 respectively (P<0.01). Number of stents per lesion were 1.1±0.3, 1.2±0.4, 1.3±0.5 and 1.5±0.8 (P<0.01) respectively. There were no differences in diameter stenosis at baseline (on average 84.8%, P<0.60) while after procedure they were 2.8%, 2.9%, 1.9% and 2.6% (P<0.01) respectively. At 1 year, there was no difference (P<0.35) in the rate of any death, cardiac death, and MI (Table). Composite endpoints TLT was slightly higher in long length subgroups (2.9%, 3.4%, 4.7% and 4.2% respectively, P=0.006). The rate of stent thrombosis was low and comparable across 4 subgroups (0.38%, 0.65%, 0.77% and 0.18%, P=0.16).

CONCLUSIONS In a real-life practice registry, patients with long lesions showed favorable and similar clinical outcomes when treated with Nobori Biolimus A9 eluting stent. Although we cannot completely exclude the possibility of underreporting of events, especially of periprocedural MIs, the comparable and very low rate of stent thrombosis across different lesion length groups up to 1 year is encouraging.

CATEGORIES CORONARY: Stents: Drug-Eluting

KEYWORDS Bioabsorbable polymer, Drug-eluting stent, Long lesion