PROCEDURAL AND LONG-TERM CLINICAL OUTCOMES AFTER PERCUTANEOUS CORONARY INTERVENTION OF CHRONIC TOTAL OCCLUSIONS IN WOMEN: A REPORT FROM THE MULTINATIONAL CTO REGISTRY

i2 Poster Contributions
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Background: Most prior series of percutaneous coronary intervention (PCI) of chronic total occlusions (CTO) have included few women, and thus little is known about their success rates and clinical outcomes.

Methods: Between 1998 and 2007, a total of 1,791 patients underwent CTO PCI in four tertiary care referral centers in the US, UK, Italy and South Korea. We analyzed procedural success rates (residual stenosis <50%) and clinical outcomes after successful vs. unsuccessful CTO PCI, and use of bare metal stents (BMS) vs. drug-eluting stents (DES) among women.

Results: 247 women (13.8% of the total cohort) underwent CTO PCI. Mean age was 66±10 years, 66% had hypertension, 82% were smokers, 29% had diabetes mellitus, 63% had multivessel disease, 51% had a prior myocardial infarction (MI), and 16% had prior coronary artery bypass grafting surgery (CABG). Procedural success was obtained in 184 women (75%), and stents were implanted in 173 (93%), 72% of which were DES (68% sirolimus- and 32% paclitaxel-eluting stents). 5-year clinical event rates for women with successful vs. unsuccessful CTO PCI are shown in table 1a, and outcomes according to stent type use in those with successful PCI are shown in table 1b.

Conclusion: In this large international study, the procedural success rate of CTO PCI in women was 75%, and was associated with favorable long-term outcomes. Furthermore, after successful CTO PCI in women, the use of DES compared with BMS was associated with lower rates of death and target vessel revascularization.