

Phosphorylcholine (PC) coated stent (BiodivYsio stent) in small coronary artery disease

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Background & Purpose: The outcome of stenting of small coronary artery is still discussing. In vivo studies on PC coated BiodivYsio stents have shown that the polymer is non-thrombogenic and that PC coating does not elicit an inflammatory effect and the PC coated stent is safe for coronary deployment. Recent data for stenting of small coronary artery using PC coated stent demonstrated promising. This study is designed to evaluate the feasibility and efficacy of PC coated stent in small coronary artery disease.

Method: Study design; multicenter, prospective, non-controlled study, participating 4 centers in Korea.

Angiographic inclusion criteria is native <2.75mm RD, TL stenosis > 50%, De novo, and LL < 15mm.

Primary end point is clinical end points including 30 day and 6month MACE.

secondary end point is 6 month angiographic endpoints including binary restenosis, late loss, loss index, late MLD.

Results: Enrolled are 120 patients. mean referenced diameter (mRD) was 2.60 ± 0.29 mm and mean lesion length was 12.7 ± 4.8 mm. MLD was 0.34 ± 0.24 mm before procedure and 2.34 ± 0.26 mm after stenting respectively, and %DS was $85 \pm 9\%$ before procedure and 10 ± 10 after stenting respectively. Procedural success rate was 98%, 30 day major adverse cardiac event rate was 0%.

Conclusions : PC coated stent in small coronary artery stenosis demonstrated a high procedural success rate and a low incidence of MACE at short and midium term follow up. This results may confirm the hypothesis that PC may have antithrombogenic properties. Mid-term angiographic data will be presented.