

Outstanding patient outcomes



Ultrathin struts



Excellent deliverability

Vascular Intervention // Coronary Drug-Eluting Stent System







Orsiro Ultrathin struts[§]. Outstanding patient outcomes[¢].

Outstanding patient outcomes

Improving patient outcomes, year after year*

BIOFLOW-V (n = 1,334) FDA pivotal trial

Significant differences in TLF observed at year 1 and 2 were maintained and further increased at year 3 (8.6% vs. 14.4%, p = 0.003), driven by significant differences in TV-MI (5.5% vs. 10.1%, p = 0.004) and Ischemiadriven TLR (3.4% vs. 6.9%, p = 0.008) that favor Orsiro over Xience.^{1,2,3}

TLF and components at 12, 24 and 36 Months



TLF – Target Lesion Failure; TV-MI – Target Vessel Myocardial Infarction; TLR – Target Lesion Revascularization.

§As characterized with respect to strut thickness in Bangalore et al. Meta-analysis.
>Based on investigator's interpretation of BIOFLOW-V primary endpoint results.
*Compared to Xience, based on three consecutive years.

[¤]p-values for 36-m frequentist analysis.

[¢]vs. Xience, based on 36-m frequentist analysis.

Long-term performance

In the randomized, all-comers BIOSCIENCE trial (n= 2,119)⁴

Orsiro shows numerically equal or lower Stent Thrombosis (ST) in complex patients in comparison to Xience.





Ultrathin Struts – thinnest available in the US⁵

Thinner struts, faster endothelialization⁶

Improved outcomes start in the early phase



48 hours Thinner struts mean less vessel injury⁶

Vascular Healing



30 days[∆] 80.4% strut coverage⁷



90 days[∆] 98.7% strut coverage⁷

‡ Driven by peri-procedural MI events (<48 hours). In-hospital rate may include events > 48 hours. Δ Images: Secco G et al. Time-related changes in neointimal tissue coverage following a new generation SES implantation: an OCT observational study. Presented at: EuroPCR, May 20, 2014; Paris, France.

Small Vessels. Ultrathin Struts. Big Difference.

Small vessel subgroup analysis (n = 1,506) of a large scale all-comers BIO-RESORT (n = 3,514) trial.

Fewer repeat target lesion revascularizations (TLR) compared to Resolute Integrity at 36 months.⁸



Lower revascularization rates in the 3rd year



Ultrathin, ultra effective

Ultrathin vs. thin strut DES in a large scale meta-analysis including more than 11,000 patients⁹

reduction in TLF rate at 12m (RR=0.84; 95%) CI 0.72-0.99)

Excellent deliverability



Lower crossing profile Improved acute performance – up to 7% lower crossing profile¹⁰



Better push

Transmits up to 72% more force from hub to tip¹⁰





25.0 35.0 40.0 30.0 45.0 50.0 55.0 Pushability (%)

"Low profile and great deliverability coupled with superb clinical outcomes is a game-changer. In the current era of coronary stents, thinner struts are better and thinnest might be best."

Dr. Dean Kereiakes BIOFLOW-V Site Principal Investigator

1. Kandzari D et al. Ultrathin, bioresorbable polymer sirolimus-eluting stents versus thin, durable polymer everolimuseluting stents in patients undergoing coronary revascularisation (BIOFLOW V): a randomised trial. Lancet. October, 2017; 2. Kandzari D et al. Ultrathin Bioresorbable Polymer Sirolimus-Eluting Stents versus Thin Durable Polymer Everolimus-Eluting Stents: Journal of American College of Cardiology. 2018, doi: https//doi.org/10.1016/j.jacc.2018.09.019; 3. Kandzari D et al. J Am Coll Cardiol. Cardiovasc Interven. 2020, doi: 10.1016/j.jcin.2020.02.019; 4. Pilgrim T et al. 5-year outcomes of the BIOSCIENCE randomised trial. Supplementary appendix. Lancet, August, 2018; 5. When compared to FDA approved Drug Eluting Stents. BIOTRONIK data on file; 6. Foin N et al. Int J of Cardiol. 2014, 177(3); 7. Secco G et al. Time-related changes in neointimal tissue coverage of a novel Sirolimus eluting stent: Serial observations with optical coherence tomography. Cardiovascular Revascularization Medicine 17.1 (2016): 38-43; 8. Buiten R et al. Outcomes in patients treated with thin-strut, very thin-strut, or ultrathin-strut drug-eluting stents in small coronary vessels - A prespecified analysis of the randomized BIO-RESORT trial; JAMA Cardiol. Published online May 21, 2019. doi:10.1001/jamacardio.2019.1776; Clinical Trials. gov: NCT01674803; 9. Bangalore S et al. Circulation. 2018, 138; 10. BIOTRONIK data on file; IIB(P)24/2018.

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