

## Orsiro® drug-eluting stent family\*

### Bibliography – JUL 2022

#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
1	Pre-clinical study by Koppara	Pre-clinical - 6mo	6mo	2012	Pre-clinical study	Animal (Porcine)	Journal of Thrombosis and Haemostasis	Koppara T, et al. Histopathological comparison of biodegradable polymer and permanent polymer based sirolimus eluting stents in a porcine model of coronary stent implantation. <i>Journal of Thrombosis and Haemostasis</i> . 2012; 107(6): 1161-71.
2	Pre-clinical study by Otsuka	Pre-clinical	n/a	2015	Pre-clinical study	Animal (Porcine)	JACC: Cardiovascular Interventions	Otsuka F, et al. Acute Thrombogenicity of a Durable Polymer Everolimus-Eluting Stent Relative to Contemporary Drug-Eluting Stents With Biodegradable Polymer Coatings Assessed Ex Vivo in a Swine Shunt Model. <i>JACC Cardiovascular Intervention</i> . 2015; 8(9): 1248-1260.
3	Pre-clinical study by Lee	Pre-clinical	1mo	2016	Pre-clinical study	Animal (Porcine)	EuroIntervention	Lee R, et al. Early coverage of drug-eluting stents analysed by optical coherence tomography: evidence of the impact of stent apposition and strut characteristics on the neointimal healing process. <i>EuroIntervention</i> . 2016; 12(5): e605-614.
4	BIOFLOW-I	Primary Endpoint	1Y	2013	First-in-man study	Selected Patients	EuroIntervention	Hamon M, et al. Clinical and angiographic experience with a third-generation drug-eluting Orsiro stent in the treatment of single de novo coronary artery lesions (BIOFLOW-I): a prospective, first-in-man study. <i>EuroIntervention</i> . 2013; 8(9): 1006-11.
5	BIOFLOW-II	Primary Endpoint	1Y	2015	Randomized controlled trial	Selected Patients	Circulation. Cardiovascular Interventions	Windecker S, et al. Comparison of a novel biodegradable polymer sirolimus-eluting stent with a durable polymer everolimus-eluting stent: results of the randomized BIOFLOW-II trial. <i>Circulation. Cardiovascular Interventions</i> . 2015; 8(2): 1-12.
6	BIOFLOW-II	Follow-up	5Y	2018	Randomized controlled trial	Selected Patients	JACC: Cardiovascular Interventions	Lefèvre T, et al. Comparison of a Novel Biodegradable Polymer Sirolimus-Eluting Stent With a Durable Polymer Everolimus-Eluting Stent: 5-Year Outcomes of the Randomized BIOFLOW-II Trial. <i>JACC Cardiovascular Intervention</i> . 2018; 11(10): 995-1002.
7	BIOFLOW-III	Primary Endpoint	1Y	2016	Observational registry	All-comers	EuroIntervention	Waltenberger J, et al. Real-world experience with a novel biodegradable polymer sirolimus-eluting stent: twelve-month results of the BIOFLOW-III registry. <i>EuroIntervention</i> . 2016; 11(10): 1106-10.
8	BIOFLOW-III	Follow-up	5Y	2019	Observational registry	All-comers	Cardiovascular Revascularization Medicine	Waltenberger J, et al., Five-Year Results of the Bioflow-III Registry: Real-World Experience with a Biodegradable Polymer Sirolimus-Eluting Stent, <i>Cardiovascular Revascularization Medicine</i> , Volume 21, Issue 1, 2020, Pages 63-69, ISSN 1553-8389, <a href="https://doi.org/10.1016/j.carrev.2019.03.004">https://doi.org/10.1016/j.carrev.2019.03.004</a> .
9	BIOFLOW-III - Israel registry	Primary Endpoint	1Y	2017	Observational registry	Diabetic	Cardiovascular Revascularization Medicine	Kornowski R, et al. BIOFLOW-III satellite-One-year clinical outcomes of diabetic patients treated with a biodegradable polymer sirolimus-eluting stent and comprehensive medical surveillance. <i>Cardiovascular Revascularization Medicine</i> . 2017; 18(5): 338-343.

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
10	BIOFLOW-III - Italy registry	Primary Endpoint	18mo	2019	Observational registry	High risk	Journal of Cardiovascular Medicine	Bartorelli et al. The BIOFLOW-III Italian Satellite Registry: 18-month results of the Orsiro stent in an all-comer high-risk population, Journal of Cardiovascular Medicine: July 2019 - Volume 20 - Issue 7 - p 464-470 doi: 10.2459/JCM.0000000000000795
11	BIOFLOW-III - Canada registry	Primary Endpoint	1Y	2020	Observational registry	All-comers	Cardiovascular Revascularization Medicine	Boukhris M, et al. Safety and Performance of the Orsiro Sirolimus-Eluting Stent in the Treatment of All-Comers Patient Population in Daily Clinical Practice, Cardiovascular Revascularization Medicine, Volume 21, Issue 11, 2020, Pages 1348-1354, ISSN 1553-8389, <a href="https://doi.org/10.1016/j.carrev.2020.04.021">https://doi.org/10.1016/j.carrev.2020.04.021</a> .
12	BIOFLOW-IV	Primary Endpoint	1Y	2019	Randomized controlled trial	Selected patients	EuroIntervention	Saito S, et al. A Randomized, Intercontinental, Multicenter Study to Assess the Safety and Effectiveness of the Orsiro Sirolimus Eluting Stent in the Treatment of Subjects with de novo Coronary Artery Lesions BIOFLOW IV-Primary Outcome Target Vessel Failure at 12 Months. EuroIntervention: journal of EuroPCR in collaboration with the Working Group on Interventional Cardiology of the European Society of Cardiology (2019).
13	BIOFLOW-IV	Follow-up	3Y	2018	Randomized controlled trial	Selected patients	JACC: Cardiovascular Interventions	Slagboom T, et al. Prospective Randomized Multicenter Study to Assess the Safety and Effectiveness of the Orsiro Sirolimus Eluting Stent in the Treatment of Subjects with up to two de novo Coronary Artery Lesions – BIOFLOW IV: 3 Year Clinical Results. JACC Cardiovascular Intervention. 2018; 72(13): B283.
14	BIOFLOW-V	Primary Endpoint	1Y	2017	Randomized controlled trial	Selected Patients	The Lancet	Kandzari D, et al. Ultrathin, bioresorbable polymer sirolimus-eluting stents versus thin, durable polymer everolimus-eluting stents in patients undergoing coronary revascularisation (BIOFLOW V): a randomised trial. Lancet. 2017; 390(10105): 1843-1852.
15	BIOFLOW-V	Subgroup analysis	1Y	2018	Randomized controlled trial	ACS	Circulation. Cardiovascular Interventions	Roguin A, et al. Subgroup Analysis Comparing Ultrathin, Bioresorbable Polymer Sirolimus-Eluting Stents Versus Thin, Durable Polymer Everolimus-Eluting Stents in Acute Coronary Syndrome Patients. Circ Cardiovasc Interv. 2018; 11(10): 1-11.
16	BIOFLOW-V	Follow-up	2Y	2018	Randomized controlled trial	Selected Patients	JACC: Cardiovascular Interventions	Kandzari D, et al. Ultrathin bioresorbable polymer sirolimus-eluting stents versus thin durable polymer everolimus-eluting stents. Journal of the American College of Cardiology 72.25 (2018): 3287-3297.
17	BIOFLOW-V	Follow-up	3Y	2020	Randomized controlled trial	Selected Patients	JACC: Cardiovascular Interventions	Kandzari D, et al. Ultrathin Bioresorbable-Polymer Sirolimus-Eluting Stents Versus Thin Durable-Polymer Everolimus-Eluting Stents for Coronary Revascularization: 3-Year Outcomes From the Randomized BIOFLOW V Trial, JACC: Cardiovascular Interventions, Volume 13, Issue 11, 2020, Pages 1343-1353, ISSN 1936-8798, <a href="https://doi.org/10.1016/j.jcin.2020.02.019">https://doi.org/10.1016/j.jcin.2020.02.019</a> .

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
18	BIOFLOW-VI	Primary Endpoint	1Y	2020	Randomized controlled trial	All-comers	Clinical Therapeutics	Li C, et al. Comparison of the Ultrathin Strut, Biodegradable Polymer Sirolimus-eluting Stent With a Durable Polymer Everolimus-eluting Stent in a Chinese Population: The Randomized BIOFLOW VI Trial; Clin Ther. 2020 Apr;42(4):649-660. e9. doi: 10.1016/j.clinthera.2020.02.014. Epub 2020 Apr 5.
19	BIODEGRADE	Primary Endpoint	18mo	2021	Randomized controlled trial	All-comers	EuroIntervention	Yoon C, et al. BioMatrix versus Orsiro stent for coronary artery disease: a multicenter, randomized, open-label study. EuroIntervention 2020; Jaa- 845, 2020, doi: 10.4244/EIJ-D-20-00185
20	BIOSCIENCE	Primary Endpoint	1Y	2014	Randomized controlled trial	All-comers	The Lancet	Pilgrim T, et al. Ultrathin strut biodegradable polymer sirolimus-eluting stent versus durable polymer everolimus-eluting stent for percutaneous coronary revascularisation (BIOSCIENCE): a randomised, single-blind, non-inferiority trial. Lancet. 2014; 384(9960): 211-22.
21	BIOSCIENCE	Subgroup analysis	1Y	2015	Randomized controlled trial	Diabetic	Circulation. Cardiovascular Interventions	Franzone A, et al. Clinical outcomes according to diabetic status in patients treated with biodegradable polymer sirolimus-eluting stents versus durable polymer everolimus-eluting stents: prespecified subgroup analysis of the BIOSCIENCE trial. Circulation. Cardiovascular Intervention. 2015; 8(6): 1-12.
22	BIOSCIENCE	Follow-up	2Y	2016	Randomized controlled trial	All-comers	Journal of the American Heart Association	Zbinden R, et al. Ultrathin Strut Biodegradable Polymer Sirolimus-Eluting Stent Versus Durable-Polymer Everolimus-Eluting Stent for Percutaneous Coronary Revascularization: 2-Year Results of the BIOSCIENCE Trial. Journal of the American Heart Association. 2016; 5(3): 1-10.
23	BIOSCIENCE	Subgroup analysis	1Y	2016	Randomized controlled trial	AMI	EuroIntervention	Pilgrim T, et al. Biodegradable polymer sirolimus-eluting stents versus durable polymer everolimus-eluting stents for primary percutaneous coronary revascularisation of acute myocardial infarction. EuroIntervention. 2016; 12(11): 1-12.
24	BIOSCIENCE	Follow-up	5Y	2018	Randomized controlled trial	All-comers	The Lancet	Pilgrim T, et al. Ultrathin-strut, biodegradable-polymer, sirolimus-eluting stents versus thin-strut, durable-polymer, everolimus-eluting stents for percutaneous coronary revascularisation. Lancet. 2018; 392(10149). 737-746.
25	BIOSCIENCE	Subgroup analysis	5Y	2019	Randomized controlled trial	SV	Circulation. Cardiovascular Interventions	Iglesias JF, et al. Long-Term Effect of Ultrathin-Strut Versus Thin-Strut Drug-Eluting Stents in Patients With Small Vessel Coronary Artery Disease Undergoing Percutaneous Coronary Intervention: A Subgroup Analysis of the BIOSCIENCE Randomized Trial, Circ Cardiovasc Interv. 2019;12:e008024. DOI: 10.1161/CIRCINTERVENTIONS.119.008024
26	BIOSCIENCE	Subgroup analysis	5Y	2019	Randomized controlled trial	Diabetic	Journal of the American Heart Association	Iglesias JF. et al. Five-Year Outcomes in Patients With Diabetes Mellitus Treated With Biodegradable Polymer Sirolimus-Eluting Stents Versus Durable Polymer Everolimus-Eluting Stents, JAHA, 2019

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
27	BIO-SCIENCE	Follow-up	5Y	2021	Randomized controlled trial	ACS	Cardiovascular Revascularization Medicine	Iglesias JF, et al. Five-Year Outcomes With Biodegradable Polymer Sirolimus-Eluting Stents Versus Durable-Polymer Everolimus-Eluting Stents in Patients With Acute Coronary Syndrome: A Subgroup Analysis of the BIO-SCIENCE Trial, Cardiovascular Revascularization Medicine, Volume 34, 2022, <a href="https://doi.org/10.1016/j.carrev.2021.02.008">https://doi.org/10.1016/j.carrev.2021.02.008</a> .
28	BIO-RESORT	Primary Endpoint	1Y	2016	Randomized controlled trial	All-comers	The Lancet	von Birgelen C, et al. Very thin strut biodegradable polymer everolimus-eluting and sirolimus-eluting stents versus durable polymer zotarolimus-eluting stents in all-comers with coronary artery disease (BIO-RESORT): a three-arm, randomised, non-inferiority trial. <i>Lancet</i> . 2016; 388(10060): 2607-2617.
29	BIO-RESORT	Follow-up	2Y	2018	Randomized controlled trial	All-comers	EuroIntervention	Kok MM, et al. Two-year clinical outcome of all-comers treated with three highly dissimilar contemporary coronary drug-eluting stents in the randomised BIO-RESORT trial. <i>EuroIntervention</i> . 2018; 14: 1-9.
30	BIO-RESORT	Subgroup analysis	1Y	2018	Randomized controlled trial	HBR	Cardiovascular Drugs and Therapy	Zocca P, et al. High bleeding risk patients treated with very thin-strut biodegradable polymer or thin-strut durable polymer drug-eluting stents in the BIO-RESORT trial. <i>Cardiovascular drugs and therapy</i> 32.6 (2018): 567-576.
31	BIO-RESORT	Subgroup analysis	1Y	2018	Randomized controlled trial	Diabetic	JACC: Cardiovascular Interventions	von Birgelen C, et al. "Silent" diabetes and clinical outcome after treatment with contemporary drug-eluting stents: the BIO-RESORT Silent Diabetes study. <i>JACC: cardiovascular interventions</i> 11.5 (2018): 448-459.
32	BIO-RESORT	Follow-up	3Y	2019	Randomized controlled trial	All-comers	JACC: Cardiovascular Interventions	Buiten RA, et al. Thin, very thin, or ultrathin strut biodegradable or durable polymer-coated drug-eluting stents: 3-year outcomes of BIO-RESORT. <i>JACC: Cardiovascular Interventions</i> 12.17 (2019): 1650-1660.
33	BIO-RESORT	Subgroup analysis	3Y	2019	Randomized controlled trial	SV	JAMA Cardiology	Buiten RA, 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. <i>JAMA cardiology</i> (2019).
34	BIO-RESORT	Subgroup analysis	3Y	2019	Randomized controlled trial	Diabetic	Catheterization and Cardiovascular Interventions	Ploumen EH, et al. Three-year clinical outcome in all-comers with "silent" diabetes, prediabetes, or normoglycemia, treated with contemporary coronary drug-eluting stents: From the BIO-RESORT Silent Diabetes study. <i>Catheter Cardiovasc Interv</i> . 2020; 96: E110– E118. <a href="https://doi.org/10.1002/ccd.28536">https://doi.org/10.1002/ccd.28536</a>
35	BIO-RESORT	Subgroup analysis	2Y	2020	Randomized controlled trial	Calcified lesions	Catheterization and Cardiovascular Interventions	Buiten RA, et al. Three contemporary thin-strut drug-eluting stents implanted in severely calcified coronary lesions of participants in a randomized all-comers trial. <i>Catheter Cardiovasc Interv</i> . 2020; 96: E508– E515. <a href="https://doi.org/10.1002/ccd.28886">https://doi.org/10.1002/ccd.28886</a>
36	BIO-RESORT	Subgroup analysis	3Y	2020	Randomized controlled trial	Bifurcation lesions	Coronary Artery Disease	Buiten RA, et al. Coronary bifurcations treated with thin-strut drug-eluting stents: a prespecified analysis of the randomized BIO-RESORT trial. <i>Coron Artery Dis</i> . 2021 Jan;32(1):51-57. doi: 10.1097/MCA.0000000000000891. PMID: 33278175.

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
37	BIONYX	Primary Endpoint	1Y	2018	Randomized controlled trial	All-comers	The Lancet	von Birgelen C, et al. Thin composite wire strut, durable polymer-coated (Resolute Onyx) versus ultrathin cobalt-chromium strut, bioresorbable polymer-coated (Orsiro) drug-eluting stents in allcomers with coronary artery disease (BIONYX). Lancet. 2018; 392(10154): 1235-1245.
38	BIONYX	Follow-up	2Y	2020	Randomized controlled trial	All-comers	JACC: Cardiovascular Interventions	Buiten RA, et al. Thin Composite-Wire-Strut Zotarolimus-Eluting Stents Versus Ultrathin-Strut Sirolimus-Eluting Stents in BIONYX at 2 Years, JACC: Cardiovascular Interventions, Volume 13, Issue 9, 2020, Pages 1100-1109, ISSN 1936-8798, <a href="https://doi.org/10.1016/j.jcin.2020.01.230">https://doi.org/10.1016/j.jcin.2020.01.230</a> .
39	BIONYX	Subgroup analysis	2Y	2021	Randomized controlled trial	AMI	Catheterization and Cardiovascular Interventions	Ploumen EH, et al. Acute myocardial infarction treated with novel Resolute Onyx and Orsiro stents in the randomized BIONYX trial, Catheter Cardiovasc Interv. 2021;1-9., DOI: 10.1002/ccd.29594
40	BIONYX	Follow-up	3Y	2021	Randomized controlled trial	All-comers	Circulation. Cardiovascular Interventions	Ploumen EH, et al. First Report of 3-Year Clinical Outcome After Treatment With Novel Resolute Onyx Stents in the Randomized BIONYX Trial, Circulation Journal, 2021, Volume 85, Issue 11, Pages 1983-1990, Released on J-STAGE October 25, 2021, Advance online publication July 13, 2021, Online ISSN 1347-4820, Print ISSN 1346-9843, <a href="https://doi.org/10.1253/circj.CJ-21-0292">https://doi.org/10.1253/circj.CJ-21-0292</a> ,
41	BIOSTEMI	Primary Endpoint	1Y	2019	Randomized controlled trial	STEMI	The Lancet	Iglesias JF, et al. Biodegradable polymer sirolimus-eluting stents versus durable polymer everolimus-eluting stents in patients with ST-segment elevation myocardial infarction (BIOSTEMI): a single-blind, prospective, randomised superiority trial, Lancet. 2019 Oct 5;394(10205):1243-1253. doi: 10.1016/S0140-6736(19)31877-X. Epub 2019 Sep 2.
42	BIOSTEMI	Subgroup analysis	1Y	2020	Randomized controlled trial	STEMI-Primary PCI	JACC: Cardiovascular Interventions	Iglesias JF, et al. Ultrathin-Strut Versus Thin-Strut Drug-Eluting Stents for Primary PCI: A Subgroup Analysis of the BIOSTEMI Randomized Trial, JACC: Cardiovascular Interventions, Volume 13, Issue 19, 2020, Pages 2314-2316, ISSN 1936-8798, <a href="https://doi.org/10.1016/j.jcin.2020.07.038">https://doi.org/10.1016/j.jcin.2020.07.038</a> .
43	BIOSTEMI	Subgroup analysis	2Y	2021	Randomized controlled trial	STEMI-MVD	International Journal of Cardiology	Iglesias JF, et al., Multivessel percutaneous coronary intervention with thin-strut biodegradable versus durable polymer drug-eluting stents in ST-segment elevation myocardial infarction: A subgroup analysis of the BIOSTEMI randomized trial, International Journal of Cardiology, Volume 334, 2021, <a href="https://doi.org/10.1016/j.ijcard.2021.04.034">https://doi.org/10.1016/j.ijcard.2021.04.034</a> .
44	BIOSTEMI	Follow-up	2Y	2021	Randomized controlled trial	STEMI	JACC: Cardiovascular Interventions	Pilgrim T, et al. Biodegradable- Versus Durable-Polymer Drug-Eluting Stents for STEMI: Final 2-Year Outcomes of the BIOSTEMI Trial, JACC: Cardiovascular Interventions, Volume 14, Issue 6, 2021, Pages 639-648, ISSN 1936-8798, <a href="https://doi.org/10.1016/j.jcin.2020.12.011">https://doi.org/10.1016/j.jcin.2020.12.011</a>
45	GUIDE-DES	Primary Endpoint	1Y	2022	Randomized controlled trial	All-comers	BMJ Open	Lee PH, et al. Quantitative coronary angiography versus intravascular ultrasound guidance for drug-eluting stent implantation (GUIDE-DES): study protocol for a randomised controlled non-inferiority trial. BMJ Open 2022;12:e052215. doi:10.1136/bmjopen-2021-052215

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
46	HATTRICK-OCT	Primary Endpoint	3mo	2014	Randomized controlled trial	ACS	Circulation. Cardiovascular Interventions	Karjalainen PP, et al. Early neointimal coverage and vasodilator response following biodegradable polymer sirolimus-eluting vs. durable polymer zotarolimus-eluting stents in patients with acute coronary syndrome – HATTRICK-OCT trial. <i>Circulation Journal: official journal of the Japanese Circulation Society.</i> 2014; 79(2): 360-7.
47	HOST-REDUCE-POLYTECH-ACS	Primary Endpoint	1Y	2020	Randomized controlled trial	ACS	The Lancet	Kim SH, et al. Prasugrel-based de-escalation of dual antiplatelet therapy after percutaneous coronary intervention in patients with acute coronary syndrome (HOST-REDUCE-POLYTECH-ACS): an open-label, multicentre, non-inferiority randomised trial, <i>The Lancet</i> , Volume 396, Issue 10257, 2020, Pages 1079-1089, ISSN 0140-6736, <a href="https://doi.org/10.1016/S0140-6736(20)31791-8">https://doi.org/10.1016/S0140-6736(20)31791-8</a> .
48	HOST-REDUCE-POLYTECH-ACS	Sub-group analysis	1Y	2021	Randomized controlled trial	ACS	Circulation. Cardiovascular Interventions	Hyo-Soo K, et al. Durable Polymer Versus Biodegradable Polymer Drug-Eluting Stents After Percutaneous Coronary Intervention in Patients with Acute Coronary Syndrome :The HOST-REDUCE-POLYTECH-ACS Trial, <i>Circulation.</i> 2021;143:1081–1091. DOI: 10.1161/CIRCULATIONAHA.120.051700
49	ORIENT	Primary Endpoint	9mo	2017	Randomized controlled trial	All-comers	EuroIntervention	Kang SH, et al. Angiographic outcomes of Orsiro biodegradable polymer sirolimus-eluting stents and Resolute Integrity durable polymer zotarolimus-eluting stents: results of the ORIENT trial. <i>EuroIntervention.</i> 2017; 12(13): 1623-1631.
50	ORIENT	Follow-up	3Y	2020	Randomized controlled trial	All-comers	Catheterization and Cardiovascular Interventions	Kim, SH, et al. Three-year clinical outcome of biodegradable hybrid polymer Orsiro sirolimus-eluting stent and the durable biocompatible polymer Resolute Integrity zotarolimus-eluting stent: A randomized controlled trial. <i>Catheter Cardiovasc Interv.</i> 2020; 96: 1399– 1406. <a href="https://doi.org/10.1002/ccd.28654">https://doi.org/10.1002/ccd.28654</a>
51	PREPARE-CALC	Primary Endpoint	9mo	2018	Randomized controlled trial	Calcified lesions	Circulation. Cardiovascular Interventions	Abdel-Wahab M, et al. High-Speed Rotational Atherectomy Versus Modified Balloons Prior to Drug-Eluting Stent Implantation in Severely Calcified Coronary Lesions. <i>Circ Cardiovasc Interv.</i> 2018; 11(10): 1-12.
52	PREPARE-CALC	Subgroup analysis	1day	2020	Randomized controlled trial	Calcified lesions-Bifurcation lesions	Journal of Interventional Cardiology	Allali A. et al. Impact of Lesion Preparation Technique on Side Branch Compromise in Calcified Coronary Bifurcations: A Subgroup Analysis of the PREPARE-CALC Trial, <i>Journal of Interventional Cardiology</i> , 2020, doi. <a href="https://doi.org/10.1155/2020/9740938">https://doi.org/10.1155/2020/9740938</a>
53	PREPARE-CALC	Subgroup analysis	9mo	2021	Randomized controlled trial	Calcified lesions	Cardiovascular Revascularization Medicine	Hemetsberger R, et al. Impact of Calcified Lesion Complexity on the Success of Percutaneous Coronary Intervention With Upfront High-Speed Rotational Atherectomy or Modified Balloons - A Subgroup-Analysis From the Randomized PREPARE-CALC Trial, <i>Cardiovascular Revascularization Medicine</i> , 2021, <a href="https://doi.org/10.1016/j.carrev.2021.01.002">https://doi.org/10.1016/j.carrev.2021.01.002</a> .
54	PRISON IV	Primary Endpoint	9mo	2017	Randomized controlled trial	CTO	JACC: Cardiovascular Interventions	Teeuwen K, et al. Randomized Multicenter Trial Investigating Angiographic Outcomes of Hybrid Sirolimus-Eluting Stents With Biodegradable Polymer Compared With Everolimus-Eluting Stents With Durable Polymer in Chronic Total Occlusions: The PRISON IV Trial. <i>JACC Cardiovascular Intervention.</i> 2017; 10(2): 133-143.

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55	PRISON IV	Subgroup analysis	9mo	2018	Randomized controlled trial	CTO	Journal of Interventional Cardiology	Zivelonghi C, et al. Impact of ultra-thin struts on restenosis after chronic total occlusion recanalization: Insights from the randomized PRISON IV trial. <i>Journal of Interventional Cardiology</i> . 2018: 1-8.
56	PRISON IV	Follow-up	3Y	2019	Randomized controlled trial	CTO	JACC: Cardiovascular Interventions	Carlo Zivelonghi, et al. 3-Year Clinical Outcomes of the PRISON-IV Trial: Ultrathin Struts Versus Conventional Drug-Eluting Stents in Total Coronary Occlusions, <i>JACC: Cardiovascular Interventions</i> , 2019, <a href="https://doi.org/10.1016/j.jcin.2019.05.044">https://doi.org/10.1016/j.jcin.2019.05.044</a> .
57	PRISON IV	Subgroup analysis	13mo	2017	Randomized controlled trial	CTO	EuroIntervention	Teeuwen K, et al. Optical coherence tomography findings: insights from the randomised multicentre trial investigating angiographic outcomes of hybrid sirolimus-eluting stents with biodegradable polymer compared with everolimus-eluting stents with durable polymer in chronic total occlusions (PRISON IV) trial. <i>EuroIntervention</i> . 2017 Aug 4;13(5):e522-e530. doi: 10.4244/EIJ-D-17-00261. PMID: 28512069.
58	SORT OUT VII	Primary Endpoint	1Y	2016	Randomized controlled trial	All-comers	Circulation. Cardiovascular Interventions	Jensen LO, et al. Randomized Comparison of a Biodegradable Polymer Ultrathin Strut Sirolimus-Eluting Stent With a Biodegradable Polymer Biolimus-Eluting Stent in Patients Treated With Percutaneous Coronary Intervention: The SORT OUT VII Trial. <i>Circulation. Cardiovascular Interventions</i> . 2016; 9(7): 1-10.
59	SORT OUT VII	Subgroup analysis	13mo	2018	Randomized controlled trial	All-comers	European Heart Journal	Andreasen LN, et al. Randomized comparison of sirolimus eluting, and biolimus eluting bioresorbable polymer stents: the SORT-OUT VII optical coherence tomography study. <i>European Heart Journal Cardiovascular Imaging</i> . 2018; 19(3): 329-338.
60	SORT OUT VII	Follow-up	2Y	2018	Randomized controlled trial	All-comers	EuroIntervention	Jensen LO, et al. Two-year outcome after biodegradable polymer sirolimus- and biolimus-eluting coronary stents (from the randomised SORT OUT VII trial). <i>EuroIntervention</i> . 2018; 13(13): 1587-1590.
61	SORT OUT VII	Follow-up	3Y	2020	Randomized controlled trial	All-comers	Coronary Artery Disease	Ellert J, et al. Clinical outcomes three-year after revascularization with biodegradable polymer stents: ultrathin-strut sirolimus-eluting stent versus biolimus-eluting stent: from the Scandinavian organization for randomized trials with clinical outcome VII trial, <i>Coronary Artery Disease</i> : September 2020 - Volume 31 - Issue 6 - p 485-492 doi: 10.1097/MCA.0000000000000875
62	SORT OUT IX	Primary Endpoint	1Y	2020	Randomized controlled trial	All-comers	Circulation. Cardiovascular Interventions	Okkels Jensen L, et al. Randomized Comparison of the Polymer-Free Biolimus-Coated BioFreedom Stent With the Ultrathin Strut Biodegradable Polymer Sirolimus-Eluting Orsiro Stent in an All-Comers Population Treated With Percutaneous Coronary Intervention, <i>Circulation</i> . 2020 Jun 23;141(25):2052-2063. doi: 10.1161/CIRCULATIONAHA.119.040241. Epub 2020 May 21.

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
63	SORT OUT IX	Subgroup analysis	1Y	2022	Randomized controlled trial	All-comers	Catheterization and Cardiovascular Interventions	Hansen KN, et al. Impact of diabetes on 1 year clinical outcome in patients undergoing revascularization with the BioFreedom stents or the Orsiro stents from the SORT OUT IX trial. <i>Catheter Cardiovasc Intervention</i> . 2022;1 9. doi:10.1002/ccd.30090
64	SORT OUT IX	Follow-up	2Y	2022	Randomized controlled trial	All-comers	EuroIntervention	Ellert-Gregersen J, et al. Polymer-free biolimus-coated stents versus ultrathin-strut biodegradable polymer sirolimus-eluting stents: two-year outcomes of the randomised SORT OUT IX trial. <i>EuroIntervention</i> . 2022 Jan 5;EIJ-D-21-00874. doi: 10.4244/EIJ-D-21-00874. Epub ahead of print. PMID: 34984983.
65	SORT OUT X	Primary Endpoint	1Y	2021	Randomized controlled trial	All-comers	Circulation. Cardiovascular Interventions	Jakobsen L, et al. Randomized Clinical Comparison of the Dual-Therapy CD34 Antibody-Covered Sirolimus-Eluting Combo Stent With the Sirolimus-Eluting Orsiro Stent in Patients Treated With Percutaneous Coronary Intervention: The SORT OUT X Trial. <i>Circulation</i> . 2021 Jun;143(22):2155-2165. doi: 10.1161/CIRCULATIONAHA.120.052766. Epub 2021 Apr 7.
66	SORT OUT X	Subgroup analysis	1Y	2022	Randomized controlled trial	Diabetic	Catheterization and Cardiovascular Interventions	Jakobsen L. et al. Impact of diabetes on clinical outcomes after revascularization with the dual therapy CD34 antibody-covered sirolimus-eluting Combo stent and the sirolimus-eluting Orsiro stent. <i>Catheter Cardiovasc Interv</i> . 2022; 1- 11. doi:10.1002/ccd.30175
67	SMART-CHOICE	Primary Endpoint	1Y	2019	Randomized controlled trial	All-comers	JAMA Cardiology	Hahn J, et al. Effect of P2Y12 Inhibitor Monotherapy vs Dual Antiplatelet Therapy on Cardiovascular Events in Patients Undergoing Percutaneous Coronary Intervention: The SMART-CHOICE Randomized Clinical Trial. <i>JAMA</i> . 2019;321(24):2428–2437. doi:10.1001/jama.2019.8146
68	SMART-CHOICE	Subgroup analysis	1Y	2021	Randomized controlled trial	All-comers	Journal of the American Heart Association	Ho Yun K, et al. Safety of 3 Month Dual Antiplatelet Therapy After Implantation of Ultrathin Sirolimus Eluting Stents With Biodegradable Polymer (Orsiro): Results From the SMART CHOICE Trial, <i>J Am Heart Assoc</i> . 2021 Jan 5;10(1):e018366. doi: 10.1161/JAHA.120.018366. Epub 2020 Dec 21.
69	TICO	Primary Endpoint	1Y	2020	Randomized controlled trial	ACS-HBR	JAMA Cardiology	Kim B, et al. Effect of Ticagrelor Monotherapy vs Ticagrelor With Aspirin on Major Bleeding and Cardiovascular Events in Patients With Acute Coronary Syndrome: The TICO Randomized Clinical Trial. <i>JAMA</i> . 2020;323(23):2407–2416. doi:10.1001/jama.2020.7580
70	TICO	Primary Endpoint	1Y	2021	Randomized controlled trial	HBR	Journal of the American Heart Association	Cho JY, et al. Factors Related to Major Bleeding After Ticagrelor Therapy: Results from the TICO Trial, <i>Journal of the American Heart Association</i> . 2021;10:e019630
71	Bern Registry	Primary Endpoint	1Y	2018	Observational registry	All-comers	Cardiovascular Revascularization Medicine	Yamaji K, et al. Unselected Use of Ultrathin Strut Biodegradable Polymer Sirolimus-Eluting Stent Versus Durable Polymer Everolimus-Eluting Stent for Coronary Revascularization. <i>Circ Cardiovasc Interv</i> . 2018; 11(9): 1-12.

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
72	Bifurcation technique by Rigatelli	Primary Endpoint	1Y	2016	Observational registry	Bifurcation lesions	International Journal Cardiovascular Imaging	Rigatelli G, et al. Complex coronary bifurcation revascularization by means of very minimal crushing and ultrathin biodegradable polymer DES: Feasibility and 1-year outcomes of the Nano-crush technique. <i>Cardiovascular Revascularization Medicine</i> . 2016; 18(1): 22-27.
73	Bifurcation technique by Rigatelli	Primary Endpoint	3Y	2018	Observational registry	Bifurcation lesions	Coronary Artery Disease	Rigatelli G, et al. Culotte versus the novel nano-crush technique for unprotected complex bifurcation left main stenting: difference in procedural time, contrast volume and X-ray exposure and 3-years outcomes. <i>Int J Cardiovasc Imaging</i> . 2018.
74	CASTLE	Primary Endpoint	1Y	2022	Randomized controlled trial	All-comers	Circulation. Cardiovascular Interventions	Nakamura M, et al. Ultrathin, Biodegradable-Polymer Sirolimus-Eluting Stent vs Thin, Durable-Polymer Everolimus-Eluting Stent, <i>J Am Coll Cardiol Intv</i> . 2022 Jul, 15 (13) 1324-1334
75	CTO study by Markovic	Primary Endpoint	9mo	2017	Observational registry	CTO	JACC: Cardiovascular Interventions	Markovic S, et al. Angiographic and clinical outcomes after recanalization of coronary chronic total occlusions with the Orsiro sirolimus-eluting stent compared with the resolute zotarolimus-eluting stent. <i>Coronary Artery Disease</i> . 2017; 28(5): 376-380.
76	HEROES	Primary Endpoint	3Y	2020	Observational registry	STEMI	Journal of Invasive Cardiology	De Marzo V et al. Hard Events After Orsiro Sirolimus-Eluting Stent (HEROES) in STEMI: A Multicenter Registry, <i>J Invasive Cardiol</i> . 2020 Dec;32(12):E331-E337. Epub 2020 Nov 22.
77	ORSHINE	Primary Endpoint	2Y	2021	Observational registry	All-comers	World Journal of Cardiovascular Diseases	Kasturi S, et al. All-Comers Study of Percutaneous Coronary Interventions with Ultrathin Strut Biodegradable-Polymer Sirolimus-Eluting Stents—ORSHINE Registry. <i>World Journal of Cardiovascular Diseases</i> , 11, 319-331. doi: 10.4236/wjcd.2021.117031.
78	Observational registry by Rigatelli	Primary Endpoint	35.6mo	2021	Observational registry	All-comers	Cardiovascular Revascularization Medicine	Rigatelli G, et al. Ultrathin Biodegradable-Polymer Orsiro Drug-Eluting Stent Performance in Real Practice Challenging Settings, <i>Cardiovascular Revascularization Medicine</i> , Volume 30, 2021, Pages 12-17, ISSN 1553-8389, <a href="https://doi.org/10.1016/j.carrev.2020.09.027">https://doi.org/10.1016/j.carrev.2020.09.027</a> .
79	Observational registry by Jo	Imaging	6mo	2020	Observational registry	ACS	Journal of the American Heart Association	Jo Y-Se et al. Different Microcirculation Response Between Culprit and Non Culprit Vessels in Patients With Acute Coronary Syndrome, <i>J Am Heart Assoc</i> . 2020;9:e015507. DOI: 10.1161/JAHA.119.015507
80	Observational registry by Gili	Primary Endpoint	13mo	2022	Observational registry	All-comers	Frontiers in Cardiovascular Medicine	Gili S, et al. Gender-Associated Outcomes Following Percutaneous Coronary Intervention With a Third-Generation, Ultrathin-Strut Drug-Eluting Stent: A Real-World, Single-Center Experience. <i>Front. Cardiovasc. Med</i> . 8:796604. doi: 10.3389/fcvm.2021.796604
81	Observational registry - Thailand Orsiro - by Suwannasom	Primary Endpoint	1Y	2021	Observational registry	All-comers	BMC Cardiovascular Disorders	Suwannasom P, et al. Clinical outcomes of an ultrathin-strut sirolimus-eluting stent in all-comers population: Thailand Orsiro registry. <i>BMC Cardiovasc Disord</i> 21, 501 (2021). <a href="https://doi.org/10.1186/s12872-021-02310-0">https://doi.org/10.1186/s12872-021-02310-0</a>
82	ROSES	Primary Endpoint	1Y	2021	Observational registry	All-comers	Cardiovascular Revascularization Medicine	Donald E. Cutlip, et al. ROSES – Avoiding the Thorns, <i>Cardiovascular Revascularization Medicine</i> , Volume 36, 2022, Pages 71-72, ISSN 1553-8389, <a href="https://doi.org/10.1016/j.carrev.2021.12.014">https://doi.org/10.1016/j.carrev.2021.12.014</a> .

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
83	ROSES	Primary Endpoint	1Y	2022	Observational registry	All-comers	Cardiovascular Revascularization Medicine	Giacaman A, et al. PROspective observational registry evaluating the safety and effectiveness of Orsiro stent in Chilean patients – ROSES registry, Cardiovascular Revascularization Medicine (2021), <a href="https://doi.org/10.1016/j.carrev.2021.05.022">https://doi.org/10.1016/j.carrev.2021.05.022</a>
84	Rotablation study by Mankierious	Imaging	2Y	2021	Observational registry	Calcified lesions	Clinical Research in Cardiology	Mankierious N, et al. Outcomes of patients treated with a biodegradable-polymer sirolimus-eluting stent versus durable-polymer everolimus-eluting stents after rotational atherectomy. Clin Res Cardiol 110, 1574–1585 (2021). <a href="https://doi.org/10.1007/s00392-021-01852-9">https://doi.org/10.1007/s00392-021-01852-9</a>
85	SCAAR	Primary Endpoint	2Y	2019	Observational registry	All-comers	European Heart Journal	Buccheri S, et al. Clinical and angiographic outcomes of bioabsorbable vs. permanent polymer drug-eluting stents in Sweden: a report from the Swedish Coronary and Angioplasty Registry (SCAAR), European Heart Journal, Volume 40, Issue 31, 14 August 2019, Pages 2607–2615, <a href="https://doi.org/10.1093/eurheartj/ehz244">https://doi.org/10.1093/eurheartj/ehz244</a>
86	SCAAR	Primary Endpoint	10Y	2021	Observational registry	All-comers	Catheterization and Cardiovascular Interventions	Grimfjård P, et al. Outcome of PCI with Xience versus other commonly used modern drug eluting stents: A SCAAR report, Catheterization and Cardiovascular Interventions Catheter Cardiovasc Interv, <a href="https://doi.org/10.1002/ccd.29641">https://doi.org/10.1002/ccd.29641</a>
87	Angioscopic observation by Ishihara	Primary Endpoint	n/a	2018	Observational registry	All-comers	Cardiovascular Intervention and Therapeutics	Ishihara T, et al. Satisfactory arterial repair 1 year after ultrathin strut biodegradable polymer sirolimus-eluting stent implantation: an angioscopic observation. Cardiovascular Intervention and Therapeutics. 2018.
88	Angioscopic observation by Tsujimura	Primary Endpoint	10mo	2021	Observational registry	All-comers	Circulation. Cardiovascular Interventions	Tsujimura T, et al. Arterial Healing 10 Months After Implantation of an Ultrathin-Strut, Biodegradable-Polymer, Sirolimus-Eluting Stent - An Angioscopic Study. Circ Rep. 2021 May 29;3(6):316-323. doi: 10.1253/circrep.CR-21-0053. PMID: 34136706; PMCID: PMC8180372.
89	Healing study by Secco	Imaging	6mo	2016	Observational registry	STEMI-MVD	Cardiovascular Revascularization Medicine	Secco GG, et al. Time-related changes in neointimal tissue coverage of a novel Sirolimus eluting stent: Serial observations with optical coherence tomography. Cardiovascular Revascularization Medicine. 2016; 17(1): 38-43.
90	Healing study - ALSTER-OCT - by Heeger	Imaging	1Y	2017	Observational registry	All-comers	AsiaIntervention	Heeger CH, et al. Optical coherence tomography analysis of neointimal tissue in drug-eluting stents with biodegradable and durable polymer coatings: the ALSTER-OCT registry. AsiaIntervention. 2017; 3: 41-48.
91	Healing study by Koppara	Imaging	6mo	2018	Randomized controlled trial	All-comers	International Journal of Cardiology	Koppara T, et al. Randomised comparison of vascular response to biodegradable polymer sirolimus eluting and permanent polymer everolimus eluting stents: An optical coherence tomography study. International Journal of Cardiology. 2018; 1(258): 42-49.
92	Healing study by Kretov	Imaging	3mo	2018	Observational registry	All-comers	Journal of Interventional Cardiology	Kretov E, et al. Three-months optical coherence tomography analysis of a biodegradable polymer, sirolimus-eluting stent. Journal of Interventional Cardiology. 2018: 1-8.

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
93	Healing study - EVALUATION - by Miura	Imaging	1mo	2020	Observational registry	All-comers	Cardiovascular Intervention and Therapeutics	Miura, T, et al. Early vascular response of ultra-thin bioresorbable polymer sirolimus-eluting stents assessed by optical frequency domain imaging: the EVALUATION study. <i>Cardiovasc Interv and Ther</i> 36, 281–288 (2021). <a href="https://doi.org/10.1007/s12928-020-00689-9">https://doi.org/10.1007/s12928-020-00689-9</a>
94	Healing study by Ogura	Imaging	1mo	2021	Observational registry	All-comers	International Heart Journal	Ogura K, et al. Early Vascular Healing Following Bioresorbable-Polymer Sirolimus-Eluting Stent Placement Compared to That with Durable-Polymer Everolimus-Eluting Stent, <i>International Heart Journal</i> , 2021, Volume 62, Issue 3, Pages 510-519, Released on J-STAGE May 29, 2021, Advance online publication May 15, 2021, Online ISSN 1349-3299, Print ISSN 1349-2365, <a href="https://doi.org/10.1536/ihj.20-627">https://doi.org/10.1536/ihj.20-627</a>
95	Healing study by Oishi	Imaging	2we	2021	Observational registry	STEMI	International Heart Journal	Oishi Y, et al. Early Vascular Response to Ultrathin Biodegradable Polymer Sirolimus-Eluting Stents for the Treatment of ST-Elevation Myocardial Infarction After Plaque Rupture, <i>International Heart Journal</i> , 2021, Volume 62, Issue 1, Pages 42-49, Released on J-STAGE January 30, 2021, Online ISSN 1349-3299, Print ISSN 1349-2365, <a href="https://doi.org/10.1536/ihj.20-458">https://doi.org/10.1536/ihj.20-458</a> , <a href="https://www.jstage.jst.go.jp/article/ihj/62/1/62_20-458/_article/-char/en">https://www.jstage.jst.go.jp/article/ihj/62/1/62_20-458/_article/-char/en</a>
96	Healing study by Kawamura	Imaging	8mo	2022	Observational registry	ACS	Cardiovascular Intervention and Therapeutics	Kawamura A, et al. Preferable vascular healing of ultrathin strut biodegradable-polymer sirolimus-eluting stents in patients with acute coronary syndrome. <i>Cardiovasc Interv and Ther</i> (2022). <a href="https://doi.org/10.1007/s12928-022-00842-6">https://doi.org/10.1007/s12928-022-00842-6</a>
97	Healing STEMI by Hansen	Imaging	1mo	2022	Randomized controlled trial	STEMI	Coronary Artery Disease	Hansen K, et al. Early vascular healing after implantation of the polymer-free biolimus-eluting stent or the ultrathin strut biodegradable polymer sirolimus-eluting stent in patients with ST-segment elevation myocardial infarction, <i>Coronary Artery Disease: May 2022 - Volume 33 - Issue 3 - p 196-205</i> doi: 10.1097/MCA.0000000000001113
98	Meta-analysis by Lupi	Meta-analysis	1Y	2014	Meta-analysis	n.a.	Catheterization and Cardiovascular Interventions	Lupi A, et al. Meta-analysis of bioabsorbable versus durable polymer drug-eluting stents in 20,005 patients with Coronary Artery Disease: an update. <i>Catheter Cardiovascular Intervention</i> . 2014; 83(6): 1-14.
99	Meta-analysis by El-Hayek	Meta-analysis	26mo	2017	Meta-analysis	n.a.	JACC: Cardiovascular Interventions	El-Hayek G, et al. Meta-Analysis of Randomized Clinical Trials Comparing Biodegradable Polymer Drug-Eluting Stent to Second-Generation Durable Polymer Drug-Eluting Stents. <i>JACC Cardiovascular Intervention</i> . 2017; 10(5): 462-473.
100	Meta-analysis by Bangalore	Meta-analysis	1Y	2018	Meta-analysis	n.a.	Circulation. Cardiovascular Interventions	Bangalore S, et al. Newer Generation Ultra-Thin Strut Drug-Eluting Stents versus Older Second-Generation Thicker Strut Drug-Eluting Stents for Coronary Artery Disease: A Meta-Analysis of Randomized Trials. <i>Circulation</i> . 2018: 1-17.

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
101	Meta-analysis by Cassese	Meta-analysis	1Y	2018	Meta-analysis	n.a.	EuroIntervention	Cassese S, et al. Outcomes of patients treated with ultrathin-strut biodegradable polymer sirolimus-eluting stents versus fluoropolymer-based everolimus-eluting stents: a meta-analysis of randomised trials. <i>EuroIntervention</i> . 2018; 14(2): 224-231.
102	Meta-analysis by Lipinski	Meta-analysis	2Y	2018	Meta-analysis	n.a.	Cardiovascular Revascularization Medicine	Lipinski MJ, et al. A comparison of the ultrathin Orsiro Hybrid sirolimus-eluting stent with contemporary drug-eluting stents: A meta-analysis of randomized controlled trials. <i>Cardiovascular Revascularization Medicine</i> . 2018; 19(1a): 5-11.
103	Meta-analysis by Zhu	Meta-analysis	1Y	2018	Meta-analysis	n.a.	BMC Cardiovascular Disorders	Ping Z, et al. Safety and efficacy of ultrathin strut biodegradable polymer sirolimus-eluting stent versus durable polymer drug-eluting stents: a meta-analysis of randomized trials. <i>BMC cardiovascular disorders</i> 18.1 (2018): 170.
104	Meta-analysis by Hideo-Kajita	Primary Endpoint	1Y	2020	Patient-level pooled analysis	n.a.	International Journal of Cardiology	Hideo-Kajita A, et al., Comparison of clinical outcomes between Magmaris and Orsiro drug eluting stent at 12 months: Pooled patient level analysis from BIOSOLVE II-III and BIOFLOW II trials, <i>International Journal of Cardiology</i> (2019), <a href="https://doi.org/10.1016/j.ijcard.2019.11.003">https://doi.org/10.1016/j.ijcard.2019.11.003</a>
105	Meta-analysis by Lou	Meta-analysis	5Y	2019	Meta-analysis	n.a.	Cardiovascular Drugs and Therapy	Lou, Y, et al. Five-Year Outcomes of Biodegradable Polymer Drug-Eluting Stents Versus Second-Generation Durable Polymer Drug-Eluting Stents: a Meta-Analysis of Randomized Controlled Trials. <i>Cardiovasc Drugs Ther</i> 33, 557-566 (2019). <a href="https://doi.org/10.1007/s10557-019-06912-x">https://doi.org/10.1007/s10557-019-06912-x</a>
106	Meta-analysis by Roguin	Follow-up	2Y	2020	Patient-level pooled analysis	n.a.	JACC: Cardiovascular Interventions	Roguin A, et al. Proximal LAD Treated With Thin-Strut New-Generation Drug-Eluting Stents: A Patient-Level Pooled Analysis of TWENTE I-III, <i>JACC: Cardiovascular Interventions</i> , Volume 13, Issue 7, 2020, Pages 808-816, ISSN 1936-8798, <a href="https://doi.org/10.1016/j.jcin.2019.11.018">https://doi.org/10.1016/j.jcin.2019.11.018</a> .
107	Meta-analysis by Schapiro-Dufour	Meta-analysis	1Y	2019	Meta-analysis	HBR	Arch Cardiovasc Dis	Schapiro-Dufour E, et al. Major ischaemic and bleeding risks following current drug-eluting stent implantation: Are there differences across current drug-eluting stent types in real life?, <i>Archives of Cardiovascular Diseases</i> , Volume 112, Issues 8-9, 2019, Pages 469-484, ISSN 1875-2136, <a href="https://doi.org/10.1016/j.acvd.2019.04.007">https://doi.org/10.1016/j.acvd.2019.04.007</a> .
108	Meta-analysis by Waksman	Primary Endpoint	1Y	2019	Patient-level pooled analysis	Diabetic	The American Journal of Cardiology	Waksman R, et al. Efficacy and Safety of Ultrathin, Bioresorbable-Polymer Sirolimus-Eluting Stents Versus Thin, Durable-Polymer Everolimus-Eluting Stents for Coronary Revascularization of Patients With Diabetes Mellitus, <i>The American Journal of Cardiology</i> , Volume 124, Issue 7, 2019, Pages 1020-1026, ISSN 0002-9149, <a href="https://doi.org/10.1016/j.amjcard.2019.06.021">https://doi.org/10.1016/j.amjcard.2019.06.021</a> .

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
109	Meta-analysis by Bavishi	Meta-analysis	2.7Y	2019	Meta-analysis	Diabetic	European Heart Journal	Bavishi C, et al. Biodegradable polymer drug-eluting stent vs. contemporary durable polymer drug-eluting stents in patients with diabetes: a meta-analysis of randomized controlled trials, European Heart Journal - Quality of Care and Clinical Outcomes, Volume 6, Issue 1, January 2020, Pages 81–88, <a href="https://doi.org/10.1093/ehjqcco/qcz031">https://doi.org/10.1093/ehjqcco/qcz031</a>
110	Meta-analysis by Chandrasekhar	Primary Endpoint	1Y	2020	Patient-level pooled analysis	n.a.	JACC: Cardiovascular Interventions	Chandrasekhar J, et al. 1- Year Clinical Outcomes of All Comers Treated with 2 Bioresorbable Polymer-Coated Sirolimus-Eluting Stents. Propensity Score-Matched Comparison of the Combo and Ultrathin-strut Orsiro stents. JACC: Cardiovascular Interventions. 2020;820–30.
111	Meta-analysis by Dan	Subgroup analysis	1Y	2020	Patient-level pooled analysis	Calcified lesions-SV	Circulation. Cardiovascular Interventions	Dan K, et al. Comparison of Ultrathin, Bioresorbable-Polymer Sirolimus-Eluting Stents and Thin, Durable-Polymer Everolimus-Eluting Stents in Calcified or Small Vessel Lesions. Circ Cardiovasc Interv. 2020 Sep;13(9):e009189. doi: 10.1161/CIRCINTERVENTIONS.120.009189. Epub 2020 Sep 8. PMID: 32895004.
112	Meta-analysis by Innacconne	Meta-analysis	1Y	2020	Meta-analysis	n.a.	Catheterization and Cardiovascular Interventions	Iannaccone M, et al. Impact of strut thickness and number of crown and connectors on clinical outcomes on patients treated with second-generation drug eluting stent. Catheter Cardiovasc Interv. 2020; 96: 1417– 1422. <a href="https://doi.org/10.1002/ccd.28228">https://doi.org/10.1002/ccd.28228</a>
113	Meta-analysis by Kobayashi	Meta-analysis	5Y	2019	Meta-analysis	n.a.	Cardiovascular Intervention and Therapeutics	Kobayashi T, et al. Five-year clinical efficacy and safety of contemporary thin-strut biodegradable polymer versus durable polymer drug-eluting stents: a systematic review and meta-analysis of 9 randomized controlled trials. Cardiovasc Interv and Ther 35, 250–258 [2020]. <a href="https://doi.org/10.1007/s12928-019-00613-w">https://doi.org/10.1007/s12928-019-00613-w</a>
114	Meta-Analysis by Monjur	Primary Endpoint	2.8Y	2020	Meta-analysis	n.a.	Open Heart	Monjur MR, et al. Ultrathin-strut biodegradable polymer versus durable polymer drug-eluting stents: a meta-analysis, Open Heart 2020;7:e001394. doi: 10.1136/openhrt-2020-001394
115	Meta-analysis by Ploumen	Primary Endpoint	1Y	2020	Patient-level pooled analysis	Octogenarians	American Heart Journal	Ploumen EH, et al. New-generation drug-eluting coronary stents in octogenarians: Patient-level pooled analysis from the TWENTE I-IV trials, American Heart Journal, Volume 228, 2020, Pages 109-115, ISSN 0002-8703, <a href="https://doi.org/10.1016/j.ahj.2020.07.003">https://doi.org/10.1016/j.ahj.2020.07.003</a> .
116	Meta-analysis by Ploumen	Subgroup analysis	2Y	2021	Meta-analysis	Diabetic	International Journal of Cardiology	Ploumen EH, et al. Treating diabetic all-comers with contemporary drug-eluting stents: Prespecified comparisons from the BIO-RESORT and the BIONYX randomized trials, Int J Cardiol. 2021 Feb 15;325:37-44. doi: 10.1016/j.ijcard.2020.10.051. Epub 2020 Oct 22.

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
117	Meta-analysis by Taglieri	Meta-analysis	1Y	2020	Network Meta-analysis	n.a.	JACC: Cardiovascular Interventions	Nevio Taglieri, et al. Target Lesion Failure With Current Drug-Eluting Stents: Evidence From a Comprehensive Network Meta-Analysis, JACC: Cardiovascular Interventions, Volume 13, Issue 24, 2020, Pages 2868-2878, ISSN 1936-8798, <a href="https://doi.org/10.1016/j.jcin.2020.09.014">https://doi.org/10.1016/j.jcin.2020.09.014</a> .
118	Meta-analysis by Madhavan	Meta-analysis	5Y	2020	Meta-analysis	n.a.	Current opinion in cardiology	Madhavan MV, et al. Adverse events beyond 1 year after percutaneous coronary intervention. <i>Curr Opin Cardiol.</i> 2020 Nov;35(6):687-696. doi: 10.1097/HCO.0000000000000792. PMID: 32852348.
119	Meta-analysis by Gomez-Lara	Primary Endpoint	3Y	2021	Meta-analysis	n.a.	Journal of the American Heart Association	Gomez-Lara, et al. Coronary endothelium-dependent vasomotor function after drug-eluting stent and bioresorbable scaffold implantation, <i>J Am Heart Assoc.</i> 2021;10:e022123. DOI: 10.1161/JAHA.121.022123
120	Meta-analysis by Hemetsberger	Subgroup analysis	2Y	2021	Meta-analysis	Calcified lesions	Journal of the American Heart Association	Hemetsberger R, et al. Impact of Coronary Calcification on Clinical Outcomes After Implantation of Newer-Generation Drug-Eluting Stents. <i>Clin Res Cardiol</i> [2022]. <i>J Am Heart Assoc.</i> 2021;10:e019815. DOI: 10.1161/JAHA.120.019815
121	Meta-analysis by Hussain	Meta-analysis	2Y	2021	Meta-analysis	n.a.	Catheterization and Cardiovascular Interventions	Hussain, Y, et al. Long term outcomes of ultrathin versus standard thickness second-generation drug eluting stents: Meta-analysis of randomized trials. <i>Catheter Cardiovasc Interv.</i> 2021; 99: 563–574. <a href="https://doi.org/10.1002/ccd.29866">https://doi.org/10.1002/ccd.29866</a>
122	Meta-analysis by Iglesias	Meta-analysis	1Y	2021	Meta-analysis	ACS	JACC: Cardiovascular Interventions	Iglesias JF, et al. Differential Effects of Newer-Generation Ultrathin-Strut Versus Thicker-Strut Drug-Eluting Stents in Chronic and Acute Coronary Syndromes, <i>JACC: Cardiovascular Interventions</i> , 2021, <a href="https://doi.org/10.1016/j.jcin.2021.09.028">https://doi.org/10.1016/j.jcin.2021.09.028</a> .
123	Meta-analysis by Madhavan	Meta-analysis	2.5Y	2021	Meta-analysis	n.a.	European Heart Journal	Madhavan MV, et al. Long-term follow-up after ultrathin vs. conventional 2nd-generation drug-eluting stents: a systematic review and meta-analysis of randomized controlled trials <i>JF European Heart Journal</i> , 2021, 10.1093/eurheartj/ehab280
124	Meta-analysis by Mir	Meta-analysis	5Y	2021	Meta-analysis	n.a.	Expert Review of Cardiovascular Therapy	Tanveer Mir, L. et al. Bioresorbable polymer and durable polymer metallic stents in coronary artery disease: a meta-analysis, <i>Expert Review of Cardiovascular Therapy</i> , 19:5, 445-456, DOI: 10.1080/14779072.2021.1915769
125	Meta-analysis by Pilgrim	Meta-analysis	739days	2021	Patient-level pooled analysis	n.a.	American Heart Journal	Thomas Pilgrim, et al. Biodegradable polymer sirolimus-eluting stents vs durable polymer everolimus-eluting stents in patients undergoing percutaneous coronary intervention: A meta-analysis of individual patient data from 5 randomized trials, <i>American Heart Journal</i> , Volume 235, 2021, Pages 140-148, ISSN 0002-8703, <a href="https://doi.org/10.1016/j.ahj.2021.02.009">https://doi.org/10.1016/j.ahj.2021.02.009</a> .
126	Meta-analysis by Ploumen	Primary Endpoint	3Y	2021	Patient-level pooled analysis	Diabetic	Cardiovascular diabetology	Ploumen, E.H., et al. Impact of prediabetes and diabetes on 3-year outcome of patients treated with new-generation drug-eluting stents in two large-scale randomized clinical trials. <i>Cardiovasc Diabetol</i> 20, 217 [2021]. <a href="https://doi.org/10.1186/s12933-021-01405-4">https://doi.org/10.1186/s12933-021-01405-4</a>

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### Bibliography – JUL 2022

#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
127	Meta-analysis by Saito	Meta-analysis	1Y	2021	Meta-analysis	n.a.	Catheterization and Cardiovascular Interventions	Saito, A. et al. The relationship between coronary stent strut thickness and the incidences of clinical outcomes after drug-eluting stent implantation: A systematic review and meta-regression analysis. <i>Catheter Cardiovasc Interv.</i> 2021; 99: 575–582. <a href="https://doi.org/10.1002/ccd.29922">https://doi.org/10.1002/ccd.29922</a>
128	Meta-analysis by Sethi	Meta-analysis	5Y	2021	Meta-analysis	n.a.	Coronary Artery Disease	Sethi A. et al. Ultrathin biodegradable polymer sirolimus-eluting stent versus contemporary durable polymer everolimus-eluting stent for percutaneous coronary intervention: a meta-analysis of randomized trials, <i>Coronary Artery Disease: August 2021 - Volume 32 - Issue 5 - p 459-465</i> doi: 10.1097/MCA.0000000000000949
129	Meta-analysis by Toelg	Subgroup analysis	1Y	2021	Patient-level pooled analysis	n.a.	Catheterization and Cardiovascular Interventions	Toelg R, et al. Individual patient data analysis of the BIOFLOW study program comparing safety and efficacy of a bioresorbable polymer sirolimus eluting stent to a durable polymer everolimus eluting stent. <i>Catheter Cardiovasc Interv.</i> 2021; 98: 848– 856. <a href="https://doi.org/10.1002/ccd.29254">https://doi.org/10.1002/ccd.29254</a>
130	Meta-analysis by Hemetsberger	Subgroup analysis	3Y	2022	Meta-analysis	Complex PCI	Clinical Research in Cardiology	Hemetsberger R, et al. Complex vs. non-complex percutaneous coronary intervention with newer-generation drug-eluting stents: an analysis from the randomized BIOFLOW trials. <i>Clin Res Cardiol</i> [2022]. <a href="https://doi.org/10.1007/s00392-022-01994-4">https://doi.org/10.1007/s00392-022-01994-4</a>
131	Health Economic Evaluation by Mattke	Follow-up	1Y	2018	Health Economics	n.a.	Cardiovascular Revascularization Medicine	Mattke S, et al. Health economic evaluation of an ultrathin, bioresorbable polymer sirolimus-eluting coronary stent compared to a thin, durable polymer everolimus-eluting stent. <i>Cardiovascular Revascularization Medicine</i> [2018].
132	Health Economic Evaluation by Mattke	Follow-up	2Y	2019	Health Economics	n.a.	JACC: Cardiovascular Interventions	Mattke S, et al. Two-year results after implantation of an ultrathin, bioresorbable polymer sirolimus-eluting coronary stent compared to a thin, durable polymer everolimus-eluting stent: health economic evaluation. <i>Journal of the American College of Cardiology</i> 73.9 Supplement 1 [2019]: 1152.
133	Health Economic Evaluation by Mattke	Healtheco	4Y	2019	Health Economics	n.a.	Cardiovascular Revascularization Medicine	Mattke S, et al. Cost and Mortality Implications of Lower Event Rates After Implantation of an Ultrathin-Strut Coronary Stent Compared With a Thin-Strut Stent Over Four Years, <i>Cardiovascular Revascularization Medicine</i> , Volume 21, Issue 7, 2020, Pages 835-842, ISSN 1553-8389, <a href="https://doi.org/10.1016/j.carrev.2019.12.018">https://doi.org/10.1016/j.carrev.2019.12.018</a> .
134	Review article by Iglesias	Review Article	n/a	2017	Clinical review	n.a.	Expert Review of Medical Devices	Iglesias JF, et al. Orsiro cobalt-chromium sirolimus-eluting stent: present and future perspectives. <i>Expert Review of Medical Devices.</i> 2017: 1-16.
135	Review article by Iglesias	Review Article	n/a	2018	Clinical review	n.a.	Cardiovascular Revascularization Medicine	Iglesias JF, et al. Safety and efficacy of drug-eluting stents combining biodegradable polymers with ultrathin stent platforms. <i>Cardiovascular Revascularization Medicine.</i> 2018; 19(1PtA): 2-4.
136	Review article by Iglesias - High Risk	Review Article	n/a	2015	Clinical review	High risk	Minerva Cardioangiologica	Iglesias JF, et al. Performance of the Orsiro Hybrid drug-eluting stent in high-risk subgroups. <i>Minerva Cardioangiologica.</i> 2015; 64(1): 55-73.

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#	Trial name	Data type	Follow-up	Year	Study type	Population	Journal	Citation style
137	Review article by Tittelbach	Review Article	n/a	2011	Technical review	n.a.	International Journal of Cardiology	Tittelbach M, et al. Orsiro – The First Hybrid Drug-eluting Stent, Opening Up a New Class of Drug-eluting Stents for Superior Patient Outcomes. <i>Interventional Cardiology</i> . 2011; 6(2): 1-5.

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