

Taglieri et al. Network Meta-Analysis

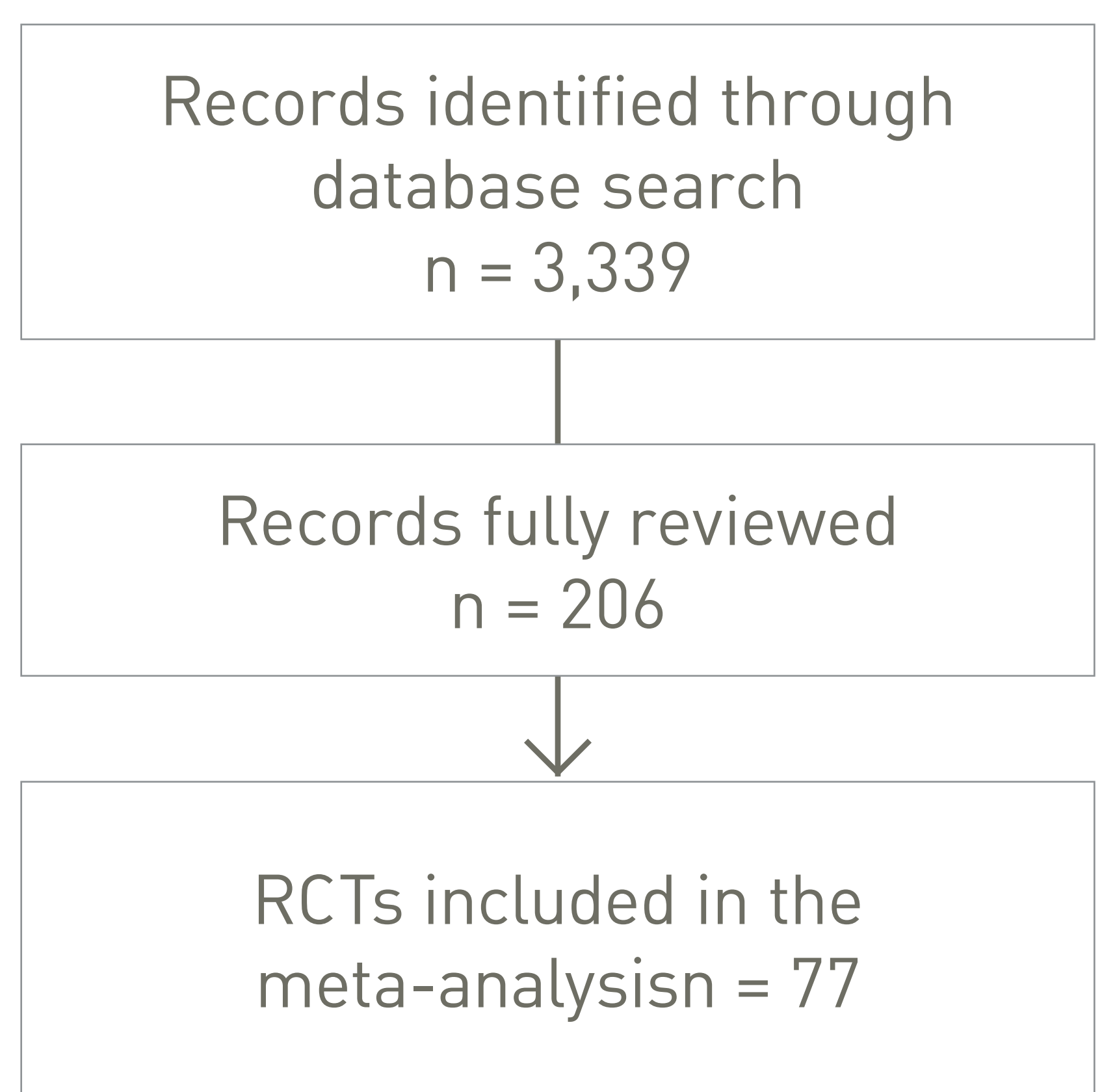
Network meta-analysis of randomized controlled trials (RCTs) comparing **Orsiro**[®] and 9 other currently used drug-eluting stents (DES).

Conclusions

- Orsiro was associated with a lower 1-year rate of TLF compared with Xience (OR [95% CI] 0.84 [0.71, 0.98], p = 0.03), Resolute[◇] (OR [95% CI] 0.81 [0.68, 0.95], p = 0.01), and Nobori/BioMatrix[°] (OR [95% CI] 0.81 [0.67, 0.98], p = 0.03).
- Orsiro had the highest probability (70.8%) to rank as the best stent, based on 1-year TLF SUCRA* score.
- At long-term follow-up**, there were no statistically significant differences among the different DES with respect to TLF; however, Orsiro still ranked as the best stent, with a probability of 58.6%.

Study design

Large, network meta-analysis of 77 randomized controlled trials (RCTs) comparing Orsiro and 9 other currently used DES in patients undergoing PCI. Four DES received the most extensive research (Orsiro, Xience, Resolute[◇], Nobori/BioMatrix[°]).



Endpoints

Primary endpoint

Target Lesion Failure (TLF) at 12 months and at the longest follow-up available defined as the composite of:

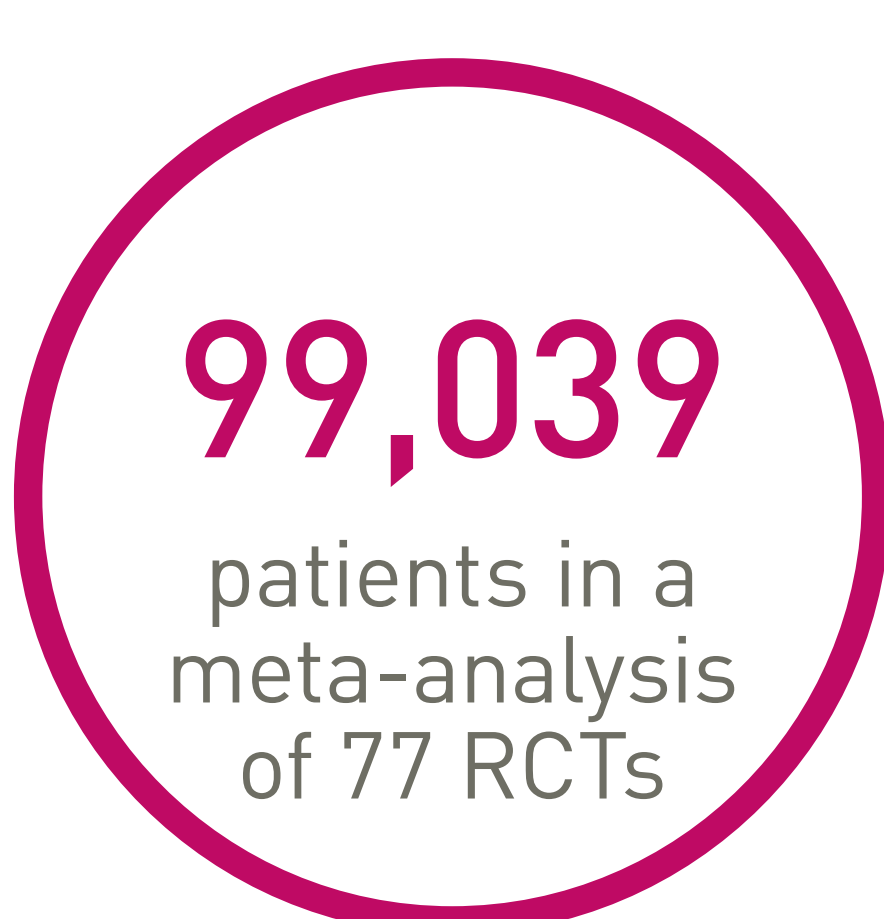
- Cardiac Death
- Target Vessel Myocardial Infarction (TV-MI)
- Ischemia-driven Target Lesion Revascularization (TLR)

Secondary endpoints

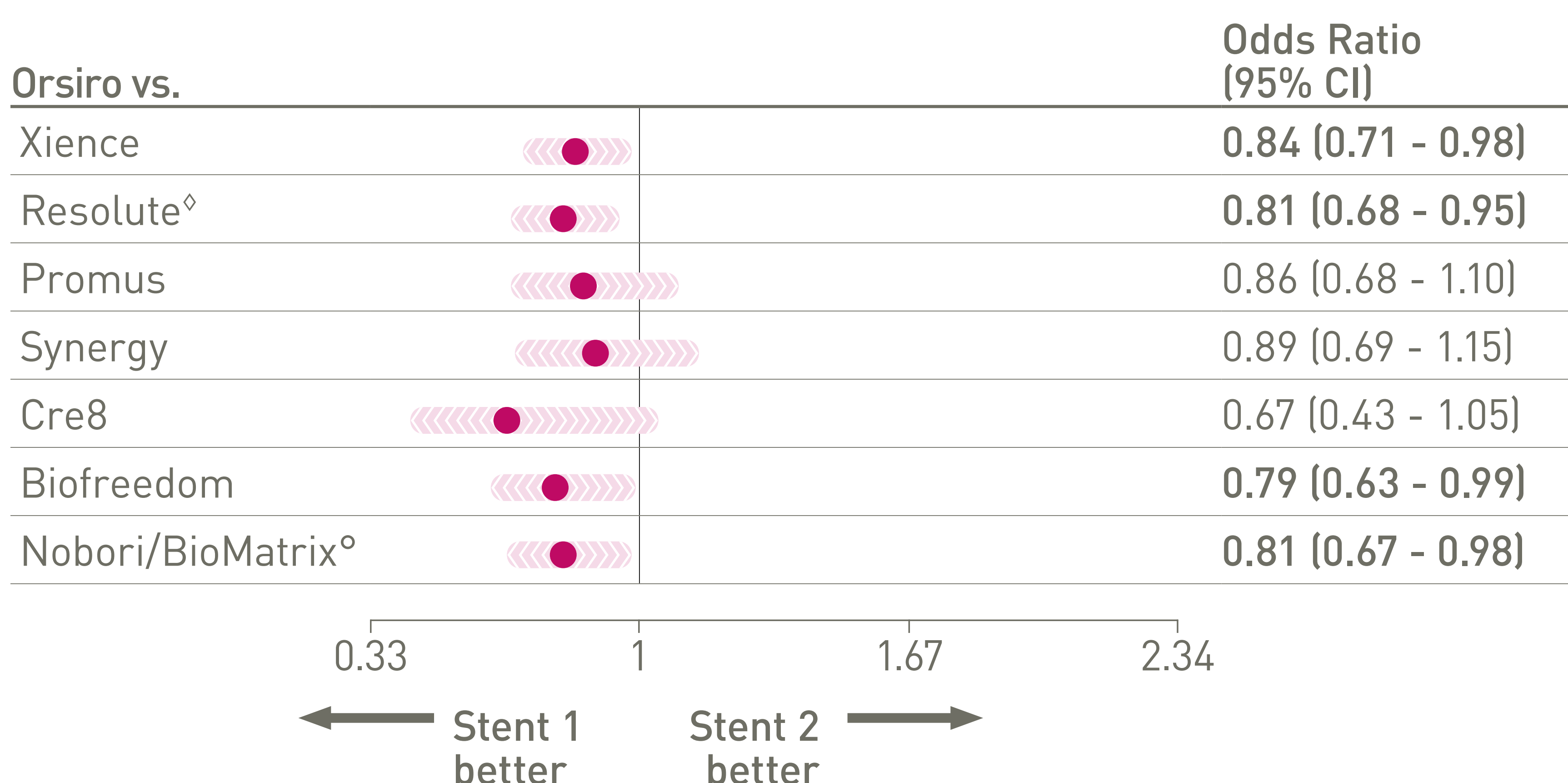
- Individual components of the primary endpoint
- All-cause mortality
- Stent Thrombosis (ST)

Included RCTs

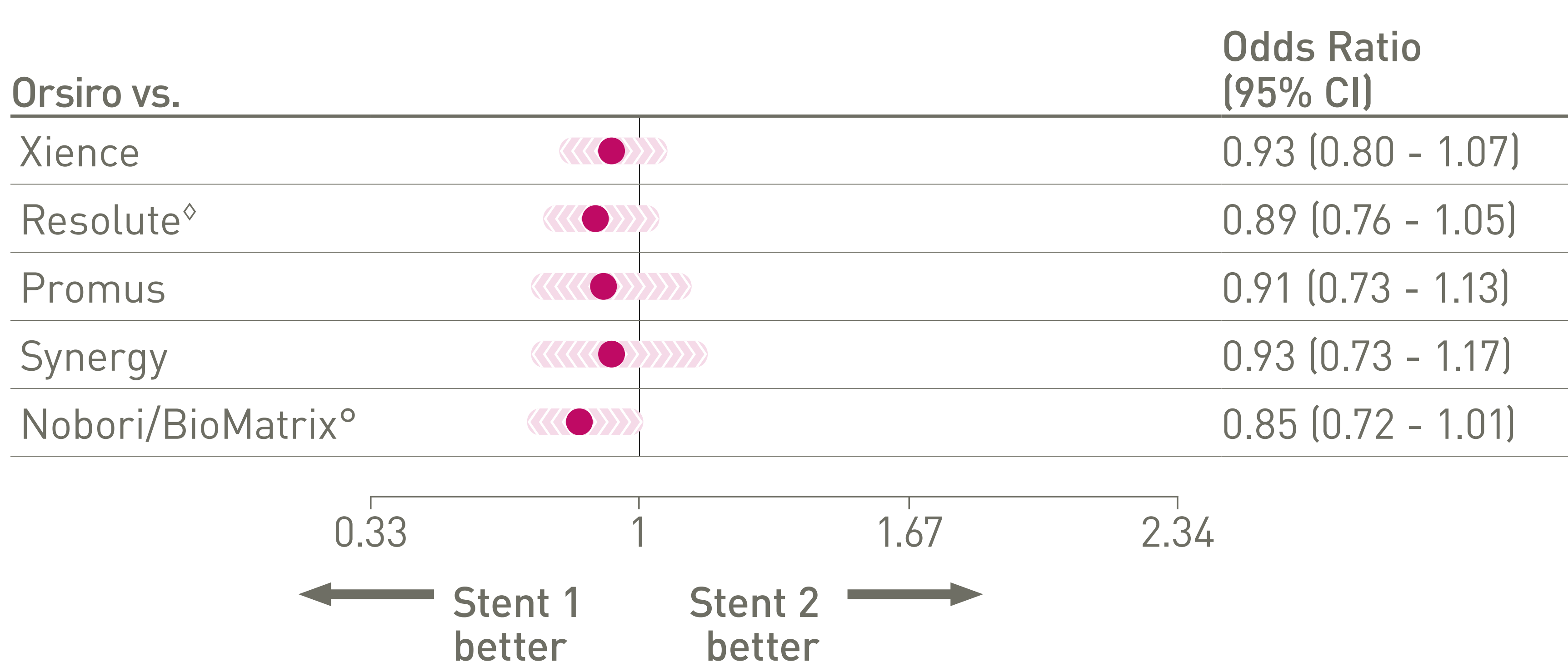
BASKET-PROVE	ESSENCE-DIABETES	LONG-DES V	Separham et al.
BASKET-PROVE II	EVERBIO II	LONG-DES VI	SORT OUT IV
BIOFLOW-II	EVOLVE CHINA	NEXT	SORT OUT V
BIOFLOW-IV	EVOLVE FHU	NOBORI 1-Phase 1 and 2	SORT OUT VI
BIOFLOW-V	EVOLVE II	ONYX ONE	SORT OUT VII
BIOFLOW-VI	EXAMINATION	ORIENT	SORT OUT VIII
BIOFREEDOM	EXCELLENT	PLATINUM	SORT OUT IX
BIONYX	EXECUTIVE	PLATINUM CHINA	SPIRIT II
BIO-RESORT	HOST ASSURE	PLATINUM PLUS	SPIRIT III
BIOSCIENCE	ISAR-LEFT-MAIN 2	PRISON III - Phase 2	SPIRIT IV
BIOSTEMI	ISAR-TEST	PRISON IV	SPIRIT V
Carrié et al.	ISAR-TEST 2	PROMISE	SPIRIT WOMEN
CIBELES	ISAR-TEST 3	ReCre8	TUXEDO India
COMFORTABLE AMI	ISAR-TEST 4	RESERVOIR	TWENTE
COMPARE	ISAR-TEST 5	RESET	Viswanathan et al.
COMPARE II	LEADERS	RESOLUTE All Comers	XAMI
CORPAL	LEADERS FREE	RESOLUTE China	XIMA
CTO-IVUS	LIPSIA	SEA-CORP	
De la Torre	LONG-DES III	SEA-SIDE	
DUTCH PEERS (TWENTEII)	LONG-DES IV	SENIOR	



TLF at 1 year



TLF at long-term follow-up**



Selected secondary endpoints at 1 year and long-term follow-up**

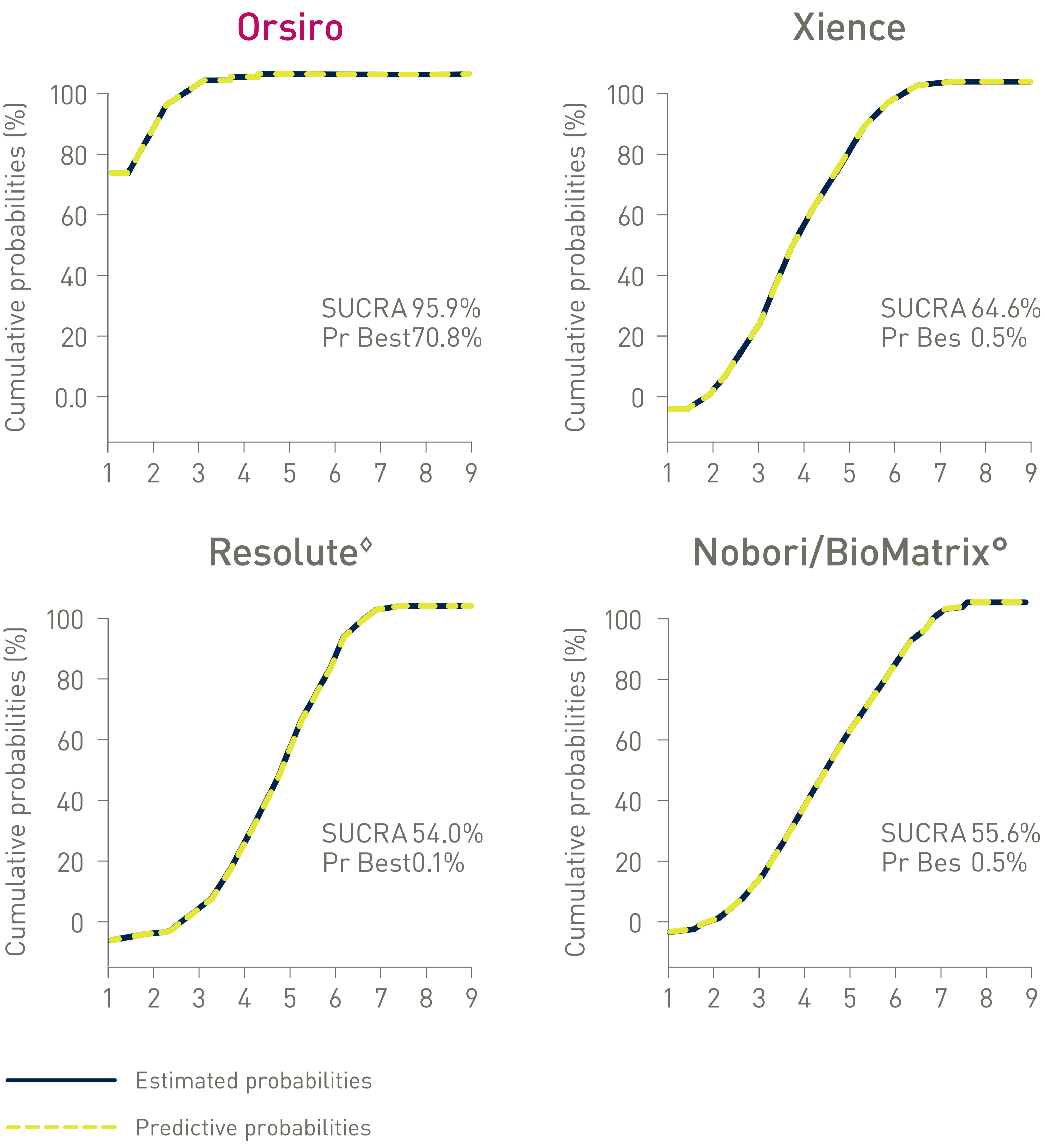
Ischemia-driven TLR at 1 year	Pooled Estimate Odds Ratio (95% CI)	p value for effect estimate	p value for local inconsistency
Orsiro vs. Resolute [◇]	0.74 (0.61 - 0.98)	0.04	0.62
Orsiro vs. Nobori/BioMatrix [◊]	0.80 (0.62 - 1.03)	0.08	0.45

TV-MI at long-term follow-up	Pooled Estimate Odds Ratio (95% CI)	p value for effect estimate	p value for local inconsistency
Orsiro vs. Xience	0.81 (0.64 - 1.01)	0.06	0.36

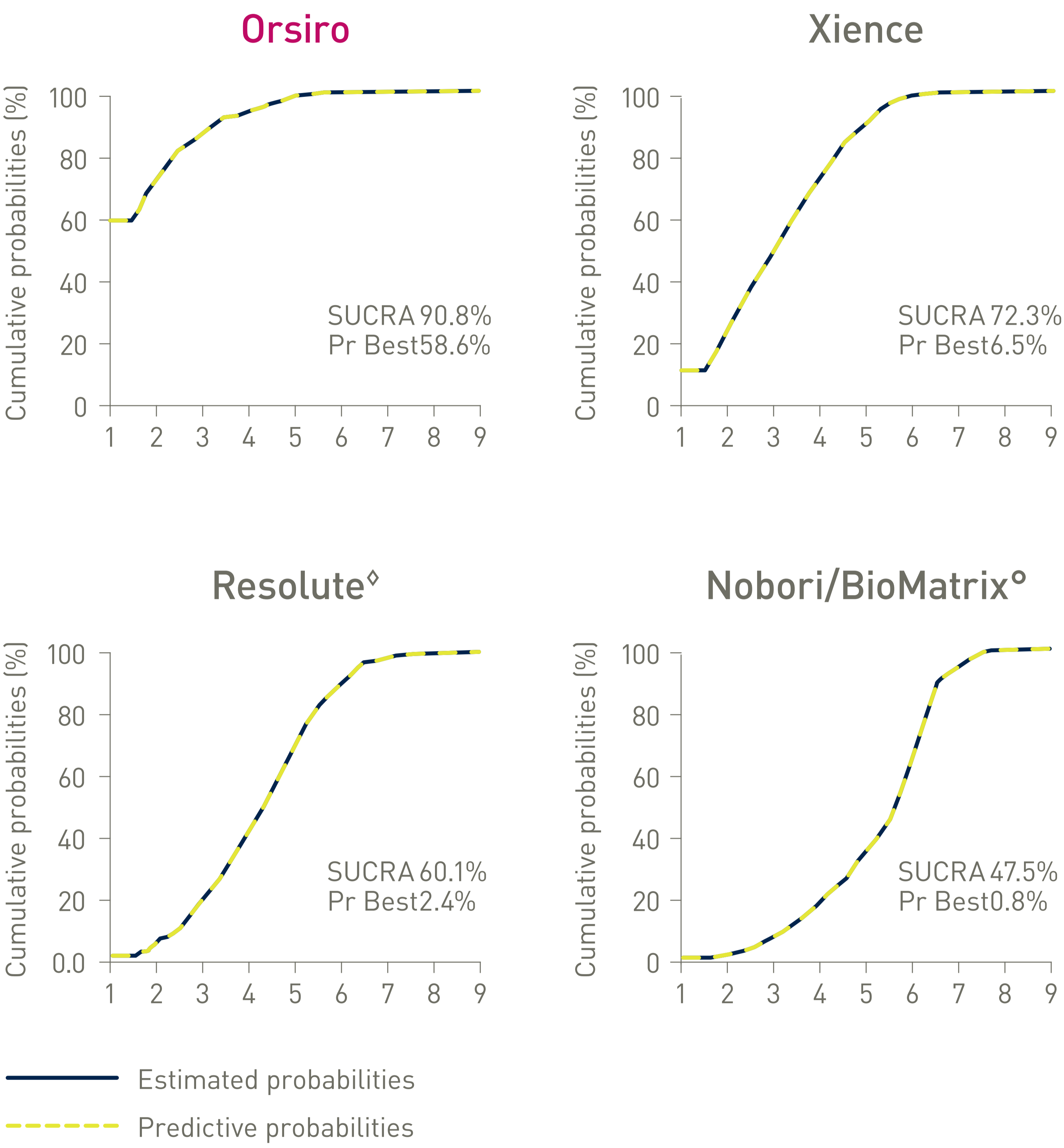
Definite ST at long-term follow-up	Pooled Estimate Odds Ratio (95% CI)	p value for effect estimate	p value for local inconsistency
Orsiro vs. Resolute [◇]	0.59 (0.33 - 1.05)	0.07	0.24
Orsiro vs. Nobori/BioMatrix [◊]	0.60 (0.36 - 0.98)	0.04	0.96

Definite or probable ST at long-term follow-up	Pooled Estimate Odds Ratio (95% CI)	p value for effect estimate	p value for local inconsistency
Orsiro vs. Resolute [◇]	0.66 (0.45 - 0.99)	0.04	0.25
Orsiro vs. Nobori/BioMatrix [◊]	0.72 (0.51 - 1.03)	0.07	0.90

Cumulative ranking probabilities (SUCRA) – TLF at 1 year



Cumulative ranking probabilities (SUCRA) – TLF at long-term follow-up**



Principal investigator

Nevio Taglieri, Policlinico S. Orsola, Malpighi, Bologna, Italy

*SUCRA: Surface Under the Cumulative Ranking Curve, **Median follow-up period of 50 months; [◊] Resolute Integrity and Resolute Onyx.

1. Taglieri N., et al., Target Lesion Failure with Current Drug-Eluting Stents. Evidence from a Comprehensive Network Meta-Analysis. J Am Coll Cardiol Intv. 2020;13(24):2868–78;
2. based on SUCRA score, in comparison to Xience, Resolute and Nobori/BioMatrix, after a median follow-up period of 50 months.

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[◊]Nobori/BioMatrix is not available in the US..

Manufacturer:
 BIOTRONIK AG
 Ackerstrasse 6
 8180 Bülach,
 Switzerland
 Tel +41 (0) 44 8645111
 Fax +41 (0) 44 8645005
 info.vi@biotronik.com
 www.biotronik.com

Distributor:
 BIOTRONIK, INC.
 6024 Jean Road
 Lake Oswego OR 97035-5369
 Tel (800) 547 0394
 Fax (800) 291 0470
 www.biotronik.com