



BIOSOLVE-II

60-month results¹

Conclusions

- Target Lesion Failure (TLF)* (8.0%) and Clinically-Driven Target Lesion Revascularization (CD-TLR) (5.6%) rates in BIOSOLVE-II remain low and demonstrate an excellent safety and efficacy profile up to 60 months.
- There was no definite or probable Scaffold Thrombosis (ST) at 60-month clinical follow-up.
- BIOSOLVE-II demonstrates favorable safety results with only 1.7% Cardiac Death and 2.1% Target Vessel Myocardial Infarction (TV-MI) rates.
- These are the first long-term results on safety and clinical performance of Magmaris® comparable to 2nd generation drug eluting stents, which will support future generations.

Study design

Prospective, multi-center, first-in-man trial

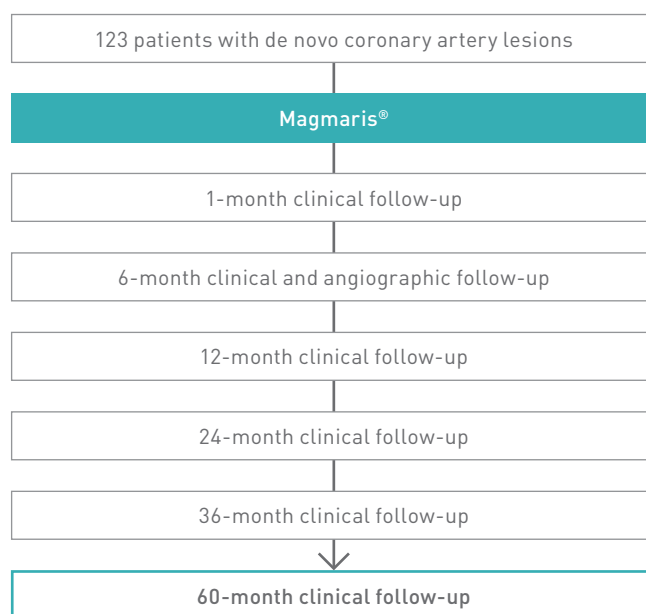
Endpoints

Primary endpoint

- In-segment Late Lumen Loss (LLL) at 6 months

Secondary endpoints (at 1, 6, 12, 60 months)

- TLF* rate
- Scaffold thrombosis rate
- Procedure and device success



Lesion location

	n = 123	
LAD	47	38.2%
LCx	29	23.6%
RCA	45	36.6%
Intermediate branch	2	1.6%

Lesion characteristics

	n = 123	
Lesion length (mm)**	12.6 ± 4.5	
Reference vessel diameter (mm)**	2.7 ± 0.40	
AHA/ACC lesion class B2/C	53	43.4%
Calcification moderate/severe	13	10.7%

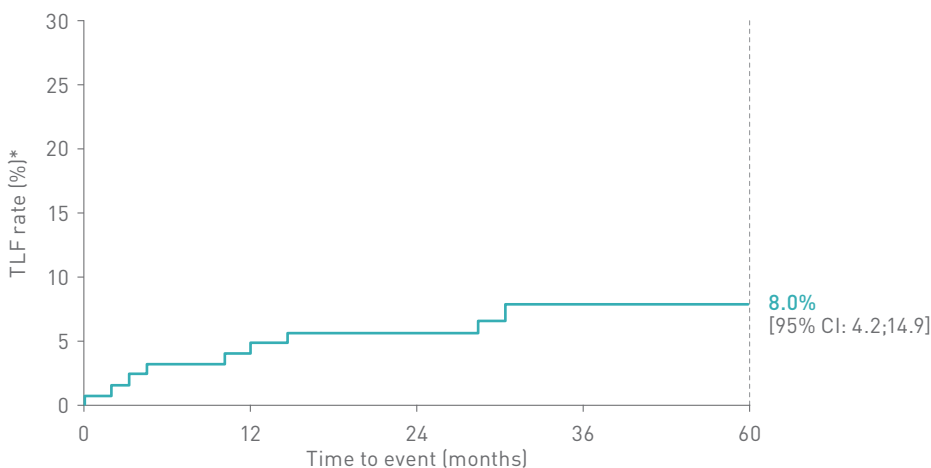
Patient characteristics

	n = 123	
Age, yrs**	65.2 ± 10.3	
Male	78	63.4%
Hypertension	101	82.1%
Hyperlipidemia	74	60.2%
Smoking	67	54.5%
Diabetes mellitus	36	29.3%
Insulin dependent	11	30.6%
Non-insulin dependent	25	69.4%
History of MI	29	23.6%
Previous percutaneous intervention	52	42.3%

* Composite of Cardiac Death, Target Vessel Myocardial Infarction (TV-MI), Clinically-Driven Target Lesion Revascularization (CD-TLR) and CABG.

** Data shown as mean ± SD

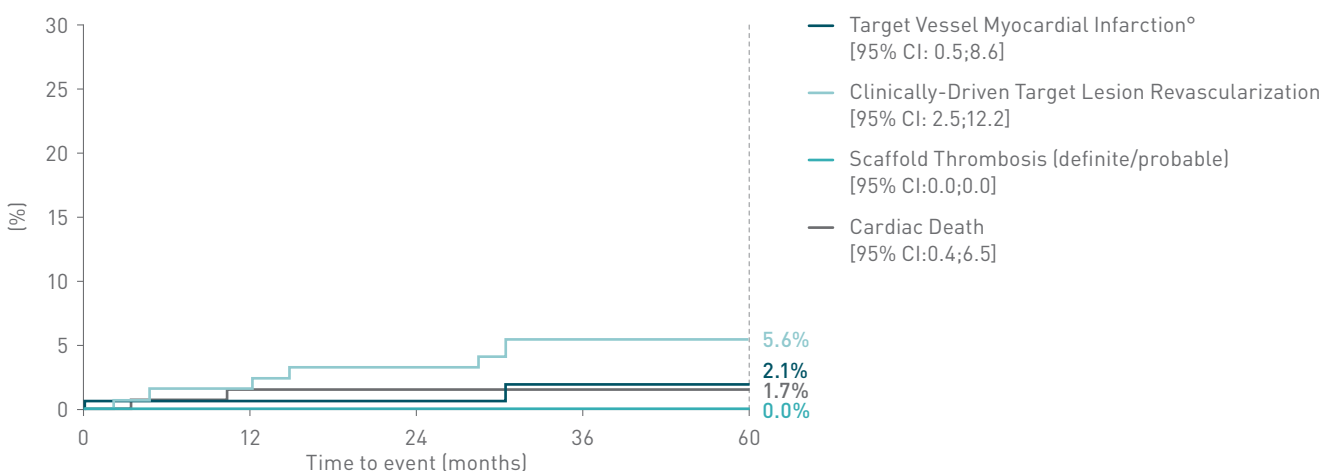
TLF* rate up to 60 months



	6 months ⁷ n = 120		12 months ⁸ n = 118		24 months ⁷ n = 120		36 months ⁹ n = 117		60 months ¹ n = 121	
TLF*	4	3.3%	4	3.4%	7	5.9%	8	6.8%	7	8.0%
TLF* components										
Death	2	1.7%	2	1.7%	4	3.3%	5	4.3%	6	7.5%
Cardiac death	1 ²	0.8%	1 ²	0.8%	2 ^{2,3}	1.7%	2 ^{2,3}	1.7%	2	1.7%
Non-cardiac death	1 ⁴	0.8%	1 ⁴	0.8%	2 ^{4,5}	1.7%	3 ^{4,5,6}	2.6%	4	5.0%
TV-MI ^o	1	0.8%	1	0.8%	1	0.8%	1	0.9%	2	2.1%
CD-TLR	2	1.7%	2	1.7%	4	3.3%	5	4.3%	5	5.6%
CABG	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
ST definite or probable	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Note: 6-, 12-, 24-, 36- month outcomes are based on frequency analysis whereas the 60-month results are based on Kaplan-Meier failure estimate analysis including censored observations.

Selected secondary clinical endpoints up to 60 months



* Composite of Cardiac Death, Target Vessel Myocardial Infarction (TV-MI), Clinically-Driven Target Lesion Revascularization (CD-TLR) and CABG.

^o Peri-procedural MI according to SCAI definition and spontaneous MI according to the Extended Historical definition.

Principal investigator

Prof. M. Haude, Lukaskrankenhaus, Neuss, Germany

1. Haude M. Long-term clinical data of the BIOSOLVE-II study with the drug-eluting absorbable metal scaffold in the treatment of subjects with de novo lesions in native coronary arteries - BIOSOLVE-II. Presented at the: e-Course PCR, 25 June 2020, Paris, France; 2. Unwitnessed death 134 days post PCI of distal RCA, no autopsy available; 3. Unwitnessed death 395 days post PCI of the mid RCA, no autopsy available; 4. Patient died of cancer; 5. Patient died of pulmonary infection leading to septic shock; 6. Patient died of intracerebral hemorrhage; 7. Haude M et al. Sustained safety and clinical performance of a drug-eluting absorbable metal scaffold up to 24 months: pooled outcomes of BIOSOLVE-II and BIOSOLVE-III. EuroIntervention. 2017;13-online publish-ahead-of-print May 2017; 8. Haude M et al. Sustained safety and performance of the second-generation drug-eluting absorbable metal scaffold in patients with de novo coronary lesions: 12-month clinical results and angiographic findings of the BIOSOLVE-II first-in-man trial. European Heart Journal. 2016; 37, 2701-2709; doi:10.1093/eurheartj/ehw196; 9. Haude M. Long-term clinical data and multimodality imaging analysis of the BIOSOLVE-II study with the drug-eluting absorbable metal scaffold in the treatment of subjects with de novo lesions in native coronary arteries - BIOSOLVE-II. presented at EuroPCR 2018, Paris, France. All events have been adjudicated by a clinical event committee.

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