

Statin therapy and amputation-free survival in CLI patients: insights from the CRITISCH registry

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Disclosures

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I have the following potential conflicts of interest to report:

- Consulting: Boston Scientific, Medtronic, COOK, Bard, Penumbra, Cordis
- Other: **Vascupedia (Co-founder)**

AHA and ESC new guidelines

Statins in PAD and CLI patients

2016 AHA/ACC Guideline on the Management of Patients With Lower Extremity Peripheral Artery Disease: Executive Summary

A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines

Developed in Collaboration With the American Association of Cardiovascular and Pulmonary Rehabilitation, Inter-Society Consensus for the Management of Peripheral Arterial Disease, Society for Cardiovascular Angiography and Interventions, Society for Clinical Vascular Surgery, Society for Interventional Radiology, Society for Vascular Medicine, Society for Vascular Nursing, Society for Vascular Surgery, and Endovascular Surgery Society

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The Comprehensive RWI Data Supplement table is available with this article at <http://circ.ahajournals.org/lookup/suppl/doi:10.1161/CIR.0000000000000470/-/DC1>.

Statin Agents		Treatment with a statin medication is indicated for all patients with PAD (88, 135-139).
I	A	

AHA and ESC new guidelines

Statins in PAD and CLI patients

ESC European Heart Journal (2017) 38, 1–60
European Society of Cardiology doi:10.1093/eurheartj/ehw095

ESC GUIDELINES

2017 ESC Guidelines on the Diagnosis and Treatment of Peripheral Arterial Diseases, in collaboration with the European Society for Vascular Surgery (ESVS)

Document covering atherosclerotic disease of extracranial carotid and vertebral, mesenteric, renal, upper and lower extremity arteries

Endorsed by: the European Stroke Organization (ESO)

The Task Force for the Diagnosis and Treatment of Peripheral Arterial Diseases of the European Society of Cardiology (ESC) of the European Society for Vascular Surgery (ESVS)

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ESC Collaboration for Practice Guidelines (CPG) and National Cardiac Societies (NCS) document reviewers listed in the Appendix

¹Representing the European Society for Vascular Surgery (ESVS)

²Representing the European Stroke Organization (ESO)

ESC experts having participated in the development of this document:

Associations: European Association of Preventive Cardiology (EAPC), European Association of Cardiovascular Imaging (EACVI), European Association of Percutaneous Cardiovascular Interventions (EAPCI), European Council for Cardio-Thoracic Practice (EACTP), Council on Cardiovascular Primary Care (CCPC), Council on Hypertension (CHT), Working Groups: Atherosclerosis and Vascular Biology, Cardiovascular Pharmacotherapy, Cardiovascular Surgery, Hypertension Guidelines, Transcatheter

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Statins are recommended in all patients with PADs. ^{31,32}	I	A
In patients with PADs, it is recommended to reduce LDL-C to < 1.8 mmol/L (70 mg/dL) or decrease it by ≥ 50% if baseline values are 1.8–3.5 mmol/L (70–135 mg/dL). ²⁵	I	C

Studies about statins in CLI patients

Limitations

- Studies with mixed populations (CLI/IC)¹
- Single-centre studies²
- Retrospective study designs³
- Evaluation of only one treatment strategy⁴
- Data about statin administration only at hospital discharge²

1. Kumbhani et al. *Eur Heart J* (2014) 35, 2864–2872
2. Westin et al. *J Am Coll Cardiol* 2014;63:682–90
3. Vogel et al. *Circ Cardiovasc Interv.* 2013;6:694-700
4. Scali et al. *J Vasc Surg* 2011;54:1006-10

CRITISCH Registry

Multicentre,
prospective and
interdisciplinary
registry

Sponsors
DGG, DIGG

Recruitment time

20

months

01/2013-09/2014

27

vascular centres

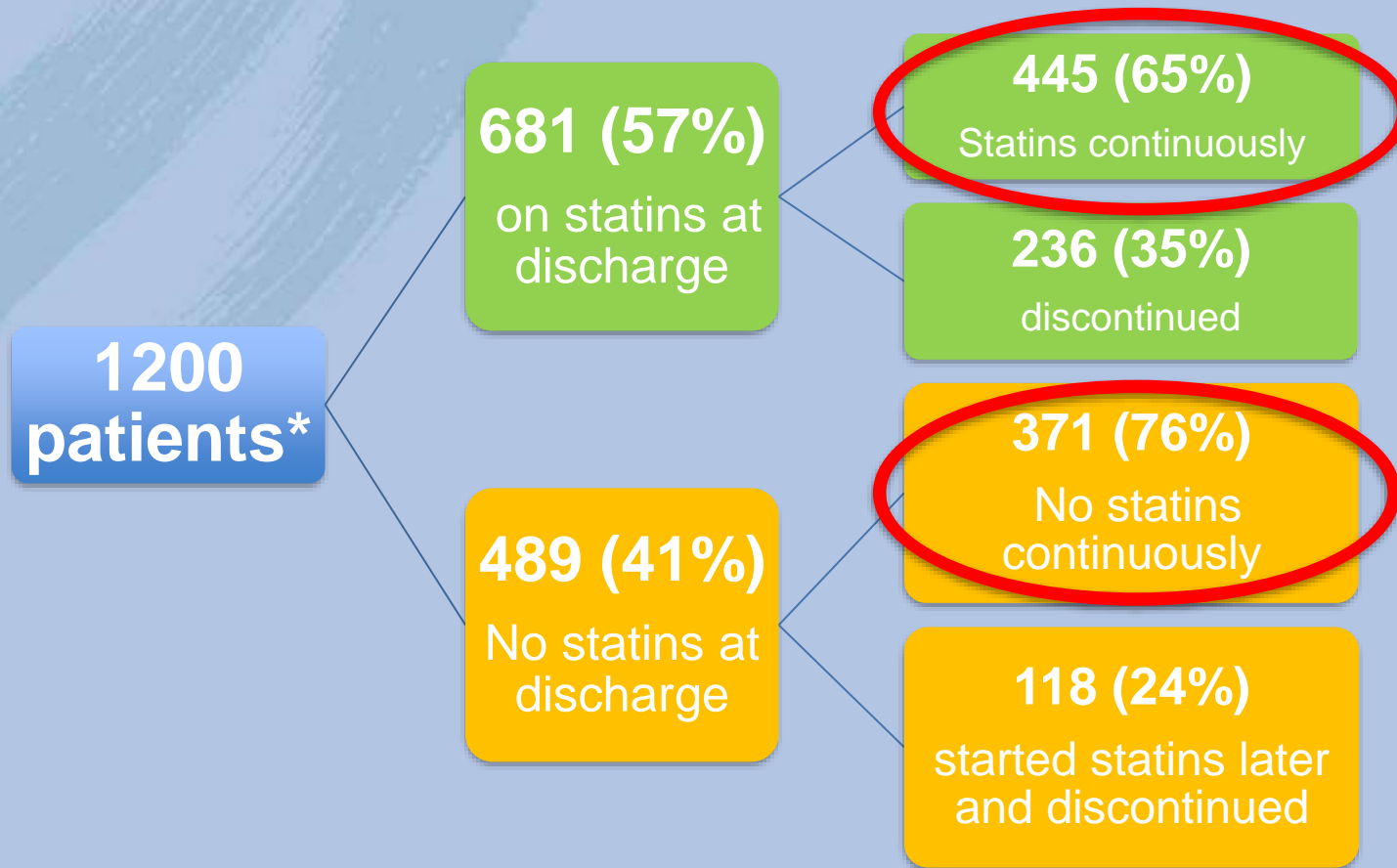
1200

consecutive
CLI patients
(Rutherford 4-6)

First-line treatments

- Endovascular treatment
- Bypass surgery
- CFA endarterectomy alone
- No vascular intervention
 - Conservative treatment
 - Primary major amputation

Statin administration in CRITISCH cohort



*30 patients met the primary composite endpoint (amputation and/or death) during the in-hospital stay

Profile of CLI-patient receiving statins @ CRITISCH



Younger patients

History of coronary heart disease

Previous acute coronary syndrome

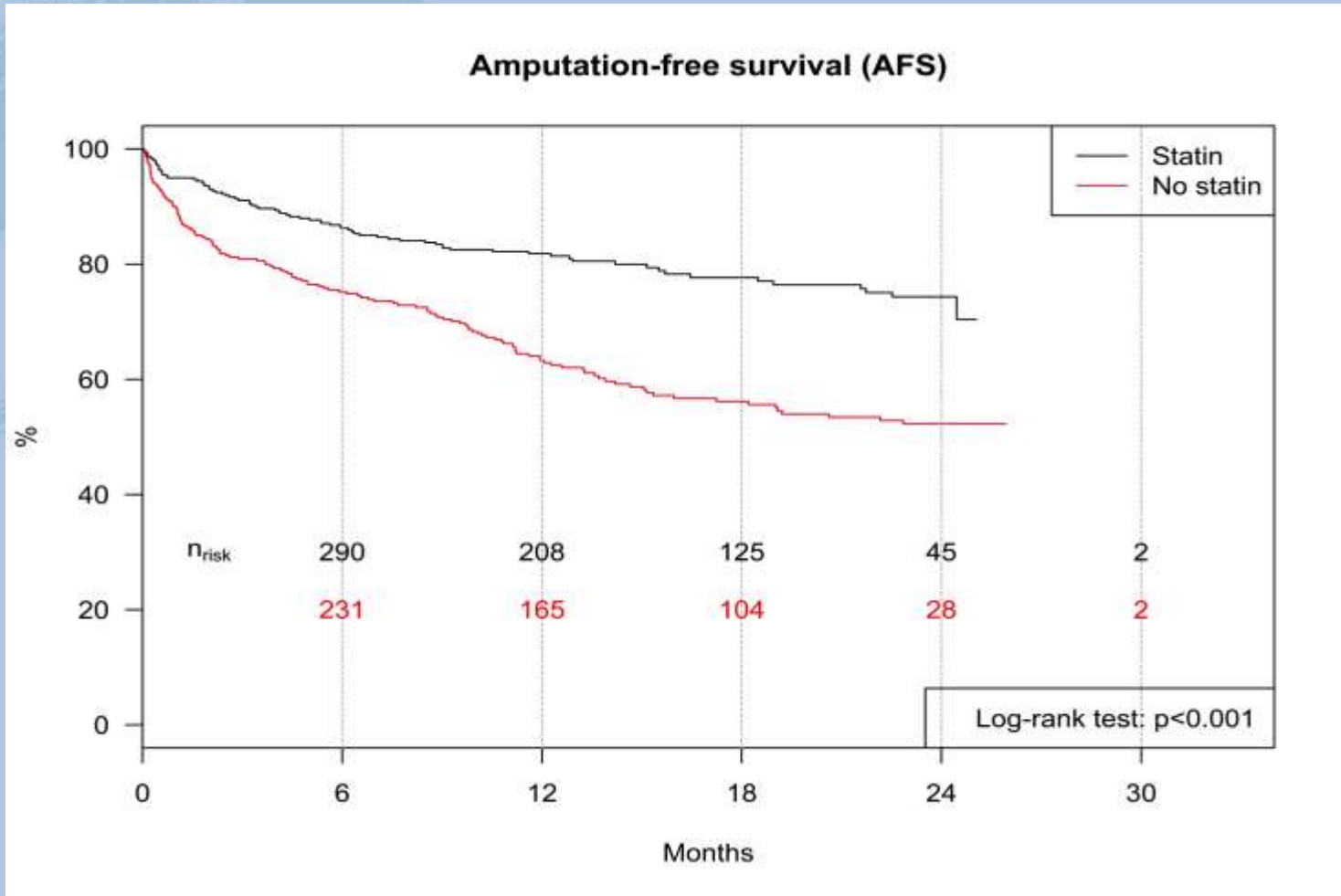
Previous vascular intervention

Rutherford class 4

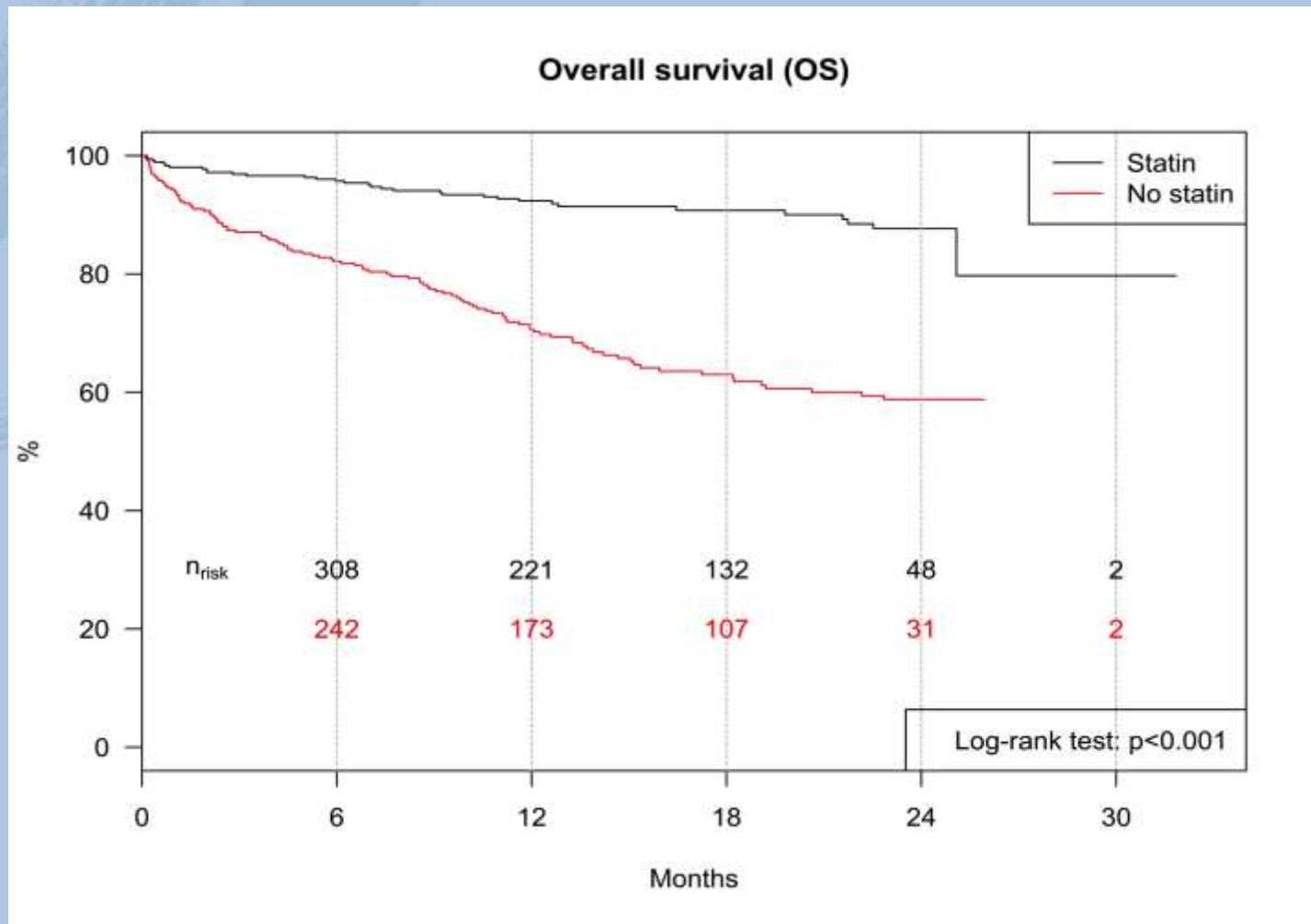
Normal renal function

Lower mPREVENT III score

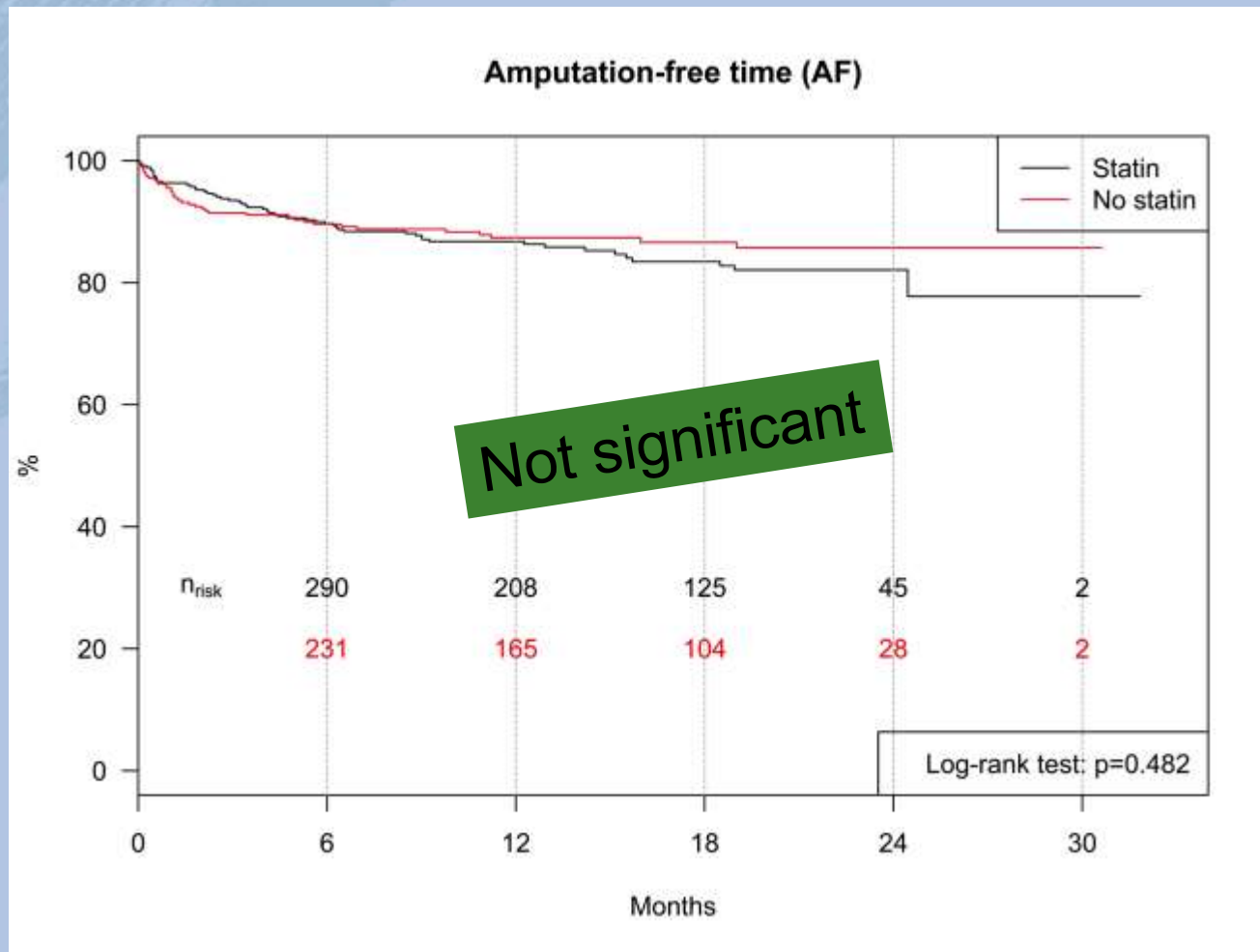
Amputation-free survival



Survival

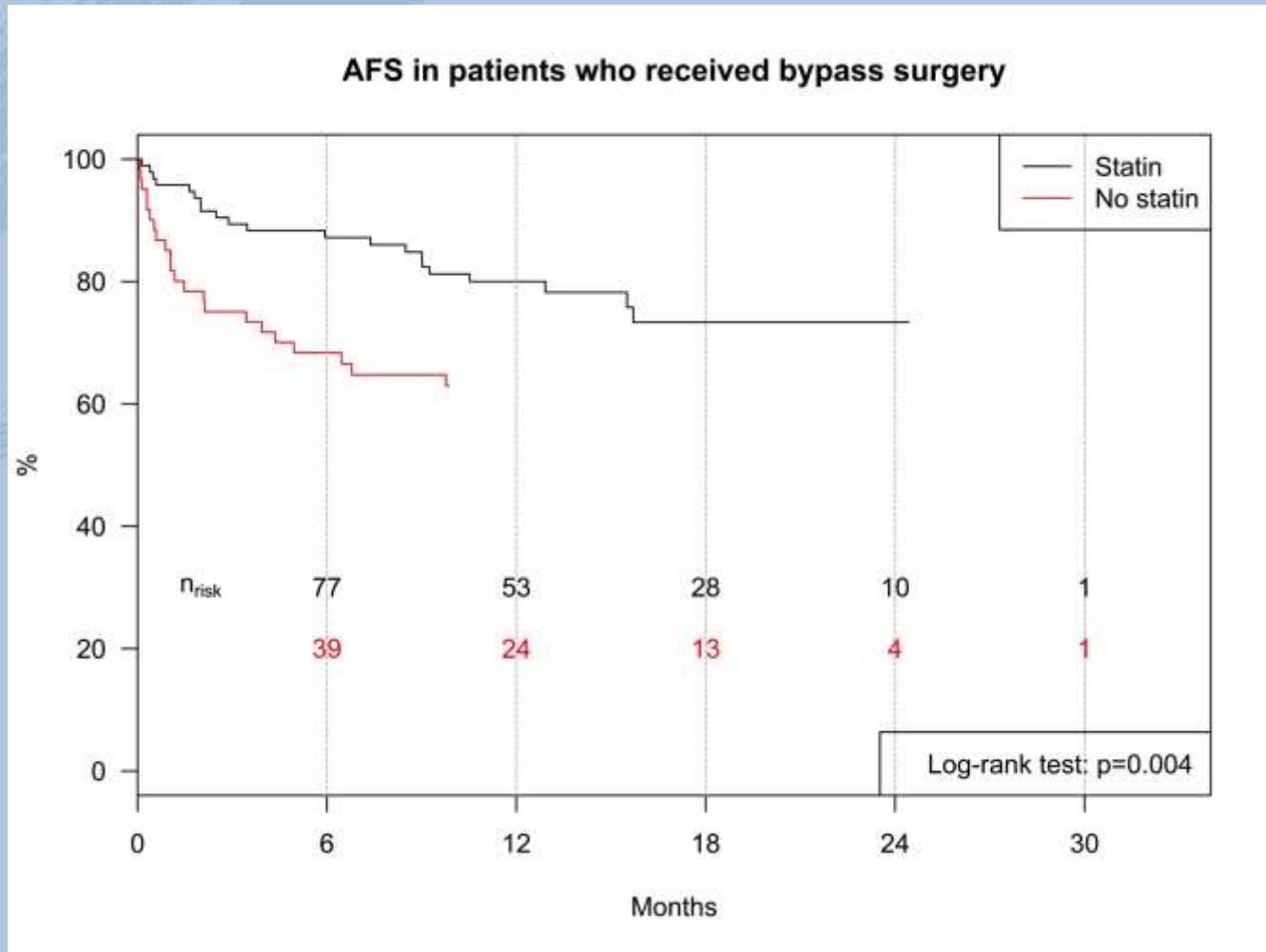


Freedom from major amputation



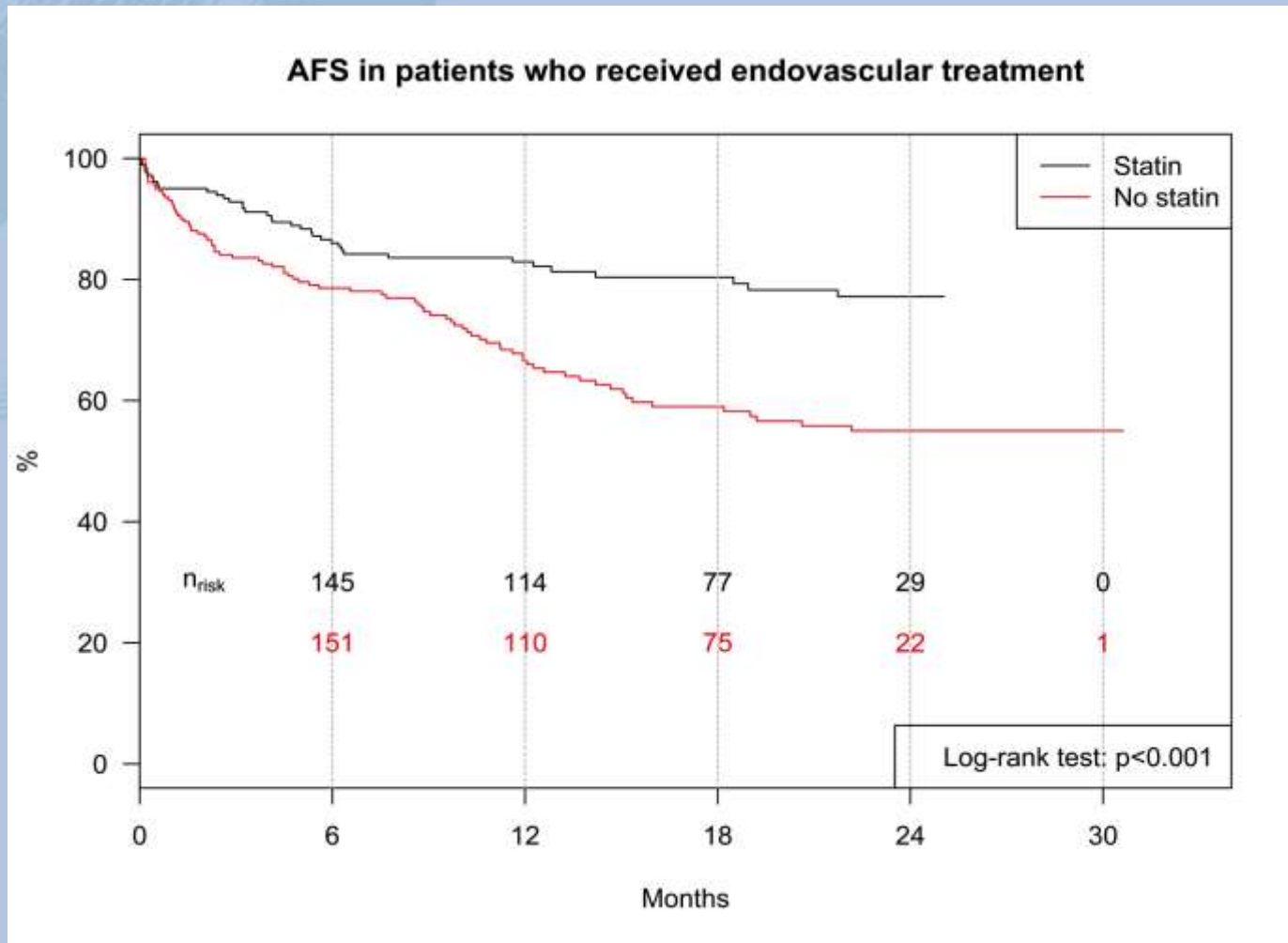
Amputation-free survival

Bypass group



Amputation-free survival

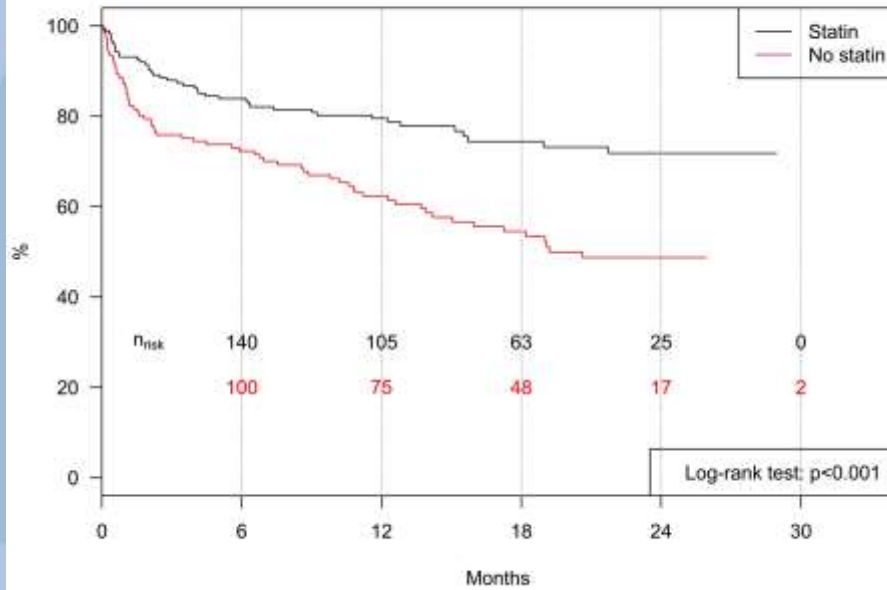
Endovascular group



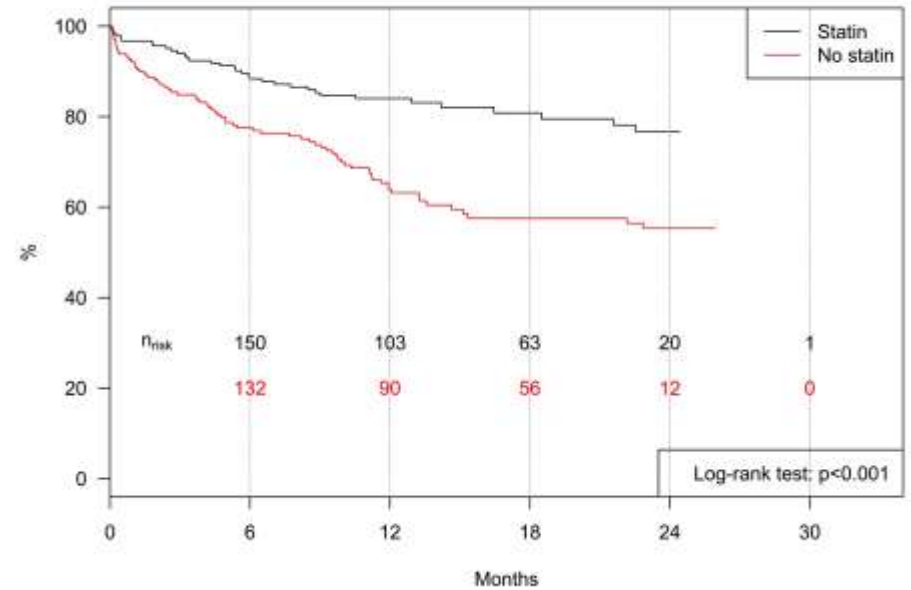
Amputation-free survival

Diabetic and non-diabetic patients

AFS in patients with diabetes



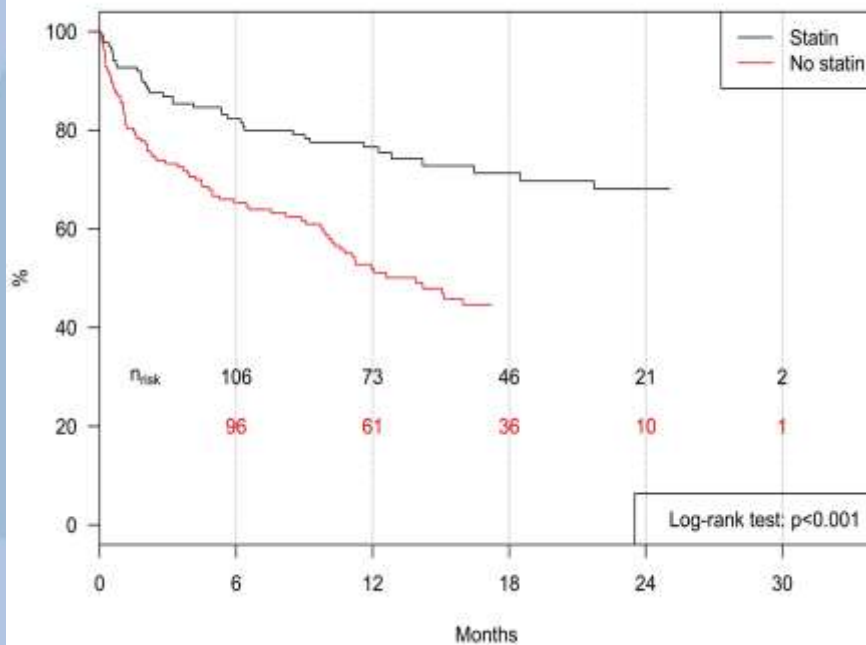
AFS in patients without diabetes



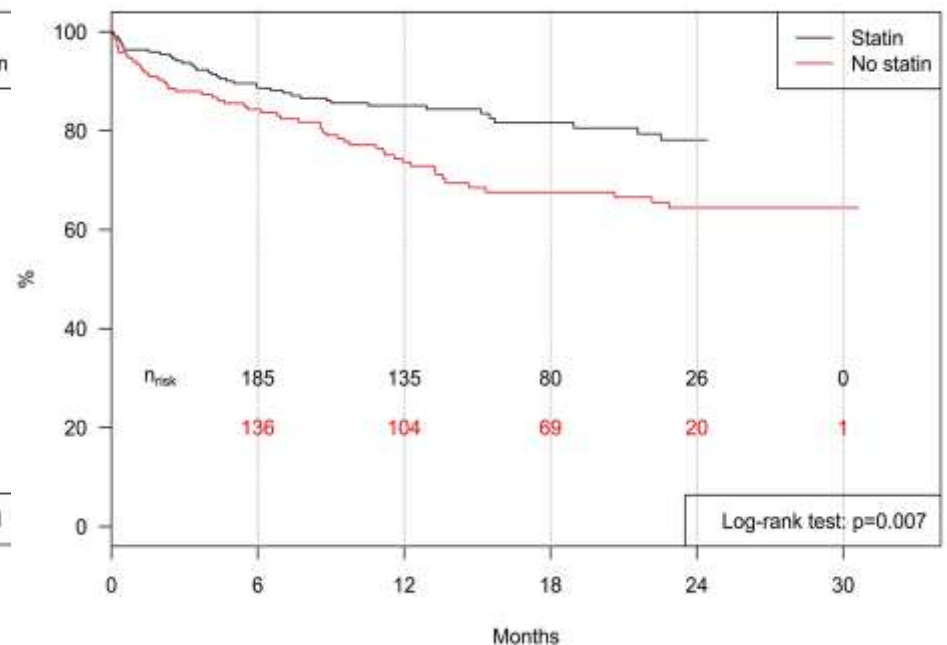
Amputation-free survival

Chronic kidney disease

AFS in patients with renal insufficiency or dialysis

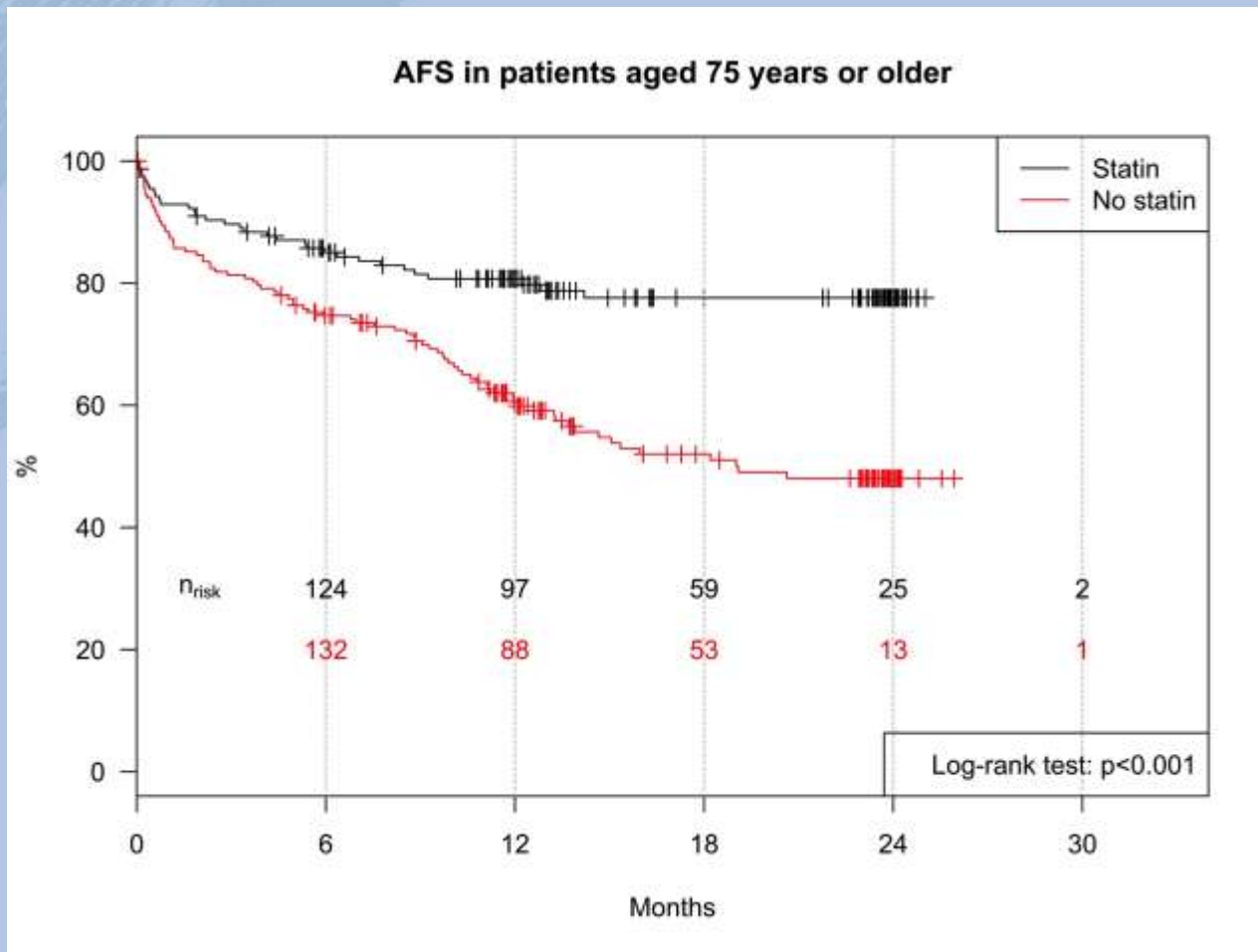


AFS in patients with normal renal function

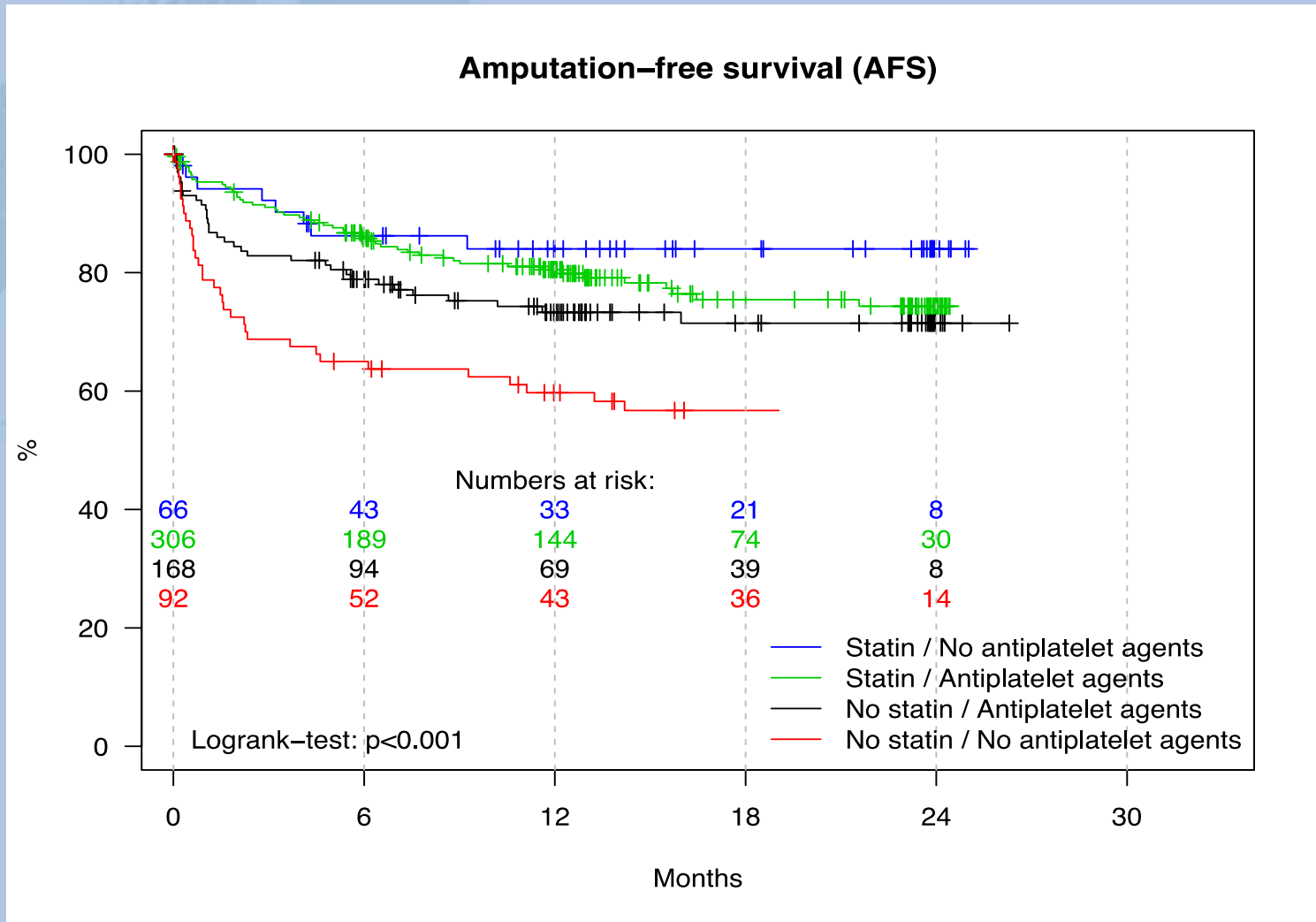


Amputation-free survival

Age > 75 years



Best medical treatment in CLI



Conclusions

Statins in CLI patients

- Improvement of amputation-free survival
- Higher survival rate in patients on statins
- **No impact on major amputation rate**
- Beneficial for both bypass and endo-treatment
- Increase of AFS in CKD/Diabetes and in older patients
- Compliance on current guidelines needs further optimization

Thank you

CRITISCH Collaborators:

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