

## Department of Angiology

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Dr. Ulrike Hügel Senior Physician

### Profile

- Teaching programs for students of medicine and sports-/ physiotherapists
- Regular student lectures and courses (clinical skills), weekly lectures (DHGE)
- Weekly internal education in the field of vascular medicine
- Multitude of divisional and interdisciplinary research projects
- Aim: To advance the field of vascular medicine
- Fundamental research as well as clinical trials
- Projects comprise analysis, classification and computational hemodynamic modeling of congenital vascular malformations, risk factor analysis and risk factor modulating therapies in peripheral artery disease, integration of omics technologies in research of vascular malformations and arteriosclerosis expression, drug therapy and endovascular management of venous thromboembolism
- External Partners: Vorarlberg Institute for Vascular Investigation and Treatment (VIVIT), Feldkirch, Austria, University Hospital Basel, Department of Angiology, Basel, Switzerland, University Hospital Zürich, Department of Angiology, Zürich, Switzerland, University Hospital Munich, Institute of Epidemiology and Prophylaxis of Cardiovascular Diseases, Munich, Germany, University of Colorado Hospital, Heart and Vascular Center, Denver, Colorado, USA, University of Milan, Department of Pharmacological and Biomolecular Sciences, Milan, Italy, University of Cambridge, Cardiovascular Strategic Research Initiative Institution, Cambridge, United Kingdom, McGill University, Department of Human Genetics, Montreal, Canada

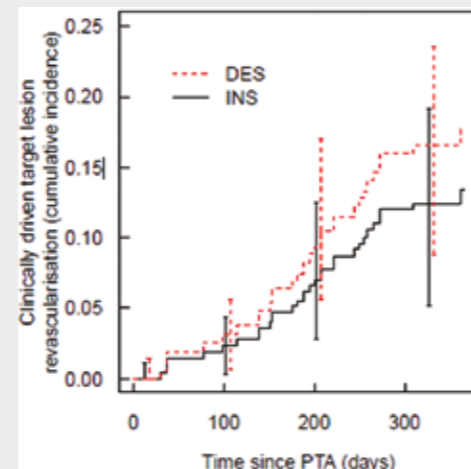
### Grants

- Bangerter Rhyner Grant (Dr. Luise Adam)
- Förderungspreis Forschung 2019 der Union Schweizerischer Gesellschaften für Gefässerkrankungen (USGG): PD Dr. med. Marc Schindewolf

### Highlights

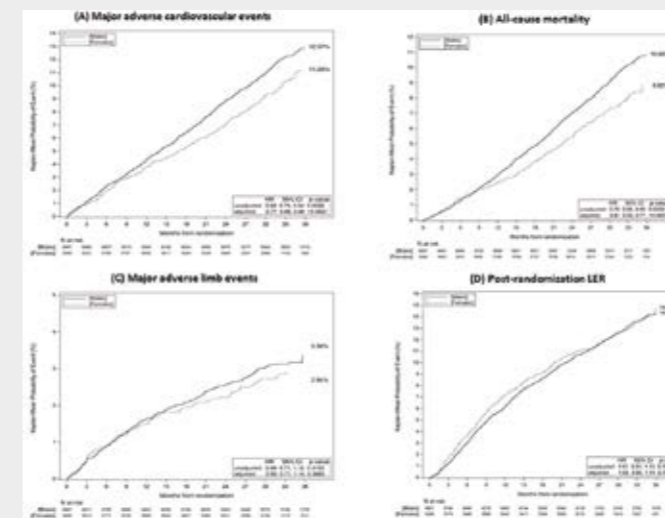
#### Comparison of interwoven nitinol with drug-eluting stents for endovascular treatment of femoropopliteal artery disease

We analyzed efficiency of interwoven nitinol stents with drug-eluting stents for the femoropopliteal artery with regard to clinically-driven target lesion reintervention at 12 months in patients with symptomatic PAD. Data was prospectively collected. The results do not provide conclusive evidence to favor one stent over the other. Haine A et al., Eur J Vasc Endovasc Surg. 2019 Oct 25. pii: S1078-5884(19)31465-0. doi: 10.1016/j.ejvs.2019.09.002.



#### Sex-specific Differences in Risks of Major Cardiovascular and Limb Events in Symptomatic Peripheral Artery Disease

The EUCLID trial showed no difference for either ticagrelor or clopidogrel, for reduction of major adverse cardiovascular events (MACE) and limb events in patients with symptomatic peripheral artery disease (PAD). We post-hoc analyzed sex-specific differences in these events. While women with PAD were at lower risk for MACE and all-cause mortality, risk for limb events was similar between sexes. Haine A et al., accepted for JACC publication 11/2019.



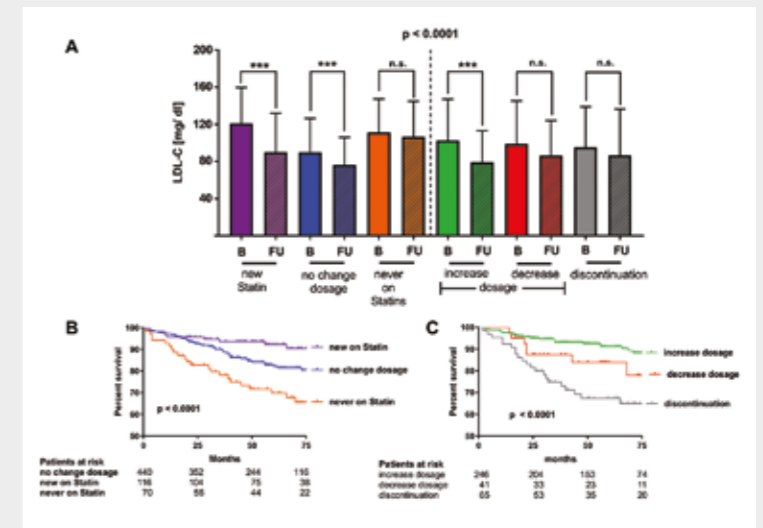
#### Adherence to Statin Therapy Favours Survival of Patients with Symptomatic Peripheral Artery Disease (PAD)

Patients with PAD are at a very high cardiovascular risk. Guidelines recommend a strict lipid lowering therapy with statins. However, adherence to statins is generally low. In our single center study we observed 691 symptomatic PAD patients. Those never receiving statins had a significant higher mortality rate (31%) compared to patients continuously on statins (13%) or new on statins (8%).

Moreover, patients on intensified statin medication had a low mortality of 9%, whereas those who terminated statin medication or reduced statin dosage had a higher mortality (34% and 20%, respectively).

Our data suggest that adherence to statin therapy is associated with reduced mortality in symptomatic PAD patients. A strategy of intensive and sustained statin therapy is therefore recommended.

Dopheide JF et al., accepted for publication in European Heart Journal – Cardiovascular Pharmacotherapy in Dec. 2019.



(A) Achieved mean LDL-C reductions depending on treatment incentives. (B) Kaplan-Meier survival curves of patients on and off statins. (C) Kaplan-Meier survival curves of patients with a switch in statin dosage.

#### Broadening the categories of patients eligible for extended venous thromboembolism treatment.

VTE causes >500.000 deaths/year in Europe and the risk of recurrence after cessation of anticoagulation is up to 10%/year. Traditional treatment algorithms seem to be overly simplistic. More granular definitions of risk factor groupings, e.g. minor transient/persistent, environmental/non-environmental risk, in combination with new extended anticoagulation therapy options may provide refined management strategies for patients who commonly receive shorter-duration therapy.

Schindewolf M, Weitz JI. Thromb Haemost. 2019 doi:10.1055/s-0039-3400302.