### **AMIS Plus Sponsors & Participants' Meeting**



#### **Program**

14:00-14:05	Welcome	Paul Erne
14:05-14:20	History and highlights of the AMIS Plus Registry	Paul Erne
14:20-14:30	Status of the AMIS Plus Registry	Dragana Radovanovic
14:30-14:45	Quality in Cardiovascular Medicine	Michael Zellweger
14:45-15:00	Quality measurements using the AMIS Plus Registry	Philip Urban
15:00-15:30	Coffee Break	
15:30-15:45	Hypertension in ACS patients enrolled in AMIS Plus	Paul Erne
15:45-16:00	Obesity paradox in STEMI patients who underwent PCI	Fabienne Witassek
16:00-16:15	Trends in treatment of octogenarians and nonagenarians with ACS	Andreas Schoenenberger
16:15-16:30	Changing strategies during hospitalization for ACS	Marco Roffi
16:30-16:45	Triple therapy in ACS patients	Hans Rickli
16:45-17:00	Discussion	



# History and highlights of the AMIS Plus Registry

Paul Erne Sponsors & Participants' Meeting 5 March 2015, Berne







- History of AMIS Plus Registry
- Highlights
  - Temporal trends in therapy
  - Comorbidities
  - Palliative treatment
  - Very old patients
  - Multiple PCI
  - P2Y12 inhibitors
  - Complications and outcomes
- Sponsors and Donators

## **AMIS Plus Project**

AMIS Acute Myocardial Infarction in Switzerland

- Founding medical societies:
  - Swiss Society of Cardiology
  - Swiss Society of Internal Medicine
  - Swiss Society of Intensive Medicine







- Prospective, observational study supported by pharmaceutical industry funding
- Project approved by
  - UREK (supra-regional ethics committee)
  - Swiss Federal Commission for Data Security
  - All Cantonal Ethics Commissions (2005)
  - Amendment for follow-up questionnaire (2014/2015)

## **AMIS Plus History**



PIMICS (Captopril Survey)
1995/1996, AMI in 73 hospitals



- AMIS: 1997, AMI in approximately 50 hospitals, electronic data transfer, diskettes or Internet
- AMIS Plus: 2000, AMI and UA
- Transfer of AMIS Data Center from Geneva

to Zurich





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# Reperfusion therapy in ACS patients (N=48,604)



AMIS

Infarction

in Switzerland

Acute Myocardial

P<0.001

### Trends in immediate drug therapy of ACS patients (n=48,604)







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### Comorbidities as independent predictors of in-hospital mortality (n=38,708)





Radovanovic D et al. Heart 2014; 100:288-94.



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### In-hospital complications and outcomes in ACS patients according to therapy received



AMIS

Infarction in Switzerland

Acute Myocardial

\*in-hospital development

# Palliative treatment of ACS patients



- Only 3-4% of all patients with ACS have been treated palliatively (use of aspirin and analgesics only).
- Whereas it may often be completely appropriate to provide restrictive and palliative care only for elderly patients with very poor prognoses, the study shows a much larger grey zone of decision making.
- An international consensus should be reached on whether such patients should be included in the overall evaluation of ACS patient outcomes.



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PCI (any) and in-hospital mortality in ACS patients according to age groups and admission periods (N=13,196)





#### In-hospital mortality



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#### In-hospital mortality according to risk in STEMI patients who underwent single or multivessel PCI %

After stratifying patients according to risk M-PCI does not appear to be associated with higher in-hospital mortality.



High-risk patients

AMIS

Infarction in Switzerland

Acute Myocardial

Predictors.for.1-year.MACCE.(composed.end.point.of.re-infarction,.cerebrovascular.

event, interventions and/or death during follow-up period)

Variables¤	OR¤	95%Cl¤	Pvalue¤	}
Multivessel treatment	0.69¤	0.51-0.93¤	0.017¤	}
Left·main¤	1.28¤	0.76-2.14¤	0.36¤	≱
Female∙gender¤	1.15¤	0.87-1.53¤	0.33¤	þ
Age∙(per∙additional∙year)¤	0.99¤	0.99-1.00¤	0.80¤	≱
Charlson·Index·=>2¤	1.42¤	1.05-1.92¤	0.025¤	}
Resuscitation prior admission X	0.87¤	0.45-1.67¤	0.67¤	}
Killip·class·>2¤	1.76¤	0.99-3.12¤	0.052¤	þ

Jaguszewski M et al. EuroIntervention 2013; 9:909-15. Jeger R et al. Int J Cardiology 2014; 172:76-81.



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### Prasugrel versus clopidogrel (N=7621)



Analyses of ACS patients treated with PCI showed that prasugrel treatment is frequently used selectively in younger STEMI patients.

In a propensity score-matched analysis of 4,602 patients, prasugrel use was associated with reduced in-hospital mortality, despite a significant increase in bleeding complications.

This suggests that prasugrel improves outcomes when used in appropriately selected ACS patients treated with PCI.

Table 2.	Independent predictors of hospital mortality in acute
coronary	syndrome (ACS) patients treated by percutaneous
coronary	intervention (PCI).

OR (95% CI)	p-value
0.50 (0.29-0.86)	0.013
1.04 (1.02–1.06)	<0.001
7.99 (4.84-13.2)	<0.001
1.89 (1.19–2.99) 9.35 (5.38–16.3)	0.007 <0.001
	OR (95% CI) 0.50 (0.29–0.86) 1.04 (1.02–1.06) 7.99 (4.84–13.2) 1.89 (1.19–2.99) 9.35 (5.38–16.3)

CI: confidence interval; OR: odds ratio.



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# Complications and outcomes in ACS patients (n=48,604)





\*in-hospital development



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### **Sponsors** and Donators 2014



- Abbott
- Amgen
- AstraZeneca
- Bayer
- Biotronik
- Daiichi-Sankyo/Lilly
- Novartis
- Pfizer
- SIS Medical
- Vascular Medical



- B. Braun Medical
- Cordis
- A. Menarini
- Mepha Pharma
- MSD/Essex
- St. Jude Medical
- Servier
- Takeda