Acute Myocardial Infarction in Switzerland

AMIS Plus Registry

Acute Myocardial Infarction in Switzerland

Paul Erne

5 March 2009, Berne
AMIS Plus
Sponsor’s Meeting Programme
9:00 – 10:30

• Welcome – history of the AMIS Plus Registry
  P. Erne

• AMIS Plus in perspective with other large registries
  F. Eberli

• Status of the AMIS Plus Registry
  D. Radovanovic

• The need for a national registry – some recent findings
  P. Urban

• Discussion
AMIS Plus Project

• Sponsoring medical societies:
  • Swiss Society of Cardiology
  • Swiss Society of Internal Medicine
  • Swiss Society of Intensive Medicine

• Prospective, observational study funded by the industry
  – Approval of the project through
    • UREK (supra-regional ethics committee)
    • Swiss Federal Commission for data safety
    • All Cantonal Ethics Commissions (for follow-ups)
Thank you ! 1997 - 2009
- Sponsors and Donators  
  mortality 12->6%
- Participants  
  76 hospitals
- Members March 2009  
  > 30’000 patients

We need to go on !
AMIS Plus History

- **PIMICS**: 1995/96, AMI in 73 hospitals
- **AMIS**: 1997, AMI in 50 hospitals
  - electronic data transfer, diskettes or Internet
  - Data Center at the Department of Clinical Epidemiology, Geneva University Hospital
- **AMIS Plus**: 2000, AMI and UA, 20 hospitals
- **Transfer of Data Center from Geneva to Zurich**
  - at the Institute of Social and Preventive Medicine, University of Zurich
Quality of Patient Care through a reliable Data Base

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The AMIS concept

Randomized controlled trials = EBM

Guidelines

Practical work = AMIS

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Role of Observational Studies

- Collect data demographics, practice patterns and outcomes
- Comparison of the «real world » to randomized trials and define topics to be improved
- Examine subgroups
- Access and analyze clinical issues at less cost than in clinical trials
Registries versus Prospective Studies

Registries

• „Real world“ conditions (females, elderly patients, polymorbidity)
• Representative of various strategies and differing treatment logistics
• Results reliable only if data acquisition is complete and data quality checked

Prospective Studies

• Selected well-defined study populations: Selection bias by exclusion of the majority of patients
• Strictly standardized treatment conditions
• High data quality

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Why are ACS registries necessary?

- ACS is the most important single cause of death – outcome
- ACS patients are high-cost users of medical care
- ACS care is complex although the patient population is homogenous
- ACS is a suitable index tracer for testing overall performance of cardiovascular care addressing all important dimensions of quality
Why do we need a national ACS registry?

• Teaching
  – Adherence to guidelines ?
  – Application to current knowledge ?
  – Assessment of quality ?

• Research
  – Are results from RCT identical in the real world and in subgroups ?
  – Are guidelines applicable and cost effective ?
  – Trends – do they have an impact ? Do we need to adapt ?

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A National AMIS Plus Registry of ACS Patients...

- Provides reliable data on epidemiology
- Is a valuable instrument of quality improvement by assessment and benchmarking
- Gives possibilities for intervention
- Allows improvement of logistics and algorithms

- AMIS-Plus is a comprehensive and ongoing registry
- Focuses on data controlling and data quality
- Enables online analyses
- Is powered by the positive motivation of participating physicians and nurses

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### Networks / other registries

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<tr>
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<th>Strengths</th>
<th>Weaknesses</th>
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| Verein Outcome/ QuaZentral | –Implementation through cantonal authorities  
–Compulsory | –No national registry  
–Limited duration (only a few years) |
| European Society of cardiology Registry/ GRACE | –International comparison  
–Intensive controlling of data collection | –Not a representative inclusion of centers and limited time periods |
Players

- Sponsors and Donators
- Hospitals:
  - >500 beds: 9
  - 250-499 beds: 10
  - 125-245 beds: 30
  - 75-124 beds: 14
  - 74 beds: 13
- AMIS Plus Data Center
- Steering Committee:
  - 14 members
AMIS Plus Founding Sponsors
1997

• Swiss Heart Foundation
• Astra
• Bristol-Myers Squibb
• Merck Sharp & Dohme-Chibret
• Pfizer
AMIS Plus Sponsors and Donators (time frame)

- Aventis Pharma, 2004
- Boston Scientific, 2004-2006
- Bayer, 2004-2005
- Boehringer Ingelheim, 2003-2006
- Boston Scientific, 2004-2006
- Guidant, 2002-2006
- Jomed, 2002
- MCMmedsys, 2006
- Mepha Pharma, 2004-2005
- Merck, 2003-2005
- Roche Pharma, 2002
- Sanofi-Aventis, 2002-2004
- Santésuisse, 2004
- SPSS Schweiz, 2003
- St. Jude Medical, 2003, 2005
- Takeda Pharma, 2004
- Vision Stiftung, 2003

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Sponsors of the AMIS Plus Project
2009

• AstraZeneca
• Biotronik, since 2003
• Bayer/Schering, since 2005
• Daiichi/Sankyo/Lilly, since 2008
• Invatec, since 2004
• Medtronic, since 2003
• A. Menarini, since 2002
• Pfizer
• St. Jude Medical, since 2006
Donators of the AMIS Plus project 2009

- Abbott, since 2006
- Aotec, since 2007
- Bristol-Myers Squibb, since 2005
- GlaxoSmithKline AG, since 2004
- Guidant, since 2008
- Johnson & Johnson – since 2002
- Merck Sharp & Dohme-Chibret/Essex, since 2005
- Novartis, since 2006
- Servier, since 2003
- Sanofi-Aventis, since 2005
- Takeda Pharma, since 2005
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Steering Committee

- Erne Paul, Lucerne, President
- Bertel O, Zurich
- Eberli F, Zurich
- Essig M, Zweisimmen
- Gutzwiller F, Zurich
- Hunziker P, Basel
- Keller P-F, Genève
- Maggiorini M, Zurich
- Pedrazzini G, Lugano
- Radovanovic D, Zurich
- Rickli H, St. Gallen
- Stauffer J-C, Lausanne
- Urban P, Genève
- Windecker S, Berne

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AMIS Plus Data Center Team

Dragana Radovanovic, head of Data Center (60%)
• Nicole Duvoisin, data management (60%)
• Caroline Bähler, data management (40%)
• Eveline Doukas, office management (40%)
• Jenny Piket, publications assistant (50%)

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AMIS Plus - Future

• Modifications needed to focus on current challenges
  – Assess novel diagnostic & therapeutic options
  – Assess drug interactions
  – Optimal care despite constraints
  – Assess shortcomings
  – Challenge of congestive heart failure
  – Strategies to prevent sudden death
  – Outcome

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