



1st Annual Meeting of the EUROTRACS project
Athens, 5 & 6 June 2014

Minutes

Participants:

| | |
|-------------|----------------------|
| IMIM-PSMAR: | MARRUGAT, JAUME |
| | ROMAN, IRENE |
| | SUBIRANA, ISAAC |
| | VILA, JOAN |
| | FERRER, YOLANDA |
| HCC-UOA: | LEKAKIS, JOHN |
| | FARMAKIS, DIMITRIOS |
| DEASL: | MATALONI, FRANCESCA |
| | SCIATTELLA, PAOLO |
| FMUP: | PEREIRA, MARTA |
| HMGU: | KIRSCHBERGER, INGE |
| | QUINONES, PHILIP |
| ESREFO: | SPAGNOLO, BARBARA |
| AEPMCV: | BONGARD, VANINA |
| ISS: | TORRE, MARINA |
| HOPE | GAREL, PASCAL |
| CINECA: | CORONA, ALESSANDRO |
| | MASTROGIOVANNI, LUCA |
| | PROSPERINI, GIANLUCA |

1. Welcome

J Marrugat welcomes the attendees, thanks the hosts, Dr. Lekakis and Dr. Farmakis for the organization of the meeting, and introduces the points in the agenda of the meeting.

He reminds that our officer is no longer Dr. Guy Dargent, but Dr. Anne Marie Yazbeck, who will finally be not able to attend the meeting.

J Lekakis and D Farmakis welcome the audience and present the Hellenic College of Cardiology and their activities, and also the University of Athens Medical School and the University Hospital Attikon.



2. WP2 Dissemination of the project.

A Corona from CINECA presents the EUROTRACS website, a tool to disseminate information and results of the project, and also to act as a document repository.

This website will also show the internet-based model to analyze the 10-year CAD event incidence.

There is a public area with dissemination sections on the project, and a member area in which the model is, and one can estimate the 10 years CAD events by country by introducing the different parameters. Some tables are shown as a result of the data input. A Corona list the things to do from now on: output in downloadable results in a CSV format and a High Definition PDF plot, implementing validation process for input data, and comparing data among different countries.

M Torre from ISS presents this WP which contents the following subjects:

- Dissemination plan: there is already a draft prepared which will be included in the Annual Report. Several partners are involved: ISS, CINECA, HOPE and IMIM. We will present it as a Deliverable.
- Promotional leaflet: the leaflet has been presented already as a deliverable in all the languages of the project.
- Project website: Already working
- Dissemination materials: templates for deliverables and for PPT presentations have been spread among partners for their perusal.
- Activities planned for the 2nd year: M Torre presents also the brochure or Laymen's version of the final report and the structure it will contain. She also asks for help from partners to identify some stakeholders to be targeted for dissemination. One is the European Heart Network (some contacts have already been made but we are waiting for the publication of the EURHOBOP main paper.

M Torre asks also for the collaboration of partners by sending news to be published in the new tab NEWS of the EUROTRACS website.

All partners decide a list of possible future publications and their leaders:

1 PSMAR-J Marrugat / Projections of CAD incidence in participant countries.

2 PSMAR- I Roman / Differences in prognosis and management of elderly ACS patints in Europe.

3 DEASL- F Mataloni / Time to PCI. In-hospital mortality.

4 OBLIKUE- M Brosa / Cost Analisis of changing CHD 10 year incidence y population risk factor reduction.

5 OBLIKUE – Max Brosa / Cost analysis of optimizing managementof elderly patients during ACS acute phase.

Other to be proposed during the last year of the project to the coordinator.



Some congresses to disseminate the EUROTRACS can be:

EUROPREVENT, EUPHA, EUROPCR... Partners are requested to send some other ideas to be included in the Dissemination Plan.

3. WP3 Evaluation of the project.

P Quinones from HMGU presents the objectives of WP3 and the results of the evaluation of the project in terms of meeting and teleconference attendance, adherence of deliverables to timetable, and quality control of data.

The forthcoming Annual Report will be a deliverable of this workpackage that will show the work carried out and the results obtained during this first period, as well as the adherence to the project budget.

We produced a list of missing variables in the databases (enclosed in annex).

4. WP4 Number of CAD events prevented at 10 years by population interventions: From the function to the EUROTRACS website

V Bongard from AEPMCV presents the evolution of WP4.

The objective was to estimate the number of coronary artery disease events that and be prevented at 10 years by reducing population smoking, total cholesterol and hypertension.

V Bongard details how data have been collected:

By country:

- Population projections
 - o estimates 2005-2013
 - o Projections 2014-2025
- CHD incidence
 - o Population based registries (2000-2010)
 - o Official mortality and morbidity figures
- CVRF prevalence
 - o Population-based studies or registries 2000-2010
- Assumptions for CVRF reduction
 - o Total cholesterol and BP categorized in 5 groups
 - o 10 year reduction applied proportionally to the population.



J Vila's presentation was about a brief summary of the formulas behind the rationale of the prevented events showing results for different scenarios. Taking a look on the results some concerns appeared about the prevalences.

Specifically:

A) Total cholesterol and HDL cholesterol prevalences, were the same for Greece and Portugal. Irene Roman comments that it was because Portugal prevalences were imputed to Greece as Greece's were missing, however, the mean concentration of total and HDL cholesterol were available. As these values were almost the same in Portugal and Greece, it was decided to take Portugal's prevalence as the best approach.

B) Spain's hypertension prevalence was considered a mistake and needs to be revised.

C) Prevalences for some countries looked odd. For example 5% or lower in diabetes. Joan Vila prepared a report with the prevalences by country and by sex and was sent to participants in the meeting in order to check if the figures agreed with the standards.

We all agreed in reviewing the figures on risk factor prevalences in the next weeks.

5. WP5 Cost-effectiveness of WP4 (work in progress)

On the cost questionnaires we agreed:

- The pattern of expenditure of general practitioners and specialists can be country-specific
- We accepted the proposal from AEPMCV:

Comments/questions on the WP5 and WP7 forms.

- What lab tests do you include in the lipoprotein and the blood pressure control analyses? We thought of :
 - Total cholesterol, HDL and LDL-cholesterol, triglycerides, apolipoproteins A1 and B, lipoprotein (a), and hepatic transaminases (AST/ALT) levels.
 - Plasma Creatinine, sodium and potassium levels.
- For the acute care costs:
 - We have separate data for public and private hospitals. Do we use the public one?
Max Brossa said that costs from the public healthcare system are preferred, however, if in a specific country a large proportion of ACS patients are attended in the private healthcare system, the two set of values should be provided. Then, the appropriate weighting would be applied taking into account the proportion of patients attended in the public or private healthcare system.
- Regarding the follow-up costs:



- It may be useful to establish a standard follow-up for all participants. Making estimations would be easier using a standard follow-up combined with the information already given in the forms.
 - It may also be useful to have the cost of a stress test (stress performed by standard exercise, echocardiography, SPECT or MRI, realised during the follow-up).
 - Other comments:
 - Which period will we use (the last data available)?
- To use the most recent year. J Marrugat will ask Max Brosa about it.
- As for WP5, are we going to include other country level costs such as the ones derived from the dissemination and implementation of smoking bans?

IMIM will meet with M Brosa from Oblikue to discuss the above comments and questions that have not been answered yet.

6. **WP6 Procedure-associated in-hospital mortality and procedure cost in ACS.** (Irene Roman Dégano & Francesca Mataloni)

F Mataloni presents some data on the association between in-hospital mortality and percutaneous coronary intervention in patients with STEACS.

The results of this study can be published in the future.

WP6 follow-up (Iren Román)

We have gathered a database of 98,133 ACS patients, aged >35 years, by merging the following databases: DEASL (n=44,662), ESREFO (n=1,510), EURHOBOP_Portugal (n=2,989), HMGU (n=3,973), MASCARA (n=7,014), REGICOR (n=10,929), EURHOBOP (n=12,070), European Heart Survey (EHS) I (n=9,863) and II (n=5,123). We are missing the database from the Hellenic Society of Cardiology (HSC) and the extended EHS I and II databases. The database from the HSC is not available due to copyright specifications. We will try to solve this issue in the following weeks. We are already in contact with the ESC, through Aldo Maggioni, to obtain the extended EHS I and II databases. We expect we will get these extended databases during the following weeks.

The number of patients by ACS type, sex and age group are presented in tables 1-3. Briefly, from the 98,133 ACS patients, 36,305 had an ST elevation ACS (STEACS) and 47,165 had a non STEACS (NSTEACS). Approximately, 60% of STEACS and NSTEACS patients were men. Regardless of the ACS type, the age groups with the highest number of patients were 35-64 years and 75-84 years, for men and women, respectively. When we stratified by proceeded coronary angiography (CA) and percutaneous coronary intervention (PCI), the number of patients was still adequate to calculate in-hospital mortality except for the oldest age group in women who underwent CA. We have decided to analyze only the effect of PCI use and not the effect of CA use on in-hospital mortality,



because the results from both analyses would be similar and the variable for performed CA had a high number of missing values.

To prepare deliverable 4, we have selected from the above described database the patients from the EUROTRACS participating countries (Italy, Portugal, Germany, Greece, Spain and France). From the total of 85,308 patients selected, 40,639 had a NSTEMI and 30,863 had a STEMI (Table 4). When we stratified the patients by ACS type, sex, country and age group, we realized that the number of patients in each group was too low to obtain meaningful estimates of in-hospital mortality (Table 5). And we still had to separate the patients that underwent and did not undergo PCI. To solve this situation we have decided to calculate in-hospital mortality estimates for deliverable 4 as follows:

- We will provide in-hospital mortality estimates by country and for all countries together.
- As for the specific in-hospital mortality estimates by country, we will stratify by age group but we will use 2 age groups (35-64 years, >64 years) instead of 4 (35-64 years, 65-74 years, 75-84 years, >84 years). We will not stratify by ACS type and we will stratify by sex if there are significant differences between men and women, otherwise we will obtain mortality estimates for men and women together.
- As for the global in-hospital mortality estimates for all countries, we will obtain the estimates by ACS type, the 4 age groups and sex.

6. WP7 Cost effectiveness of WP6 preliminary discussion. (Jaume Marrugat)

We are in advance with this WP because we already have an advanced data collection form draft. We will make the necessary corrections and return it to the partners to initiate the data collection in the next weeks.



8. Annual Report

The annual report is a deliverable responsibility of WP3-HMGU. It has to describe the work carried out and the results obtained during the period:

1) the results obtained to date and an indication of any deviation from the initial work programme in the grant agreement:

WP1 Coordination of the project – IMIM

DL1 "Consortium Agreement" . Submitted on **Month 2**

and Milestones:

1. Kick-off meeting organization. Completed on **Month 1**
2. Consortium agreement signature: all participants will have acknowledged their commitments and will know the details of the contents of their tasks. Completed on **Month 2**
3. Completion of risk factor prevalence and CAD annual incidence data collection from partners. Completed on **Month 5**
4. Completion of ACS data bases and CAD and interventions cost data collection from partners. To be completed on **Month 21**
5. Final workshop organization. To be completed on **Month 23**

WP2 Dissemination of results – ISS

DL2 "Project Website and promotional leaflet" . Submitted on **Month 5**

DL9 "Laymen's version of the final report and dissemination leaflet." To be submitted on **Month 24**

and Milestones:

1. Completion of the website and promotional leaflet. Completed on **Month 5**
2. Completion of the dissemination plan. Completed on **Month 9**
3. Completion of the Internet based model. To be completed on **Month 22**
4. Completion of the final report laymen's version and dissemination leaflet. To be completed on **Month 24**

WP3 Evaluation of the project – HMGU

DL5 "Annual Report" . Submitted on **Month 13**

DL8 "Final Report" To be submitted on **Month 24**

and Milestones:

1. Completion of evaluation plan. Completed on **Month 4**
2. Completion of first annual report. Completed **Month 13**
3. Completion of final report. To be completed on **Month 24**

WP4 Estimation of number of CAD events prevented at 10 years by population interventions – AEPMCV

DL3 "Estimates of the number of coronary artery disease (CAD) annual incidence for each participating country" . Submitted on **Month 10**

and Milestones:

1. Obtention of CVD Framingham functions adapted to each participating country. Completed on **Month 7**



2. Obtention of 10-year estimates of the number of CHD events for the different intervention scenarios in the participating countries. Completed on **Month 9**

Legal advice was subcontracted and we already have the text for the use of the CAD events 10-year projections.

WP5 Cost-effectiveness analysis of decreasing CAD incidence by reducing population risk factor prevalence – IMIM
- NO DL NOR MILESTONE YET

DL6 "Cost-effectiveness analysis of population interventions to prevent CAD in European countries ". To be submitted on **Month 20**
and Milestone:

1. Obtention of the most cost-effective population interventions focused on decreasing risk factor prevalence to prevent CAD by sex. To be completed on **Month 20**

WP6 Estimation of procedure-associated in-hospital mortality and procedure cost in ACS – DEASL

DL4 "Estimates of in-hospital mortality in acute coronary syndrome (ACS) patients for each participating country". Submitted on **Month 13**
and Milestones:

1. Obtention of in-hospital mortality estimates for coronary angiography and percutaneous intervention by age group, sex and procedure use. Completed on **Month 12**

WP7 Cost-effectiveness analysis of ACS procedures that lower in-hospital fatality in patients older than 34 years – IMIM

DL 7 "Cost-effectiveness analysis of interventions to treat ACS in Europe". To be submitted on **Month 23**
and Milestones:

1. Obtention of the most cost-effective ACS procedure/s to reduce in-hospital mortality by age group and sex. To be completed on **Month 22**
2. Obtention of the most cost-effective ACS procedure use to reduce in-hospital mortality by age group and sex. To be completed on **Month 22**

2) the work programme planned for the following period

3) copies of any publications, products or other relevant outputs or deliverables of the project to date.

4) The interim financial implementation report.

Partners are requested to send a description of the evolution of their work-packages to P Quinones from HMGU.



**The date and place for the Final Meeting is decided:
Porto 7-8 May 2015**

Another meeting with Aldo Maggioni and L Tavazzi will be scheduled next autumn.



Annex 1. List of variables

NA or Not stated

| DEASL, n=44855 | | | | |
|-----------------------------|---------|--------|--------|------|
| | <20% | 20-49% | 50-99% | 100% |
| smoking | | | | x |
| ini_creat | | | | x |
| Time_to_PCI | | | x | |
| proceeded_angiography | | | | x |
| proceeded_PCI | x (<5%) | | | |
| proceeded_PCI_type | | | | x |
| proceeded_thromboaspiration | | | | x |
| bblockers_hosp | | | | x |
| statins_hosp | | | | x |
| ACEI_ARB_hosp | | | | x |
| Aspirin_hosp | | | | x |
| Other_antiplaetet_hosp | | | | x |
| GPIIbIIIa_inhib_hosp | | | | x |
| hemorrhage | | | | x |
| reinfarction | | | | x |
| Troponin_peak | | | | x |
| Troponin_upper_limit | | | | x |
| Troponin_type | | | | x |
| EF_category | | | | x |
| EF_value | | | | x |



| ESREFO, n=1512 | | | | |
|-----------------------------|------|--------|--------|------|
| | <20% | 20-49% | 50-99% | 100% |
| smoking | | | x | |
| diabetes | | | x | |
| hypertension | | | x | |
| hyperlipid | | | x | |
| hist_renal_failure | | | x | |
| histCV_MI | | | x | |
| histCV_CHD | | x | | |
| histCV_stroke | | | x | |
| histCV_PAD | | | | x |
| histCV_PCI | | | | x |
| histCV_CABG | | | | x |
| histCV_heartfail | | | | x |
| type_ACS | | | x | |
| pulmo_adm | | | x | |
| shock_adm | | | x | |
| proceeded_thrombolysis | | | x | |
| proceeded_PCI_type | | x | | |
| proceeded_thromboaspiration | | | x | |
| bblockers_hosp | | | x | |
| statins_hosp | | | x | |
| ACEI_ARB_hosp | | | x | |
| Aspirin_hosp | | | x | |
| Other_antiplaetet_hosp | | | x | |
| GPIIbIIIa_inhib_hosp | | | x | |
| pulmo_hosp | | | | x |
| shock_hosp | | | | x |
| hemorrhage | | | x | |
| reinfarction | | | | x |
| Renal_failure_hosp | | | x | |
| Ventricular_Fibrillation | | | | x |
| Ventricular_Tachicardia | | | | x |
| Troponin_peak | | | | x |
| Troponin_upper_limit | | | | x |
| Troponin_type | | | | x |
| EF_category | | | x | |
| diagnosis | | | | x |
| | | | | |



| FMUP, n=3009 | | | | | | | |
|-----------------------------|---------|--------|--------|------|--|------------------------------|--|
| | <20% | 20-49% | 50-99% | 100% | | | |
| smoking | | | x | | | | |
| diabetes | | | x | | | | |
| hypertension | | x | | | | | |
| hyperlipid | | x | | | | | |
| hist_renal_failure | | | x | | | | |
| histCV_MI | | x | | | | | |
| histCV_CHD | | x | | | | | |
| histCV_stroke | | x | | | | | |
| histCV_PAD | | x | | | | | |
| histCV_PCI | | x | | | | | |
| histCV_CABG | | x | | | | | |
| histCV_heartfail | | x | | | | | |
| type_ACS | x (<5%) | | | | | | |
| pulmo_adm | | | x | | | | |
| shock_adm | | | x | | | | |
| proceeded_PCI_type | x (<5%) | | | | | | |
| proceeded_thromboaspiration | x (<5%) | | | | | | |
| proceeded_CABG | x | | | | | | |
| bblockers_hosp | | x | | | | | |
| statins_hosp | | x | | | | | |
| ACEI_ARB_hosp | | x | | | | | |
| Aspirin_hosp | | x | | | | | |
| Other_antiplaetlet_hosp | | x | | | | | |
| GPIIb/IIIa_inhib_hosp | | x | | | | | |
| pulmo_hosp | | | x | | | | |
| shock_hosp | | | x | | | | |
| hemorrhage | | | | x | | | |
| reinfarction | | | x | | | | |
| Renal_failure_hosp | | | x | | | | |
| Ventricular_Fibrillation | | | | x | | They have provided Ventricul | |
| Ventricular_Arrhythmias | | | | x | | | |
| EF_category | | x | | | | | |
| EF_value | | | x | | | | |



| HMGU, n=3973 | | | | |
|-----------------------------|---------|--------|--------|------|
| | <20% | 20-49% | 50-99% | 100% |
| smoking | x | | | |
| hypertension | x (<5%) | | | |
| hyperlipid | x (<5%) | | | |
| hist_renal_failure | | | | x |
| histCV_MI | x (<5%) | | | |
| histCV_CHD | x (<5%) | | | |
| histCV_stroke | x | | | |
| histCV_PAD | x (<5%) | | | |
| histCV_PCI | | | x | |
| histCV_CABG | x | | | |
| histCV_heartfail | | | | x |
| type_ACS | x | | | |
| pulmo_adm | | x | | |
| shock_adm | | x | | |
| Time_to_PCI | | | | x |
| proceeded_thrombolysis | | x | | |
| proceeded_angiography | x (<5%) | | | |
| proceeded_PCI | x (<5%) | | | |
| proceeded_PCI_type | | | | x |
| proceeded_thromboaspiration | | | | x |
| proceeded_CABG | x (<5%) | | | |
| bblockers_hosp | x (<5%) | | | |
| statins_hosp | x (<5%) | | | |
| ACEI_ARB_hosp | x (<5%) | | | |
| Aspirin_hosp | x (<5%) | | | |
| Other_antiplaetlet_hosp | x (<5%) | | | |
| GPIIbIIIa_inhib_hosp | x (<5%) | | | |
| pulmo_hosp | x (<5%) | | | |
| shock_hosp | x (<5%) | | | |
| hemorrhage | | | | x |
| reinfarction | x (<5%) | | | |
| Renal_failure_hosp | | | | x |
| Ventricular_Fibrillation | x (<5%) | | | |
| Ventricular_Tachicardia | x (<5%) | | | |
| Troponin_upper_limit | | | | x |
| EF_category | | | | x |
| | | | | |



| EHSI, n=9347 | | | | |
|-----------------------------|---------|--------|--------|------|
| | <20% | 20-49% | 50-99% | 100% |
| sex | x (<5%) | | | |
| smoking | x | | | |
| diabetes | x (<5%) | | | |
| hypertension | x (<5%) | | | |
| hyperlipid | x | | | |
| hist_renal_failure | x (<5%) | | | |
| histCV_MI | x (<5%) | | | |
| histCV_CHD | | | | x |
| histCV_stroke | x (<5%) | | | |
| histCV_PAD | | | | x |
| histCV_PCI | x (<5%) | | | |
| histCV_CABG | x (<5%) | | | |
| histCV_heartfail | x (<5%) | | | |
| date_adm | x (<5%) | | | |
| pulmo_adm | x (<5%) | | | |
| shock_adm | x (<5%) | | | |
| ini_creat_mg | x | | | |
| Time_to_PCI | | x | | |
| proceeded_angiography | x (<5%) | | | |
| proceeded_PCI | x (<5%) | | | |
| proceeded_PCI_type | | | | x |
| proceeded_thromboaspiration | | | | x |
| proceeded_CABG | x (<5%) | | | |
| pulmo_hosp | x (<5%) | | | |
| shock_hosp | x (<5%) | | | |
| reinfarction | x (<5%) | | | |
| Renal_failure_hosp | | | | x |
| Ventricular_Fibrillation | x (<5%) | | | |
| Ventricular_Tachicardia | x (<5%) | | | |
| Troponin_peak | | | | x |
| Troponin_upper_limit | | | | x |
| Troponin_type | | | | x |
| EF_category | | x | | |
| EF_value | | x | | |
| date_dis | x | | | |
| Coronary_Unit | | | | x |
| Intensive_Care_Unit | | | | x |
| Catheterization_Laboratory | x | | | |
| Coronary_Surgery | x | | | |
| University_Hospital | x | | | |
| | | | | |



| EHSII, n=4676 | | | | |
|-----------------------------|---------|--------|--------|------|
| | <20% | 20-49% | 50-99% | 100% |
| age | x (<5%) | | | |
| sex | x (<5%) | | | |
| smoking | x | | | |
| diabetes | x (<5%) | | | |
| hypertension | x (<5%) | | | |
| hyperlipid | x (<5%) | | | |
| hist_renal_failure | x (<5%) | | | |
| histCV_MI | x (<5%) | | | |
| histCV_CHD | | | | x |
| histCV_stroke | x (<5%) | | | |
| histCV_PAD | | | | x |
| histCV_PCI | x (<5%) | | | |
| histCV_CABG | x (<5%) | | | |
| histCV_heartfail | | | | x |
| pulmo_adm | x | | | |
| shock_adm | x | | | |
| ini_creat_mg | | x | | |
| Time_to_PCI | | | x | |
| proceeded_PCI_type | | | | x |
| proceeded_thromboaspiration | | | | x |
| proceeded_CABG | x | | | |
| bblockers_hosp | x (<5%) | | | |
| statins_hosp | x (<5%) | | | |
| ACEI_ARB_hosp | x (<5%) | | | |
| Aspirin_hosp | x (<5%) | | | |
| GPIIbIIIa_inhib_hosp | x (<5%) | | | |
| pulmo_hosp | x | | | |
| shock_hosp | x | | | |
| reinfarction | x | | | |
| Renal_failure_hosp | | | | x |
| Troponin_peak | | | | x |
| Troponin_upper_limit | | | | x |
| Troponin_type | | | | x |
| EF_category | | x | | |
| EF_value | | x | | |
| date_dis | x | | | |
| vital | x (<5%) | | | |
| diagnosis | x (<5%) | | | |
| Coronary_Unit | | | | x |
| Intensive_Care_Unit | | | | x |



| | | | | |
|--|--|--|--|--|
| | | | | |
|--|--|--|--|--|

| MASCARA, n=7127 | | | | |
|-----------------------------|-----------|--------|--------|------|
| | <20% | 20-49% | 50-99% | 100% |
| age | x (<5%) | | | |
| sex | x (<5%) | | | |
| adm_date | x (<5%) | | | |
| pulmo_adm | x (<5%) | | | |
| shock_adm | x (<5%) | | | |
| ini_creat_mg | | x | | |
| Time_to_PCI | | | x | |
| proceeded_angiography | x (<5%) | | | |
| proceeded_PCI_type | | | | x |
| proceeded_thromboaspiration | | | | x |
| proceeded_CABG | x (<5%) | | | |
| bblockers_hosp | x | | | |
| statins_hosp | x | | | |
| ACEI_ARB_hosp | x | | | |
| Other_antiplaetlet_hosp | x (clopi) | | | |
| GPIIbIIIa_inhib_hosp | | | | x |
| pulmo_hosp | x (<5%) | | | |
| shock_hosp | x (<5%) | | | |
| EF_category | x | | | |
| EF_value | x | | | |
| date_dis | x | | | |
| diagnosis | x (<5%) | | | |
| | | | | |



| REGICOR, n=11035 | | | | |
|-----------------------------|------|--------|--------|------|
| | <20% | 20-49% | 50-99% | 100% |
| smoking | | x | | |
| diabetes | | x | | |
| hypertension | | x | | |
| hyperlipid | | x | | |
| hist_renal_failure | | | | x |
| histCV_MI | | x | | |
| histCV_CHD | | x | | |
| histCV_stroke | | | | x |
| histCV_PAD | | | | x |
| histCV_PCI | | | | x |
| histCV_CABG | | | | x |
| histCV_heartfail | | | | x |
| type_ACS | | | x | |
| pulmo_adm | | x | | |
| shock_adm | | x | | |
| ini_creat_mg | | | | x |
| Time_to_PCI | | | x | |
| proceeded_thrombolysis | | | | x |
| proceeded_angiography | | | x | |
| proceeded_PCI | | | x | |
| proceeded_PCI_type | | | | x |
| proceeded_thromboaspiration | | | | x |
| proceeded_CABG | | | x | |
| bblockers_hosp | | | x | |
| statins_hosp | | | x | |
| ACEI_ARB_hosp | | | x | |
| Aspirin_hosp | | | x | |
| Other_antiplaetet_hosp | | | x | |
| GPIIbIIIa_inhib_hosp | | | x | |
| pulmo_hosp | | | x | |
| shock_hosp | | | x | |
| hemorrhage | | | | x |
| reinfarction | | | x | |
| Renal_failure_hosp | | | | x |
| Ventricular_Fibrillation | | | x | |
| Ventricular_Tachicardia | | | x | |
| Troponin_peak | | | x | |
| Troponin_upper_limit | | | x | |
| Troponin_type | | | x | |
| EF_category | | x | | |
| EF_value | | x | | |



| | | | | |
|----------------------------|---|---|--|--|
| date_dis | x | | | |
| diagnosis | x | | | |
| vital | x | | | |
| Coronary_Unit | | x | | |
| Intensive_Care_Unit | | x | | |
| Catheterization_Laboratory | | x | | |
| Coronary_Surgery | | x | | |
| University_Hospital | | x | | |



| EURHOBOP, n=15170 | | | | |
|-----------------------------|---------|--------|--------|------|
| | <20% | 20-49% | 50-99% | 100% |
| age | x (<5%) | | | |
| sex | x (<5%) | | | |
| smoking | x | | | |
| diabetes | | x | | |
| hypertension | x | | | |
| hyperlipid | | | | x |
| hist_renal_failure | | x | | |
| type_ACS | x (<5%) | | | |
| pulmo_adm | | x | | |
| shock_adm | | x | | |
| ini_creat_mg | | x | | |
| Time_to_PCI | | | x | |
| proceeded_thrombolysis | x (<5%) | | | |
| proceeded_angiography | x (<5%) | | | |
| proceeded_PCI | x (<5%) | | | |
| proceeded_PCI_type | | x | | |
| proceeded_thromboaspiration | | x | | |
| proceeded_CABG | x | | | |
| bblockers_hosp | | | | x |
| statins_hosp | | | | x |
| ACEI_ARB_hosp | | | | x |
| Aspirin_hosp | | | | x |
| Other_antiplatelet_hosp | | | | x |
| GPIIbIIIa_inhib_hosp | | | | x |
| pulmo_hosp | | x | | |
| shock_hosp | | x | | |
| hemorrhage | | x | | |
| reinfarction | | | x | |
| Renal_failure_hosp | | | x | |
| Ventricular_Fibrillation | | | | x |
| Ventricular_Tachicardia | | | | x |
| Troponin_type | | x | | |
| EF_category | | x | | |
| EF_value | | | x | |
| diagnosis | x (<5%) | | | |
| Coronary_Unit | x (<5%) | | | |
| Intensive_Care_Unit | x (<5%) | | | |
| Catheterization_Laboratory | x | | | |
| Coronary_Surgery | x | | | |
| University_Hospital | x (<5%) | | | |