

**Webex Teleconference of the EUROTRACS project
April 14th, 2015**

Minutes

Participants:

IMIM-PSMAR:

COMAS, MERCÈ
ELOSUA, ROBERTO
FERRER, YOLANDA
MARRUGAT, JAUME
ROMAN, IRENE
SUBIRANA, ISAAC
VILA, JOAN

HCC-UOA:

FARMAKIS, DIMITRIOS

DEASL:

SCIATTELLA, PAOLO

HMGU:

QUINONES, PHILIP

AEPMCV:

FERRIÈRES, JEAN

ISS:

TORRE, MARINA

HOPE:

NOTARANGELO, ISABELLA

CINECA:

PROSPERINI, LUCA
FRANGELLA, CLAUDIA

EXCUSE THEIR ABSENCE:

FMUP:

ESREFO:

OBLIKUE:

1) Approval of the Minutes of the teleconference of February 17th 2015.

They will be approved as they are if M Torre has no amendment to make before next Friday.

2) Results of WP6: differences in patients with high propensity score for PCI in-hospital mortality between patients with PCI done and not done, by age group >65 years

In the appendix XXX there are the results corresponding to the analyses of the benefits of optimizing PCI use on in-hospital mortality by age group (>65 years).

Methods: Approximately 90,000 patients admitted in hospitals from several European countries were analysed.

Demographic, history and admission variables were considered to compute the probability of receiving PCI: Propensity Score (PS).

Patients were split in tertiles of PS as well as in two age groups (>65y or <65y). For each of the 6 groups, the attributable risk (AR) of receiving PCI on in-hospital

mortality was computed. The AR was defined as the absolute difference of predicted mortality between those patients who received PCI vs those who didn't, adjusting for age and other risk factors during hospitalization.

Results: The groups with the highest AR was the elderly patients in the highest tertile of PS (AR ~ 8%), while the lowest AR (~1%.) corresponded to the youngest people with the lowest PS.

ANNEX 1

3) WP7 cost analyses in progress & WP5 cost analyses on the EUROTRACS web site

WP5 Was submitted as a deliverable on due time. We have addressed our efforts into translating these results in figures on the website: not only the number of events than can be prevented with different efforts regarding a decrease in the prevalence of cholesterol, hypertension and smoking in the population, but also the cost that will represent these efforts will be displayed in the website in a few weeks.

During the meeting that the Coordination team will have in short in Rome with CINECA and ISS we will discuss and design the best way to have these presentations of the costs together with the effects in terms of decrease in the number of events at 10 years.

The next step will be to upload this system to the EUROTRACS website now in the member area, and in public area when the paper is published.

WP7 cannot be presented in an interactive way: the cost analysis regarding the decrease in mortality obtained in ACS patients >65years with PCI is fixed by country and there is no interaction possible for that. We will have to reflect this on a paper. This cost analysis is under construction. There have been a couple of meetings on this with OBLIKUE to discuss the best approach. The work is expected to be completed by the end of April and presented during the EUROTRACS final meeting.

4) Forthcoming deliverables

- a) D6 cost-effectiveness analysis of population interventions. Successfully submitted. Pending posting it in the web site member area – M Torre
- b) D10 Dissemination plan. Successfully submitted. Pending posting it in the web site member area. – M Torre
- c) WP7 (D7 Cost-effectiveness analysis of interventions to treat ACS in Europe. Due on April 2015. (M Brosa, OBLIKUE)
- d) WP3 (D8 Final report. Due on May 2015). I Kirchberger/Ph Quinones - HMGU & J Marrugat – PSMAR. We will talk about it during the final meeting. We should have the structure of this document prepared for discussion during the meeting.
- e) WP2 (D9 Laymen's version of the final report and dissemination leaflet). Summary solicited to R Elosua PSMAR, J Ferrieres AEMCV& D Fusco DEASL. Due on May 2015. (M Torre ISS).

M Torre has sent two proposals of design of brochures to choose from. The result of the on-line voting during the teleconference showed a clear preference for the brochure with the "heart" shape in the first page. The contents will be discussed during the meeting in Rome in a few days.

5) Initialization of manuscript writing.

We have planned 5 papers so far:

- a) Projections of CAD incidence in participant countries (J Marrugat, R Elosua, M Grau, I Roman PSMAR)
- b) Differences in prognosis and management of elderly ACS patients in Europe (I Roman, J Marrugat, R Elosua, M Grau PSMAR)
- c) Time to PCI. In-hospital mortality. Database sent to DEASL (F Mataloni DEASL & I Roman PSMAR)
- d) Cost Analysis of changing CHD 10 year incidence and population risk factor reduction (M Brosa, OBLIKUE)
- e) Cost analysis of optimizing management of elderly patients during ACS acute phase (M Brosa, OBLIKUE).

During the meeting in Barcelona, we are going to spend 10 minutes in each proposal and we could also have the opportunity to show our interest in participating in those manuscripts to the responsible author of each paper.

Each responsible person is required to present the corresponding paper during the meeting.

J Ferrières suggests a paper to present CAD Risk factors trends.

We can group the participating hospitals by countries and compare the CAD Risk factors between the European Heart Survey ACS data 2000 and 2005 and the EURHOBOP patients.

This will provide a 10 year difference in the prevalence of CAD Risk factors. We can discuss it during the Barcelona meeting.

6) ANMCO congress in Milano. J Marrugat has sent the EURHOBOP and EUROTRACS presentations to M Torre who will be in charge of the presentation. M Torre does not have any news on the schedule yet but Prof. Tavazzi has confirmed the inclusion of the EUROTRACS and EURHOBOP presentation in the program.

7) Mark the final workshop meeting dates: Barcelona, May 7-8, 2015.

Agenda has evolved to the version enclosed with new suggestions and comments from Partners in **ANNEX 2**

8) Date & time for next EUROTRACS teleconference

May 5th 2015, at 16:00

- N original: 94,402.

Selection:

- Diagnosis = IAM or UA.

- The studies ESREFO and FMUP have been discarded since they do not provide admission killip. Additionally NKUA has been discarded since it has a lot of missings in max killip and in trombolysis.

- N after selection: 87,377.

Missingness table by study:

	[ALL]	DEASL	EHSI	EHSII	EURHOBOP	HMGU	MASCARA	REGICOR	
p.overall	N=87377	N=44855	N=10180	N=4560	N=12131	N=3973	N=6503	N=5175	
diagnosis	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	.
age	0.37%	0.00%	2.43%	0.00%	0.07%	0.00%	1.03%	0.00%	<0.001
sex	0.28%	0.00%	2.27%	0.00%	0.10%	0.00%	0.06%	0.00%	0.000
smoking	58.8%	100%	11.6%	5.26%	33.9%	10.7%	0.00%	11.5%	0.000
diabetes2	3.33%	0.00%	2.61%	0.44%	16.2%	0.00%	0.00%	12.8%	0.000
hypertension2	2.45%	0.00%	3.52%	0.48%	9.69%	0.08%	0.00%	11.3%	0.000
hyperlipid	16.6%	0.00%	8.99%	2.24%	100%	0.08%	0.00%	26.1%	0.000
hist_renal_failure	24.7%	0.00%	2.62%	0.35%	100%	100%	0.00%	100%	0.000
histCV_MI	0.95%	0.00%	3.05%	0.11%	0.00%	0.05%	0.00%	9.97%	0.000
histCV_CHD	30.3%	0.00%	100%	100%	0.00%	0.93%	100%	100%	0.000
histCV_stroke	6.48%	0.00%	2.61%	0.20%	0.00%	5.44%	0.00%	100%	0.000
histCV_PAD	11.5%	0.00%	2.97%	100%	0.00%	0.10%	0.00%	100%	0.000
histCV_PCI	8.59%	0.00%	2.86%	0.11%	0.00%	51.3%	0.00%	100%	0.000
histCV_CABG	7.07%	0.00%	2.41%	0.13%	0.00%	19.0%	0.00%	100%	0.000
histCV_heartfail	11.8%	0.00%	2.83%	100%	0.00%	100%	0.00%	28.6%	0.000
type_ACS	1.68%	0.00%	0.00%	0.00%	1.58%	8.38%	0.00%	18.1%	0.000
adm_killip	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	.
max_killip	1.37%	0.00%	2.61%	0.00%	0.00%	0.08%	0.60%	17.1%	0.000
ventricular	18.5%	0.00%	2.50%	0.00%	100%	0.20%	0.00%	72.8%	0.000
proceeded_thrombolysis2	2.28%	0.00%	0.00%	0.00%	0.05%	22.9%	0.00%	20.9%	0.000
proceeded_CABG	1.64%	0.00%	2.64%	1.58%	0.00%	0.03%	2.03%	18.6%	0.000
proceeded_PCI2	2.08%	1.18%	2.51%	0.00%	0.54%	0.05%	0.00%	18.6%	0.000
vital_status	0.45%	0.00%	0.00%	0.04%	0.32%	0.00%	0.00%	6.72%	0.000

— Note: adm_killip assumed to be 'No'='I-II' when missing. Originally it had ~50% of NA.

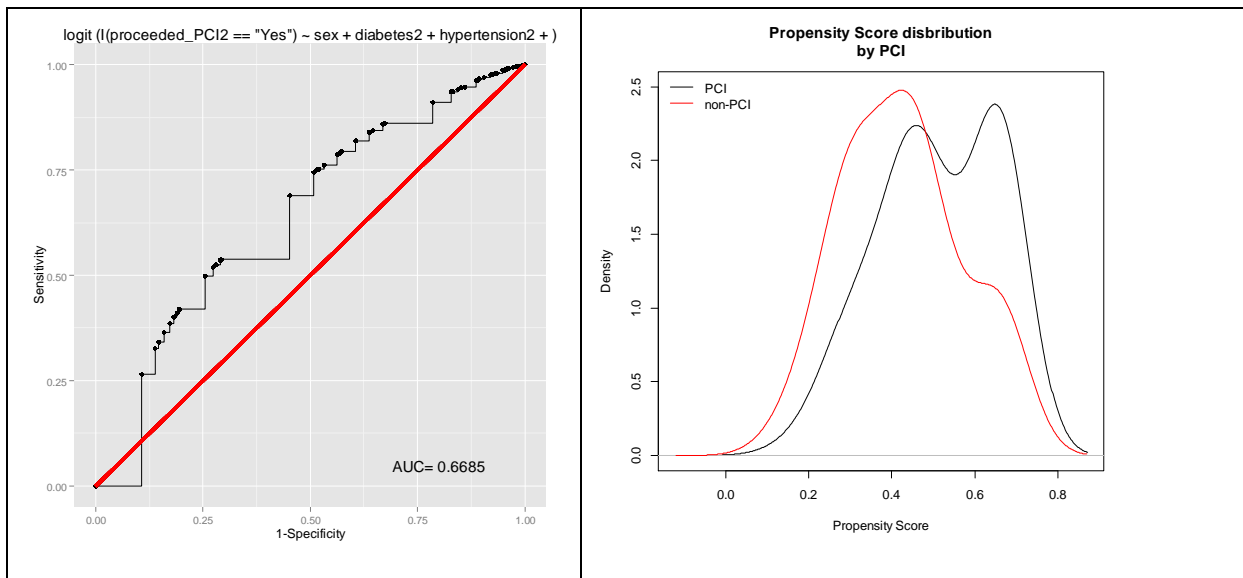
Descriptive table by study:

	[ALL] N=87377	DEASL N=44855	EHSI N=10180	EHSII N=4560	EURHOBOP N=12131	HMGU N=3973	MASCARA N=6503	REGICOR N=5175	p.overall
diagnosis:									0.000
MI	76878 (88.0%)	44855 (100%)	5917 (58.1%)	3416 (74.9%)	8974 (74.0%)	3973 (100%)	5351 (82.3%)	4392 (84.9%)	
UA	10499 (12.0%)	0 (0.00%)	4263 (41.9%)	1144 (25.1%)	3157 (26.0%)	0 (0.00%)	1152 (17.7%)	783 (15.1%)	
age	69.0 [58.0;78.0]	71.0 [60.0;81.0]	66.0 [56.0;75.0]	65.0 [55.0;74.0]	68.0 [58.0;78.0]	64.0 [55.0;69.0]	69.0 [58.0;77.0]	67.0 [56.0;74.0]	0.000
sex:									<0.001
Female	28004 (32.1%)	15561 (34.7%)	3234 (32.5%)	1419 (31.1%)	3582 (29.6%)	1006 (25.3%)	1783 (27.4%)	1419 (27.4%)	
Male	59126 (67.9%)	29294 (65.3%)	6715 (67.5%)	3141 (68.9%)	8537 (70.4%)	2967 (74.7%)	4716 (72.6%)	3756 (72.6%)	
smoking	12270 (34.1%)	0 (.%)	2990 (33.2%)	1570 (36.3%)	3060 (38.1%)	1397 (39.4%)	1817 (27.9%)	1436 (31.3%)	<0.001
diabetes2	16217 (19.2%)	4903 (10.9%)	2276 (23.0%)	1062 (23.4%)	2983 (29.3%)	1369 (34.5%)	1999 (30.7%)	1625 (36.0%)	0.000
hypertension2	32619 (38.3%)	7791 (17.4%)	5742 (58.5%)	2627 (57.9%)	6377 (58.2%)	3148 (79.3%)	3896 (59.9%)	3038 (66.2%)	0.000
hyperlipid	16377 (22.5%)	1818 (4.05%)	4707 (50.8%)	2148 (48.2%)	0 (.%)	2496 (62.9%)	3017 (46.4%)	2191 (57.3%)	0.000
hist_renal_failure	3712 (5.64%)	2507 (5.59%)	510 (5.14%)	282 (6.21%)	0 (.%)	0 (.%)	413 (6.35%)	0 (.%)	0.003
histCV_MI	16125 (18.6%)	6286 (14.0%)	3025 (30.6%)	1091 (24.0%)	2401 (19.8%)	807 (20.3%)	1462 (22.5%)	1053 (22.6%)	0.000
histCV_CHD	9122 (15.0%)	5707 (12.7%)	0 (.%)	0 (.%)	2269 (18.7%)	1146 (29.1%)	0 (.%)	0 (.%)	<0.001
histCV_stroke	5451 (6.67%)	2869 (6.40%)	754 (7.61%)	293 (6.44%)	713 (5.88%)	292 (7.77%)	530 (8.15%)	0 (.%)	<0.001
histCV_PAD	4208 (5.44%)	1094 (2.44%)	944 (9.56%)	0 (.%)	997 (8.22%)	487 (12.3%)	686 (10.5%)	0 (.%)	0.000
histCV_PCI	9662 (12.1%)	4563 (10.2%)	1154 (11.7%)	522 (11.5%)	2316 (19.1%)	363 (18.8%)	744 (11.4%)	0 (.%)	<0.001
histCV_CABG	4311 (5.31%)	1759 (3.92%)	792 (7.97%)	276 (6.06%)	866 (7.14%)	269 (8.36%)	349 (5.37%)	0 (.%)	<0.001
histCV_heartfail	6166 (8.00%)	3169 (7.06%)	1134 (11.5%)	0 (.%)	695 (5.73%)	0 (.%)	351 (5.40%)	817 (22.1%)	<0.001
type_ACS:									<0.001
Non-STEACS	44707 (52.0%)	23627 (52.7%)	5209 (51.2%)	2120 (46.5%)	6373 (53.4%)	2062 (56.6%)	3374 (51.9%)	1942 (45.8%)	
Non classifiable	4396 (5.12%)	1542 (3.44%)	666 (6.54%)	239 (5.24%)	952 (7.97%)	261 (7.17%)	348 (5.35%)	388 (9.16%)	
STEACS	36810 (42.8%)	19686 (43.9%)	4305 (42.3%)	2201 (48.3%)	4614 (38.6%)	1317 (36.2%)	2781 (42.8%)	1906 (45.0%)	
adm_killip: III-IV	4049 (4.63%)	1296 (2.89%)	524 (5.15%)	279 (6.12%)	876 (7.22%)	92 (2.32%)	549 (8.44%)	433 (8.37%)	<0.001
max_killip: III-IV	4353 (5.05%)	890 (1.98%)	915 (9.23%)	289 (6.34%)	810 (6.68%)	309 (7.78%)	470 (7.27%)	670 (15.6%)	0.000
ventricular	2607 (3.66%)	1067 (2.38%)	539 (5.43%)	138 (3.03%)	0 (.%)	234 (5.90%)	403 (6.20%)	226 (16.0%)	<0.001
proceeded_thrombolysis2	6930 (8.12%)	1637 (3.65%)	1628 (16.0%)	605 (13.3%)	840 (6.93%)	60 (1.96%)	1255 (19.3%)	905 (22.1%)	0.000
proceeded_CABG	2882 (3.35%)	436 (0.97%)	443 (4.47%)	284 (6.33%)	369 (3.04%)	571 (14.4%)	333 (5.23%)	446 (10.6%)	0.000
proceeded_PCI2	39777 (46.5%)	20320 (45.8%)	3196 (32.2%)	2183 (47.9%)	6976 (57.8%)	2753 (69.3%)	2712 (41.7%)	1637 (38.9%)	0.000
vital: Dead	6308 (7.25%)	3878 (8.65%)	501 (4.92%)	203 (4.45%)	666 (5.51%)	261 (6.57%)	354 (5.44%)	445 (9.22%)	<0.001

Model to compute propensity score for PCI:

	OR (95% C.I.)	p-value
Sex: Male	1.86 (1.80 - 1.92)	0.000
Diabetes	0.86 (0.82 - 0.89)	0.000
Hypertension	1.00 (0.97 - 1.03)	0.982
History of MI	0.74 (0.71 - 0.77)	0.000
ACS type: Non classifiable	0.51 (0.48 - 0.56)	0.000
ACS type: STEACS	2.43 (2.36 - 2.51)	0.000
Admission killip III-IVYes	0.62 (0.58 - 0.67)	0.000

N: 82,160



Frequencies of groups (by age and PS):

PS tertiles	<65y	>=65y
First [0.082,0.414)	7,259 (22.7%)	22,365 (44.6%)
Second [0.414,0.555)	10,915 (34.2%)	16,882 (33.7%)
Third [0.555,0.667]	13,737 (43.0%)	10,920 (21.8%)

Model to predict in-hospital fatality by PCI.

Group I. Age \geq 65y & PS 1st tertile:

	OR (95%CI)	pval	means
PCI	0.49 [0.43; 0.56]	0.000	0.270
Logit-PS	1.00 [0.88; 1.14]	0.949	-0.860
Age	1.07 [1.06; 1.08]	0.000	77.696
Thrombolysis	1.58 [1.10; 2.27]	0.013	0.011
Max killip III-IV	9.82 [8.69; 11.1]	0.000	0.072
UA	0.13 [0.10; 0.18]	0.000	0.163
-. Valid data (N): 22,156 (out of 22,365)			
-. Fatality in non-treated by PCI (p0): 11.8%			
-. Fatality in treated by PCI (p1): 6.8%			
-. Attributable risk p0-p1 [95%CI]: 5.0% [4.2%; 5.8%]			

Group II. Age \geq 65y & PS 2nd tertile:

	OR (95%CI)	pval	means
PCI	0.37 [0.32; 0.42]	0.000	0.410
Logit-PS	12.7 [8.06; 20.1]	0.000	-0.111
Age	1.08 [1.07; 1.09]	0.000	76.928
Thrombolysis	0.69 [0.53; 0.91]	0.008	0.047
Max killip III-IV	24.8 [20.7; 29.7]	0.000	0.045
UA	0.16 [0.09; 0.28]	<0.001	0.073
-. Valid data (N): 16,728 (out of 16,882)			
-. Fatality in non-treated by PCI (p0): 11.4%			
-. Fatality in treated by PCI (p1): 5.5%			
-. Attributable risk p0-p1 [95%CI]: 5.9% [5.1%; 6.7%]			

Group III. Age \geq 65y & PS 3rd tertile:

	OR (95%CI)	pval	means
PCI	0.36 [0.31; 0.42]	0.000	0.577
Logit-PS	0.06 [0.04; 0.09]	0.000	0.608
Age	1.08 [1.07; 1.09]	0.000	74.643
Thrombolysis	0.37 [0.29; 0.48]	<0.001	0.148
Max killip III-IV	12.9 [10.7; 15.6]	0.000	0.062
UA	0.20 [0.10; 0.38]	<0.001	0.023
-. Valid data (N): 10,817 (out of 10,920)			
-. Fatality in non-treated by PCI (p0): 15.5%			
-. Fatality in treated by PCI (p1): 7.4%			
-. Attributable risk p0-p1 [95%CI]: 8.1% [6.8%; 9.4%]			

Group IV: Age<65y & PS 1st tertile:

	OR (95%CI)	pval	means
PCI	0.69 [0.51; 0.93]	0.016	0.411
Logit-PS	0.29 [0.20; 0.43]	<0.001	-0.749
Age	1.02 [0.99; 1.04]	0.156	55.914
Thrombolysis	1.03 [0.44; 2.42]	0.937	0.016
Max killip III-IV	10.6 [7.56; 14.7]	0.000	0.041
UA	0.10 [0.05; 0.21]	<0.001	0.287
-. Valid data (N): 7,078 (out of 7,259)			
-. Fatality in non-treated by PCI (p0): 3.6%			
-. Fatality in treated by PCI (p1): 2.6%			
-. Attributable risk p0-p1 [95%CI]: 1.0% [0.2%; 1.7%]			

Group V. Age<65y & PS 2nd tertile:

	OR (95%CI)	pval	means
PCI	0.43 [0.30; 0.62]	<0.001	0.555
Logit-PS	5.48 [1.29; 23.2]	0.021	-0.143
Age	1.05 [1.02; 1.08]	<0.001	54.047
Thrombolysis	1.03 [0.59; 1.77]	0.928	0.054
Max killip III-IV	62.8 [42.3; 93.3]	0.000	0.017
UA	0.20 [0.06; 0.65]	0.007	0.129
-. Valid data (N): 10,690 (out of 10,915)			
-. Fatality in non-treated by PCI (p0): 2.0%			
-. Fatality in treated by PCI (p1): 1.0%			
-. Attributable risk p0-p1 [95%CI]: 1.0% [0.6%; 1.5%]			

Group VI. Age<65y & PS 3rd tertile:

	OR (95%CI)	pval	means
PCI	0.30 [0.23; 0.38]	0.000	0.706
Logit-PS	0.02 [0.01; 0.04]	0.000	0.638
Age	1.03 [1.01; 1.05]	0.001	53.282
Thrombolysis	0.33 [0.23; 0.47]	<0.001	0.202
Max killip III-IV	25.6 [19.1; 34.2]	0.000	0.028
UA	0.06 [0.01; 0.47]	0.007	0.024
-. Valid data (N): 13,496 (out of 13,737)			
-. Fatality in non-treated by PCI (p0): 4.3%			
-. Fatality in treated by PCI (p1): 1.6%			
-. Attributable risk p0-p1 [95%CI]: 2.7% [2.0%; 3.3%]			

AGENDA

Thursday 7 TH (from 15:00)						Session Moderator: Dimitrios Farmakis (HCC-UoA)					
	TOPIC	SPEAKER	FROM ... TO ...	duration	discussion						
1	Welcome by the Project Coordinator & CHAFEA - The Consumers, Health, Agriculture and Food Executive Agency Officer	Jaume Marrugat Anne-Marie Yazbeck	15:00 15:15	15min							
2	WP2 Dissemination of results (part I) <i>ISS/CINECA – Italy ; HOPE Belgium</i> <ul style="list-style-type: none"> - Dissemination Plan - Website - Brochure - Hope activities 	Marina Torre, Alessandro Corona, Isabella Notarangelo	15:15 15:45	25min	5min						
3	WP FINDINGS (part I):										
	a) WP4 Estimation of number of CAD events prevented at 10 year by population interventions <i>AEPMCV – France</i> <ol style="list-style-type: none"> 1. Summary of findings 2. Hands-on demo on web site 3. Discussion 	Vanina Bongard, Roberto Elosua Joan Vila	15:45 16:30	25min	10min						
	- <i>Scientific articles:</i> * <i>Projections of CAD incidence in participant countries</i>	J Marrugat PSMAR	16:30 16:45	10min	5 min						
Coffee break – 30min (16:45-17:15)											
	b) WP6 Estimation of procedure-associated in-hospital mortality and procedure cost in ACS <i>DEASL – Italy</i> <ol style="list-style-type: none"> 1. Summary of findings 2. Discussion 	Irene Roman, Danilo Fusco Paolo Sciattella Isaac Subirana	17:15 18:00	35min	10min						
	- <i>Scientific articles:</i> * <i>Differences in prognosis and management of elderly ACS patients in Europe</i>	I Roman PSMAR	18:00 18:15	10min	5 min						
	* <i>Time to PCI. In-hospital mortality</i>	F Mataloni DEASL	18:15 18:30	10min	5 min						
EUROTRACS FINAL WORKSHOP DINNER Restaurant BESTIAL C/ Ramon Trias Fargas, 2-4. 08005 Barcelona. T. 93 224 04 07											

Friday 8 TH (from 9:00) Session Moderator: Vanina Bongard (AEPMCV)					
	TOPIC	SPEAKER	FROM ... TO ...	duration	discussion
4	WP3 Evaluation of the project <i>HMGU – Germany</i>	Philip Quinones, Inge Kirchberger	09:00 09:30	25min	5min
5	WP FINDINGS (part II):				
	c) WP5 Cost-effectiveness analysis of decreasing CAD incidence by reducing population risk factor prevalence <i>IMIM – Spain</i> <ol style="list-style-type: none"> 1. Summary of findings 2. Hands-on demo on web site 3. Discussion <p><i>- Scientific articles:</i> * Cost Analysis of changing CHD 10 year incidence and population risk factor reduction</p>	Max Brosa M Brosa OBLIKUE	09:30 10:15 10:15 10:30	35min 10min	10min 5min
Coffee break – 30min (10:30-11:00)					
	d) WP7 Cost effectiveness analysis of ACS procedures that lower in-hospital fatality in patients older than 34 years <i>IMIM – Spain</i> <ol style="list-style-type: none"> 1. Summary of findings 2. Discussion <p><i>- Scientific articles:</i> * Cost Analysis of changing CHD 10 year incidence and population risk factor reduction *Cost analysis of optimizing management of elderly patients during ACS acute phase</p>	Max Brosa M Brosa OBLIKUE M Brosa OBLIKUE	11:00 11:45 11:45 12:00 12:00 12:15	35min 10min 10min	10min 5min 5min
6	WP1 Coordination of the project. <i>IMIM - Spain / HMGU - Germany</i> - Final Report.	Jaume Marrugat Yolanda Ferrer Philip Quinones	12:15 12:45	25min	5min
7	Concluding remarks by Project Coordinator & CHAFAEA - The Consumers, Health, Agriculture and Food Executive Agency Officer	Jaume Marrugat, Anne-Marie Yazbeck	12:45 13:15	30min	
LUNCH at the PRBB terrace					