MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD

Instituto de Salud Carlos III

PROGRAMA HERACLES
Red de Investigación Cardiovascular

SCIENTIFIC MEETING
HERACLES NETWORK 2015

Madrid ISCIII, June 19, 2015

AGENDA

Friday, June 19

HERACLES SCIENTIFIC MEETING PROGRAM
Room: **Salón Ernest Lluch**

08:30 09:00	**Arrival and reception**	
09:00 09:10	**Welcome – J Marrugat – F Fernández-Avilés**	**10min**

WORKSHOP WP2 & WP3

09:10 09:30	**WP2. Analysis of predictive and reclassification capacity of CVD biomarkers in cohort studies & mendelian randomization trials**	**20min**

Speaker: Roberto Elosua
Title: On-going collaborative research projects: aims and main results
Abstract: In this presentation we will summarize the main collaborative projects that the groups participating in WP2 are developing, some of these projects have already finalized and others are still in progress. The main areas of research are:

- The development of new methods to estimate cardiovascular risk and the evaluation of new biomarkers to improve the predictive capacity of cardiovascular risk functions.
- The evaluation of the impact of environmental factors on cardiovascular disease and cardiovascular risk factors, including physical activity, air pollution and noise.
- The study of genetic and epigenetic markers related to cardiovascular risk and cardiovascular functional traits.

09:30 09:50	**WP3. Biomarkers & other prognostic factors in ACS, stroke & CHF patients**	**20min**

Speaker: Juan Sanchis
Title: Comorbidities in Acute Coronary Syndromes: the MOSCA Trial
Abstract: Our aim was to investigate the benefit of the invasive strategy in patients with non-STEMI and comorbidities. A total of 107 patients hospitalized with non-STEMI, older than 70 years and with significant comorbidities, were included and randomized to an invasive (routine coronary angiogram, n=52) or conservative (coronary angiogram only if recurrent ischemia or heart failure, n=55) strategy. The outcomes were MACE (death or cardiac events) and total events (MACE or readmission for any cause) at one-year follow-up. The analysis of longitudinal cumulative events showed a tendency towards a better outcome with the invasive strategy in terms of MACE (IRR= 0.5, 95% CI 0.2 to 1.4) and MACE and readmission for any cause (IRR= 0.5, 95% CI 0.3 to 1.1). Indeed, the invasive strategy delayed 39 days the occurrence of the first event (p=0.02, RMST analysis). In conclusion, in patients with non-STEMI, over 75 years and with comorbidities, the invasive management tended to improve outcomes and delayed the occurrence of the first event after discharge

WORKSHOP WP4 & WP5

09:50
10:10

WP4. Endothelial function and vascular regeneration — **20min**

Speaker: Ginés Escolar
Title: Endothelial function and dysfunction: Role in CVD and related complications
Abstract: The endothelium is the biological interface between blood and tissues and plays a critical role in the control of vascular tone and in the regulation of coagulation and fibrinolysis. WP4 is directly oriented to the role of endothelial function and vascular regeneration, while indirectly investigating endothelial dysfunction and its contribution to CVD and related complications. This presentation will update the progression of the different subprojects, the milestones achieved and the status of the expected deliverables. We will highlight the most relevant publications and competitive projects and will place in perspective possibilities for future developments.

10:10
10:30

WP5. Ion channels in the vasculature and CVDs — **20min**

Speaker: Manel Garabito. In collaboration with U. Valladolid
Title: Role of selective inhibition of Kv1.3 channels in intimal hyperplasia
Abstract: Changes in the functional expression of Kv1.5 to Kv1.3 currents upon phenotypic modulation in mice VSMCs have been shown to contribute to cell migration and proliferation and specific blockade of Kv1.3 inhibits VSMCs proliferation *in vitro* and *in vivo*, in a mouse model of endoluminal injury.
We sought to analyze the effect of local administration of the Kv1.3 channel blocking agent PAP-1 (5-4-phenoxybutoxy psoralen) in a model of chronic transplant vasculopathy and to develop a model of drug eluting stent PAP-1, using a newly designed amphiphilic biopolymer (pHPMA-chol (5%).
PAP-1 locally-administered in vivo treatment completely abolished intimal hyperplasia development in this experimental model of transplant vasculopathy. In addition, a good drug release profile from a PAP-1 drug-eluting stent prototype has been achieved and further intracoronary stenting experiments will be performed.
Our data confirm the role of Kv1.3 in intimal hyperplasia and the potential use of specific blocking agents, such as PAP-1, as a new therapeutic strategy to prevent restenosis.

10:30
11:00

COFFE BREAK (Sala de catering del Salón Ernest Lluch) — **30 min**

11:00
11:45

GENDIAG AWARDS CEREMONY — **45 min**

Best HERACLES Publication 2014
Best HERACLIDES (YOUNG INVESTIGATOR) Publication 2014

- Presentation of the results of the best HERACLES publication — 15min
- Presentation of the results of the best HERACLIDES INVESTIGATOR publication — 15min

11:45
13:00

HERACLES SCIENTIFIC COMMITTEE meeting — **1h 15 min**

Room: **Salón Ernest Lluch**

11:45
13:00

HERACLIDES (young investigators) meeting — **1h 15 min**

Room: **Aula 1 (Escuela Nacional de Salud, Pab 7)**