

European Journal of Clinical Investigation

52nd Annual Scientific Meeting of the
European Society for Clinical Investigation



Barcelona, Spain
30th May – 1st June 2018

ABSTRACT BOOK

Volume 48

Supplement 1

May 2018

Abstracts of the 52nd Annual Scientific Meeting of the European Society for Clinical Investigation

"Precision medicine for healthy ageing"

Barcelona, Spain

30th May – 1st June 2018

Guest Editor:

Prof. Lina Badimon

Prof. Gema Frühbeck

These abstracts have been published as they were received via online electronic submission. Every effort has been made to reproduce faithfully the abstracts as submitted. However, no responsibility is assumed by the organizers for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of methods, products, instructions or ideas contained in the materials herein. Because of the rapid advances in medical sciences, we recommend that independent verification of diagnoses and drug doses should be made.

Contents

Abstract number

PL | Plenary speakers

PL-1-PL-5

Workshop invited speakers

W1 | Phagocyte biology
W2 | Mitochondria, ageing and disease
W2/W4 | Mitochondria, ageing and disease & Hepato-Gastroenterology/Lipids
W3 | Cardiology-CIBERCV
W4/W7 | Hepato-Gastroenterology/Lipids & Obesity-CIBEROBN
W5/W7 | Omics & Obesity-CIBEROBN
W6 | Precision nutrition
W7 | Obesity-CIBEROBN

W1-L1-W1-L19
W2-L1-W2-L18
W2/W4-L1-W2/W4-L4
W3-L1-W3-L18
W4/W7-L1-W4/W7-L7
W5/W7-L1-W5/W7-L14
W6-L1-W6-L9
W7-L1-W7-L4

Oral presentations

W1 | Phagocyte biology
W2 | Mitochondria, ageing and disease
W3 | Cardiology-CIBERCV
W4/W7 | Hepato-Gastroenterology/Lipids & Obesity-CIBEROBN
W7 | Obesity-CIBEROBN

W1-O1-W1-O15
W2-O1-W2-O10
W3-O1-W3-O14
W4/W7-O1-W4/W7-O10
W7-O1-W7-O4

Posters by theme

W1 | Phagocyte biology
W1 | Phagocyte biology
W2 | Mitochondria, ageing and disease
W2 | Mitochondria, ageing and disease
W2 | Mitochondria, ageing and disease
W3 | Cardiology-CIBERCV
W3 | Cardiology-CIBERCV
W3 | Cardiology-CIBERCV
W4 | Hepato-Gastroenterology/Lipids
W5 | Omics
W6 | Precision nutrition
W7 | Obesity-CIBEROBN
W7 | Obesity-CIBEROBN
W9 | Miscellaneous Medical Topics

Poster session 1
Poster session 2
Poster session 1
Poster session 2
Poster session 3
Poster session 1
Poster session 2
Poster session 3
Poster session 3
Poster session 2
Poster session 3
Poster session 1
Poster session 3
Poster session 3

P1-T-P20-T
P21-T-P35-T
P36-T-P55-T
P56-T-P72-T
P1-F-P34-F
P73-T-P102-T
P103-T-P128-T
P35-F-P68-F
P69-F-P90-F
P129-T-P161-T
P91-F-P99-F
P162-T-P191-T
P100-F-P125-F
P126-F-P142-F

Posters by session

W1 | Phagocyte biology
W2 | Mitochondria, ageing and disease
W3 | Cardiology-CIBERCV
W7 | Obesity-CIBEROBN
W1 | Phagocyte biology
W2 | Mitochondria, ageing and disease
W3 | Cardiology-CIBERCV
W5 | Omics
W2 | Mitochondria, ageing and disease
W3 | Cardiology-CIBERCV
W4 | Hepato-Gastroenterology/Lipids
W6 | Precision nutrition
W7 | Obesity-CIBEROBN
W9 | Miscellaneous Medical Topics

Poster session 1
Poster session 1
Poster session 1
Poster session 1
Poster session 2
Poster session 2
Poster session 2
Poster session 2
Poster session 3
Poster session 3
Poster session 3
Poster session 3
Poster session 3
Poster session 3
Poster session 3

P1-T-P20-T
P36-T-P55-T
P73-T-P102-T
P162-T-P191-T
P21-T-P35-T
P56-T-P72-T
P103-T-P128-T
P129-T-P161-T
P1-F-P34-F
P35-F-P68-F
P69-F-P90-F
P91-F-P99-F
P100-F-P125-F
P126-F-P142-F

Poster session 1 Thursday, 31 May, 12:30-14:30

Poster session 2 Thursday, 31 May, 17:30-19:00

Poster session 3 Friday, 1 June, 12:30-14:30

Conclusions: Use of proven-efficacy pharmacological treatment in ACS patients improved from 2000 to 2010, and was associated to a better outcome at discharge.

P115-T | Influence of pathology of auditory analyzer on cardiac output

T.L. Zefirov; A.M. Golovachev; R.G. Biktemirova; A. Ibragimov; N.I. Ziyatdinova

Kazan (Volga Region) Federal University, Kazan, Russian Federation

Congenital disorders of the auditory analyzer can influence the functioning of other physiological systems. The cardiac output of young people with disorders of hearing was studied in comparison with healthy people similar parameters. The cardiac output from the left ventricle into the aorta was measured using Ultrasound Cardiac Output Monitor (USCOM, Australia) in young people 20–25 years old with disabilities having a pathology of hearing. The first group (gr.1) included young people completely devoid of hearing and with IV degree of hearing loss. The second group (gr.2) included young people with disorders of the auditory analyzer having I-III degrees of hearing loss. Healthy young people participated in the study as control group (gr.contr.) The AV (aortic valve) examination mode was selected on the monitor for aortic measure. The transducer was placed with the appropriate localization for this mode (suprasternal position). All the measurements were performed at rest.

Significant differences were revealed between the indicators of the minute distance (MD) ($P \leq 0.05$), cardiac output (CO) ($P \leq 0.05$) in gr.1 and gr.contr. These indicators were as follows: MD (Gr.1) – 26.71 ± 3.59 m/min; MD (Gr.2) – 16.58 ± 3.95 m/min; MD (Gr.contr.) – 17.33 ± 2.27 m/min; CO (Gr.1) – 7.81 ± 1.00 L/min; CO (Gr.2) – 5.36 ± 1.38 L/min; CO (Gr.contr.) – 5.16 ± 0.52 L/min. The obtained data may indicate the influence of pathological processes in the hearing organs on the normal development of the cardiovascular system.

Work supported by Program of Competitive Growth of KFU and Russian Foundation for Basic Research.

P116-T | Angiographic predictors of experimental infarct size in a swine model of reperfused myocardial infarction

V. Crisóstomo^{*,†}; C. Baez-Díaz^{*,†}; V. Blanco-Blázquez^{*,†}; A. Abad-Cobo^{*}; I. González-Buena^{*}; J.A. Antequera-Barroso[‡]; J. Maestre^{*,†}; F.M. Sánchez-Margallo^{*,†}

^{*}Centro De Cirugía De Mínima Invasión Jesús Usón, Cáceres, Spain; [†]CIBER de Enfermedades Cardiovasculares, Madrid, Spain; [‡]Mathematics and Experimental Sciences Department, University of Extremadura, Cáceres, Spain

Background: To realize the exciting potential of cardiac regenerative therapies rigorous translational models must be used. Swine infarct models are widely used for this purpose. However, the infarct sizes obtained via balloon occlusion of the porcine LAD are highly variable.

We set out to study the relationship between the anatomical features of the porcine LAD and the size of infarction (IS) measured with MRI at 1 week.

Material and methods: Twenty-four pigs surviving a 90 minutes balloon occlusion of the mid-LAD were used for this study. The following angiographic parameters were considered: Number of branches present, number of branches occluded, level of occlusion (expressed as percentage of arterial length occluded), presence of a distinct “ramus intermedius” and animal weight.

The relationship between these parameters and IS as measured by DE-MRI on day 7 after induction was studied using non parametric correlations and lineal regression. Moreover, an inclusion criterion of $IS > 15\%$ was defined and the capability of these variables to predict whether animals were going to meet it was determined using logistic binary regression.

Results: Significant correlations were found between IS and the number of branches present ($P = 0.004$) and the number of branches occluded ($P = 0.003$), while no correlation could be evidenced with the other parameters. However, while significant ($P = 0.024$), lineal regression model could only predict 30% of observed IS. Logistic binary regression yielded a significant ($P = 0.014$) model that could correctly predict 75% of cases, with 72.7% specificity and 76.9% sensitivity. While further work is needed to refine the model, with this tool a single angiographic procedure could be used to predict the probability of an experimental subject not meeting the inclusion criterion, thus allowing greater ethical refinement of the infarction procedure by decreasing the amount of animals used that will be discarded due to insufficient IS.