



# 6<sup>TH</sup> MACEDONIAN CONGRESS of CARDIOLOGY

3 - 6 OCTOBER, 2019

OHRID, NORTH MACEDONIA

Hotel Complex Metropol

[www.msccardiology.org.mk](http://www.msccardiology.org.mk)



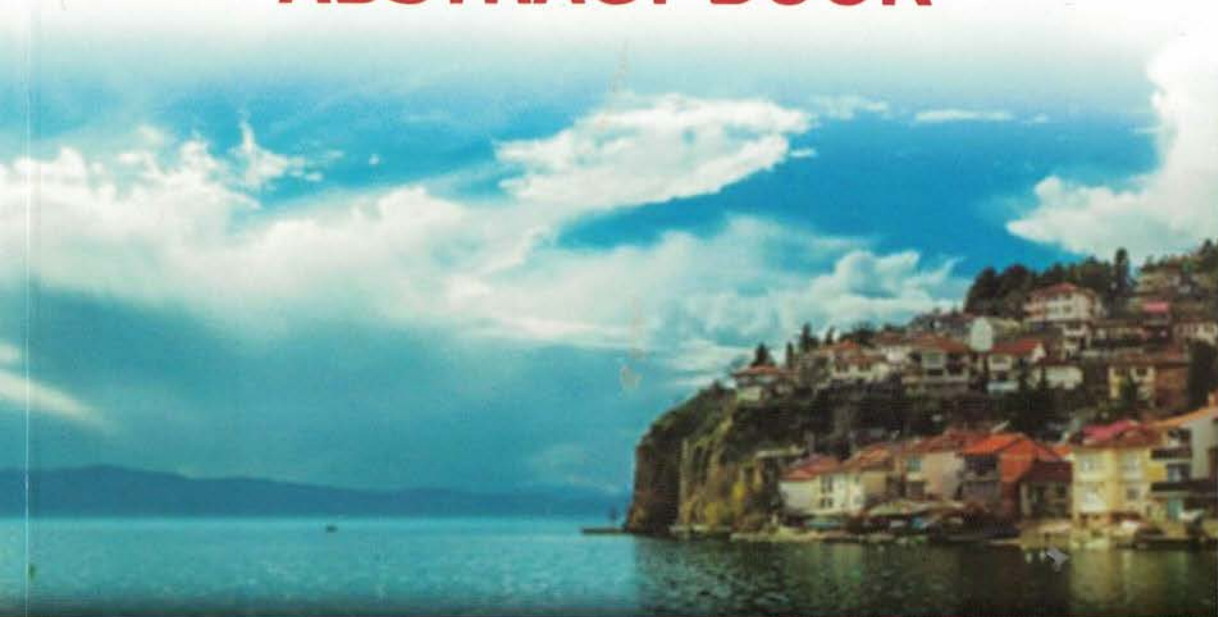
**FIRST REGIONAL CONGRESS OF  
NURSES AND TECHNICIANS**

Supported by  
**ESC**  
European Society  
of Cardiology



## **ЗБОРНИК НА АПСТРАКТИ**

## **ABSTRACT BOOK**



**ШЕСТИ КОНГРЕС НА  
МАКЕДОНСКОТО ЗДРУЖЕНИЕ  
ПО КАРДИОЛОГИЈА СО  
МЕЃУНАРОДНО УЧЕСТВО**

**SIXTH CONGRESS OF THE  
MACEDONIAN SOCIETY  
OF CARDIOLOGY WITH  
INTERNATIONAL PARTICIPATION**

Издавач:  
Македонско здружение по  
кардиологија

Publisher:  
Macedonian Society of Cardiology

Уредник:  
Проф. Елизабета Србиновска Костовска

Editor:  
Prof. Elizabeta Srbinovska Kostovska

Техничко уредување:  
Пруф Принт - Скопје

Technical editing:  
Pruf Print - Skopje

Печати:  
Датапонс - Скопје

Printing:  
Datapons - Skopje

Тираж:  
800

Copies:  
800

ОБРАЌАЊЕ / WELL

ОДБОРИ/COMMIT

МАПА НА КОНРЕСО

ПРОГРАМА / PROGR

АПСТРАКТИ / ABST

УСНИ ПРЕЗЕНТАЦИ

ПОСТЕРИ/POSTERS

ИНДЕКС НА АВТОР

## ОДБОРИ

President of N.Macedonian Society of cardiology

**Elizabeta Srbinovska Kostovska**

General Secretary

**Marijan Bosevski**

Treaser

**Irena Mitevska**

Scientific Committee:

**Emilija Antova**

**Vesna Bozinovska**

**Marijan Bosevski**

**Ljubica Georgievska Ismail**

**Fatmir Ferati**

**Sasko Kedev**

**Jorgo Kostov**

**Elizabeta Srbinovska Kostovska**

**Marija Vavlukis**

**Hristo Pejkov**

**Lidija Poposka**

Organization committee:

**Valentina Andova**

**Slobodan Antov**

**Tanja Anguseva**

**Frosina Arnaudova -Dazdulovic**

**Marjan Bosev**

**Vladimir Boskov**

**Oliver Busletic**

**Emilija Caparoska-Velickovska**

**Saso Jovev**

**Aleksandar Jovkovski**

**Filip Janusevski**

**Slavica Jordanova**

**Aleksandar Jovkovski**

**Oliver Kalpak**

**Sasa Caeva**

**Darko Kitanovski**

**Nela Kostova**

**Snezana Kupeva**

**Emilija Lazarova**

**Nensi Lozance**

**Snezana Meskova**

**Zan Mitrev**

**Irena Mitevska**

**Aleksandar Nikolic**

**Magdalena Otljanska**

**Savetka Paljoskovska**

**Bekim Pocesta**

**Igor Spirovski**

**Danica Petkovska Spirova**

**Dejan Risteski**

**Jane Taleski**

**Hajber Taravari**

**Ivan Trajkov**

**Sladzana Tupare**

**Ivan Vasilev**

**Biljana Zafirovska-Taleska**

**Zan Zimbakov**

Local Committee:

**Nikola Bakracevski**

**Elena Basuroska Kovaceska**

**Blagovesna Fortomarska Mileska**

**Marjan Kotlar**

**Biljana Tegovska**

**Marija Zimbova**

**Ilie Barb (U**

**D.Bacal (Se**

**Thomas Binder**

**Branko Belestin**

**Noel G. Boyle**

**Matijas Bunc (S**

**Maria Dorubantu**

**Chiara Bucciar**

**(England**

**Ana Djordjevic Dil**

**Dirk J. Duncer (N**

**Mihajlo Farkic**

**Pontone Gianlu**

**F.Heinzel (Ge**

**Krassimira Hristov**

**Nenad Ilievski**

**Mario Ivanusa (**

**Kalon Ho (U**

**Jaroslav Kasperz**

**Dimitra Kalimano**

**(Serbia**

**Stefan Klain**

**Igor Koncar (**

**Kornelia Kotseva**

**Ivan Knezevic (**

**Zumreta Kusljugic**

**Hercegov**

**Irene Lang (A**

**G.Liuri (U**

**Sime Manola (**

**Davor Milicic (**

## COMMITTEES

### International faculty

|   |  |
|---|--|
| <b>Ilie Barb (USA)</b>                                | <b>Maria Milanova (Bulgaria)</b>                   |
| <b>D.Bacal (Serbia)</b>                               | <b>Aleksandar Neskovic (Serbia)</b>                |
| <b>Thomas Binder (Austria)</b>                        | <b>Nedelin Nikoliv (Bulgaria)</b>                  |
| <b>Branko Belestin (Serbia)</b>                       | <b>Igor Petrov (Bulgaria)</b>                      |
| <b>Noel G. Boyle(USA)</b>                             | <b>Victor Persic (Croatia)</b>                     |
| <b>Matijas Bunc (Slovenia)</b>                        | <b>Tatjana Potpara (Serbia)</b>                    |
| <b>Maria Dorubantu (Romania)</b>                      | <b>Dario Rahelic (Croatia)</b>                     |
| <b>Chiara Bucciareli Ducci<br/>(England)</b>          | <b>A.Romanov (Russia)</b>                          |
| <b>Ana Djordjevic Dikic (Serbia)</b>                  | <b>Dragana Saranovic – Sobic<br/>(Serbia)</b>      |
| <b>Dirk J. Duncer (Nederland)</b>                     | <b>Jadranka Separovic</b>                          |
| <b>Mihajlo Farkic (Serbia)</b>                        | <b>Handzevacki (Croatia)</b>                       |
| <b>Pontone Gianluca (Italy)</b>                       | <b>V.Sibanov (Russia)</b>                          |
| <b>F.Heinzel (Germany)</b>                            | <b>K.Stambuk (Croatia)</b>                         |
| <b>Krassimira Hristova (Bulgaria)</b>                 | <b>Sakib Sokolovic (Bosna and<br/>Hercegovina)</b> |
| <b>Nenad Ilievski (Serbia)</b>                        | <b>Hatam Soliman (England)</b>                     |
| <b>Mario Ivanusa (Croatia)</b>                        | <b>Ivan Stankovic (Serbia)</b>                     |
| <b>Kalon Ho (USA)</b>                                 | <b>Vesna Stojanov (Serbia)</b>                     |
| <b>Jaroslav Kasperzak (Poland)</b>                    | <b>S. Tisheva (Bulgaria)</b>                       |
| <b>Dimitra Kalimanovska Ostric<br/>(Serbia)</b>       | <b>Stefan Tofovic (USA)</b>                        |
| <b>Stefan Klain (USA)</b>                             | <b>Maria Tokmakova ( Bulgaria)</b>                 |
| <b>Igor Koncar (Serbia)</b>                           | <b>Vassil Traykov (Bulgaria)</b>                   |
| <b>Kornelia Kotseva (England)</b>                     | <b>Svetlin Tsconeov ( Bulgaria)</b>                |
| <b>Ivan Knezevic (Slovenia)</b>                       | <b>Ara Uroglu (Austria)</b>                        |
| <b>Zumreta Kusljugic (Bosnia and<br/>Hercegovina)</b> | <b>Josif Vincelj (Croatia)</b>                     |
| <b>Irene Lang (Austria)</b>                           | <b>Marija Zdravkovic (Serbia)</b>                  |
| <b>G.Liuri (USA)</b>                                  |  |
| <b>Sime Manola (Croatia)</b>                          |  |
| <b>Davor Milicic (Croatia)</b>                        |  |

**МОДЕРИРАНИ ПОСТЕР ПРЕЗЕНТАЦИИ  
MODERATED POSTER PRESENTATION**

**КОРОНАРНА АРТЕРИСКА БОЛЕСТ И ИНТЕРВЕНТНИ  
ПРОЦЕДУРИ: ПЕРИФЕРНА ВАСКУЛАРНА БОЛЕСТ И  
ТРОМБОЕМБОЛИЗАМ; ВРОДЕНИ И ВАЛВУЛАРНИ СРЦЕВИ  
МАНИ; СРЦЕВА СЛАБОСТ**

**CORONARY ARTERY DISEASES AND INTERVENTIONAL  
PROCEDURES; PERIPHERAL ARTERY DISEASES AND  
TROMBOEMBOLIZAM; CONGENITAL AND VALVULAR HEART  
DISEASE AND HEART FAILURE**

**PO1. Association of biomarkers of oxidative stress, stress glycaemia and glycated hemoglobin with acute coronary syndrome**

**M. Vavlukis<sup>1</sup>, G. Kamceva<sup>2</sup>, LjG Ismail<sup>1</sup>, D. Kitanovski<sup>1</sup>, I. Kotlar<sup>1</sup>,  
I. Bojovski<sup>1</sup>, E. Shehu<sup>1</sup>, H. Taravari<sup>1</sup>, B. Pocesta<sup>1</sup>**

<sup>1</sup>University Clinic of Cardiology, Faculty of Medicine, Ss' Cyril and Methodius University, Skopje, Macedonia, <sup>2</sup>Clinical Hospital Stip, Stip, Macedonia

**Introduction:** Oxidative stress produced by free radicals has been linked to the development of several diseases, including the coronary artery disease. Assessment of oxidative stress markers could modify prevention, risk stratification and treatment of patients with coronary artery disease. **The aim of our study** was to comparatively evaluate association between biomarkers of oxidative stress, stress glycemia and HgbA1c in patients with coronary artery disease.

**Methods.** Cross-sectional observational study performed in patients treated for coronary artery disease (CAD). Patients were evaluated for their demographics, clinical data, lipoprotein and glycemic profile and oxidative stress biomarkers: malondialdehyde (MDA) and hydroperoxide (HP), and antioxidant enzymes: superoxide dismutase (SOD), CATALASE and glutathione peroxidase (GPS). Patients were divided in two groups: patients with acute coronary syndrome (ACS) and chronic coronary artery disease (HCAD), and then subdivided, ACS patients in: STEMI, NSTEMI and USA, HCAD in: asymptomatic CAD, revascularised and post MI patients. We also had comparator group of healthy volunteers.

POSTERS

**Results.** 300 patients included, 194(64.7%) males and 106(36.3%) females, mean age  $62.9 \pm 11.2$  years. ( $p=ns$  for age difference). 187 (62.3%) were ACS (three subgroups: STEMI, NSTEMI and UAP), and 113 (37.7%) HCAD. No statistically significant difference in the risk profile between the groups was observed. Patients with CAD had significantly higher pro-oxidative and significantly lower anti-oxidative biomarkers levels, as compared with healthy volunteers. Statistically significant differences were observed for HP and SOD between ACS and HCAD group. In HCAD group revascularized patients experienced higher oxidative stress as compared to stable post MI patients. Among ACS patients there were statistically significant intergroup difference but not pointing to the single type of ACS. ACS patients had also higher levels of stress glycaemia and HgbA1c. Significant positive correlation was found for HgbA1c and stress glycaemia with MDA ( $r=,154^{**}$ ,  $p=0,008$ ;  $r=,254^{**}$ ,  $p=0,024$  respectively). **Conclusion.** Markers of oxidative stress were significantly higher, and antioxidative activity significantly lower in comparison to healthy volunteers, between ACS and HCAD patients for HP and SOD, while inside the groups, revascularised HCAD patients were with the highest pro-oxidative and lowest anti-oxidative activity, while in ACS patients although there were significant intergroup differences in biomarkers of oxidative stress there were no specifics as a function of STEMI, NSTEMI or UAP.

## PO2. Трансрадијален пристап во третманот на повеќесадовна артериска болест кај млад пациент

**Х. Пејков, О. Калпак, Ж. Зимбаков, И. Спиоровски, О. Бушлетиќ, М. Бошев, Ј. Костов, Д. Китановски, И. Бојовски, М. Бушева, И. Василев**

Универзитетска Клиника за Кардиологија, Скопје, Р.С. Македонија

Да се прикаже бенефитот и сигурноста од перкутани коронарни интервенции кај млади пациенти со повеќесадовна коронарна болест со трансрадијален пристап. Пациентот е 34 години, кој беше примен на нашата клиника поради градна болка при напор. Во минати заболувања негира болести од интерес. Фамилиарна анамнеза позитивна, Татко со коронарна артериска болест и ЦАБГ кој после 5 години починал. Направен КСТ кој во 5 минути прекинат поради градна болка и СТ сегмент депресија во V4-V6 од 2 мм. Хокардиографијата покажува уредна кинетика на лева комора со ЕФ 65% и присутна митрална инсуфициенција од 2 степени. Наредниот ден е направена коронарографија со наод за ЛАД

прох 80%, Л  
му сепредл  
соштосепре  
соTIMI 3 flow  
TIMI 3 flow. П  
на I стент на  
преку транс  
општа состо  
ишемија.

## PO3. Spontaneous

**E. Grueva M. Z. Petrovski,**  
University Clin

### Introduction

non atherosclerotic  
prevalence of  
previously no  
women with  
a typical chest  
ECG: ST segm  
and precordia  
pLAD stenosi  
TIMI flow=3.  
ventricular di  
and IVS. Tre  
statins and ar  
for cardio su  
(LIMA-LAD) v  
with echocardi  
-16.8%. **Discu**  
dissection tha  
not iatrogenic  
a false lumen  
hematoma fro  
arteriopathies  
cases) has bee  
SCAD. Preval  
pregnancies.  
chest pain an