



REPUBLIC OF SERBIA
GOVERNMENT



Republic of Serbia
MINISTRY OF HEALTH

UNIVERSITY CLINICAL CENTRE OF SERBIA



Abstract Book

The First World Conference
Fighting COVID-19 Pandemic
Health Challenges

**COLLECTIVE KNOWLEDGE.
GLOBAL HEALTH.**

26-28 March 2022, Belgrade, Serbia



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COLLECTIVE KNOWLEDGE. GLOBAL HEALTH.

26-28 MARCH 2022, BELGRADE, SERBIA



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Table of contents

Organizing Committee	5
Scientific Committee	6
Honorary Committee	8
Members and deputy members of the Executive Committee	8
Welcome to Serbia. Welcome to Belgrade.	9
Introductory	10
1. CHALLENGES THE HEALTH SYSTEMS ARE FACED WITH DURING THE PANDEMIC	12
 Invited Speakers	13
 Oral Presentations	21
 E Posters	26
2. COVID-19 DIAGNOSIS, IMMUNIZATION AND PREVENTION	39
 Invited Speakers	40
 Oral Presentations	54
 E Posters	62
3. STATE-OF THE-ART APPROACH TO COVID-19 TREATMENT WITH EMPHASIS ON MULTIDISCIPLINARY TEAMWORK	117
 Invited Speakers	118
 Oral Presentations	164
 E Posters	241



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Committee**

**Scientific
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**Honorary
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Welcome to Serbia Welcome to Belgrade





3

State-of the-art approach to COVID-19 treatment with emphasis on multidisciplinary teamwork

Invited speakers

Oral presentations

E poster

Abstracts are ordered by arrival date

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Androgen Dependence in Thrombosis of Patients With COVID-19

Sanja Miljatović¹, Teodora Dragojević², Dragoslava Đikić²,
Emilija Živković², Goran Stevanović^{1,3}, Vladan Čokić²

Background. A vascular system inflammation is a risk of venous thromboembolism and can result in widespread microangiopathy with microvascular thrombosis.

Methods. We performed laboratory clinical follow-up of patients with COVID-19 to compare gender differences. To study the sex difference in COVID-19 outcome we will measure estradiol and androgens: dihydrotestosterone (DHT) and sex hormone binding globulin (SHBP) in plasma of 63 COVID-19 patients, analyzed by ELISA. Their levels will be correlated to the adhesion molecules: soluble intercellular adhesion molecule 1 (sICAM-1), soluble vascular adhesion molecule 1 (sVCAM-1), sE-selectin, and sP-selectin as biomarkers for inflammation and thrombosis.

Results. DHT was increased (1.9 fold) in male COVID-19 patients compared to healthy male volunteers. SHBP was significantly increased in COVID-19 patients compared to healthy volunteers ($p < 0.05$) as well as female vs. male COVID-19 patients ($p < 0.001$, 2.5 fold). sVCAM-1 and sICAM-1 were increased in female COVID-19 patients compared to male COVID-19 patients and female volunteers, respectively ($p < 0.05$). The sP-selection was significantly ($p < 0.01$) increased in male vs. female COVID-19 patients. SHBP was in negative correlation with sP-selectin ($p < 0.05$). DHT was in positive correlation with sVCAM-1 ($p < 0.05$). Ferritin had 3-fold higher levels in male than female COVID-19 patients ($p < 0.001$).

Conclusions. Upregulation of androgen hormones and thrombotic biomarkers in COVID-19 patients demonstrate sex dependence.

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1

Challenges facing the health systems during the pandemic

2

COVID-19 diagnostics, immunization and prevention

3

State-of the art approach to COVID-19 treatment with emphasis on multidisciplinary team work