





# Abstract Book

The First World Conference Fighting COVID-19 Pandemic Health Challenges

COLLECTIVE KNOWLEDGE. GLOBAL HEALTH.

26-28 March 2022, Belgrade, Serbia





## **Abstract Book**

The First World Conference Fighting COVID-19 Pandemic - Health Challenges COLLECTIVE KNOWLEDGE. GLOBAL HEALTH.

26-28 MARCH 2022, BELGRADE, SERBIA



The First World Conference Fighting COVID-19 Pandemic - Health Challenges COLLECTIVE KNOWLEDGE. GLOBAL HEALTH. 26-28 March 2022, Belgrade, Serbia

#### **Abstract Book**

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#### **Associate Editors**

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Honorary Committee

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\* The Members of the Scientific Committee are presented in alphabetical order

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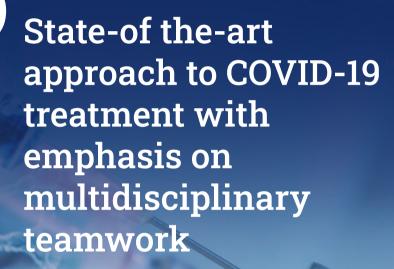
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GLOBAL HEALTH.

## Welcome to Serbia Welcome to Belgrade







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#### **Invited speakers**

**Oral presentations** 

#### E poster

Abstracts are ordered by arrival date

The First World Conference Fighting COVID-19 Pandemic - Health Challenges

> COLLECTIVE KNOWLEDGE. GLOBAL HEALTH.

## Androgen Dependence in Thrombosis of Patients With COVID-19

Sanja Miljatović<sup>1</sup>, Teodora Dragojević<sup>2</sup>, Dragoslava Đikić<sup>2</sup>, Emilija Živković<sup>2</sup>, Goran Stevanović<sup>1,3</sup>, Vladan Čokić<sup>2</sup>

**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.

<sup>1</sup> Clinic of Infectious and Tropical Diseases, Clinical Centre of Serbia, Belgrade, Serbia.

<sup>2</sup> Institute for Medical Research, National Institute of Republic of Serbia, University of Belgrade, Belgrade, Serbia

<sup>3</sup> Faculty of Medicine, University of Belgrade, Belgrade, Serbia.

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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