

# Македонски Фармацевтски Macedonian билтен Pharmaceutical Bulletin

волумен **66** (додаток 1) 2020 / volume **66** (Suppl 1) 2020



Македонско фармацевтско друштво, ул. Маршал Тито 13б/8, Скопје, Македонија  
Macedonian Pharmaceutical Association, Marshal Tito 13b/8, Skopje Macedonia

It is our great pleasure to present this Supplement Issue on “*Macedonian Pharmaceutical Bulletin*” to the scientific and professional community. This supplement includes the short communications accepted for the *Seventh Congress of Pharmacy in North Macedonia with International participation 2020*, which was postponed to 2021 due to the ongoing spread of Corona (SARS-CoV-2) virus over the world.. Respecting the right of the authors to publish the results of their research, the Scientific Board decided to publish all papers that received a positive review, after obtaining the consent of the authors. The authors will also be invited to submit their papers in 2021, once the conditions for holding the Congress are provided.

The main theme of the Congress was “Modern trends in Pharmacy: opportunities and challenges” A broad spectrum of topics within the pharmaceutical sciences and practice carefully selected for this special occasion in order to build up a highly interesting and comprehensive program were covered. We received more than 120 short paper submissions from more than 15 countries. These numbers show that our Congress was aiming for the highest scientific standards, and that it can be considered a well-established venue for researchers in the broad fields of Pharmaceutical sciences and practice.

Sincere thanks to the hosts of the Seventh Congress of Pharmacy in North Macedonia with International participation, Macedonian Pharmaceutical Association and Faculty of Pharmacy, Ss Cyril and Methodius University in Skopje for their vision and commitments.

In the period the decision to postpone the Congress was made, organizational activities were at an advanced stage. We would like to thank the companies that showed interest in supporting our efforts during the organization. We acknowledge the sponsoring companies: the platinum sponsor AD ALKALOID, Skopje, the golden sponsors: PLIVA, EUROFARM, BOSNA LIJEK and KRKA, and the bronze sponsors: LEK, HEMOFARM and SEPTIMA,

We would also like to thank our members of the Scientific Committee for their volunteer time and dedication to the critical peer review process. We also wish to thank all the members of the Organizing Committee, whose work and commitment was invaluable.

On behalf of the Advisory and Scientific Committees, we would like to especially thank all internationally prominent researchers, whose work was supposed to be an essential part of the Congress. The interest in publishing their short communications in this issue of the *Macedonian Pharmaceutical Bulletin* is of a crucial importance for reinforcing the overall quality and standards of the bulletin. They give the state of the art of the recent advances in the field of pharmacy research.

The pharmaceutical sciences continue to grow as dynamic scientific interdisciplinary fields. We believe that published short communications will be an excellent source of scientific material in the fast evolving fields in Pharmaceutical sciences and practice.

Chair of the Scientific Committee

*Prof. Marija Glavas Dodov*



Chair of the Organizing Committee

*Prof. Rumenka Petkovska*



**Your hosts**  
**Macedonian Pharmaceutical Association**  
**and**  
**Faculty of Pharmacy, Ss Cyril and Methodius University in Skopje**

**Organizing Committee**

Rumenka Petkovska, Ss. Cyril and Methodius University in Skopje, Faculty of Pharmacy/Chair  
Zoran Sterjev, Ss. Cyril and Methodius University in Skopje, Faculty of Pharmacy/Co-Chair  
Nikola Geskovski, Ss. Cyril and Methodius University in Skopje, Faculty of Pharmacy/Secretary  
Aleksandra Kapedanovska Nestorovska, Ss. Cyril and Methodius University in Skopje, Faculty of Pharmacy  
Liljana Anastasova, Ss. Cyril and Methodius University in Skopje, Faculty of Pharmacy  
Dushko Shalabalija, Ss. Cyril and Methodius University in Skopje, Faculty of Pharmacy  
Biljana Taneva, Alkaloid AD Skopje

**Advisory Board**

Aleksandar Dimovski – North Macedonia, Aneta Dimitrovska – North Macedonia, Atila Hinchal – Turkey,  
Biljana Bauer – North Macedonia, Ilkay Orhan - Turkey, Fahir Bečić – Bosnia and Herzegovina,  
Irena Mlinarič-Raščan – Slovenia, Jelena Filipovic-Grcic – Croatia, Kristina Mladenovska – North Macedonia,  
Katerina Goracinova – North Macedonia, Lidija Petrusevska Tozi – North Macedonia,  
Lilian Azzopardi – Malta, Ljubica Suturkova – North Macedonia, Renata Slaveska Raicki – North Macedonia,  
Rumenka Petkovska – North Macedonia, Slađana Šobajić – Serbia,  
Suzana Trajkovic Jolevska – North Macedonia, Svetlana Kulevanova – North Macedonia,  
Tatjana Kadifkova Panovska – North Macedonia, Vasia Bankova – Bulgaria,  
Zoran Kavrakovski – North Macedonia

**Scientific Committee**

Marija Glavas Dodov / Chair

Maja Simonoska Crcarevska / Secretary

Aleksandra Grozdanova – North Macedonia  
Aleksandra K. Nestorovska – North Macedonia  
Ana Poceva Panovska – North Macedonia  
Andreas Zimmer - Austria  
Antonio Makris - Greece  
Arijana Meštrović - Croatia  
Brigita Djordjevic – Serbia  
César Viseras Iborra - Spain  
Dea Baricevik – Slovenia  
Dimitar Efremov – Italy  
Dinko Vitezic – Croatia  
Edina Vranic – Bosnia and Herzegovina  
Ela Hoti – Albania  
Federica Rinaldi - Italy  
Giangiacomo Beretta - Italy  
Gjose Stefkov – North Macedonia  
Henning Blume – Germany  
Ivan Stankovic – Serbia  
Jan Tytgat – Belgium  
Jasmina Tonic Ribarska – North Macedonia  
Jelena Acevska – North Macedonia  
Johanes Novak - Austria  
Katerina Ancevska Netkovska – North Macedonia  
Katerina Brezovska – North Macedonia  
Kevin O'Donnell - Ireland

Liljana Anastasova – North Macedonia  
Luciano Saso - Italy  
Margarida Caramona – Portugal  
Maria Halabalaki – Greece  
Marija Hiljadnikova Bajro – North Macedonia  
Marija Karapandzova – North Macedonia  
Milen I. Georgiev - Bulgaria  
Milenko Tanasijevic – USA  
Mirko Trajkovski – Switzerland  
Nada Majkic-Singh - Serbia  
Nadica Matevska Geskovska - North Macedonia  
Natalija Nakov – North Macedonia  
Nebojsa Menkovic - Serbia  
Nikola Geskovski – North Macedonia  
Rok Dreu – Slovenia  
Rubin Zareski – North Macedonia  
Sanda Vladimir-Knezevic - Croatia  
Sema Calis – Turkey  
Slavica Razic – Serbia  
Sokol Abazi - Albania  
Suela Kellici – Albania  
Tanja Petreska – North Macedonia  
Vilma Papajani Toska - Albania  
Zoran Sterjev – North Macedonia  
Zorica Naumovska – North Macedonia

This issue of *Macedonian Pharmaceutical Bulletin* contains short papers accepted by the Scientific Committee for the presentation at the 7<sup>th</sup> Congress of Pharmacy in Macedonia with international participation 2020.

The authors are fully responsible for the contents of their short papers.

All reviewers that were involved in the short papers revision process are sincerely acknowledged.