



# 15<sup>th</sup> INTERNATIONAL CONGRESS OF INTENSIVE CARE MEDICINE

ZAGREB April 12-13, 2024



# ORGANISERS

Croatian Medical Council - [hlz.hr](http://hlz.hr)

Croatian Society for Intensive Care Medicine - [hdim.hlz.hr](http://hdim.hlz.hr)

Clinical Department for Anesthesiology and Intensive Care Medicine, University Hospital Dubrava, Zagreb, Croatia - [kbd.hr](http://kbd.hr)

University of Zagreb School of Dental Medicine - [sfzg.unizg.hr](http://sfzg.unizg.hr)

## ORGANISING COMMITTEE:

**President:** Jasminka Peršec

**Members:** Tomislav Breitenfeld, Andrej Šribar, Gordana Brozović, Sanda Stipić Stojanović, Stoja Erić, Edita Grbavac, Ivana Haršanji Drenjančević, Nataša Gocić Perić, Vlasta Merc, Nikola Bradić, Ivan Bandić

## SCIENTIFIC COMMITTEE:

**President:** Jasminka Peršec

**Members:** Vlatka Sotošek, Predrag Stevanović, Radmilo Janković, Marcus Schultz, Vesna Durnev, Jasmina Smajić, Gordana Jovanović, Matthias Heringlake, Armin Kalenka, Milica Lukić, Marija Santini, Radmila Popović, Rihard Knafelj

Dear colleagues,

It is my great honor and pleasure to invite you to the 15<sup>th</sup> International Congress of Intensive Care Medicine, which will be held in Zagreb, Sheraton Hotel, from April 12<sup>th</sup> to 13<sup>th</sup>, 2024, organized by the Croatian Society for Intensive Care Medicine of the Croatian Medical Association. The Croatian Society for Intensive Care Medicine has been maintaining the continuity of professional and scientific education for many years, striving to bring new knowledge to its members, the implementation of which has always contributed to the progress of intensive care medicine.

With this year's thematic units, we want to cover as many important areas of intensive care medicine as possible: new possibilities in hemodynamic monitoring, mechanical ventilation, sepsis and blood purification, coagulopathy and infections in the intensive care unit, volume replacement, invasive procedures in the intensive care unit, new strategies and possibilities in the intensive care unit.

In addition to invited lectures by top domestic and foreign experts, there will be a special section for short oral presentations as part of the Congress. All "in extenso" papers will be published in the supplement of the "Liječnički Vjesnik" (online edition).

The official languages of the Congress: Croatian and English. The meeting will be accredited according to the Rules of the Croatian Medical Chamber. Residents are allowed to participate in the Congress without a registration fee.

I invite all of you to enhance this meeting by your participation so that we can contribute to better and stronger networking in intensive care medicine, because the exchange of knowledge and experience always leads us to the final joint success.

Additional information about the Congress is available on the official website of the Croatian Society for Intensive Care Medicine – <http://hdim.hlz.hr>.

We look forward to your participation in the work of the Congress and we cordially expect you!

Head of the organizing committee  
President of the Croatian Society for Intensive Care Medicine  
prof. Jasminka Peršec, MD, PhD

A handwritten signature in black ink, appearing to be 'J. Peršec', written in a cursive style.

## INVITED LECTURERS:

**Davor Barić, MD, PhD, Prim.**, Department for Cardiac and Transplant Surgery, University Hospital Dubrava, Zagreb, [Croatia](#)

**Jan Benes, MD, PhD, Assoc. Prof.**, Department for Anesthesiology, Intensive Medicine and Resuscitation, University Hospital Plzen, Pilsen, [Czech Republic](#)

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**Miljenko Crnjaković, MD, PhD**, Department for Neurology, University Hospital Dubrava, Zagreb, [Croatia](#)

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**Sandro Glumac, MD, PhD, Asst. Prof.**, Clinical Department for Anesthesiology, Reanimatology and Intensive Care Medicine, University Hospital Centre Split, [Croatia](#)

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**Matthias Heringlake, MD, PhD, Prof.**, Director of the Department for Anesthesiology and Intensive Care Medicine, Karlsburg Hospital, Karlsburg, [Germany](#)

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**Vjeran Leventić, MD**, Clinical Department for Anesthesiology, Reanimatology and Intensive Care Medicine, University Hospital Centre Osijek, [Croatia](#)

**Daniel Lovrić, MD, PhD, Prim.**, Clinical Department for Cardiovascular Medicine, University Hospital Centre Zagreb, [Croatia](#)

**Milica Lukić, MD**, President of Slovenian Society of Intensive Care Medicine, Department of Internal Intensive Care Medicine, University Medical Centre Ljubljana, [Slovenia](#)

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**Zsolt Molnar, MD, PhD, Prof.**, University Department for Anaesthesiology and Intensive Therapy Centre for Translation Medicine, Semmelweis University, Budapest, [Hungary](#)

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**Marcus Schultz, MD, PhD, Prof.**, Professor of Experimental Intensive Care, Faculty of Medicine, University of Amsterdam, [Netherlands](#)

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**Sven Županić, MD**, Department for Neurology, University Hospital Dubrava, Zagreb, [Croatia](#)

# PROGRAMME

**FRIDAY, April 12<sup>th</sup> 2024**

- 08.00-09.00     **Registration**
- 09.00-09.20     **Jasminka Peršec, President of CroSICM - Opening of the Congress**  
**Welcome word**
- Session 1             **Grand Ballroom / Section A**  
**What's new in treatment of septic patients?**
- Moderators:         **Zsolt Molnar, Milica Lukić**
- 09.20-09.35     **Vesna Durnev**  
Emerging role of the gut-body crosstalk in sepsis
- 09.35-09.50     **Oliver Grottke**  
Comprehensive approach to bleeding management
- 09.50-10.05     **Zsolt Molnar**  
Influence of hemoadsorption on microcirculation and vascular protection
- 10.05-10.20     **Milica Lukić**  
Nutritional support in critically ill patients with sepsis and septic shock
- 10.20-10.35     **Marija Santini**  
Do we have a therapeutic solution for Gram negative MDR pathogens?
- 10.35-10.45     **Discussion**
- Session 2             **Grand Ballroom / Section A**  
**State of the art mechanical ventilation**
- Moderators:         **Marcus Schultz, Armin Kalenka**
- 10.45-11.00     **Marcus Schultz**  
The (real) benefits of automated ventilation
- 11.00-11.15     **Armin Kalenka**  
Mechanical ventilation: standard protocols or better individualized?
- 11.15-11.30     **Marcus Schultz**  
Is high PEEP good, or bad?
- 11.30-11.45     **Andrej Šribar**  
There is no „perfect“ PEEP – but can EIT help us get close enough?
- 11.45-11.55     **Discussion**

11.55-12.25 **Coffee break**

Session 3 Grand Ballroom / Section A

**Hemodynamics**

Moderators: **Jan Benes, Predrag Stevanović**

- 12.25-12.40 **Radmilo Janković**  
Vasopressors and inotropes in sepsis
- 12.40-12.55 **Jan Benes**  
Prediction of hypotension in the ICU
- 12.55-13.10 **Predrag Stevanović**  
Perioperative hemodynamic optimization - Goal-directed therapy (GDT)
- 13.10-13.25 **Nikola Bradić**  
Anesthetic management of patients with MCS in Noncardiac Surgery
- 13.25-13.40 **Davor Barić**  
Bloodless Cardiac Surgery
- 13.40-13.50 **Discussion**

13.50-14.50 **Lunch break**

Session 4 Grand Ballroom / Section A

**ICU from a different perspective**

Moderators: **Jasmina Smajić, Višnja Neseć Adam**

- 14.50-15.05 **Predrag Stevanović**  
Artificial intelligence powered Mixed Reality Technology in Healthcare and Education - presentation of three years of experience
- 15.05-15.20 **Vilena Vrbanović Mijatović**  
The Hidden Danger: Understanding Negative Pressure Pulmonary Edema
- 15.20-15.35 **Višnja Neseć Adam**  
Non-thyroidal illness syndrome - a physiological adaptation or a therapeutic target?
- 15.35-15.50 **Jasmina Smajić**  
Fiberoptic bronchoscopy during percutaneous tracheostomy: yes or no?
- 15.50-16.00 **Discussion**

Session 5      Grand Ballroom / Section A  
**When heart could use a little help**

Moderators:      **Matthias Heringlake, Daniel Lovrić**

16.00-16.15      **Daniel Lovrić**  
• Short-term mechanical circulatory support for cardiogenic shock – Impella  
• Combined is better? - ECPELLA

16.15-16.30      **Marin Pavlov**  
• Pulmonary embolism beyond Heparin  
• Short-term mechanical circulatory support for cardiogenic shock - VA ECMO

16.30-16.45      **Mate Moguš**  
Hemodynamic management of patients with cardiogenic shock during veno-arterial extracorporeal membrane oxygenation

16.45-16.55      **Discussion**

Session 6      Grand Ballroom / Section A  
**Keep calm and don't get up – ICU sedation**

Moderators:      **Rihard Knafelj, Ivana Haršanji Drenanjčević**

16.55-17.10      **Radmila Popović**  
Central nervous system infections in neurosurgical critically ill patients – 5-year experience of Clinical Center of Vojvodina

17.10-17.25      **Ivana Haršanji Drenjančević**  
ICU sedation strategies in patients with traumatic brain injury

17.25-17.40      **Rihard Knafelj**  
ICU sedation with volatile anesthetics – an example of good clinical practice

17.40-17.50      **Discussion**

## ORAL PRESENTATIONS

Session 1            Lecture hall Opatija / Pula

Moderators:        **Nikola Bradić, Edina Pajt**

- 16.00-16.10        **Polona Gams**  
End of Life Decision Making and Palliative Care in a Surgical Intensive Care Unit
- 16.10-16.20        **Nikola Vuković**  
Incidence of upper gastrointestinal tract bleeding in patients receiving DOAC
- 16.20-16.30        **Živa Macura**  
364 days of addressing heart failure, liver failure, vasoplegia and associated pathologies in a 46-year old woman with a congenital heart defect: a case report
- 16.30-16.40        **Miloš Milenković**  
Incidence of myocardial infarction in patients with acute gastrointestinal bleeding
- 16.40-16.50        **Bojana Radanović**  
Role of CO<sub>2</sub> gap in hemodynamic monitoring in the ICU
- 16.50-17.00        **Edina Pajt**  
Intraoperative cardiac arrest – case report
- 17.00-17.10        **Amela Katica Mulalić**  
Mechanical ventilation induced diaphragmic dysfunction
- 17.10-17.20        **Ana Marija Antunović**  
Procalcitonin – prognostic biomarker in pancreatitis
- 17.20-17.30        **Sadija Lušija**  
Treatment of necrotizing pancreatitis – case report
- 17.30-17.40        **Maša Kontić**  
Clinical cases and presence of comorbidities in non-surgical patients in the ICU
- 17.40-17.50        **Violeta Anđelić**  
Diferentiation syndrome – treatment challenges in the ICU
- 17.50-18.00        **Aleksandar Božić**  
Acute intoxication – our experience
- 18.00-18.10        **Marcela Čučković**  
The influence of anesthesia on surgical stress response
- 18.10-18.20        **Azra Mukanović Alihodžić**  
Therapeutic hypothermia – case report
- 18.20-18.30        **Edin Gadžo**  
Hospital acquired infections and antimicrobial resistance in the ICU

**SATURDAY, April 13<sup>th</sup> 2024**

Session 7                      Grand Ballroom / Section A  
**The light at the end of the tunnel – End of life dilemmas**

Moderators:                **Vlasta Merc, Željka Gavranović**

09.00-09.15                **Nataša Gocić Perić**  
 End of life care – problems and possible solutions

09.15-09.30                **Vjeran Leventić**  
 The struggle to let go: realities of death in the ICU

09.30-09.45                **Vlasta Merc**  
 End of Life Care: out and about

09.45-10.00                **Željka Gavranović**  
 End of life care in the ICU – International practices

10.00-10.10                **Discussion**

Session 8                      Grand Ballroom / Section A  
**Coagulation and fluid resuscitation**

Moderators:                **Gordana Jovanović, Vlatka Sotošek**

10.10-10.25                **Gordana Jovanović**  
 Volume optimization and deresuscitation models in a critically ill patient

10.25-10.40                **Vlatka Sotošek**  
 The effect of fluid therapy on endothelial dysfunction in critically ill patients

10.40-10.55                **Sandro Glumac**  
 Massive obstetric hemorrhage

10.55-11.10                **Marko Pražetina**  
 Effect of machine learning-guided haemodynamic optimization on postoperative free flap perfusion in reconstructive maxillofacial surgery: A study protocol and preliminary results

11.10-11.25                **Tina Tomić Mahečić**  
 Coagulation disorders in Intensive Care Unit

11.25-11.35                **Discussion**

11.35-11.55                **Coffee break**

Session 9 Grand Ballroom / Section A

**When technology takes over**

Moderators: **Axel Nierhaus, Vedran Premužić**

- 11.55-12.10 **Matthias Heringlake**  
Intra-aortic counterpulsation in cardiogenic shock and cardiac surgery - Revisited
- 12.10-12.25 **Vedran Premužić**  
Hemoadsorption modalities in sepsis
- 12.25-12.40 **Axel Nierhaus**  
Role of Ig-M enriched immunoglobulins in the management of sepsis
- 12.40-12.55 **Sonja Škiljić**  
Blood purification in sepsis – indications and patient selection
- 12.55-13.10 **Sanda Stipić Stojanović**  
Future of extracorporeal blood purification to treat sepsis – when, why and how?
- 13.10-13.25 **Gordana Kristek**  
UHC Osijek experience in blood purification of septic surgical patients
- 13.25-13.40 **Helena Ostović**  
Biomarkers in the intensive care setting
- 13.40-13.50 **Discussion**

13.50-14.50 **Lunch break**

Session 10 Grand Ballroom / Section A

**Everything we do, we do for the brain**

Moderators: **Tomislav Breitenfeld, Miljenko Crnjaković**

- 14.50-15.05 **Dmitar Vlahović**  
Aneurysmatic subarachnoid hemorrhage viewed from neurocritical care perspective
- 15.05-15.20 **Miljenko Crnjaković**  
Intracranial pressure, more than a number
- 15.20-15.35 **Mislav Budišić**  
Possibilities of neurointerventional procedures in acute ischemic stroke – our experience
- 15.35-15.50 **Marinko Vučić, Tomislav Breitenfeld**  
Anesthetic procedures in neurointerventional procedures – pros and cons?
- 15.50-16.05 **Sven Županić**  
Do we need EEG in the ICU
- 16.05-16.15 **Discussion**

Lecture Hall Opatija / Pula

15.00-15.30 **Jasminka Peršec, Marko Pražetina, Robert Majstorović**

**Hemosphere workshop**

## ORAL PRESENTATIONS

Session 2 Lecture hall Opatija / Pula

Moderators: **Nina Novak Fumić, Tatjana Kereš**

12.00-12.10 **Neven Elezović**

Effect of NSAID and opioids in the perinatal period

12.10-12.20 **Mileva Frankić**

Multi drug resistant bacteria in the intensive care unit

12.20-12.30 **Dubravka Kocen**

Intensivists/anesthesiologists outside the operating theater

12.30-12.40 **Nataša Tomić**

Optimization of antibiotic dosing – can we do better?

12.40-12.50 **Branislava Jorović**

Hypopituitarism in a patient with traumatic brain injury

12.50-13.00 **Tanja Horvat**

Massive obstetric hemorrhage - case report

13.00-13.10 **Jelena Isaković**

Achalasia complicated with bilateral pneumonia and sepsis,  
Case Report

13.10-13.20 **Nina Novak Fumić**

Acute hemorrhage in a patient with Von Willenbrandt disease

13.20-13.30 **Tatjana Kereš**

ECCO2R in COPD exacerbation

13.30-13.40 **Ermina Selimović Mujčić**

Prognostic value of elevated troponin levels after cardiac surgery

13.40-13.50 **Ana Smajo**

Septic Shock with Multiple Organ Dysfunction Syndrome:  
A Case Report

Session 3	Lecture hall Opatija / Pula
Moderators:	<b>Dubravka Bartolek Hamp, Petar Martinović</b>
15.45-15.55	<b>Anamarija Goleš</b> Timing the Percutaneous Tracheostomy. A Comparative Analysis of COVID vs. Non-COVID ICU Cases - Insights from a Single-Center Retrospective Study
15.55-16.05	<b>Dubravka Bartolek Hamp</b> Life-threatening complications after rapid volume replacement through the central vein in a polytraumatized patient
16.05-16.15	<b>Sanja Berić</b> Toxic shock syndrome after elective gastric surgery
16.15-16.25	<b>Petar Martinović</b> Radiofrequent thermocoagulation in treatment of trigeminal neuralgia
16.25-16.35	<b>Nikolina Schatzl</b> Association between nutritional status and frailty syndrome
16.35-16.45	<b>Tamara Murselović</b> Albumins, the gray zone of indications
16.45-16.55	<b>Ana Jadrijević Štefek</b> Light at the end of the tunnel – comparison of calprotectin and CRP in sepsis
16.55-17.05	<b>Gala Božac</b> Septic shock in a patient with acute monoblastic leukemia – case report
17.05-17.15	<b>Ivan Gospić</b> Remimazolam sedation for TAVI – our experience at UH Dubrava
17.15-17.25	<b>Lea Gvozdanović</b> Alcoholic ketoacidosis – case report
17.25-17.35	<b>Mirela Dobrić</b> Delayed presentation of subclavian artery pseudoaneurysm after polytrauma with left clavicle and brachial plexus injury
17.35-17.45	<b>Mark Žižak</b> Acute abdomen after splenic embolization due to immune thrombocytopenia

Session 4	Grand Ballroom A
Moderators:	<b>Nataša Gocić Perić, Andrej Šribar</b>
16.25-16.35	<b>Grgur Prižmić</b> Guillain-Barré syndrome and COVID-19 – a case report
16.35-16.45	<b>Amra Mešić</b> Vasopressor therapy in septic shock
16.45-16.55	<b>Anita Lukić</b> Can surgical drainage tubes present a problem in the ICU and be fatal for the patient? A case report.
16.55-17.05	<b>Marija Draguljić Svaguša</b> Ischemic colitis after aneurysmatic rupture of abdominal aorta
17.05-17.15	<b>Ivan Bandić</b> Ketamine analgosedation in ICU
17.15-17.25	<b>Antonia Bulić Miljak</b> Perioperative treatment for emergency cesarean section and intensive care of parturient with severe peripartum cardiomyopathy
17.25-17.35	<b>Filip Grabant</b> Airway management in obese patients - case report
17.35-17.45	<b>Iva Kurjaković</b> Bleeding management in a patient with massive gastrointestinal hemorrhage - a case report