

6. SLOVENSKI KONGRES  
KLINIČNE KEMIJE IN  
LABORATORIJSKE MEDICINE  
Z MEDNARODNO UDELEŽBO

6<sup>th</sup> Slovenian Congress of  
Clinical Chemistry and  
Laboratory Medicine with  
international participation

19.–20. 9. 2022

Grand hotel Bernardin,  
Portorož

6. SLOVENSKI KONGRES  
INŽENIRJEV IN TEHNIKOV  
LABORATORIJSKE MEDICINE

6<sup>th</sup> Slovenian Congress of  
Laboratory Medicine  
Technicians

## KONČNI PROGRAM / FINAL PROGRAMME

Pod pokroviteljstvom / *Under the auspices of:*

**EFLM**  
EUROPEAN FEDERATION OF CLINICAL CHEMISTRY  
AND LABORATORY MEDICINE

**IFCC**  
International Federation  
of Clinical Chemistry  
and Laboratory Medicine

**SZ  
K  
LM** Slovensko združenje  
za klinično kemijo  
in laboratorijsko  
medicino

**Uredili:**

Evgenija Homšak, Pika Meško Brguljan, Katarina Trebušak Podkrajšek,  
Štefka Krivec, Janja Marc, Rok Kogovšek, Lidija Gobec

**Kraj kongresa:**

Portorož

**Datum kongresa:**

september 2022

**Izdalo:**

Slovensko združenje za klinično kemijo in laboratorijsko medicino, Ljubljana 2022

**Oblikovanje in produkcija:**

Publik Market

**Tisk:**

Demago

**Število natisnjenih izvodov:**

350



## DOBRODOŠLICA

Spoštovane kolegice, spoštovani kolegi!

V veliko zadovoljstvo in čast nama je, da vas lahko v imenu Slovenskega združenja za klinično kemijo in laboratorijsko medicino pozdraviva v Portorožu, v prijetnem ambientu kongresnega centra Grand hotela Bernardin.

Slovensko združenje za klinično kemijo in laboratorijsko medicino (SZKKLM) aktivno deluje na področju klinične kemije že več kot 50 let. Kot najpomembnejša strokovna organizacija skozi vso obdobje svojega delovanja skrbi in pomembno prispeva k sprotnemu in stalnemu izobraževanju svojih članov, tako z organizacijo različnih strokovnih srečanj in tečajev, kot tudi nacionalnih in mednarodnih simpozijev in kongresov. Tokrat SZKKLM že šestič organizira Slovenski kongres klinične kemije in laboratorijske medicine z mednarodno udeležbo. Kongres organiziramo v obdobju po epidemiji Covid-19, ki je še posebej izpostavila pomen laboratorijske medicine v zdravstveni obravnavi.

6. slovenski kongres poteka pod pokroviteljstvom Mednarodnega združenja za klinično kemijo in laboratorijsko medicino (IFCC) in Evropskega združenja za klinično kemijo in laboratorijsko medicino (EFLM). SZKKLM sočasno organizira tudi že 6. slovenski kongres inženirjev in tehnikov laboratorijske medicine. Vzporedna organizacija kongresov omogoča odlično in pomembno komunikacijo ter izmenjavo strokovnih izkušenj med vsemi strokovnjaki, zaposlenimi na področju klinične kemije in laboratorijske medicine.

Program kongresa se začne s plenarnim predavanjem "Future of Laboratory Medicine with emerging new technologies, big data and artificial intelligence", profesorja Sergia Bernardinija, rednega profesorja za klinično biokemijo in klinično molekularno biokemijo na Oddelku za eksperimentalno medicino Univerze v Rimu Tor Vergata in predsednika komiteja »Emerging Technologies Division« pri IFCC. Program se nadaljuje s prispevki iz naslednjih glavnih tem: Tekoče biopsije v laboratorijski medicini-trenutno stanje in obeti za prihodnost, Novosti v laboratorijski diagnostiki ledvičnih obolenj in Izzivi laboratorijske medicine pri obravnavi ščitničnih obolenj. Na tokratnem kongresu dajemo poseben poudarek in vlogo mlajšim strokovnjakom v laboratorijski medicini. Njim je namenjen simpozij Sekcija mladih v laboratorijski medicini, kjer bodo predstavljene možnosti sodelovanja in povezovanja v evropskem in svetovnem prostoru ter njihovi projekti in vizije za aktivnosti v prihodnje.

Vzporeden program kongresa inženirjev in tehnikov laboratorijske medicine dodaja prav tako pomembni temi: Izzivi urgentne laboratorijske medicine in Primeri dobrih laboratorijskih praks ter predstavitev strokovnih dosežkov in dela v okviru prostih tem.

Posterska predstavitev ni omejena samo na teme simpozijev in pokriva vsa področja dejavnosti udeležencev kongresa.

Prav tako pomemben sestavni del programa so izobraževalne delavnice sponzorjev kongresa ter razstava laboratorijske opreme.

Kongres bomo popestrili z družabnim srečanjem in podelitvijo društvenih priznanj tistim svojim članom, ki so pomembno prispevali k delovanju združenja in dosegali posebne uspehe pri razvoju in prepoznavanju klinične kemije in laboratorijske medicine na pedagoškem, znanstveno-raziskovalnem ali strokovno-organizacijskem področju.

Prepričani smo, da bo program tega kongresa pomembno prispeval k nadaljnjemu razvoju klinične kemije in laboratorijske medicine v Sloveniji.

Želimo si, da bi kongres, druženje s kolegi in izmenjave izkušenj, uresničili vaša pričakovanja!

Uspešno strokovno delo in prijetno bivanje v Portorožu!



Mag. Lidija Gobec,  
spec.med.biokem., EuSpLM  
Predsednica SZKKLM in organizacijskega odbora



Doc. dr. Evgenija Homšak,  
spec.med.biokem., EuSpLM  
Predsednica znanstvenega odbora



Mag. Lidija Gobec,  
spec.med.biokem., EuSpLM  
President of SZKKLM and Organizing Committee



Doc. dr. Evgenija Homšak,  
spec.med.biokem., EuSpLM  
President of the Scientific Committee

## WELCOME

Dear colleagues!

*It is a great pleasure and honour to welcome you on behalf of the Slovenian Association for Clinical Chemistry and Laboratory Medicine in Portorož, at the Congress Centre of Grand Hotel Bernardin.*

*The Slovenian Association for Clinical Chemistry and Laboratory Medicine has been active in clinical chemistry for more than 50 years. Throughout this period it has supported continuing education of its members by organizing periodic training courses, professional meetings, as well as national and international symposia and congresses. This is the sixth time that the Association has organized the Slovenian Congress of Clinical Chemistry and Laboratory Medicine with International Participation. Topics of this traditional symposium stress the importance of research in laboratory medicine. The congress of clinical chemists is held under the auspices of IFCC (International Federation of Clinical Chemistry and Laboratory Medicine) and EFLM (European Federation of Clinical Chemistry and Laboratory Medicine). Moreover, the 6th Slovenian Congress of Laboratory Medicine Technicians takes place at the same time. The congress is organized in the period after the Covid-19 epidemic, which highlighted the importance of laboratory medicine in medical treatment.*

*The congress program begins with a plenary lecture "Future of Laboratory Medicine with Emerging New Technologies, Big Data and Artificial Intelligence" by Professor Sergio Bernardini, Full Professor of Clinical Biochemistry and Clinical Molecular Biochemistry at the Department of Experimental Medicine, University of Rome Tor Vergata and Committee Chairman "Emerging Technologies Division" at the IFCC. The program continues with contributions from the following main topics: Liquid biopsies in laboratory medicine: current status and future perspectives, Insights/updates in Laboratory Medicine of Kidney Diseases and The challenges of laboratory medicine in the management of thyroid diseases. At this congress, we give special emphasis and role to younger experts in laboratory medicine. The symposium of the Young Scientists in Laboratory Medicine is intended for them, where the possibilities of cooperation and networking in Europe and the world, as well as their projects and visions for future activities, will be presented. The parallel program of the Congress of Laboratory Medicine Engineers and Technicians adds to the equally important topics: Challenges of emergency laboratory medicine and Examples of good laboratory practices and presentation of professional achievements and work within free topics.*

*Poster session topics have not been limited to symposia topics. Educational workshops and exhibition are also an important part of the programme.*

*At the congress, the Slovenian Association for Clinical Chemistry and Laboratory Medicine will confer awards to several clinical chemists in recognition of their outstanding work in the Association and for their contribution to the development of clinical chemistry and laboratory medicine.*

*We are confident that the scientific programme of this congress will greatly contribute to the further development of clinical chemistry and laboratory medicine in Slovenia.*

*We hope that the congress, meeting with colleagues and the exchange of experiences have fulfilled your expectations!*

*We wish you a successful professional work and a pleasant stay in Portorož!*

# **ORGANIZATORJI / ORGANISERS**

## **Znanstveni odbor / *Scientific Committee***

Evgenija Homšak (Predsednica/*President*),  
Pika Meško Brguljan, Katarina Trebušak Podkrajšek, Štefka Krivec, Janja Marc, Rok Kogovšek

## **Organizacijski odbor / *Organizing Committee***

Lidija Gobec (Predsednica/*President*),  
Blaž Krhin, Darja Grubelnik, Greta Štrakl, Jani Klavž, Evgenija Homšak

## **Organizator / *Organiser***

Slovensko združenje za klinično kemijo in laboratorijsko medicino /  
*Slovenian Association for Clinical Chemistry and Laboratory Medicine*  
Dunajska cesta 22, 1000 Ljubljana, Slovenia  
**T:** +386 599 76089; **E:** info@szkklm.si; **W:** www.szkklm.si;  
www.szkklmkongres.si

## **Kongresna pisarna / *Congress Office***

Cankarjev dom, kulturni in kongresni center  
Oddelek za registracijo udeležencev  
Prešernova 10, 1000 Ljubljana, Slovenia  
**T:** 01 2417 136  
**E:** registration@cd-cc.si

# POVZETEK PROGRAMA KONGRESOV / PROGRAMME AT A GLANCE

## 6. Slovenski kongres klinične kemije in laboratorijske medicine z mednarodno udeležbo

6<sup>th</sup> Slovenian Congress of Clinical Chemistry and  
Laboratory Medicine with international participation

## 6. Slovenski kongres inženirjev in tehnikov laboratorijske medicine

6<sup>th</sup> Slovenian Congress of the Laboratory Medicine  
Technicians

**PONEDELJEK, 19. september 2022 /**  
MONDAY, September 19th 2022

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MONDAY, September 19th 2022

### EUROPA

Dvorana AC / Hall AC

10:00–11:00 Otvoritev / Opening ceremony

11:00–12:00 Plenarno predavanje / Plenary lecture

12:10–12:30 Delavnica / Workshop  
(Abbott Laboratories)

12:30–12:50 Delavnica / Workshop  
(Roche)

12:50–14:30 Odmor za kosilo / Lunch break

### Dvorana D / Hall D

12:50–14:30 Posterska sekcija / Poster session

### Dvorana AC / Hall AC

14:30–16:15 **Simpozij 1 / Symposium 1**  
Tekoče biopsije v laboratorijski medicini:  
trenutno stanje in obeti za prihodnost /  
Liquid biopsies in laboratory medicine:  
current status and future perspectives

16:15–16:45 Odmor s kavo / Coffee break

### Dvorana B / Hall B

14:30–16:15 **Simpozij 1 / Symposium 1**  
Izzivi urgentne laboratorijske medicine /  
Challenges of Emergency Laboratory  
Medicine

16:15–16:45 Odmor s kavo / Coffee break

### Dvorana AC / Hall AC

16:45–17:05 Delavnica / Workshop  
(Siemens Healthineers)

17:05–17:25 Delavnica / Workshop  
(Snibe)

### Dvorana D / Hall D

17:25–18:30 Posterska sekcija / Poster session

19:30 Večerja s podelitvijo društvenih priznanj / Dinner with Presentation of the Awards

**Dvorana AC / Hall AC**

<b>09:00–10:35</b>	<b>Simpozij 2 / Symposium 2</b> Sekcija mladih v laboratorijski medicini / <i>Young Scientists in Laboratory Medicine</i>
<b>10:35–10:45</b>	<b>Odmor / Break</b>
<b>10:45–11:30</b>	<b>Simpozij 2 / Symposium 2</b> Sekcija mladih v laboratorijski medicini / <i>Young Scientists in Laboratory Medicine</i>
<b>11:30–12:00</b>	<b>Odmor s kavo / Coffee break</b>

**Dvorana AC / Hall AC**

<b>12:00–14:00</b>	<b>Simpozij 3 / Symposium 3</b> Novosti v laboratorijski diagnostiki ledvičnih obolenj / <i>Insights/updates in Laboratory Medicine of Kidney Diseases</i>
<b>14:00–15:30</b>	<b>Odmor za kosilo / Lunch break</b>
<b>15:30–17:30</b>	<b>Simpozij 4 / Symposium 4</b> Izzivi laboratorijske medicine pri obravnavi ščitničnih obolenj / <i>The challenges of laboratory medicine in the management of thyroid diseases</i>
<b>17:30</b>	<b>Zaključek kongresa / Closing of the Congress</b>

**Dvorana B / Hall B**

<b>12:00–14:00</b>	<b>Simpozij 3 / Symposium 3</b> Primeri dobrih laboratorijskih praks / <i>Examples of good laboratory practices</i>
<b>14:00–15:30</b>	<b>Odmor za kosilo / Lunch break</b>
<b>15:30–17:30</b>	<b>Simpozij 4 / Symposium 4</b> Proste teme / <i>Free topics</i>
<b>17:30</b>	<b>Zaključek kongresa / Closing of the Congress</b>

# PROGRAM KONGRESA / CONGRESS PROGRAMME

Predavanja bodo potekala v dvoranah GH Bernardin.  
*Lectures will be held in halls of GH Bernardin.*

## 6. Slovenski kongres klinične kemije in laboratorijske medicine z mednarodno udeležbo

*6<sup>th</sup> Slovenian Congress of Clinical Chemistry and Laboratory Medicine with international participation*

PONEDELJEK, 19. september 2022 / MONDAY, September 19th, 2022

### EUROPA

#### Dvorana AC / Hall AC

10:00–11:00 Otvoritev / *Opening ceremony*

11:00–12:00 Plenarno predavanje / *Plenary lecture*

PL-1

*Future of Laboratory Medicine with emerging new technologies and artificial intelligence*  
Sergio Bernardini (Rim, Italija)

12:10–12:30 Delavnica / *Workshop*

*Artificial intelligence in clinical laboratory - autoverification rules for thyroid function profile*  
Abbott Laboratories, Sanja Mandić (Osijek, Hrvaška)

12:30–12:50 Delavnica / *Workshop*

*Enhancing the value of laboratory test results through Clinical Data*  
Roche, Ina Sapranauskiene (Roche Diagnostics Baltics, Lithuania)

12:50–14:30 Odmor za kosilo / *Lunch break*

#### Dvorana D / Hall D

12:50–14:30 Posterska sekcija / *Poster session*

#### Dvorana AC / Hall AC

### Simpozij 1 / Symposium 1

**Tekoče biopsije v laboratorijski medicini: trenutno stanje in obeti za prihodnost / *Liquid biopsies in laboratory medicine: current status and future perspectives***

Moderatorji / *Chairs*: Katarina Trebušak Podkrajšek, Janja Marc

14:30–15:00 IL-1

*The potential of liquid biopsy in the management of cancer patients*  
Evi Lianidou (Atene, Grčija)

15:00–15:20 IL-2

*Plazemske RNA v proučevanju aterogeneze / Plasma RNAs in study of atherogenesis*  
Darko Černe (Ljubljana, Slovenija)





15:20–15:40 **IL-3**

RNA iz zunajceličnih veziklov kot biološki označevalci razvoja sladkorne bolezni tipa 1 /  
*RNA from extracellular vesicles as biomarkers of type 1 diabetes*

Tine Tesovnik, Jernej Kovač, Maruša Debeljak, Tadej Battelino, Katarina Trebušak Podkrajšek (Ljubljana, Slovenija)

15:40–16:00 **IL-4**

Mitohondrijska DNA kot bioznačevalec v diagnostiki raka prostate / *Mitochondrial DNA as a biomarker in prostate cancer diagnostics*

Irena Prodan Žitnik, Iztok Ditz, Tomaž Smrkolj, Joško Osredkar (Ljubljana, Slovenija)

16:00–16:15 Razprava / *Discussion*

16:15–16:45 Odmor s kavo / *Coffee break*

16:45–17:05 Delavnica / *Workshop*

*Novel markers in inflammation and autoimmunity*

Siemens Healthineers, Michael Edetsberger (Dunaj, Avstrija)

17:05–17:25 Delavnica / *Workshop*

*Chemiluminescence Immunoassays update in Autoimmunity*

Snibe, Sergio Bernardini (Rim, Italija)

**Dvorana D / Hall D**

17:25–18:30 Posterska sekcija / *Poster session*

19:30 Večerja s podelitvijo društvenih priznanj / *Dinner with Presentation of the Awards*

**TOREK, 20. september 2022 / TUESDAY, September 20th, 2022**

**Dvorana AC / Hall AC**

Simpozij 2 / *Symposium 2*

**Sekcija mladih v laboratorijski medicini / *Young Scientists in Laboratory Medicine***

Moderatorji / *Chairs*: Evgenija Homšak, Rok Kogovšek

9:00–9:30 **IL-5**

*Leadership & Team Development: Success Together*

Pradeep K. Dabla (Delhi, India)

9:30–10:00 **IL-6**

*IFCC TF-YS Networking with millennials, preparing for the future*

Santiago Fares-Taie (Buenos Aires, Argentina)

10:00–10:15 **IL-7**

Kakšne možnosti/orodja za izobraževanje nudi EFLM mladim v laboratorijski medicini? /  
*What educational tools and resources does EFLM offer to young scientists in Laboratory Medicine?*

Evgenija Homšak (Maribor, Slovenija)

10:15–10:25 **IL-8**

Sekcija mladih pri SZKKLM–vizija za prihodnost / *YS section of the SZKKLM–the vision for the future*

Rok Kogovšek (Golnik, Slovenija)

10:25–10:35 Razprava / *Discussion*

10:35–10:45 Odmor / *Break*

10:45–11:00	IL-9	Pristopi personalizirane medicine za raziskovanje in uporabo novih biomarkerjev / <i>Personalised medicine approaches for investigation and application of new biomarkers</i> Vesna Gorenjak (Ljubljana, Slovenija)
11:00–11:10	IL-10	Prepoznavanje kandidatnih mikroRNA, vpletenih v razvoj in napredovanje nefropatije pri Fabryjevi bolezni / <i>Identification of candidate microRNAs associated with development and progression of nephropathy in Fabry disease patients</i> Tina Levstek (Ljubljana, Slovenija)
11:10–11:20	IL-11	Specifični humoralni in avtoimunski odziv na cepljenje proti covidu-19 / <i>Specific humoral and autoimmune response to COVID-19 vaccination</i> Manca Ogrič, Polona Žigon, Tinka Švec, Katja Lakota, Snežna Sodin-Šemrl, Žiga Rotar, Saša Čučnik (Ljubljana, Slovenija)
11:20–11:30	IL-12	Laboratorijska medicina: strokovno znanstvena revija Slovenskega združenja za klinično kemijo in laboratorijsko medicino za vse generacije strokovnjakov / <i>Laboratory Medicine: professional scientific journal of the Slovenian Association for Clinical Chemistry and Laboratory Medicine for all generations of experts</i> Katarina Trebušak Podkrajšek (Ljubljana, Slovenija)
11:30–12:00	Odmor s kavo / <i>Coffee Break</i>	

#### Dvorana AC / Hall AC

##### Simpozij 3 / Symposium 3

### Novosti v laboratorijski diagnostiki ledvičnih obolenj / *Insights/updates in Laboratory Medicine of Kidney Diseases*

Moderatorji / *Chairs*: Pika Meško Brguljan, Maksimiljan Gorenjak

12:00–12:30	IL-13	How to estimate kidney function in 2022 Joris Delanghe (Gent, Belgija)
12:30–13:00	IL-14	Jadecare - integrirana oskrba na področju kronične ledvične bolezni / <i>Jadecare - integrated care in the field of Chronic Kidney Diseases (CKD)</i> Jelka Lindič, Karmen Janša, Martina Zorko Kodelja, Miha Arnol, Nena Kopčavar Guček, Radovan Hojs, Dimitrij Klančič, Damjan Kovač, Andrej Škoberne, Nebojša Vasić, Bojan Vujkovic, Marjeta Zupet, Maksimiljan Gorenjak (Ljubljana, Maribor, Nova Gorica, Slovenj Gradec, Slovenija)
13:00–13:20	IL-15	Referenčna metoda za določanje hitrosti glomerulne filtracije / <i>Reference method for determination of glomerular filtration rate</i> Jani Klavž (Maribor, Slovenija)
13:20–13:40	IL-16	Terapevtsko spremljanje koncentracij zdravil z uporabo pametne tehnologije / <i>Therapeutic drug monitoring with the use of smart technology</i> Mateja Stopinšek, Polonca Drogenik, Sebastjan Bevc (Maribor, Slovenija)
13:40–14:00	Razprava / <i>Discussion</i>	
14:00–15:30	Odmor za kosilo / <i>Lunch break</i>	



**Izzivi laboratorijske medicine pri obravnavi ščitničnih obolenj /**

*The challenges of laboratory medicine in the management of thyroid diseases*

Moderatorji / Chairs: Blaž Krhin, Damien Gruson

**15:30–16:00** IL-17

*Thyroid function tests: clinical value, assay evolution and common pitfalls*

Damien Gruson (Bruselj, Belgija)

**16:00–16:30** IL-18

*TSH Reference Values in elderly population (controversial)*

Santiago Fares-Taie (Buenos Aires, Argentina)

**16:30–16:50** IL-19

**Vpliv fizioloških dejavnikov na rezultate laboratorijskih preiskav ščitnice / Influence of Physiological Parameters on Results of Thyroid Laboratory Tests**

Blaž Krhin (Ljubljana, Slovenija)

**16:50–17:10** IL-20

**Vloga laboratorijskega diagnosticiranja pri celostni obravnavi tirološkega bolnika / Impact of Laboratory Diagnostics on Clinical Management of Patients with Thyroid Disease**

Katja Zaletel (Ljubljana, Slovenija)

**17:10–17:30** Razprava / Discussion

**17:30** Zaključek kongresa / Closing of the Congress

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### 6<sup>th</sup> Slovenian Congress of Laboratory Medicine Technicians

PONEDELJEK, 19. september 2022 / MONDAY, September 19th, 2022

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Abbott Laboratories, Sanja Mandić (Osijek, Hrvaška)

12:30–12:50 Delavnica / *Workshop*

*Enhancing the value of laboratory test results through Clinical Data*

Roche, Ina Sapranauskiene (Roche Diagnostics Baltics, Lithuania)

##### Dvorana D / Hall D

12:50–14:30 Posterska sekcija / *Poster session*

12:50–14:30 Odmor za kosilo / *Lunch break*

##### Dvorana B / Hall B

#### Simpozij 1 / Symposium 1

### Izzivi urgentne laboratorijske medicine / *Challenges of Emergency Laboratory Medicine*

Moderatorji / *Chairs*: Štefka Krivec, Petra Novak

14:30–15:00 IL-T1

Laboratorijska medicina kot pomemben del urgentne obravnave bolnika / *Laboratory medicine as an important part of urgent patient care*

Štefka Krivec (Celje, Slovenija)

15:00–15:15 T1-OP

Urgentno medoperativno določanje intaktnega parathormona / *Rapid intra-operative intact parathyroid hormone determination*

Helena Poplašen, Barbara Možina, Katarina Lenart, Alenka Grošel (Ljubljana, Slovenija)

15:15–15:30 T2-OP

Zastrupitev z etilenglikolom / *Ethylene Glycol poisoning*

Petra Novak, Jani Klavž (Maribor, Slovenija)

15:30–15:45 T3-OP

Vključenost laboratorijske medicine v urgentno obravnavo akutnih krvavitev–izkušnje z aparatom ClotPro / *Involvement of laboratory medicine in the urgent treatment of acute bleeding–experience with ClotPro analyzer*

Mojca Krivec, Štefka Krivec (Celje, Slovenija)



15:45–16:00 T4-OP

Urgentne preiskave z dolgimi časi poročanja v laboratorijski hematologiji / *Urgent investigations in laboratory hematology with long reporting times*

Hermína Čibej, Katarina Reberšek, Helena Podgornik (Ljubljana, Slovenija)

16:00–16:15 Razprava / *Discussion*

16:15–16:45 Odmor s kavo / *Coffee break*

**Dvorana AC / Hall AC**

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**Dvorana AC / Hall AC**

Simpozij 2 / *Symposium 2*

**Sekcija mladih v laboratorijski medicini / *Young Scientists in laboratory medicine***

Moderatorji / *Chairs*: Evgenija Homšak, Rok Kogovšek

9:00–9:30 IL-5

*Leadership & Team Development: Success Together*

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9:30–10:00 IL-6

*IFCC TF-YS Networking with millennials, preparing for the future*

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10:00–10:15 IL-7

Kakšne možnosti / orodja za izobraževanje nudi EFLM mladim v laboratorijski medicini? / *What educational tools and resources does EFLM offer to young scientists in Laboratory Medicine?*

Evgenija Homšak (Maribor, Slovenija)

10:15–10:25 IL-8

Sekcija mladih pri SZKKLM-vizija za prihodnost / *YS section of the SZKKLM—the vision for the future*

Rok Kogovšek (Golnik, Slovenija)

10:25–10:35 Razprava / *Discussion*

10:35–10:45 Odmor / *Break*

10:45–11:00	<b>IL-9</b>	<b>Pristopi personalizirane medicine za raziskovanje in uporabo novih biomarkerjev / Personalised medicine approaches for investigation and application of new biomarkers</b> Vesna Gorenjak (Ljubljana, Slovenija)
11:00–11:10	<b>IL-10</b>	<b>Prepoznavanje kandidatnih mikroRNA, vpletenih v razvoj in napredovanje nefropatije pri Fabryjevi bolezni / Identification of candidate microRNAs associated with development and progression of nephropathy in Fabry disease patients</b> Tina Levstek (Ljubljana, Slovenija)
11:10–11:20	<b>IL-11</b>	<b>Specifični humoralni in avtoimunski odziv na cepljenje proti covidu-19 / Specific humoral and autoimmune response to COVID-19 vaccination</b> Manca Ogrič, Polona Žigon, Tinka Švec, Katja Lakota, Snežna Sodin-Šemrl, Žiga Rotar, Saša Čučnik (Ljubljana, Slovenija)
11:20–11:30	<b>IL-12</b>	<b>Laboratorijska medicina: strokovno znanstvena revija Slovenskega združenja za klinično kemijo in laboratorijsko medicino za vse generacije strokovnjakov / Laboratory Medicine: professional scientific journal of the Slovenian Association for Clinical Chemistry and Laboratory Medicine for all generations of experts</b> Katarina Trebušak Podkrajšek (Ljubljana, Slovenija)
11:30–12:00	<b>Odmor s kavo / Coffee Break</b>	

#### Dvorana B / Hall B

#### [Simpozij 3 / Symposium 3](#)

#### **Primeri dobrih laboratorijskih praks / Examples of good laboratory practices**

**Moderatorji / Chairs:** Eva Fliser, Ivana Jurković Jakopanec

12:00–12:30	<b>IL-T2</b>	<b>Avtomatizacija in konsolidacija laboratorijskih preiskav / Automation and consolidation of laboratory tests</b> Eva Fliser (Maribor, Slovenija)
12:30–12:45	<b>T5-OP</b>	<b>Transport bioloških vzorcev s cevno pnevmatsko pošto–vpeljava, verifikacija in kontrola kakovosti / Transport of biological samples by pneumatic tube system–implementation, verification and quality control</b> Marsel Bratuša, Rok Kogovšek, Nina Karakaš, Pika Meško Brguljan (Golnik, Slovenija)
12:45–13:00	<b>T6-OP</b>	<b>Verifikacija indeksa hemolize, ikteričnosti in lipemije na Oddelku za laboratorijsko diagnostiko Splošne bolnišnice dr. Jožeta Potrča Ptuj / Verification of hemolysis, icterus and lipemia index at the Department of laboratory diagnostics, General hospital dr. Jože Potrč Ptuj</b> Ivana Jurković Jakopanec, Mojca Završnik (Ptuj, Slovenija)
13:00–13:15	<b>T7-OP</b>	<b>Ni vseeno, kakšen je madež krvi / The importance of quality in dried blood spot sample</b> Vanja Čuk, Domen Trampuž, Eva Kozjek, Karmen Willewaldt Bobek, Barbka Repič Lampret (Ljubljana, Slovenija)
13:15–13:30	<b>T8-OP</b>	<b>Merilna negotovost nekaterih hematoloških parametrov analizatorja Sysmex XN-L 550/ Measurement uncertainty of some hematological parameters on Sysmex XN-L 550 analyzer</b> Sebastjan Božič, Milka Ogrin, Polonca Likar, Minka Lužovec, Marija Prezelj (Vrhnika, Slovenija)



13:30–13:45 T9-OP

Beleženje in obravnava napak v Transfuzijskem centru Splošne bolnišnice Celje / *Detection and analysis of laboratory errors in Transfusion centre, General hospital Celje*

Mirjana Kunaj, Urška Turnšek, Jožica Ojsteršek (Celje, Slovenija)

13:45–14:00 Razprava / *Discussion*

14:00–15:30 Odmor za kosilo / *Lunch break*

## Dvorana B / Hall B

Simpozij 4 / *Symposium 4*

### Proste teme / *Free topics*

Moderatorji / *Chairs*: Ivica Avberšek Lužnik, Mateja More

15:30–16:00 IL-T3

Mediatorji in biomarkerji vnetnih procesov–kontinuirani izziv laboratorijske medicine / *Mediators and biomarkers of inflammatory processes - a continuous challenge of laboratory medicine*

Ivica Avberšek Lužnik (Jesenice, Slovenija)

16:00–16:15 T10-OP

Novosti na področju presejalnega testiranja novorojencev v Sloveniji / *Recent advancements in Slovenian newborn screening*

Žiga Iztok Remec, Vanja Čuk, Daša Perko, Karmen Willewaldt Bobek, Pia Staudacher, Barbka Repič Lampret (Ljubljana, Slovenija)

16:15–16:30 T11-OP

Določanje monoklonskih proteinov v urinu / *Determination of monoclonal proteins in urine*

Mateja More, Urška Čegovnik Primožič (Ljubljana, Slovenija)

16:30–16:45 T12-OP

Detekcija bakteriurije pri nosečnicah s pretočnim citometrom–primerjava z urinokulturo / *Use of flow cytometry for detection of bacteriuria in pregnancy–comparison with urine culture*

Meta Zupančič, Ivica Avberšek Lužnik (Jesenice, Slovenija)

16:45–17:00 T13-OP

Merjenje biokemičnih označevalcev kroničnega stresa pri reševalcih / *Measurement of chronic stress biochemical markers in paramedics*

Ana Ambruš, Aleš Jerin (Murska Sobota, Slovenija)

17:00–17:15 T14-OP

Avtomatizacija v laboratorijski diagnostiki avtoimunskih bolezni / *Automation in laboratory diagnostics of autoimmune diseases*

Mateja Svetej, Evgenija Homšak (Maribor, Slovenija)

17:15–17:30 Razprava / *Discussion*

17:30 Zaključek kongresa / *Closing of the Congress*

# VABLJENI PREDAVATELJI IN MODERATORJI / INVITED SPEAKERS AND CHAIRS

6. SLOVENSKI KONGRES  
KLINIČNE KEMIJE IN  
LABORATORIJSKE MEDICINE  
Z MEDNARODNO UDELEŽBO

6<sup>th</sup> Slovenian Congress of  
Clinical Chemistry and  
Laboratory Medicine with  
international participation

## Uvodno predavanje / Plenary lecture

**Sergio Bernardini** (Italy)

## Simpozij 1 / Symposium 1

**Tekoče biopsije v laboratorijski medicini: trenutno stanje in obeti za prihodnost /  
*Liquid biopsies in laboratory medicine: current status and future perspectives***

Moderatorji / Chairs:

**Katarina Trebušak Podkrajšek, Janja Marc**

**Evi Lianidou** (Greece)

**Darko Černe** (Slovenia)

**Tine Tesovnik** (Slovenia)

**Irena Prodan Žitnik** (Slovenia)

## Simpozij 2 / Symposium 2

**Sekcija mladih v laboratorijski medicini /  
*Young Scientists in Laboratory Medicine***

Moderatorji / Chairs:

**Evgenija Homšak, Rok Kogovšek**

**Pradeep Dabla** (India)

**Santiago Fares-Taie** (Argentina)

**Evgenija Homšak** (Slovenia)

**Rok Kogovšek** (Slovenia)

**Vesna Gorenjak** (Slovenia)

**Tina Levstek** (Slovenia)

**Manca Ogrič** (Slovenia)

**Katarina Trebušak Podkrajšek** (Slovenia)

## Simpozij 3 / Symposium 3

**Novosti v laboratorijski diagnostiki ledvičnih obolenj /  
*Insights/updates in Laboratory Medicine of Kidney Diseases***

Moderatorji / Chairs:

**Pika Meško Brguljan, Maksimiljan Gorenjak**

**Joris Delanghe** (Belgium)

**Karmen Janša** (Slovenia)

**Janez Klavž** (Slovenia)

**Mateja Stopinšek** (Slovenia)

## Simpozij 4 / Symposium 4

**Izzivi laboratorijske medicine pri obravnavi ščitničnih obolenj /  
*The challenges of laboratory medicine in the management of thyroid diseases***

Moderatorji / Chairs:

**Blaž Krhin, Damien Gruson** (Belgium)

**Damien Gruson** (Belgium)

**Santiago Fares-Taie** (Argentina)

**Katja Zaletel** (Slovenia)

**Blaž Krhin** (Slovenia)





**6. SLOVENSKI KONGRES  
INŽENIRJEV IN TEHNIKOV  
LABORATORIJSKE MEDICINE**

**6<sup>th</sup> Slovenian Congress of  
Laboratory Medicine  
Technicians**

**Simpozij 1 / Symposium 1**

**Izzivi urgentne laboratorijske medicine /  
Challenges of Emergency Laboratory Medicine**

Moderatorji / Chairs:

**Štefka Krivec, Petra Novak**

**Štefka Krivec** (Slovenia)

**Simpozij 2 / Symposium 2**

**Sekcija mladih v laboratorijski medicini /  
Young Scientists in Laboratory Medicine**

Moderatorji / Chairs:

**Evgenija Homšak, Rok Kogovšek**

**Pradeep Dabla** (India)

**Santiago Fares-Taie** (Argentina)

**Evgenija Homšak** (Slovenia)

**Rok Kogovšek** (Slovenia)

**Vesna Gorenjak** (Slovenia)

**Tina Levstek** (Slovenia)

**Manca Ogrič** (Slovenia)

**Katarina Trebušak Podkrajšek** (Slovenia)

**Simpozij 3 / Symposium 3**

**Primeri dobrih laboratorijskih praks /  
Examples of good laboratory practices**

Moderatorji / Chairs:

**Eva Fliser, Ivana Jurković Jakopanec**

**Eva Fliser** (Slovenia)

**Simpozij 4 / Symposium 4**

**Proste teme /  
Free themes**

Moderatorji / Chairs:

**Ivica Avberšek Lužnik, Mateja More**

**Ivica Avberšek Lužnik** (Slovenia)

## POSTERJI / POSTERS

### 6. Slovenski kongres klinične kemije in laboratorijske medicine z mednarodno udeležbo *6<sup>th</sup> Slovenian Congress of Clinical Chemistry and Laboratory Medicine with international participation*

P-1

Regulativa preiskovanja bioloških vzorcev za covid-19 v Sloveniji / *Regulatory framework for the testing of biological samples for covid-19 in Slovenia*

**Karmen Jerebic, Borut Božič** (Ljubljana, Slovenija)

P-2

Spremembe v številu kopij izbranih genov pri slovenskih otrocih z B-celično akutno limfoblastno levkemijo / *Copy number variations of selected genes in Slovene children with B-cell acute lymphoblastic leukemia*

**Klementina Črepinšek, Gašper Marinšek, Marko Kavčič, Tomaž Prelog, Lidija Kitanovski, Janez Jazbec, Maruša Debeljak** (Ljubljana, Slovenija)

P-3

Vpliv urejenosti sladkorne bolezni tipa 1 na metilacijo DNA / *Impact of different levels of glycemic control in type 1 diabetes on DNA methylation*

**Barbara Čugalj Kern, Jernej Kovač, Robert Šket, Barbara Jenko Bizjan, Tine Tesovnik, Tadej Battelino, Nataša Bratina** (Ljubljana, Slovenija)

P-4

Primerjava testnih trakov in refraktometra za določitev relativne gostote v urinu / *Urine specific gravity measurement: comparison of reagent strips and refractometer*

**Aljaž Pirnat, Luka Turnšek, Timotej Puconja, Alenka Trampuš Bakija** (Ljubljana, Slovenija)

P-5

Primer nealkoholnega steatohepatitisa pri pediatričnem pacientu z družinsko hipobetalipoproteinemijo kot posledica novo odkrite spremembe v genu *APOB* / *Nonalcoholic steatohepatitis in a pediatric patient with familial hypobetalipoproteinemia due to a novel APOB mutation*

**Neža Molk, Mojca Bitenc, Darja Urlep, Sara Bertok, Urša Šuštar, Katarina Trebušak Podkrajšek, Mojca Žerjav Tanšek, Tadej Battelino, Maruša Debeljak, Urh Grošelj** (Ljubljana, Slovenija)

P-6

*Univants 2021 - measurable better health care performance: Renal Osteodystrophy Monitoring by Monthly PTH Determination in Hemodialysis CKD-MBD Patients*

**Sanda Jelisavac Čosić, Prof Draško Pavlović, Boris Kudumija** (Zagreb, Hrvaška)

P-7

**Pomen določanja kalcitonina pri medularnem raku ščitnice / Importance of calcitonin determination in medullary thyroid cancer**

**Maruša Zupančič, Barbara Možina** (Ljubljana, Slovenija)

P-8

**Ocena zmerne fibroze jeter z ELF testom / The assessment of moderate liver fibroses with ELF test**

**Drago Arzenšek, Lenka Gašperlin, Ivica Avberšek-Lužnik** (Ljubljana, Jesenice, Slovenija)

P-9

**SARS-CoV-2 protitelesa pri skupini prebivalcev Gorenjske / Anti SARS-COV-2 in Gorenjska population group**

**Anita Kustec, Branka Svetic** (Kranj, Slovenija)

P-10

**Overjanje hematološkega analizatorja v Univerzitetnem kliničnem centru Maribor / Verification of the hematology analyzer at the University Medical Center Maribor**

**Petra Uljarevič, Mojca Pušnik, Valerija Domajnko** (Maribor, Slovenija)

P-11

**Vpliv genetske variabilnosti v CRP (rs1800947), TNFA (rs1800629) in IL6 (rs1800795) na raven vnetnih označevalcev pri bolnikih z zelo povišanimi vrednostmi lipoproteina(a) / The influence of genetic variability in CRP (rs1800947), TNFA (rs1800629), and IL6 (rs1800795) on inflammatory markers in patients with very high lipoprotein(a) levels**

**Inge Sotlar, Tina Levstek, Nik Podkrajšek, Tamara Rojnik, Miran Šebeštjen, Andreja Rehberger Likozar, Katarina Trebušak Podkrajšek** (Ljubljana, Slovenija)

P-12

**Komunikacija znanosti in stroke z javnostjo v času epidemije covid-19 / Communicating science to the public during the covid-19 pandemic**

**Jasna Omersel, Tijana Markovič, Martina Gobec, Simona Jurkovič Mlakar, Lucija Ana Vrščaj, Nataša Karas Kuželički** (Ljubljana, Slovenija)(Ženeva, Švica)

P-13

**Molekularno genetska analiza Beckwith-Wiedemann sindroma / Molecular genetics of Beckwith-Wiedemann Syndrome**

**Maja Ficko, Sara Bertok, Gregor Nosan, Tinka Hovnik** (Ljubljana, Slovenija)

P-14

**Primer hude oblike malarije / A case of severe malaria infection**

**Marjana Prah Krumpak, Elizabeta Božnar Alič** (Ljubljana, Slovenija)

P-15

**Avtomatizacija in konsolidacija laboratorijskih procesov na primarni ravni / Automation and consolidation of laboratory processes at the primary level**

**Mateja Šter, Gregor Kurinčič, Darja Pungertnik** (Ljubljana, Slovenija)

**P-16**

**Primer uporabe kazalnika kakovosti / *An example of the quality indicator use***

**Marjana Prah Krumpak, Saša Bratož** (Ljubljana, Slovenija)

**P-17**

**Prostaglandinski receptor EP4–nov potencialni biomarker in terapevtska tarča v kronični limfocitni levkemiji / *Prostaglandin EP4 receptor as a potencial novel biomarker and therapeutic target in chronic lymphocytic leukemia***

**Tijana Markovič, Alenka Šmid, Helena Podgornik, Damjan Avsec, Irena Mlinarič-Raščan** (Ljubljana, Slovenija)

**P-18**

**Določanje multimerne sestave von Willebrandovega faktorja z delno-avtomatizirano gelsko elektroforezo / *Multimer analysis of von Willebrand factor with semi-automated gel electrophoresis***

**Anja Švigelj, Alenka Trampuš Bakija** (Ljubljana, Slovenija)

**P-19**

**Uporabnost analizatorja Microsemi CRP v laboratoriju terciarne bolnišnice / *Usefulness of Microsemi CRP analyzer in tertiary care hospital***

**Alenka Trampuš Bakija, Anja Švigelj** (Ljubljana, Slovenija)

**P-20**

**Pregled laboratorijskih preiskav celiakije na Kliničnem inštitutu za specialno laboratorijsko diagnostiko v letu 2021 / *Overview of laboratory tests of coeliac disease at Clinical institute of special laboratory diagnostics in 2021***

**Tamara Grgič, Ana Grom, Maruša Debeljak, Tinka Hovnik, Tine Tesovnik** (Ljubljana, Slovenija)

**P-21**

**Analiza sprememb v številu kopij genov povezanih s hipogonadotropnim hipogonadizmom z metodo MLPA / *Analysis of copy number variation in genes connected with hypogonadotropic hypogonadism by MLPA***

**Špela Zlodej, Maja Ficko, Magdalena Avbelj Stefanija, Katarina Trebušak Podkrajšek, Tinka Hovnik** (Ljubljana, Slovenija)

**P-22**

**Kazalniki kakovosti predanalitične faze; rezultati ankete Delovne skupine za predanalitiko pri SZKKLM / *Quality indicators for preanalytical phase; the survey results of the Working group for preanalytical phase at SZKKLM***

**Timea Tomšič, Eva Fliser, Lidija Gobec, Greta Štrakl, Alenka France Štiglic** (Celje, Ljubljana, Maribor, Murska Sobota, Trebnje, Slovenija)



**P-23**

**Spremljanje in prepoznavanje virusnih različic SARS-CoV-2 / *Monitoring and identification of SARS-CoV-2 variants***

**Robert Šket, Jera Stritar, Tine Tesovnik, Barbara Jenko Bizjan, Ana Grom, Nina Kulić, Mojca Zrimšek, Eva Kozjek, Barbara Slapnik, Špela Kert, Jernej Kovač** (Ljubljana, Slovenija)

**P-24**

**Nacionalni program populacijskega presejanja na družinsko hiperholesterolemijo pri predšolskih otrocih / *National Population Screening Program for Familial Hypercholesterolemia in Preschool Children***

**Urša Šuštar, Matej Mlinarič, Jernej Kovač, Katarina Sedej, Barbara Jenko Bizjan, Katarina Trebušak Podkrajšek, Tadej Battelino, Urh Grošelj** (Ljubljana, Slovenija)

**P-25**

**Problematika določanja LDL-holesterola pri pacientu z boleznijo jeter / *The problem of LDL-cholesterol measurement in a patient with liver disease***

**Nina Cugmas** (Celje, Slovenija)

**P-26**

**Medlaboratorijski transport biološkega materiala z brezpilotnim letalom - dronom / *Interlaboratory transport of biological material by drone***

**Jure Belak** (Topolšica, Slovenija)

**P-27**

***Serum antioxidant enzyme activities in patients with COVID-19 infection with mild symptoms related to age***

**Leonard Kurti, Genzane Mucaj Kurti, Iliriana Osmani, Ariana Kelmendi** (Priština, Kosovo)

**P-28**

***Type 2 Diabetes Mellitus and Heart - a coronary artery stenosis risk association***

**Pradeep K. Dabla, Dharmsheel Shrivastv, Desh Deepak Sing, Vimal Mehta** (Delhi, Indija)

## 6. Slovenski kongres inženirjev in tehnikov laboratorijske medicine

### 6<sup>th</sup> Slovenian Congress of Laboratory Medicine Technicians

#### T1-P

**Akutna porfirija - primer iz prakse / *Acute porphyria—case report***

**Eva Fliser, Brigita Brečko** (Maribor, Slovenija)

#### T2-P

**Identifikacija dizajnerskega benzodiazepina ob zastrupitvi s ponarejenim zdravilom / *Identification of designer benzodiazepine in a case of falsified medicine poisoning***

**Lavra Celcer, Vojko Berce, Jani Klavž** (Maribor, Slovenija)

#### T3-P

**Obvladovanje naraščanja laboratorijskih storitev v Urgentnem centru Univerzitetnega kliničnega centra Maribor / *Managing the growth of laboratory services in the Emergency Center of the University Medical Center Maribor***

**Bernarda Jevšnikar** (Maribor, Slovenija)

#### T4-P

**Prednosti in slabosti dela na avtomatizirani laboratorijski opremi / *Advantages and disadvantages of working on automated laboratory equipment***

**Katja Krajnc** (Maribor, Slovenija)

#### T5-P

**Primerjava meritev Lp(a) z nefelometrično in imunoturbidimetrično metodo določevanja / *Comparison of Lp (a) measurements with nephelometric and immunoturbidimetric method of determination***

**Rebeka Papa** (Maribor, Slovenija)

#### T6-P

**Stabilnost biokemijskih preiskav pri delu z analitično platformo / *Stability of biochemical tests on an analytical platform***

**Saša Stajnko, Eva Fliser** (Maribor, Slovenija)

#### T7-P

**Overjanje točnosti merilnih postopkov hematološkega analizatorja Sysmex XN-L 550 / *Verification of accuracy of the measurement methods in hematology analyzer Sysmex XN-L 550***

**Sebastijan Božič, Polonca Likar, Milka Ogrin, Minka Lužovec, Marija Prezelj** (Vrhnika, Slovenija)

#### T8-P

**Primerjava določitve protiteles proti SARS-Cov-2 na analizatorjih Cobas 601 Roche in LiaisonXL Diasorin / *Comparison of the determination of antibodies against SARS-Cov-2 on Cobas 601 Roche and LiaisonXL Diasorin analyzers***

**Nada Živko, Evgenija Homšak** (Maribor, Slovenija)

**T9-P**

**Merilna negotovost pri mikroskopski diferencialni krvni sliki / *Measurement uncertainty in microscopic differential blood count***

**Tina Žuran** (Ptuj, Slovenija)

**T10-P**

**Ocena biološke variabilnosti glukoze in laktata v likvorju / *Biological variation estimates of glucose and lactate in cerebrospinal fluid***

**Darja Barovič, Ines Blaž Kok, Saša Čučnik, Andreja Emeršič** (Ljubljana, Slovenija)

**T11-P**

**Digitalizacija izobraževanja in digitalne rešitve v POCT testiranju v Splošni bolnišnici Jesenice / *Digitization of education and digital solutions in POCT testing at General hospital Jesenice***

**Goran Sedlovski, Lenka Gašperlin** (Jesenice, Slovenija)

**T12-P**

**Določanje monoklonskih proteinov IgD in IgE / *Determination of monoclonal IgD and IgE***

**Urška Čegovnik Primožič, Medina Tatarevič, Dunja Baloh, Anže Kuharič, Mateja More** (Ljubljana, Slovenija)

**T13-P**

**Vpliv lipemije na hematološke parametre / *Effect of lipemia on hematological parameters***

**Tanja Smolič** (Zagorje, Slovenija)

**T14-P**

**Uvedba avtomatizirane Westergrenove metode za merjenje sedimentacije eritrocitov / *Introduction of an automated Westergren method of erythrocyte sedimentation rate***

**Nina Vilfan, Darja Kunšek, Branka Svetic** (Kranj, Slovenija)

**T15-P**

**Delne spremembe referenčnih vrednosti za dnevni profil kortizola v slini / *Changes in reference values for diurnal salivary cortisol measurements***

**Barbara Ježek, Aleš Koščak, Sanja Milijaš, Bianca Bevc, Branka Svetic** (Ljubljana, Slovenija)

**T16-P**

**Kapilarna elektroforeza serumskih beljakovin pri akutnem vnetju / *Capillary electrophoresis of serum proteins in acute inflammation***

**Simon Brlogar, Goran Sedlovski, Urška Todorović Lužnik** (Jesenice, Slovenija)

**T17-P**

**Overjanje analizatorja Pledia za kvantitativno določanje hemoglobina v blatu / *Evaluation of Pledia analyzer for immunochemical quantification of fecal occult blood***

**Gregor Kurinčič, Domen Srebot, Darja Pungertnik** (Ljubljana, Slovenija)

#### T18-P

Uvajanje preiskav za določanje tirotropina in prostatno specifičnega antigena v laboratoriju na primarni ravni / *Introduction of thyrotropin and prostate-specific antigen in laboratory at the primary level*

**Sanja Stopinšek, Simona Kaše-Velenšek, Anja Baš, Tanja Vidmar, Drago Arzenšek** (Hrastnik, Ljubljana, Slovenija)

#### T19-P

Beljakovina 14-3-3 kot biološki označevalec Creutzfeldt-Jakobove bolezni v likvorju / *Cerebrospinal fluid 14-3-3 protein as a biomarker of Creutzfeldt-Jakob disease*

**Andreja Emeršič, Ines Blaž Kok, Darja Barovič, Uroš Rot, Saša Čučnik** (Ljubljana, Slovenija)

#### T20-P

Pnevmatska cevna pošta - prednost v laboratorijski diagnostiki / *Advantages of pneumatic tube delivery systems in laboratory diagnostics*

**Zora Čede, Nataša Stanko** (Trbovlje, Slovenija)

#### T21-P

Overjanje hematološkega analizatorja Sysmex XN-550 / *Verification of hematology analyzer Sysmex XN-550*

**Morana Malnar, Valentina Buda** (Postojna, Slovenija)

#### T22-P

Verifikacija referenčnih intervalov biokemijskih preiskav v serumu in plazmi / *Verification of reference values of biochemical analytes in serum and plasma*

**Majda Grobelnik, Manuela Onič, Eva Fliser** (Maribor, Slovenija)

#### T23-P

Verifikacija urinskega analizatorja Sysmex UC-3500 in UF-4000 / *Verification of urine analyser Sysmex UC-3500 and UF-4000*

**Sara Purkat, Barbara Možina** (Ljubljana, Slovenija)

#### T24-P

Primerjava treh metod za določanje albumina v serumu (kapilarna elektroforeza, bromkrezol zeleno in imunoturbidimetrija) / *Comparison of three methods for determination of serum albumin (capillary electrophoresis, bromocresol green, immunoturbidimetry)*

**Tina Trobec Vargazon, Alenka Grošel** (Ljubljana, Slovenija)

#### T25-P

Vpliv poteka epidemije Covid-19 na izvajanja laboratorijskih testov na Oddelku za laboratorijsko medicino Splošne bolnišnice Celje / *Effect of the covid-19 epidemic on laboratory tests utilization at the Department of Laboratory Medicine of the General Hospital*

**Barbara Kac, Lidija Gobec** (Celje, Slovenija)



# INFORMACIJE ZA PREDAVATELJE /

## *Informations for speakers*

Razpoložljiva **TEHNIČNA OPREMA:**

- Projektor (PANASONIC PT-EZ 580) za računalniške predstavitve (resolucija do 1920 x 1200 pik).
- Prenosnik ali PC z operacijskim sistemom Microsoft Windows.

**Upoštevajte sledeče:**

- Lastni prenosniki niso dovoljeni.
- Predavanja bodo potekala v slovenskem ali angleškem jeziku. Simultano prevajanje ne bo zagotovljeno.
- Vse projekcije morajo biti **v angleščini** (ne velja za 6. Slovenski kongres inžinerjev in tehnikov laboratorijske medicine)

**TECHNICAL EQUIPMENT** available for oral presentations:

- *DATA projectors (DATASCOPE) for computer presentation (resolution up to 1024 x 768 pixels)*
- *Notebook or PC with Microsoft Windows*

**Please note:**

- *Personal notebooks will not be permitted*
- *Slide and overhead projector will not be available*
- *Please note that all slides must be **in English** (not valid for 6<sup>th</sup> Slovenian Congress of Laboratory Medicine Technicians)*

## **PROJEKCIJSKI CENTER / PROJECTION AND PREVIEW CENTRE**

Center za predavatelje, ki bo v predverju dvoran Europa, bo odprt 19. in 20. septembra od 8.00 do 18.00. Svoje gradivo za projekcijo oddajte vsaj dve uri pred predstavitvijo. V centru boste lahko opravili poskusno projekcijo in dobili morebitna dodatna potrebna navodila v zvezi z vašo predstavitvijo. Sprejete bodo samo PowerPoint prezentacije na USB pomnilniških karticah in v video format .mp4 ali .mov. Različica MS Power Point 2016 ali višja je priporočljiva. Za vsako drugo različico odgovarja avtor sam.

We suggest that your computer presentation is installed and tested as soon as possible, but not less than two hours before your lecture. The technical organizer will give you additional instructions concerning your session and the presentation of your paper in the Speakers Centre located in the foyer in front of the Europa halls. Please make sure that your computer presentation is fully operational before your talk. Only Power Point presentations on USB Memory cards and videos in .mp4 and .mov formats will be accepted. The MS PowerPoint 2016 (and newer) version is recommended. Any other arrangement is entirely at the risk of the presenter.

**Opening hours:** 19th and 20th September from 8.00 -18.00

## **NAVODILA ZA PREDSTAVITEV POSTERJA / INSTRUCTIONS FOR POSTER PRESENTATION**

Posterji bodo v dvorani Europa - D na ogled ves čas kongresa. Panoji za posterje bodo oštevilčeni. Številka vašega posterja je navedena v programu kongresa, ki ga boste prejeli ob registraciji. Organizator ne odgovarja za posterje, ki ne bodo odstranjeni do 20. septembra do 18. ure. Avtorje posterjev prosimo, da so med posterskimi sekcijami navzoči pri svojem posterju.

Posters are on display in the Europa – D hall throughout the Congress. Demonstration boards will be numbered. The poster numbers are listed in the congress program. The organizer is not responsible for the posters, which will not be removed until September 20th at 18.00. Authors are requested to be present at the posters during the poster sessions.



# SPLOŠNE INFORMACIJE / GENERAL INFORMATION

## KRAJ PRIREDITVE / CONGRESS VENUE

Grand Hotel Bernardin, Portorož-Kongresni center (dvorana Evropa)  
Grand Hotel Bernardin, Portorož-Congress Centre (Europa halls)

## DATUM PRIREDITVE / DATE OF EVENT

19.-20. september 2022  
September 19<sup>th</sup> - 20<sup>th</sup> 2022

## URADNI JEZIKI / THE OFFICIAL CONGRESS LANGUAGES

Slovenščina, angleščina (brez tolmačenja) /  
*Slovenian and English (no translation is provided)*

## POLNA KOTIZACIJA VKLJUČUJE / FULL REGISTRATION FEE INCLUDES

- vstop na predavanja izbranega kongresa/simpozija /  
*Admission to the chosen congress/symposium*
- kongresno gradivo / *Congress material*
- ogled razstave / *Free entrance to the exhibition*
- postrežbo med odmori po programu / *Coffee breaks as per programme*
- družabno srečanje z večerjo 19. septembra / *Dinner on September 19<sup>th</sup>*

## DNEVNA KOTIZACIJA VKLJUČUJE / THE DAILY REGISTRATION FEE INCLUDES

- vstop na predavanja izbranega dne in izbranega kongresa/simpozija /  
*Admission to the chosen congress/symposium and day*
- ogled razstave / *Free entrance to the exhibition*
- kongresno gradivo / *Congress material*
- postrežbo med odmori izbranega dne / *Coffee breaks on the chosen day*

**\*Doplačilo za svečano večerjo (19. septembra): 50 EUR /**  
**\*Dinner fee (September 19<sup>th</sup>): 50 EUR**

## KONGRESNA RECEPCIJA / REGISTRATION DESK

Kongresna recepcija bo odprta v:

ponedeljek, 19. septembra            od 8.00 do 19.00  
torek, 20. septembra                od 8.00 do 18.00

*Registration desk will be open on:*

*Monday, September 19<sup>th</sup> from 8:00 to 19:00*  
*Tuesday, September 20<sup>th</sup> from 8:00 to 18:00*

## IMENSKÉ PRIPONKE / NAME BADGES

Ob prijavi vsi udeleženci prejmejo imenske pripombe. Vse udeležence prosimo, da pripombe ves čas nosijo pri znanstvenem in družabnem programu kongresov.

*All participants will receive name badges when they check in at the registration desk. The participants are kindly asked to wear the badge during all scientific and social programme.*

## POTRDILO O UDELEŽBI / ATTENDANCE CERTIFICATE

Vsi prijavljeni udeleženci bodo prejeli potrdilo o udeležbi na kongresni recepciji v torek, 20. septembra 2022, udeleženci z dnevno kotizacijo pa na koncu dneva udeležbe.

*All registered participants will receive the attendance certificate at the congress registration desk on Tuesday, September 20<sup>th</sup> 2022 and participants with daily fee at the end of the day of attendance.*

## SILM TOČKE / SILM POINTS

6. Slovenski kongres klinične kemije z mednarodno udeležbo; dvodnevna udeležba: **16 točk** /  
6<sup>th</sup> Slovenian congress of clinical chemistry with international participation; **2 days: 16 points**

6. Slovenski kongres klinične kemije z mednarodno udeležbo; enodnevna udeležba: **8 točk** /  
6<sup>th</sup> Slovenian Congress of Clinical Chemistry and Laboratory Medicine with international participation; **1 day: 8 points**

## ODMORI S KAVO / COFFEE BREAKS

Odmori s kavo so vključeni v kotizacijo in bodo pripravljene v predverju kongresnih dvoran.

*Coffee breaks are included in the registration fee and will be served in the Foyer of the congress halls.*

## RAZSTAVA / EXHIBITION

Razstava se nahaja v predverju kongresnih dvoran Evropa.

*Commercial exhibition is located in the Foyer of the congress halls Evropa.*

## VEČERJA S PODELITVIJO DRUŠTVENIH PRIZNANJ / DINNER WITH THE PRESENTATION OF THE AWARDS

Vse udeležence prijazno vabimo na večerjo s podelitvijo društvenih priznanj, ki bo v ponedeljek 19. septembra s pričetkom ob 19.30 uri, na plaži Grand hotela Bernardin ali v primeru slabega vremena v dvorani Emerald. O točni lokaciji boste obveščeni ob registraciji.

Kongresna večerja je vključena v polno kotizacijo, udeleženci z dnevno kotizacijo se lahko udeležijo večerje za doplačilo 50,00 EUR.

*All participants are kindly invited to the congress dinner with the presentation of the awards, which will take place on the beach of Grand Hotel Bernardin or in Emerald Ballroom (depending on weather conditions). The exact location will be announced upon registration.*

*Congress dinner is included in full registration fee, participants with a daily fee may attend the dinner for additional payment in the amount of 50,00 EUR.*



## ZAHVALA / ACKNOWLEDGEMENT

Naštetim organizacijam se najlepše zahvaljujemo za finančno pomoč pri organizaciji 6. slovenskega kongresa klinične kemije in laboratorijske medicine z mednarodno udeležbo in 6. slovenskega kongresa inženirjev in tehnikov laboratorijske medicine.

*We gratefully acknowledge the financial support of the companies listed below for the organisation of the 6<sup>th</sup> Slovenian Congress of Clinical Chemistry and Laboratory Medicine with international participation and 6<sup>th</sup> Slovenian Congress of Laboratory Medicine Technicians.*

### ZLATI SPONZORJI / GOLDEN SPONSORS

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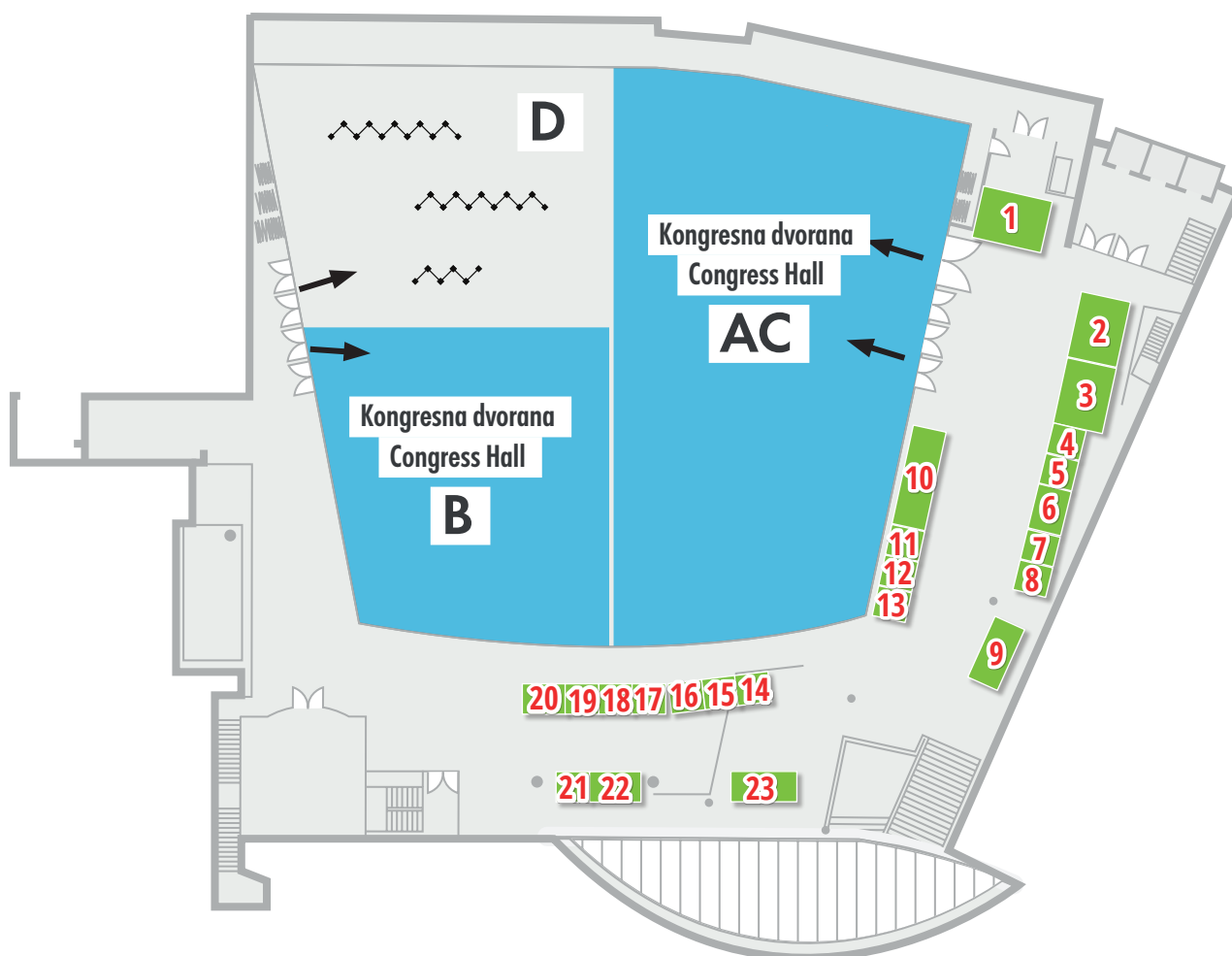


### SPONZOR / SPONSOR

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## RAZSTAVLJAVCI / EXHIBITORS



- |                         |                                      |
|-------------------------|--------------------------------------|
| 1 Roche                 | 13 Iris, Mednarodna trgovina         |
| 2 Abbott                | 14 Genos                             |
| 3 Snibe                 | 15 Tehnooptika Smolnikar             |
| 4 Meditrade             | 16 Kobis                             |
| 5 Diahem                | 17 Dr. Gorkič                        |
| 6 Sanolabor             | 18 Kemomed                           |
| 7 Mediline              | 19 Chemass                           |
| 8 Dipros                | 20 Labena                            |
| 9 Pulmodata             | 21 Fin-pro                           |
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**It's confidence**—an objective result with high sensitivity to detect blood-based biomarkers of mild brain injury within 12 hours of head trauma—giving clinicians the power to predict the absence of intracranial lesions in adult patients with suspected mild traumatic brain injury.<sup>1</sup>



**It's optimizing care and resources**—with the potential to reduce unnecessary CT scans by up to 40%.<sup>1,2</sup> Protect patients from a costly procedure that exposes them unnecessarily to radiation.<sup>1,3-5</sup>



**It's a more efficient ER and a better experience for patients and their families.** When physicians are empowered to accurately assess the absence of intracranial lesions without a CT scan, it may help them discharge patients faster from the emergency room—increasing patient throughput and reducing length of stay.<sup>1,6</sup>

**Add Alinity i TBI to clinical evaluation.\***  
**So patients can get back to what matters most to them.**


\*Alinity i TBI is used in conjunction with other clinical information.

**REFERENCES:** 1. Alinity i TBI H22974R01. Instructions for use. Abbott Ireland Diagnostics Division. Sligo, Ireland; October 2021. 2. Data on file at Abbott. 3. Bazarian JJ, Biberthaler P, Welch RD, et al. Serum GFAP and UCH-L1 for prediction of absence of intracranial injuries on head CT (ALERT-TBI): a multicentre observational study. *Lancet Neurol.* 2018;17(9):782-789. doi:10.1016/S1474-4422(18)30231-X 4. Wang KKW, Kobeissy FH, Shakkour Z, Tyndall JA. Thorough overview of ubiquitin C-terminal hydrolase-L1 and glial fibrillary acidic protein as tandem biomarkers recently cleared by US Food and Drug Administration for the evaluation of intracranial injuries among patients with traumatic brain injury. *Acute Med Surg.* 2021;8(1):e622. doi:10.1002/ams2.622 5. Bazarian JJ, Welch RD, Caudle K, et al. Accuracy of a rapid GFAP/UCH-L1 test for the prediction of intracranial injuries on head CT after mild traumatic brain injury. *Acad Emerg Med.* 2021;10.1111/acem.14366. doi:10.1111/acem.14366 6. Michelson EA, Huff JS, Loparo M, et al. Emergency department time course for mild traumatic brain injury workup. *West J Emerg Med.* 2018;19(4):635-640. doi:10.5811/westjem.2018.5.37293

#### For In Vitro Diagnostic Use.

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EVERY **PATIENT** IS UNIQUE.

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# Vitalen skok naprej pri testiranju srčne funkcije

Hitrost in točnost, kjer je to najbolj pomembno – konec čakanja na visoko občutljivi Troponin I v POCT okolju



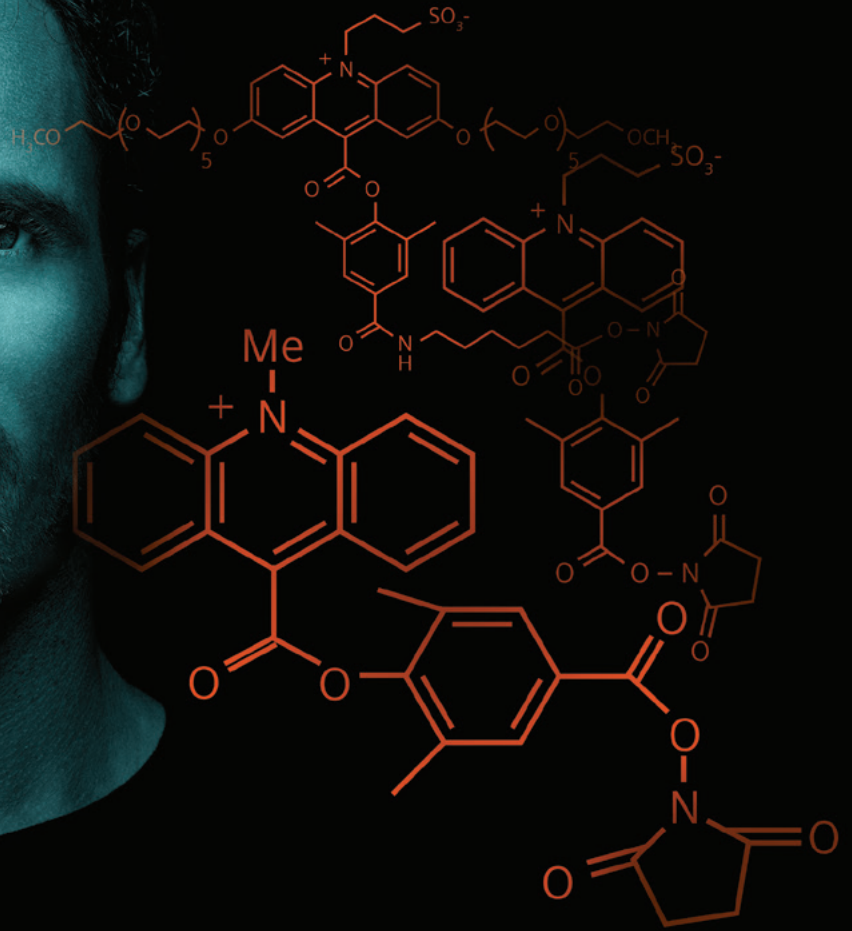
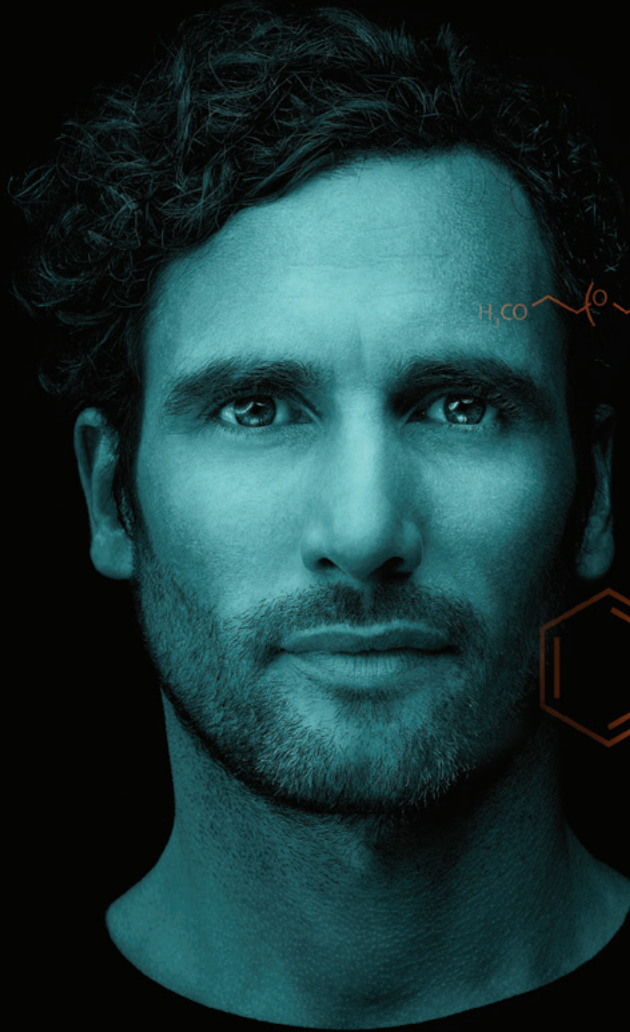
- **Hitrost:** Rezultat na voljo v 8-ih minutah
- **Enostavnost:** Kapilarni odvzem ali venska polna kri (Li-heparin)
- **Sledljivost:** POCT analizator za določitev visoko občutljivega **Troponina I**, ki je sledljiv do najnovejših kardioloških smernic
- **Mobilnost:** Možnost izvajanja meritev v različnih okoljih (reševalno vozilo ali različni zdravstveni oddelki)
- **Več informacij:** <https://www.siemens-healthineers.com/atellica-vtli>



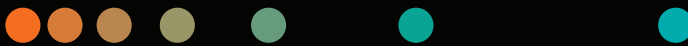
# Računajte na Enhanced Liver Fibrosis (ELF™) Test

Ocenite tveganje za napredovanje nealkoholne maščobne spremenjenosti jeter (NAFLD), nealkoholnega steatohepatitisa (NASH) in drugih bolezni jeter s preprostim krvnim testom.

[siemens-healthineers.si/elf](https://siemens-healthineers.si/elf)



ELF test ni na voljo v ZDA. Razpoložljivost produkta se lahko od države do države spreminja in je podvržen različnim regulatornim zahtevam. ELF je blagovna znamka Siemens Healthcare Diagnostics Inc. ©Siemens Healthcare Diagnostics Inc., 2019



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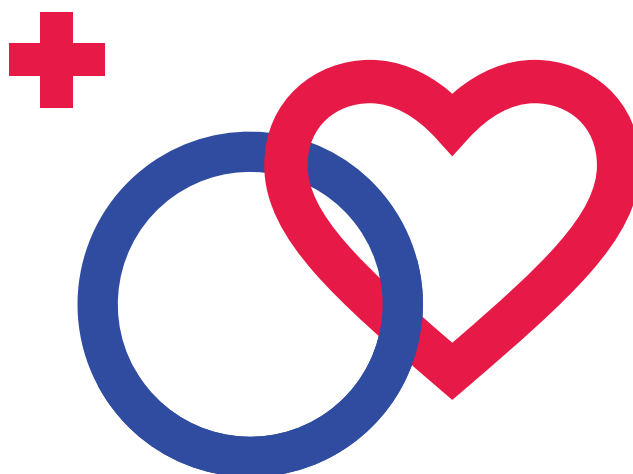


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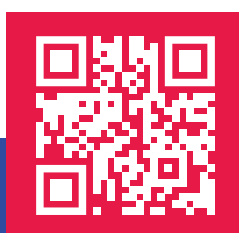
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popuščanje pri bolnikih  
s **sladkorno boleznijo tipa 2**



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## Save Your Space without Compromise

Compatible with Small and Medium-sized Hospitals and Labs

 **200** Tests/Hour

 Space occupied < **0.68** m<sup>2</sup>

 **72** Sample Positions

 **20** Reagent Positions

 **Single** Reaction Cup



### ● Small but strong

- ! The throughput per unit area is 294 T/h/m<sup>2</sup>.
- ! Compatible with all MAGLUMI® reagents with perfect compatibility (183 parameters).

### ● Convenient and efficient

- ! No-pause loading/unloading of reagents/samples/reaction cups without waiting or interrupting tests.
- ! Intuitive indicator lights make no need to check reagents and consumables frequently.

### ● Low failure rate and accurate result

- ! The single reaction cup can avoid light pollution and increase cuvette utilization, its integrated packaging can avoid the stuck of the cuvette, cuvette blockage and scratches.


### ● Cost-efficient and intelligent

- ! TEFLON-coated pipetting needle is equipped with independent washing unit to avoid carry-over (Small workload analyzer have higher consumable costs when using disposable Tips).

### ● Excellent performance


- ! The comprehensive advanced design of MAGLUMI® X3 ensures excellent performance, such as the latest intelligent washing technology and bidirectional temperature control measurement.

# MAGLUMI® X8

 **600** Tests/Hour (Single module)  
**2400** Tests/Hour (Four modules combined)

 **42** Reagent Position

 **300** Sample Position

 Single cup design

 **Capable to link Laboratory Automation system (TLA/LAS)**



# MAGLUMI® Test Menu

## Thyroid

TSH (3rd Generation) FDA  
 T4 FDA  
 T3 FDA  
 FT4 FDA  
 FT3 FDA  
 Tg (Thyroglobulin)  
 TGA (Anti-Tg)  
 Anti-TPO  
 TRAb  
 TMA  
 Rev T3  
 T-Uptake NEW

## Autoimmune

Anti-CCP  
 Anti-dsDNA IgG  
 ANA Screen  
 ENA Screen  
 Anti-Sm IgG  
 Anti-Rib-P IgG  
 Anti-Scl-70 IgG  
 Anti-Centromeres IgG  
 Anti-Jo-1 IgG  
 Anti-M2-3E IgG  
 Anti-Histones IgG  
 Anti-nRNP/Sm IgG  
 Anti-SS-B IgG  
 Anti-SS-A IgG  
 TGA(Anti-Tg)  
 Anti-TPO  
 TRAb  
 TMA  
 ICA  
 IAA(Anti Insulin)  
 GAD 65  
 Anti-IA2  
 Anti-MPO  
 \*ZnT8  
 \*Anti-Cardiolipin IgG  
 \*Anti-Cardiolipin IgM  
 \*β2-Glycoprotein I IgG  
 \*β2-Glycoprotein I IgM

## Inflammation Monitoring

CRP (High Sensitive)  
 PCT (Procalcitonin)  
 IL-6 (Interleukin 6)  
 SAA (Serum Amyloid A)  
 \*TNF-α

## Hypertension

Direct Renin  
 Aldosterone  
 Angiotensin I  
 Angiotensin II  
 Cortisol  
 ACTH

## Fertility

FSH  
 LH  
 HCG/β-HCG FDA  
 PRL (Prolactin)  
 Estradiol  
 Testosterone  
 free Testosterone  
 DHEA-S  
 Progesterone  
 free Estradiol  
 17-OH Progesterone  
 AMH  
 SHBG  
 Androstenedione  
 PIGF NEW  
 sFit-1 NEW

## Hepatic Fibrosis

HA  
 PIIIP N-P  
 C IV  
 Laminin  
 Cholyglycine

## TORCH

Toxo IgG  
 Toxo IgM  
 Rubella IgG  
 Rubella IgM  
 CMV IgG  
 CMV IgM  
 HSV-1/2 IgG  
 HSV-1/2 IgM  
 HSV-1 IgG  
 HSV-2 IgG  
 \*HSV-2 IgM  
 \*HSV-1 IgM

## Anemia

Vitamin B12  
 Ferritin  
 Folate (FA)  
 EPO  
 RBC Folate NEW

## Drug Monitoring

Digoxin  
 CSA (Cyclosporine A)  
 FK 506 (Tacrolimus)

## Kidney Function

β<sub>2</sub>-MG  
 Albumin  
 \*NGAL

## Tumor Markers

AFP  
 CEA  
 Total PSA  
 f-PSA  
 CA 125  
 CA 15-3  
 CA 19-9  
 PAP  
 CA 50  
 CYFRA 21-1  
 CA 242  
 CA 72-4  
 NSE  
 S-100  
 SCCA  
 TPA-snibe  
 ProGRP  
 HE4  
 HER-2  
 PIVKA-II

## Prenatal Screening

AFP (Prenatal Screening)  
 Free β-HCG  
 PAPP-A  
 free Estradiol

## Glyco Metabolism

C-Peptide  
 Insulin  
 GAD 65  
 Anti-IA2  
 ICA  
 IAA (Anti Insulin)  
 Proinsulin  
 \*Glucagon  
 \*ZnT8

## Coagulation Marker

D-Dimer  
 \*TAT  
 \*TM  
 \*PIC  
 \*tPAIC

## Metabolism

Pepsinogen I  
 Pepsinogen II  
 Gastrin-17  
 GH (hGH)  
 IGF-I  
 IGFBP-3

## EBV

EBV EA IgG  
 EBV EA IgA  
 EBV VCA IgG  
 EBV VCA IgM  
 EBV VCA IgA  
 EBV NA IgG  
 EBV NA IgA

## Cardiac

CK-MB  
 Troponin I  
 Myoglobin  
 hs-cTnI  
 H-FABP  
 NT-proBNP  
 BNP  
 D-Dimer  
 Lp-PLA2  
 MPO  
 \*HCY

## Infectious Disease

HBsAg  
 Anti-HBs  
 HBeAg  
 Anti-HBe  
 Anti-HBc  
 Anti-HBc IgM NEW  
 Anti-HCV  
 Syphilis  
 Anti-HAV  
 HAV IgM  
 HIV Ab/Ag Combi  
 Chagas  
 HTLV I+II  
*H. pylori* IgG  
*H. pylori* IgA  
*H. pylori* IgM  
 2019-nCoV IgG  
 2019-nCoV IgM  
 SARS-CoV-2 S-RBD IgG  
 SARS-CoV-2 Neutralizing Antibody  
 SARS-CoV-2 Ag  
 \**Chlamydia Pneumoniae* IgG  
 \**Chlamydia Pneumoniae* IgM  
 \**Mycoplasma Pneumoniae* IgG  
 \**Mycoplasma Pneumoniae* IgM

## Bone Metabolism

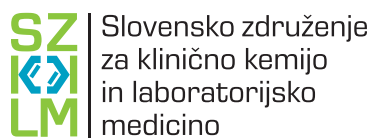
Calcitonin  
 Osteocalcin  
 25-OH Vitamin D FDA  
 Intact PTH  
 β-CTx  
 total P1NP

## Immunoglobulin

IgM  
 IgA  
 IgE  
 IgG

\* Available soon





**Slovensko združenje za klinično kemijo  
in laboratorijsko medicino**

**Slovenian Association for Clinical Chemistry  
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