Charakteristika predkladaného
Characteristics of the submitted

Tlačivo VTC slúži na predkladanie výstupov tvorivej činnosti podľa metodiky hodnotenia tvorivých činností (časť V. Met
the evaluation methodology of research/artistic/other activities (part V. The Methodology for Standards Evaluation).

ID konania/ID of the procedure: [1]
Kód VTC/Code of the research/artistic/other output (RAOO):[1]

OCA1. Priezvisko hodnotenej osoby / Surname awarded to the assessed person [2]	
OCA2. Meno hodnotenej osoby / Name awarded to the assessed person [2]	
OCA3. Tituly hodnotenej osoby / Degrees awarded to the assessed person [2]	
OCA4. Hyperlink na záznam osoby v Registri zamestnancov vysokých škôl / Hyperlink to the entry of the person in the Register of university staff [3]	
OCA5. Oblasť posudzovania / Area of assessment [4]	
OCA6. Kategória výstupu tvorivej činnosti / Category of the research/ artistic/other output *Výber zo 6 možností (pozri Vysvetlivky k položke OCA6) / Choice from 6 options (see Explanations for OCA6).*	
OCA7. Rok vydania výstupu tvorivej činnosti / Year of publication of the research/artistic/other output	
OCA8. ID záznamu v CREPČ alebo CREUČ *(ak je)* / ID of the record in the Central Registry of Publication Activity (CRPA) or the Central Registry of Artistic Activity (CRAA) [5]	
OCA9. Hyperlink na záznam v CREPČ alebo CREUČ / Hyperlink to the record in CRPA or CRAA [6]	
EUČ / Characteristics of the output that is not registered in RAA	OCA10. Hyperlink na záznam v inom verejne prístupnom registri, katalógu výstupov tvorivých činností / Hyperlink to the record in another publicly accessible register, catalogue of research/ artistic/other outputs [7]
	OCA11. Charakteristika výstupu vo formáte bibliografického záznamu CREPČ alebo CREUČ, ak výstup nie je vo verejne prístupnom registri alebo katalógu výstupov / Characteristics of the output in the format of the CRPA or the CRAA bibliographic record, if the output is not available in a publicly accessible register or catalogue of outputs
	OCA12. Typ výstupu (ak nie je výstup registrovaný v CREPČ alebo CREUČ) / Type of the output (if the output is not registered in CRPA or CRAA) *Výber zo 67 možností (pozri Vysvetlivky k položke OCA12) / Choice from 67 options (see Explanations for OCA12).*
	OCA13. Hyperlink na stránku, na ktorej je výstup sprístupnený (úplný text, iná dokumentácia a podobne) / Hyperlink to the webpage where the output is available (full text, other documentation, etc.)
	OCA14. Charakteristika autorského vkladu / Characteristics of the author's contribution

Charakteristika výstupu, ktorý nie je registrovaný v CREPČ alebo C CRPA or C	OCA15. Anotácia výstupu s kontextovými informáciami týkajúcimi sa opisu tvorivého procesu a obsahu tvorivej činnosti a pod. / Annotation of the output with contextual information concerning the description of creative process and the content of the research/artistic/other activity, etc. [8] *Rozsah do 200 slov v slovenskom jazyku / Range up to 200 words in Slovak* *Rozsah do 200 slov v anglickom jazyku / Range up to 200 words in English*
OCA16. Anotácia výstupu v anglickom jazyku / Annotation of the output in English [9] *Rozsah do 200 slov / Range up to 200 words*	
OCA17. Zoznam najviac 5 najvýznamnejších ohlasov na výstup / List of maximum 5 most significant citations corresponding to the output *Rozsah do 200 slov / Range up to 200 words*	
OCA18. Charakteristika dopadu výstupu na spoločensko-hospodársku prax / Characteristics of the output's impact on socio-economic practice *Rozsah do 200 slov v slovenskom jazyku / Range up to 200 words in Slovak* *Rozsah do 200 slov v anglickom jazyku / Range up to 200 words in English*	

OCA19. Charakteristika dopadu výstupu a súvisiacich aktivít na vzdelávací proces / Characteristics of the output and related activities' impact on the educational process

Rozsah do 200 slov v slovenskom jazyku / Range up to 200 words in Slovak

Rozsah do 200 slov v anglickom jazyku / Range up to 200 words in English

o výstupu tvorivej činnosti /
research/ artistic/other output

odiky na vyhodnocovanie štandardov) / The form is used to submit the research/artistic/other outputs according to

11.12.2021

ZAZULA

Roman

doc., MUDr., PhD.,

https://www.portalvs.sk/regzam/detail/21647

Urgentná zdravotná starostlivosť,1. stupeň/Emergency health care, 1. degree

vedecký výstup / science output

2021

306466

https://app.crepc.sk/?fn=detailBiblioFormChildE1JCH&sid=F767099068FD55D443EBA5C3C0&seo=CREP%C4%8C-detail-%C4%8Cl%C3%A1nok

https://www.mdpi.com/2075-4426/11/4/306

Myristic acid serum levels and their significance for diagnosis of systemic inflammatory response, sepsis, and bacteraemia / Zazula, Roman [Autor, PUPFZUZS, 50%] ; Moravec, Michal [Autor, 10%] ; Pehal, Frnatišek [Autor, 10%] ; Nejtek, Tomáš [Autor, 10%] ; Protuš, Marek [Autor, 10%] ; Müller, Martin [Autor, 10%]. – [angličtina]. – [OV 180]. – [článok]. – DOI 10.3390/jpm11040306. – SIGN-PU FZ-21 22/21. – WOS CC ; SCOPUS ; CCCIn: Journal of personalized medicine [elektronický dokument] . – Basel (Švajčiarsko) : Multidisciplinary Digital Publishing Institute. – ISSN (online) 2075-4426. – Roč. 11, č. 4 (2021), art. no. 306, s. [1-15] [online]

článok/ article

http://www.pulib.sk/web/kniznica/epc/dokument/9999999306466

50%

Poslední dvě desetiletí byla poznamenána významným vývojem v oblasti tzv. "přesné medicíny", včetně zavedení tohoto konceptu v diagnostice a léčbě sepse. Použití "omiky" (genomika, proteomika a metabolomika) přispělo k diagnostice sepse a pomohlo v její prognóze a úspěšné léčbě . Vznikající subspecialita v laboratorním zpracování, metabolomika, se stává mocným nástrojem pro klinickou léčbu různých onemocnění a syndromů. Zachycuje v reálné klinické situaci a čase substráty a produkty metabolismu, které jsou ovlivňovány jak genetickými, tak environmentálními faktory. Na rozdíl od jiných "omik" metabolomické studie přímo odrážejí základní biochemickou aktivitu a stav buněk/tkání. Databáze lidských metabolomů obsahuje více než 42 000 metabolitů, od cukrů a peptidů až po kofaktory./The last two decades have been marked by significant developments in the so-called "precision medicine", including the introduction of this concept in the diagnosis and treatment of sepsis. The use of "omics" (genomics, proteomics and metabolomics) has contributed to the diagnosis of sepsis and helped in its prognosis and successful treatment. The emerging subspeciality in laboratory processing, metabolomics, is becoming a powerful tool for the clinical treatment of various diseases and syndromes. It captures in a real clinical situation and over time substrates and products of metabolism that are influenced by both genetic and environmental factors. Unlike other "omik" metabolomics studies, they directly reflect basic biochemical activity and cell / tissue status. The human metabolome database contains more than 42,000 metabolites, from sugars and peptides to cofactors.

Myristic acid is identified as a metabolite with the highest diagnostic sensitivity and specificity in the metabolome of patients with bacteraemia. Its significant decrease has been observed in patients with septic shock not responding to treatment. Another study has reported a close correlation of myristic acid levels with the outcome of severe trauma patients. Myristic acid concentrations were investigated in a cohort of septic patients and patients with Systemic Inflammatory Response Syndrome (SIRS) in 5 consecutive days following diagnosis and compared to healthy controls. The study population groups—Sepsis 34, SIRS 31, and Healthy Control 120 patients were included. Serum samples were analyzed using gas chromatography and mass spectrometry. The myristic acid levels in the Sepsis Group and SIRS Group were found to be significantly higher when compared to healthy controls. The serum concentration of myristic acid in septic patients with bacteraemia was higher than in septic patients without bacteraemia. Most patients with sepsis and SIRS had the highest levels of myristic acid within 24 h after an established diagnosis. Myristic acid should be considered as a new candidate marker of severe inflammation and sepsis. A simplified analysis and sufficient body of validated data are necessary steps towards the introduction of this metabolite into routine clinical practice

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Posledné dve desaťročia boli poznačené významným vývojom v oblasti takzvanej „presnej medicíny“ vrátane zavedenia tohto konceptu do diagnostiky a manažmentu sepsy. Použitie „omics“ (genomika, proteomika a metabolomika) prispelo k diagnostike sepsy a pomohlo pri jej prognóze a úspešnej liečbe . Nová špecializácia v laboratórnom spracovaní, metabolomika, sa stáva silným nástrojom klinického manažmentu rôznych chorôb a syndrómov. V skutočnej klinickej situácii a čase zachytáva substráty a produkty metabolizmu, ktoré sú ovplyvnené genetickými aj environmentálnymi faktormi. Na rozdiel od iných „omík“, metabolomické štúdie priamo odrážajú základnú biochemickú aktivitu a stav buniek/tkanív . Databáza ľudského metabolomu obsahuje viac ako 42 000 metabolitov, od cukrov a peptidov po kofaktory./The last two decades have been marked by significant developments in the field of so-called "precision medicine", including the introduction of this concept into the diagnosis and management of sepsis. The use of omics (genomics, proteomics and metabolomics) has contributed to the diagnosis of sepsis and helped in its prognosis and successful treatment. The new specialization in laboratory processing, metabolomics, is becoming a powerful tool for clinical management of various diseases and syndromes. In the actual clinical situation and time, it captures substrates and metabolic products that are influenced by both genetic and environmental factors. Unlike other "drugs", metabolomics studies directly reflect the underlying biochemical activity and condition of cells / tissues. The human metabolome database contains more than 42,000 metabolites, from sugars and peptides to cofactors.

Pre študentov má význam samotná prospektívna observačná štúdia, ktorá sa uskutočnila od októbra 2017 do júla 2020 na Klinike anestéziológie a intenzívnej medicíny 1. lekárskej fakulty UK a Fakultnej Thomayerovej nemocnice v Prahe. Štúdia je zaregistrovaná na ClinicalTrials.gov (NCT03314831)./The prospective observational study itself, which took place from October 2017 to July 2020 at the Department of Anesthesiology and Intensive Care Medicine, 1st Faculty of Medicine, Charles University and Thomayer University Hospital in Prague, is important for students. The study is registered at ClinicalTrials.gov (NCT03314831).