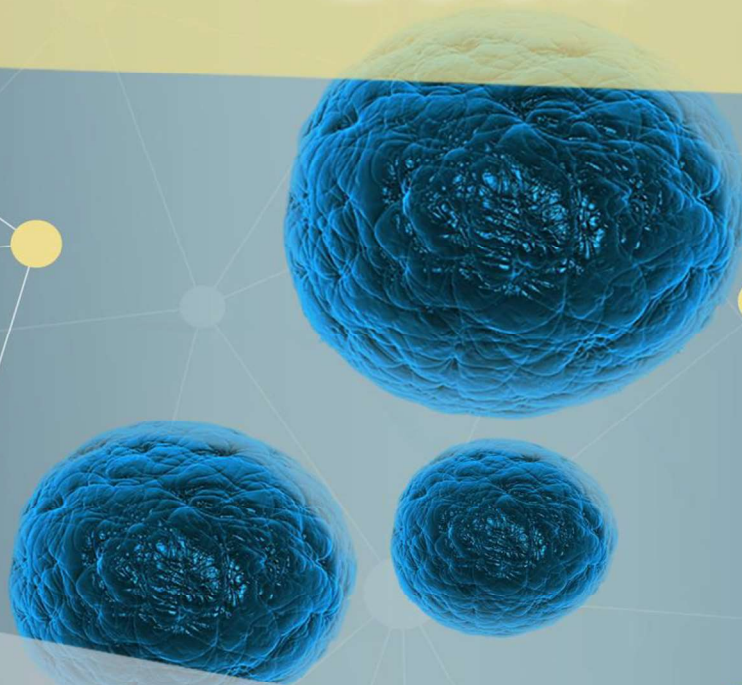


Serbian Association for Cancer Research

**5th CONGRESS OF SDIR:
TRANSLATIONAL POTENTIAL OF
CANCER RESEARCH IN SERBIA**

**ABSTRACT
BOOK**



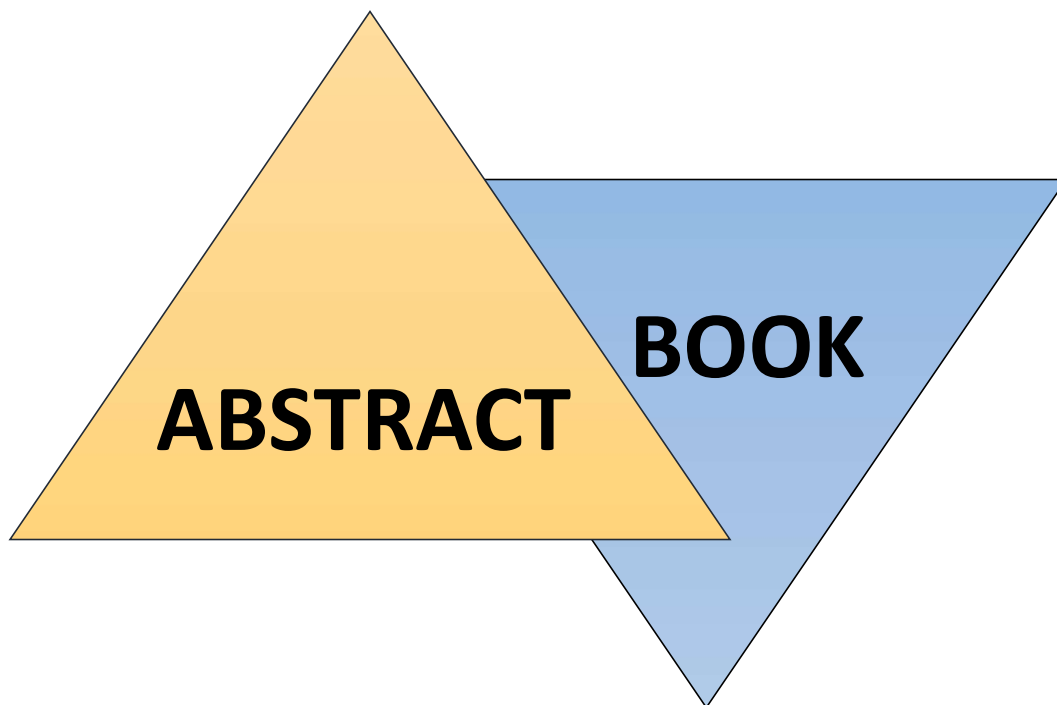
**Virtual event
December 3**

2021

**EACR
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5th CONGRESS OF THE SERBIAN ASSOCIATION FOR
CANCER RESEARCH

With international participation



TRANSLATIONAL POTENTIAL OF CANCER
RESEARCH IN SERBIA

SDIR – 5

Virtual event, December 3, 2021

THE FIFTH CONGRESS OF THE SERBIAN ASSOCIATION FOR CANCER RESEARCH

with international participation
"TRANSLATIONAL POTENTIAL OF CANCER RESEARCH IN
SERBIA "

December 3, 2021, Virtual event
Serbian Association for Cancer Research (SDIR) is a member of the European Association for
Cancer Research (EACR).
President of SDIR-5 Congress
dr sc. med. Mirjana Branković-Magić

THE FIFTH CONGRESS OF THE SERBIAN ASSOCIATION FOR CANCER RESEARCH
with international participation "Translational potential of cancer research in Serbia" Virtual event,

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LETTER OF WELCOME

Dear colleagues,

We are very pleased to welcome you to the 5th Congress of the Serbian Association for Cancer Research (SDIR) with international participation "Translational potential of cancer research in Serbia" to be held on December 3, 2021 as a virtual event.

During the congress, lectures will be delivered by a distinguished Serbian and international researchers, that will cover the following topics:

- *Liquid biopsies in lung cancer*
- *Advances in solid tumor research*
- *Cancer and metabolism*
- *Radiobiology*
- *Imaging in cancer*

We are pleased to say that our fifth congress is actively supported by the European Association for Cancer Research.

We are delighted to welcome you!

Kind regards,



dr sc. med. Mirjana Branković-Magić, president of SDIR



dr sc. Milena Čavić, president of the Organizing Committee



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PROGRAMME

03.12.2021. Virtual event 09.00 – 17.30

- 09.00 – 09.05 **Congress welcome and opening.** SDIR President Mirjana Branković-Magić
- 09.05 – 09.30 EACR Plenary lecture – EACR President Caroline Dive. **Liquid biopsies in lung cancer.** *University of Manchester, Manchester, UK*
- 09.30 - 09.40 Discussion
- 09.40 – 11.05 **Session: Advances in solid tumor research**
Chairs: Caroline Dive and Milena Čavić
- 09.40 – 10.00 Remond J.A. Fijneman. **ctDNA biomarker detection in patients with colorectal cancer.** *The Netherlands Cancer Institute, Amsterdam, Netherlands*
- 10.00 – 10.20 Gunes Esendagli. **Mesenchymal properties and immune checkpoint pathways in small cell lung cancer (SCLC) stem cells.** *Hacettepe University Cancer Institute, Ankara, Turkey*
- 10.20 – 10.50 **Short talks selected from SDIR member PIs of The Program for Excellent Projects of Young Researchers (PROMIS) of the Science Fund of the Republic of Serbia**
- 10.20 – 10.30 Miljana Tanić. **Tracking systemic therapy resistance of lung and colorectal cancer through targeted NGS analysis of genetic and epigenetic variants in liquid biopsies.** *Institute of Oncology and Radiology of Serbia, Serbia*
- 10.30 – 10.40 Aleksandra Nikolić. **Cancer biosensors based on gene regulatory elements.** *Institute of Molecular Genetics and Genetic Engineering, Serbia*
- 10.40 – 10.50 Jelena Grahovac. **Drug repurposing in pancreatic ductal adenocarcinoma.** *Institute of Oncology and Radiology of Serbia, Serbia*
- 10.50 – 11.05 Discussion
- 11.05 – 11.15 Break
- 11.15 – 12.40 **Session: Cancer and metabolism**
Chair: Milica Pešić
- 11.15 – 11.35 Liang Li. **An antibody drug conjugate-like agent DTLL sensitizes gemcitabine efficacy in pancreatic cancer based on SMAD4 profiles.** *Institute of Medicinal Biotechnology, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China*

- 11.35 – 11.55 Ljubica Harhaji-Trajković. **Dual targeting of energy metabolism and lysosomes as an anticancer strategy; it is not all about autophagy.** *Institute for Biological Research "Siniša Stanković", University of Belgrade, Belgrade, Serbia*
- 11.55 – 12.23 **Short talks selected from abstracts**
- 11.55 – 12.02 Nikolina Piteša. **Genes for competing endogenous RNAs as targets of transcription factors GLI in melanoma cell lines.** *Ruđer Bošković Institute, Zagreb, Croatia*
- 12.02 – 12.09 Cristina P.R. Xavier. **Chitinase 3-like-1 (CHI3L1) as a potential therapeutic target for pancreatic cancer.** *Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Institute of Molecular Pathology and Immunology, University of Porto, Portugal*
- 12.09 – 12.16 Jovana Jagodić. **Elemental profile of glioblastomas – analysis of blood, cerebrospinal fluid and brain tissue.** *Faculty of Chemistry, Belgrade, Serbia*
- 12.16 – 12.23 Stefana Stojanović. **Hsa-miR-222 identifies high-risk PTC patients with classical variant architecture.** *Institute for the Application of Nuclear Energy — INEP, University of Belgrade, Belgrade, Serbia*
- 12.23 – 12.40 Discussion
- 12.40 – 12.45 Break
- 12.45 – 14.30 **Session: Radiobiology**
- Chairs: Marina Nikitović and Ivana Matić
- 12.45 – 13.00 Irina Besu Žižak. **The role of IL6 in radiotherapy-induced toxicity.** *Institute of Oncology and Radiology of Serbia, Serbia*
- 13.00 – 13.15 Bojana Ilić. **Cellular senescence in ionizing radiation.** *Clinic for Endocrinology, Diabetes and Metabolic Diseases, Clinical Center of Serbia, Serbia*
- 13.15 – 13.30 Jadranka Antić. **Effects of ionizing radiation on DNA methylation: from experimental biology to clinical applications.** *Clinic for Endocrinology, Diabetes and Metabolic Diseases, Clinical Center of Serbia*
- 13.30 – 13.45 Sercan Ergün. **The interrelationship between FYN and miR-128/193a-5p/494 in Imatinib resistance in prostate cancer.** *Faculty of Medicine, Ondokuz Mayıs University, Samsun, Turkey*
- 13.45 – 14.13 **Short talks selected from abstracts**
- 13.45 – 13.52 Sami Ahmad. **Gene expression kinetics and pathway analysis of skin fibroblasts irradiated in vitro.** *Universitätsmedizin Mannheim, Medical Faculty Mannheim, Heidelberg University, Mannheim, Germany*

- 13.52 – 13.59 Jelena Stanić. **Radiation-induced lymphocyte apoptosis as a possible biological predictor of radiotherapy toxicity in prostate cancer patients.** *Institute of Oncology and Radiology of Serbia, Serbia*
- 13.59 – 14.06 Aleksandar Stepanović. **Can miRNA expression patterns predict radiotoxicity in patients with glioblastoma?** *Institute of Oncology and Radiology of Serbia, Serbia*
- 14.06 – 14.13 Bojana Kožik. **Potential predictive role of K-ras gene mutation and BCL2 protein expression status in locally advanced rectal cancers treated with neoadjuvant chemoradiotherapy.** *Vinča Institute of Nuclear Sciences, National Institute of Republic of Serbia, University of Belgrade, Serbia*
- 14.13 – 14.30 Discussion
- 14.30 – 15.15 **Poster Session, lunch break and industry session viewing.**
Moderator Ana Krivokuća
- 15.15 – 17.00 **Session: Imaging in cancer**
Chair: Jelena Grahovac
- 15.15 – 15.35 Bojana Gligorijević. **Real-time microscopy of invasive cancer cells in the tumor microenvironment context.** *Temple University, USA*
- 15.35 – 15.55 Jelena Stanisavljević. **Defining and imaging colon cancer heterogeneity.** *Institute of Photonic Sciences, Barcelona Institute for Science and Technology, Spain*
- 15.55 – 16.15 Giorgio Seano. **Vessel co-option and resistance to therapy in glioblastoma.** *Institut Curie Research Center, Centre Universitaire, France*
- 16.15 – 16.43 **Short talks selected from abstracts**
- 16.15 – 16.22 Predrag Jovanovic. **Characterizing the role of 4E-BP1 in breast cancer metastasis.** *Jewish General Hospital, Lady Davis Institute, Montreal, Canada; McGill University, Experimental Medicine, Montreal, Canada*
- 16.22 – 16.29 F. Koutsougianni. **Siramesine, a non-opioid σ_2 receptor agonist as a potential agent for the development of novel targeted treatments for pancreatic cancer.** *University of Thessaly, Larisa, Greece*
- 16.29 – 16.36 Batuhan Mert Kalkan. **The role of Nek2 on centrosome clustering in cancer cells with extra centrosomes.** *Koç University, Graduate School of Health Sciences, Istanbul, Turkey*
- 16.36 – 16.43 Tijana Martinov. **Sox2-targeted T cell therapy for treating multiple myeloma.** *Fred Hutchinson Cancer Research Center, Seattle, United States of America*
- 16.43 – 17.00 Discussion
- 17.00 – 17.30 **Closing remarks and best poster awards.** SDIR President Mirjana Branković-Magić

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The expression of MicroRNA-30a-3p and Estrogen Receptor β in Papillary Thyroid Cancer

Lidija Todorović¹, Boban Stanojević¹, Bojana Kožik¹, Ana Božović¹, Vesna Mandušić¹

¹*“Vinča” Institute of Nuclear Sciences, National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia*

Background: A number of studies point to a significant role of microRNAs (miRNAs) in papillary thyroid cancer (PTC), where specific miRNA expression profiles associate with distinct clinical and biological phenotypes of the lesion. One of the microRNAs deregulated in PTC is miR-30a-3p. Evidence suggests that estrogen receptor β (ER β), also found to be deregulated in PTCs, may directly regulate microRNA-30a-3p biogenesis and expression. Considering the possibility that ER β might influence PTC cell behavior via miRNAs, in particular, miR-30a-3p, we have investigated their expression and correlation in PTCs with different clinico-pathological characteristics. **Patients and Methods:** Quantitative PCR was used to determine the relative miR-30a-3p and ER β expression levels in 37 pairs of PTCs and matched non-tumor thyroid tissues. **Results:** The expression levels of miR-30a and ER β were significantly altered in tumors compared with non-tumor tissues. A negative correlation between miR-30 and ER β was detected in tumors with pT4 category ($P=0.038$, $r = - 0.738$) and capsular invasion (only in women) ($P=0.041$, $r = -0.552$) compared to positive correlations (or trends) found in tumors with lower pT categories (pT1+pT2) ($P=0.061$, $r=0.463$) and tumors with no capsular invasion ($P=0.019$, $r=0.618$). Similar trend was found in tumors with classic papillary pattern in the group of women ($P=0.09$, $r = - 0.432$) while in women with histovariants other than classic there was a trend towards positive correlation ($P=0.066$, $r=0.486$). **Conclusion:** The results suggest that in some PTCs, ER β might negatively regulate miR-30a expression, and the opposite roles they may play are associated with more aggressive tumor features.

Keywords: ERbeta, MicroRNA-30a-3p, Papillary Thyroid Carcinoma

