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## ONCOLOGY INSIGHTS

### Aims and Scope

Oncology Insights is a yearly oncological open-access peer-reviewed journal that publishes new research from different areas of oncology. It strives to provide a platform for the exchange of cutting-edge research and knowledge in the field of oncology. This journal aims to advance the understanding, prevention, diagnosis and treatment through the dissemination of high-quality scientific discoveries.

The journal applies a fair and accurate peer review process, employing double-blind review methodologies. Acceptance of manuscripts is based on their scientific merit, originality, clarity, and contribution to the field.

### Topics

Oncology Insights covers a wide spectrum of topics within the field of oncology, including but not limited to:

- Basic and Translational Research
- Clinical Oncology
- Radiation Oncology
- Surgical Oncology
- Pediatric Oncology
- Hematologic Oncology
- Palliative Care
- Epidemiology and Public Health
- Cancer Genetics
- Immunotherapy and Targeted Therapies
- Experimental Therapeutics
- Computational Biology and Artificial Intelligence

### About/Information

Oncology Insights welcomes various types of contributions including original research articles, review articles, case reports, case studies, clinical trials, registered reports, comments, brief communications, editorials, letters to the editor, perspectives, and conference papers from a wide range of disciplines related to cancer research.

Through encouraging interdisciplinary collaborations, the journal welcomes contributions that integrate oncology with related fields such as immunology, genetics, biochemistry, radiology, and other relevant disciplines. The journal places a special emphasis on publishing research that highlights emerging trends, novel technologies, and innovative approaches in cancer research and clinical practice.

Oncology Insights is intended for a diverse readership, including oncologists, researchers, clinicians, nurses, allied healthcare professionals, patients, patient advocates, policymakers, and all stakeholders involved in the prevention, diagnosis, and treatment of cancer. It adopts a global perspective, encompassing research from diverse regions addressing oncological challenges that may vary across different populations.

The journal is committed to upholding the highest ethical standards in research and publication provided by established international guidelines.

Periodically, Oncology Insights may publish special issues focusing on specific topics to highlight particular areas of interest or emerging needs.

Authors are provided with clear and comprehensive guidelines for manuscript preparation, including structure, formatting, and other specific requirements.



Esteemed colleagues,

It is a rare honor and privilege in a scientist's career to shape joint efforts and dedication of a group of scientific enthusiasts into a tangible outcome - ***Oncology Insights, the Official Journal of the Serbian Association for Cancer Research*** (srp. Srpsko društvo istraživača raka, SDIR).

The first volume of Oncology Insights has been derived from years of scientific contributions of many individuals and institutions who have selflessly devoted their expertise, ideas and time to establish the SDIR society that today resonates with integrity and charm. In the future, we will strive to maintain those standards, always aiming higher. Thus, we encourage researchers, physicians, nurses, laboratory technicians, as well as patients, survivors, caregivers, and patient advocates to offer their valuable expert insights that will stimulate future progress of oncology in Serbia and worldwide.

Over the last 20 years, we have witnessed remarkable progress in the field of cancer research. Oncology Insights aims to play an integral role in supporting that progress by providing a platform for sharing cutting-edge research, creating a space for new collaborations, partnering established researchers with young investigators, and serving as a home for oncology professionals of various specialties dedicating their careers to this challenging research field.

Oncology Insights pledges to evolve, adapt, reinvent, redefine, and reshape its content to serve its members and inevitable advances in the field. We hope you will be a part of its success story by providing evidence-based, unbiased multidisciplinary content, feeling both an honor and a duty to treat cancer research with the same care, passion, and dedication which individuals with cancer deserve and expect.

Please tune all your senses to enjoy the intellectual feast spread through the pages of this inaugural journal volume. The future of Oncology Insights will be shaped by you.

With kind regards,



Milena Čavić, SDIR President  
Editor-in-Chief  
Oncology Insights  
Official Journal of the Serbian Association for Cancer Research





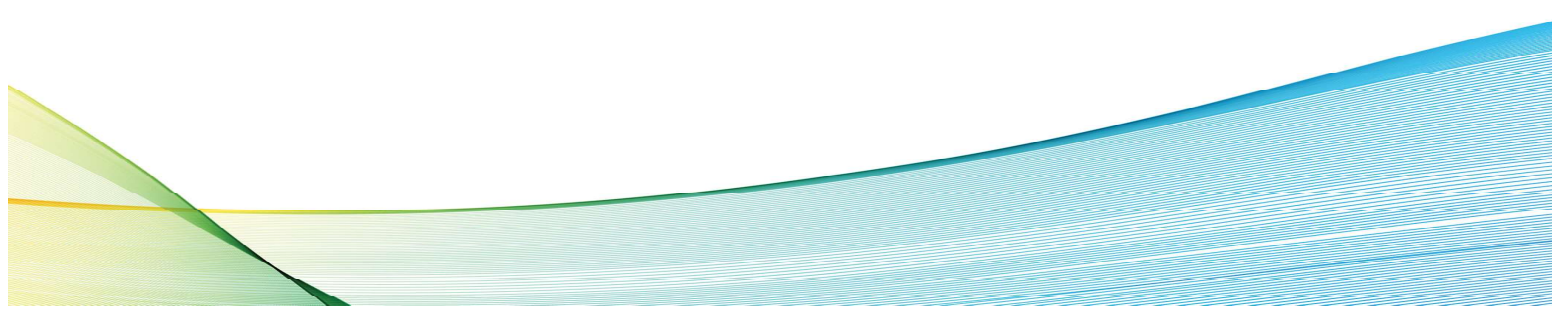
The first number of Oncology Insights includes  
**PROCEEDINGS BOOK of**  
**THE SIXTH CONGRESS OF THE SERBIAN ASSOCIATION FOR CANCER RESEARCH**  
with international participation



## **From Collaboration to Innovation in Cancer Research**

2nd – 4th October 2023  
Royal Inn Hotel, Belgrade

**SDIR-6 ORGANIZER**  
Srpsko društvo istraživača raka (SDIR)  
Serbian Association for Cancer Research (SACR)  
[www.sdir.ac.rs](http://www.sdir.ac.rs)



Dear colleagues,

We are very pleased to welcome you to the 6<sup>th</sup> Congress of the Serbian Association for Cancer Research (SDIR) with international participation "From Collaboration to Innovation in Cancer Research" which will be held on October 2-4 2023, at the Royal Inn Hotel, Kralja Petra 56, Belgrade, Serbia.

During the three-day congress, lectures will be given by distinguished Serbian and international researchers, covering the following topics:

- Tumour metabolism and biology
- Epigenetics and gene regulation in cancer
- Bioinformatics and artificial intelligence in cancer research
- Omics approaches in cancer research
- Therapy response and resistance
- Clinical and translational oncology
- Immunooncology
- New and challenging drug targets
- Pathways to innovation in cancer research

We are pleased to announce that our sixth congress is actively supported by the European Association for Cancer Research (EACR). National and regional cooperation is also important, and so representatives from our friend societies will be attending our congress.

The timing of the organisation of SDIR-6 is important for the establishment of our national society's journal *Oncology Insights*. The abstracts of the sixth congress will be published in the very first issue of the journal.

Advances and innovations in cancer research are based on growing scientific knowledge and collaboration. We believe you will enjoy the lively atmosphere of the congress and that fruitful scientific discussions will help you build new collaborations and develop new ideas.

We look forward to welcoming you in Belgrade!

Kind regards,

on behalf of the SDIR-6 Organizing Committee



Prof. dr Katarina Zeljić  
Faculty of Biology, University of Belgrade  
President of the SDIR-6 Organizing Committee



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routine tissue HER2 analysis for primary breast cancer patients. Our conclusion is based on three main findings: (i) there was no correlation between tissue and serum HER2 expression; (ii) there was no difference in patient outcomes with respect to targeted therapy; and (iii) serum HER2 values had prognostic significance.

Keywords: biomarker, breast cancer, ELISA, HER2, targeted therapy

## P27

### Prognostic significance of the localization of the primary tumor and HER2-receptor expression in KRAS wild-type metastatic colorectal cancer treated with anti-EGFR therapy

Jelena Radić<sup>1,2</sup>, Ivana Kolarov Bjelobrk<sup>1,2</sup>, Ivan Nikolić<sup>1,2</sup>, Tijana Vasiljević<sup>1,3</sup>, Aleksandar Đurić<sup>2</sup>, Vladimir Vidović<sup>2</sup>, Bojana Kožik<sup>4</sup>

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**Background:** Treatment of metastatic colorectal cancer (mCRC) remains a clinical challenge since a certain percentage of patients with RAS/RAF wild type (wt) tumor do not respond to anti-EGFR therapy. The reasons may be a consequence of primary or secondary resistance or the excessive expression of HER2 receptors in patients with mCRC. The localization of the primary tumor (LPT) can also contribute to variable treatment response and disease outcomes since segments of the large bowel represent distinctive molecular entities. The aim of this study was to examine the prognostic value of LPT, as well as to investigate the role of HER2-receptor expression in patients with mCRC. **Patients and Methods:** This study included 181 patients (101 left LPT and 80 right LPT) with KRASwt mCRC, who received anti-EGFR therapy at the Oncology Institute of Vojvodina. KRAS mutation status was determined using Real-Time PCR methodology, while HER2-receptor expression was detected immunohistochemically. The effect of anti-EGFR antibody therapy was analyzed using progression-free survival (PFS) and overall survival (OS) in relation to the LPT and the HER2-receptor expression. **Results:** The median OS in patients with left-side tumors was significantly better than in patients with right-side localized tumors (43 vs. 33 months, Mantel-Cox  $p=0.005$ ; Breslow  $p=0.001$ ), as well as median PFS (6 vs. 3 months, Mantel-Cox  $p<0.001$ ; Breslow  $p<0.001$ ). According to the multivariate Cox regression analysis of OS and PFS, right tumor localization also represents an independent prognostic factor ( $p=0.022$ ; HR 1.46; 95% CI 1.06-2.01;  $p=0.004$ ; HR 1.60; 95% CI 1.16-2.21, respectively). The OS of HER2 positive patients is worse than in HER2 negative patients ( $p=0.339$ ), while the PFS of HER2 positive patients was significantly worse ( $p<0.001$ ) compared to HER2 negative patients (despite a relatively small number of HER2 positive patients). **Conclusion:** Localization of the primary tumor is an important prognostic marker in the KRASwt mCRC patients since results demonstrated that patients with right-sided primary tumors have a statistically significantly shorter PSF and OS. The role of HER2 receptor expression requires further examination, although we noted a low expression level of HER2 receptor in KRASwt mCRC; these patients also had a shorter PFS and OS.

Keywords: Colorectal Neoplasms, humanOncogene Protein HER-2, KRAS protein, Precision Medicine

## P28

### Expression profile of sex hormone receptors in head and neck cancer: unraveling gender disparities

Josipa Čonkaš<sup>1\*</sup>, Janja Josić<sup>1</sup>, Jacqueline-Katrin Kranjčević<sup>1</sup>, Nina Milutin Gašperov<sup>1</sup>, Nikolina Piteša<sup>1</sup>, Matea Kurtović<sup>1</sup>, Vesna Musani<sup>1</sup>, Maja Sabol<sup>1</sup>, Ozren Vugrinec<sup>2</sup>, Ivan Mumlek<sup>3</sup>, Ana Kvolik Pavić<sup>3</sup>, Vedran Zubčić<sup>3</sup>, Dinko Leović<sup>2</sup>, Petar Ozretić<sup>1</sup>

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**Background:** Sex hormone receptors (SHRs), including those for androgen, estrogen, and progesterone, play a complex role in various types of cancers, including head and neck squamous cell carcinoma (HNSCC). HNSCC is a diverse group of cancers that originates in the squamous cells lining the mucosal surfaces of the head and neck region. Interestingly,