



1st BALKAN CONFERENCE on BIOMEDICAL AND CANCER RESEARCH

Balkan.BMCR 2026

**ABSTRACT BOOK
KNJIGA SAŽETAKA**

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ЦЕНТАР ЗА МОЛЕКУЛСКУ МЕДИЦИНУ И ИСТРАЖИВАЊЕ МАТИЧНИХ ЋЕЛИЈА



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FOREWORD

We present to you an abstract book of the 1st BALKAN CONFERENCE on BIOMEDICAL AND CANCER RESEARCH (Balkan.BMCR 2026), dedicated to the latest achievements, challenges, and perspectives in the fields of biomedicine and oncology. Held from September 03-05 2026, in Foca (Bosnia and Herzegovina), this meeting brought together leading scientists, clinicians, researchers, and young professionals from across the globe with a shared mission- to advance the fight against malignant diseases through the synergy of fundamental science and clinical practice.

The international character of this meeting, featuring participants from over 10 countries, underscores once again that cancer knows no borders. Global health challenges can only be overcome through collective efforts, open dialogue, and cross-border scientific collaboration. The exchange of ideas and the establishment of new research networks during this event represent an invaluable asset for the further advancement of medical science.

We believe that the conclusions we reach will make a significant contribution to our academic community.

The Organizing and Scientific Committees extend their deepest gratitude to all the authors for their exceptional scientific contributions, and to the institutions and sponsors whose support made this significant meeting possible.

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P-037 Ensuring reliability in laboratory diagnostics: comparative study of estradiol results across analytical and middleware systems

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Introduction: Accurate determination of estradiol is important in laboratory diagnostics, particularly in clinical and endocrine assessments. Reliable results depend not only on the performance of analytical systems but also on the effectiveness of post-analytical data management tools.

Aim of the Study: The aim of this study was to perform a comparative analysis of estradiol results obtained from two laboratory systems, an analytical platform (Atellica) and a middleware system (Remisol), using 15 patient samples.

Results: The comparative evaluation demonstrated a strong correlation between the two systems. Statistical analysis indicated predominantly low to moderate percentage differences (bias) among the examined samples. The observed variability remained within acceptable analytical limits, suggesting good agreement between the systems in routine laboratory practice.

Conclusion: The findings highlight the necessity of continuous verification and quality assessment of both analytical and post-analytical processes. Combined evaluation of analytical performance and data management is essential for ensuring accuracy, consistency, and reliability of laboratory diagnostic results.