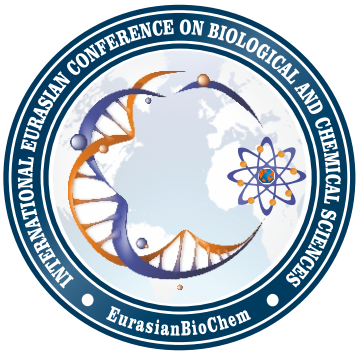


6th INTERNATIONAL EURASIAN CONFERENCE ON

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## (Abstracts and Full-Texts)

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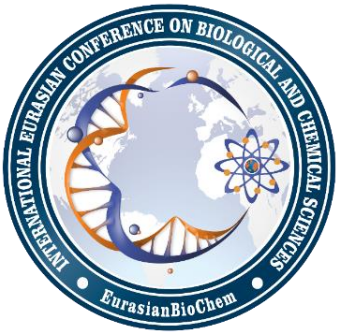


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## *ORAL PRESENTATION*

### The Role of lncRNA H19 in the Resistance of Ovarian Cancer Cells to Cisplatin Therapy

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**Abstract**

Epithelial ovarian cancer, often diagnosed at an advanced stage, possesses one of the highest mortality rates among gynecological malignancies. The standard treatment regimen combines surgery with chemotherapy, mainly platinum-based therapies. Regrettably, the effectiveness of this approach is compromised by the emergence of chemoresistance. Recent research has illuminated the role of long non-coding RNAs (lncRNAs) in chemoresistance, offering potential insights into this clinical challenge. LncRNAs wield substantial influence over various aspects of cancer biology, including cell survival, apoptosis, and responsiveness to chemotherapy. Among these, lncRNA H19 emerges as a pivotal player in the initiation, progression, and recurrence of diverse human cancers. This study aimed to investigate the correlation between lncRNA H19 expression and cisplatin resistance in ovarian cancer cells, a widely employed platinum-based chemotherapy agent. The study cohort comprised ovarian cancer patients subjected to cisplatin treatment. Formalin-fixed, paraffin-embedded ovarian tissue specimens were collected from these individuals. Stratifying the samples into two categories based on treatment response, Group 1 represented patients exhibiting sensitivity to cisplatin therapy with subsequent recovery, while Group 2 encompassed patients who remained resistant to cisplatin treatment without improvement. RNA isolation was performed on all tissue samples using a specialized RNA isolation kit, followed by cDNA synthesis using a cDNA synthesis kit. The resulting cDNAs served as templates for precise quantification of lncRNA H19 gene expression through Real-Time PCR. The expression levels between the two groups were compared using the T-test and a regression model mediated by SPSS. In our comparative analysis of the resistant and sensitive groups, our investigation revealed a statistically significant increase in lncRNA H19 expression within the resistant group. This finding underscores the potential implication of lncRNA H19 in the development of cisplatin resistance in ovarian cancer, shedding light on a novel avenue for further exploration and therapeutic intervention.

**Keywords**: Ovarian cancer, cisplatin, chemotherapy, lncRNA H19, long noncoding RNA

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