

6 th International Conference on New Findings in Midwifery, Women, Maternity and Infertility

GEORGIAN INTERNATIONAL ACADEMY OF SCIENCES AND STUDIES

10 March 2022 -TBILISI GEORGIA

1

2

3

CircRNAs as Potent Biomarkers in Ovarian Cancer Properties: A

Systematic Scoping Review

4 Zahra Foruzandeh¹, Mohammad Reza Alivand^{1,*}

- 5 1- Department of Medical Genetics, Faculty of Medicine, Tabriz university of Medical Sciences,
- 6 Tabriz, Iran
- 7 *Corresponding authors: Mohammad Reza Alivand, Assistant Professor of Genetics; Department of
- 8 Medical Genetics, Faculty of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran. Email:
- 9 <u>alivandm@tbzmed.ac.ir, mohammadreza alivand@yahoo.com</u>

10

11

12

25

Abstract:

- 13 Ovarian cancer (OC) is the second most common cancer among women globally. Nevertheless, considering advances of science and facilities in the diagnosis and therapeutic achievements, it 14 15 remains the most fatal malignancy in women of developed countries. Therefore, there is an urgent need for more powerful prognostic and diagnostic tools for identification and treatment 16 of OC. Recently, circular RNAs (CircRNAs), as a group of conservative and stable looped molecules 17 have been discovered as a subset of competing endogenous RNAs, which can regulate gene 18 expression by microRNA sponging. The discovery of CircRNAs provided new insight into new 19 20 methods to regulate genes involved in cancer. This review focuses on the dysregulated 21 expression of CircRNAs in addition, diagnostic and prognostic values of CircRNAs in OC. We found that twenty-two CircRNAs were downregulated, while fifty-six CircRNAs were upregulated 22 according to the studies. Based on studies investigated in our search, it strongly confirmed that 23 CircRNAs might act as potent biomarkers for diagnostic and prognostic values of OC. 24
 - **Keywords**: "Circular RNA", "CircRNA", "Ovarian Cancer", "OC"