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# CircRNAs OF SALIVA AS POTENTIAL BIOMARKERS FOR COLORECTAL CANCER DIAGNOSIS

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**ABSTRACT**

**Objective**: Early and accurate diagnosis are key factors in the successful treatment of colorectal cancer (CRC). Therefore, the discovery of new, reliable, and non-invasive biomarkers in CRC patients is becoming an attractive topic in cancer research. Circular RNAs (circRNA) are RNAs that have high stability and can be tissue specific. In addition, expression levels can be detected in various non-invasive samples such as saliva and serum, due to these properties, they can be a biomarker for various cancer, can be substituted by invasive methods in CRC

**Methods**: In this study, 25 circular RNAs in the literature related to CRC were evaluated for the first time in saliva samples. For this purpose, the expression level of 25 circular RNAs in saliva samples of 25 CRC patients was investigated by comparing them with 25 healthy control samples.

**Results**: We found that the expression level of 9 circular RNAs varied significantly between the two groups. In addition, ROC curve analysis showed that hsa_circ_0078767 could potentially be a biomarker candidate in CRC diagnosis.

**Conclusion**: The study showed the potential for circRNAs, particularly hsa_circ_0078767, to be a noninvasive biomarker in CRC, but further studies with more subjects are needed to confirm these results.

**Keywords:** Colorectal Cancer (CRC), Circular RNA (circRNA), Real time PCR, Saliva