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## RNA markers in the saliva that could lead in the early diagnosis of oral squamous cell carcinoma or for screening purposes

**Michailidou Evangelia**  
Aristotle University, Greece

Early detection of oral squamous cell carcinoma is the key to its management and successful early therapeutic approach.

**The aim** of the present study was to evaluate the possibility that saliva could serve as a tool in the early detection of oral squamous cell carcinoma.

The presence of extracellular mRNAs of IL-1B, IL-8, OAZ and SAT, which were previously reported as significantly elevated in patients suffering from the disease, was evaluated in RNA isolated from saliva samples.

**Patients and Methods:** 37 patients with oral squamous cell carcinoma stage T1N0M0 or T2N0M0, 23 patients suffering from oral leukoplakia with various degrees of dysplasia and 31 healthy-control subjects matched were included in the study.

This is the first study of these markers were tested as potential biomarkers in the early detection of oral squamous cell carcinoma in both patients with oral leukoplakia a potentially malignant disorder and patients with oral squamous cell carcinoma.

The expression of the 4 mRNAs was detected using sequence-specific primers by the real-time RT-PCR based detection methodology.

The ROC curve analysis was used to estimate the ability of the markers to detect oral cancer.

**Results:** The four biomarkers only combined gave us a good predictive ability in oral cancer, a predictive ability of 80%.

**Conclusion:** The results shed some light on the role of saliva and salivary mRNAs in the early detection of oral squamous cell carcinomas, much work has yet to be done down the road.

### Biography

Michailidou Evangelia is a PhD student in the Aristotle University of Greece. She completed her Master's degree in Oral Medicine and Maxillofacial Pathology, awarded with a scholarship from the State Scholarships Foundation. During the Master her research was focused on angiogenesis in oral cancer and the role of VEGF (vascular endothelial growth factor) and mast cells in this procedure. Her PhD research won the annual sponsorship "Koulouridis" sponsored by Procter & Gamble Company and is focused on biomarkers in the early diagnosis of oral cancer. Her work has been published in reputed journals and she has also served as a reviewer.

[eumixailidou@yahoo.com](mailto:eumixailidou@yahoo.com)