## CONFERINȚA ȘTIINȚIFICĂ ANUALĂ CERCETAREA ÎN BIOMEDICINĂ ȘI SĂNĂTATE: CALITATE, EXCELENȚĂ ȘI PERFORMANȚĂ



## PERIODONTAL PATHOGENIC ANALYSIS IN THE ORAL MICROBIOMA AT PATIENTS WITH HEAD AND NECK SQUAMOUS CELL CARCINOMA

**Author(s), affiliation** Stratan Valentina, Laboratory of Immunology and Molecular Genetics, Institute of Oncology Popa Cristina, Department of Molecular Biology and Medical Genetics, USMF "Nicolae Testemiţanu", Institute of Oncology Sîtnic Victor, Laboratory of Immunology and Molecular Genetics, Institute of Oncology

Ţuţuianu Valeri, Laboratory of Immunology and Molecular Genetics, Institute of Oncology

Cebotari Diana, Institute of Oncology

Cojocari Corneliu, Head - Neck Section, Institute of Oncology

**Introduction:** Research on the relationship between the human microbiome and malignant tumors has received particular interest in recent years.

Material and methods 26 saliva and oral buffer samples were analyzed from patients with HNSCC by quantitative PCR method for 7 periodontal pathogens: Porphyromonas endodontalis, Porphyromonas gingivalis, Aggregatibacter actinomycetemcomitans, Treponema denticola, Fusobacterium nucleatum, Prevotella intermedia and Tannerella forsythia.

**Purpose** of the study was to determine the concentration of periodontal pathogens in the oral microbiome in patients with HNSCC.

Results show F. nucleatum exceeds the norm in 20 samples (19 smokers and 1 non-smoker) and T. forsythia in 18. P. endodontalis was identified in all patients with laryngeal carcinoma and approx. in 30% of patients with carcinoma of the lip and oropharynx.

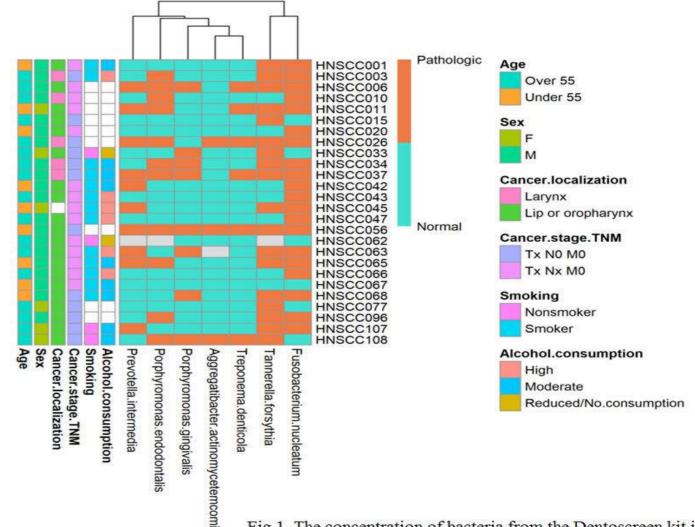


Fig 1. The concentration of bacteria from the Dentoscreen kit in the oral microbiome of patients with HNSCC

**Conclusions** Of all the 7 species studied, F. nucleatum and T. forsythia have pathological concentrations in most samples.

**Keywords** oral microbiome, squamous cell carcinoma of the head and neck.