

# IMMUNOHISTOCHEMICAL PREDICTORS FOR ASSESSING CANCER RISK IN PREMALIGNANT LESIONS OF THE LARYNX AND ORAL CAVITY

A research group from FINBA, Universidad de Oviedo and CIBER has discovered new biomarkers to predict cancer risk in premalignant lesions of the larynx and oral cavity.

## The Need

Premalignant lesions of the oral cavity and larynx show a highly variable risk of progression to cancer, which cannot currently be predicted with sufficient accuracy. The standard histopathological classification has limited predictive power and suffers from reproducibility issues. Moreover, there is a lack of reliable, standardized, and accessible biomarkers for proper risk stratification. This uncertainty can lead to suboptimal clinical decision-making, including both overtreatment and undertreatment of patients.

## The Solution

The present invention provides a predictive model based on the combination of two biomarkers detected using routine diagnostic techniques in biopsy samples. This approach enables the classification of patients into three risk categories (low, intermediate, and high) for progression to cancer, improving prognostic accuracy and allowing easy integration into clinical practice. This method can be applied directly to existing diagnostic samples without requiring additional procedures or complex infrastructure.

## Innovative Aspects

- More accurate risk stratification compared to current methods.
- Based on only two biomarkers, simplifying analysis.
- Uses standard, widely available, and low-cost techniques.
- Improved reproducibility through objective criteria.
- Validated in multiple independent patient cohorts.
- Compatible with and complementary to existing clinical classification systems.
- Facilitates more personalized patient management and follow-up strategies.
- Reduces uncertainty in clinical decision-making while maintaining scalability.

## Stage of Development:

Validated in three cohorts of patients with premalignant lesions.

## Intellectual Property:

- Priority patent application in preparation.

## Aims

Looking for a partner interested in a license and/or a collaboration agreement to develop and exploit this asset.

## Contact details