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Biomarkers of malignant transformation in oral leukoplakia: from bench to bedside

Keywords: **Oral leukoplakia; Oral squamous cell carcinoma; Malignant transformation; Biomarkers; Prognosis**

Research Summary

This review mainly focused on the potential biomarkers of malignant transformation in oral leukoplakia and explore the translational probabilities from bench to bedside:

- **Cell proliferation and apoptosis biomarkers**
- **Cell adhesion and junction biomarkers**
- **Immune and inflammatory biomarkers**
- **Biomarkers of genomic instability**
- **Other biomarkers**

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Innovation points

- **Introduction** of the biomarkers of malignant transformation reported in the literature.

- **Summary** of the promising application in the clinical management.

- **Emphasis** of the perspectives and future research directions of malignant transformation biomarkers.

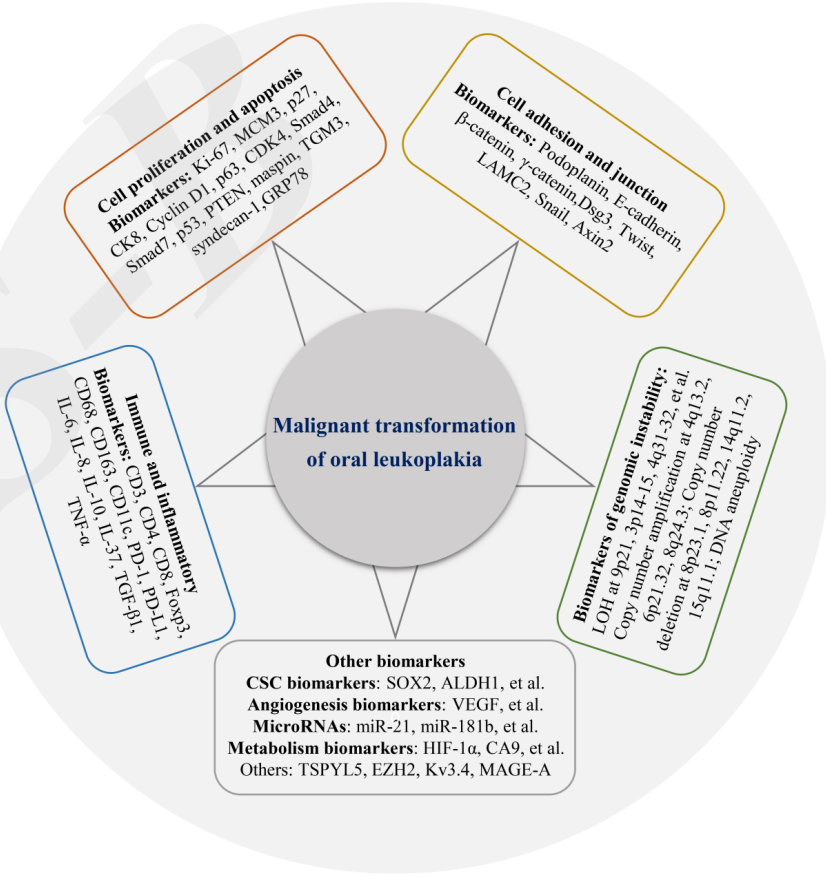

Figure 1

Innovation points

A comprehensive table was generated to summarize the latest knowledge about biomarkers associated with the prognosis of oral leukoplakia.

Table 1 | Biomarkers associated with the prognosis of oral leukoplakia.

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