Cite this as: Yuwei DAI, Ziqiong WU, Yitong CHEN, Xinjian YE, Chaowei WANG, Huiyong ZHU. OCT4's role and mechanism underlying oral squamous cell carcinoma[J]. Journal of Zhejiang University Science B, 2023, 24(9): 796-806.
http://doi.org/10.1631/jzus.B2200602

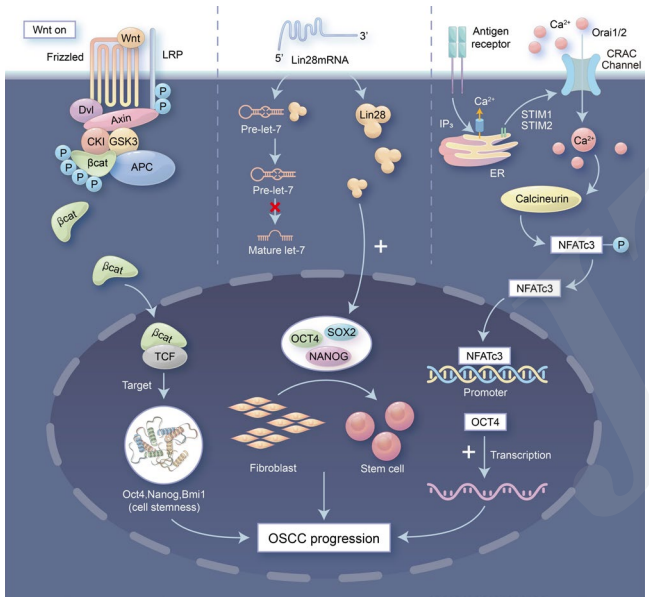
OCT4's role and mechanism underlying oral squamous cell carcinoma

JZUS-B

Key words: Cancer stem cell (CSC); Octamer binding transcription factor 4 (OCT4); Oral squamous cell carcinoma (OSCC); Prognosis; Signaling pathways

Research Summary

This review mainly focused on the structure, subtypes and function of OCT4 as well as its function in the occurrence, progression and prognosis of OSCC,and summarized the important regulatory signaling pathways related to OCT4 in OSCC as following :



- **Wnt/β-catenin signaling pathway**
- **Lin28/Let-7 signaling pathway**
- **NFAT signaling pathway**

Innovation points

- **Summary** of the structure, subtypes and function of OCT4 as well as its function in the occurrence, progression and prognosis of OSCC.

- **Emphasis** of OCT4 may promote tumorigenesis by regulating epithelial mesenchymal transition.

- **Subtypes** of the OCT4 gene, OCT-4B1, may be related to tumor progression.

- **Expression** of OCT4 in OSCC samples was related to the site of the tumor, lymph node metastasis, and TNM. stage.

- **Figure** of three important pathway mechanism of OCT4 in OSCC.

ZUSB