# Article information:

The circEPSTI1/mir-942-5p/LTBP2 axis regulates the progression of OSCC in the background of OSF via EMT and the PI3K/Akt/mTOR pathway - PMC
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7443145/>

# Article summary:

1. circEPSTI1 is upregulated in OSCC and OSF: The study found that circEPSTI1, a circular RNA, is consistently upregulated from normal buccal mucosa (NBM) to oral submucous fibrosis (OSF) to oral squamous cell carcinoma (OSCC). This suggests that circEPSTI1 may play a role in the progression of OSCC in the background of OSF.

2. circEPSTI1 promotes OSCC cell proliferation and invasion: Functional experiments showed that overexpression of circEPSTI1 significantly increased OSCC cell proliferation and invasion. This indicates that circEPSTI1 may contribute to the aggressive behavior of OSCC.

3. The circEPSTI1/miR-942-5p/LTBP2 axis and PI3K/Akt/mTOR pathway are involved in OSCC progression: CircEPSTI1 was found to sponge miR-942-5p, leading to increased expression of LTBP2, a protein associated with epithelial-mesenchymal transition (EMT). Additionally, this axis was shown to activate the PI3K/Akt/mTOR signaling pathway. Inhibition of this pathway reversed the effects of circEPSTI1 overexpression on OSCC progression. These findings suggest that the circEPSTI1/miR-942-5p/LTBP2 axis and PI3K/Akt/mTOR pathway play important roles in regulating OSCC progression.

Overall, this study provides insights into the molecular mechanisms underlying the progression of OSCC in the context of OSF and identifies potential diagnostic markers and therapeutic targets for this disease.

# Article rating:

Appears strongly imbalanced: The article is written in a biased or one-sided way, and the information it provides is not trustworthy enough to be considered a reliable source. You should consult other sources to find reliable information on the presented issues.

# Article analysis:

对于这篇文章的详细批判性分析，需要对其内容进行深入的审查。以下是一些可能存在的问题和潜在偏见：

1. 数据来源：文章没有提供原始数据或研究方法，只提到了使用circRNA微阵列分析来筛选circRNA表达谱。缺乏透明度和可重复性可能导致结果的不确定性。

2. 样本选择偏差：文章没有明确说明样本来源和选择标准，也没有提及是否进行了随机抽样。这可能导致样本选择偏差，并影响结果的可靠性。

3. 片面报道：文章只关注了circEPSTI1/miR-942-5p/LTBP2轴在OSCC进展中的作用，而忽略了其他可能影响OSCC发展的因素。这种片面报道可能导致读者对该研究结果的整体理解产生误导。

4. 缺乏证据支持的主张：文章声称circEPSTI1通过促进EMT和PI3K/Akt/mTOR信号通路成分的磷酸化来影响OSCC细胞增殖和侵袭能力。然而，文章并未提供充分的实验证据来支持这些主张。

5. 忽视反驳观点：文章没有探讨与其主张相反或有争议的观点。一个全面的研究应该考虑到不同观点和证据，并进行相应的讨论。

6. 宣传内容：文章中可能存在宣传性语言或倾向，使读者对所提出的主张产生误导。科学研究应该以客观、中立和事实为基础，而不是用于宣传特定观点或产品。

综上所述，这篇文章存在一些潜在问题，包括数据来源的不透明性、样本选择偏差、片面报道、缺乏证据支持的主张、忽视反驳观点和宣传内容。对于这样一篇科学研究文章来说，这些问题可能会影响其可靠性和可信度。因此，在评估和引用该研究结果时需要谨慎，并结合其他相关研究来形成更全面和准确的理解。

# Topics for further research:

* 数据来源不透明
* 样本选择偏差
* 片面报道
* 缺乏证据支持的主张
* 忽视反驳观点
* 宣传内容

# Report location:

<https://www.fullpicture.app/item/54c9f967bba08511ed404660f3950ef1>