# Article information:

Exosomal microRNA-21 derived from bronchial epithelial cells is involved in aberrant epithelium-fibroblast cross-talk in COPD induced by cigarette smoking - PMC  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6276085/>

# Article summary:

1. This study investigated the role of exosomal miR-21 in dysfunctional epithelium-fibroblast cross-talk caused by cigarette smoke (CS).

2. Exosomes derived from CS extract (CSE)-treated human bronchial epithelial (HBE) cells were found to induce the differentiation of bronchial fibroblasts into a phenotype of ‘myofibroblasts’.

3. Downregulation of miR-21 prevented CS-induced airway remodeling in mice, and high levels of exosomal miR-21 were found in sera of smokers and COPD patients.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

This article is generally reliable and trustworthy, as it provides a comprehensive overview of the role of exosomal miR-21 in aberrant epithelium-fibroblast cross-talk in COPD induced by cigarette smoking. The authors provide evidence for their claims through experiments conducted on both cell cultures and animals, which adds to the credibility of their findings. Furthermore, they provide detailed descriptions of their methods and results, which allows readers to assess the validity and reliability of their conclusions.

The article does not appear to be biased or one-sided, as it presents both sides equally and acknowledges potential risks associated with cigarette smoking. Additionally, all claims are supported by evidence from experiments conducted by the authors or other studies cited throughout the article. There are no unsupported claims or missing points of consideration that could lead to misinterpretation or misunderstanding.

The only potential issue with this article is that it does not explore any counterarguments or alternative explanations for its findings. However, this does not detract from its overall trustworthiness and reliability as a source for information on exosomal miR-21's role in COPD induced by cigarette smoking.

# Topics for further research:

* Cigarette smoking and COPD
* Exosomal miR-21 and COPD
* Aberrant epithelium-fibroblast cross-talk
* Role of exosomal miR-21 in COPD
* Effects of cigarette smoking on exosomal miR-21
* Alternative explanations for exosomal miR-21 in COPD

# Report location:

<https://www.fullpicture.app/item/cd23fd8a53f7b4835325f7ca0c5a4c50>