Review of: "The Application and Pathway Regulation of Traditional Chinese Medicine in Lung Cancer Treatment: An Exploratory Review"

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Potential competing interests: No potential competing interests to declare.

This review article summarizes that the current treatment of non-small cell lung cancer (NSCLC), as the major subtype of cancer and the leading cause of cancer-related deaths, faces challenges due to limited molecular targets, resulting in low cure rates and high recurrence rates. Therefore, recent research highlights the potential of traditional Chinese medicine (TCM) and herbal formulas in inhibiting NSCLC progression through diverse pathways and targets, reducing metastasis and recurrence rates while alleviating treatment side effects and drug resistance. Since complications and adverse reactions persist despite advancements in conventional treatments like surgery, radiotherapy, targeted therapy, and immunotherapy, TCM, with its multi-component and multi-target approach, has shown promising results in both basic and clinical studies. This article comprehensively reviews TCM's regulation of signaling pathways and key protein expression in NSCLC, aiming to clarify its mechanisms of action and provide a theoretical foundation for its clinical application in lung cancer intervention. The comments are shown in the following:

1. The references in this article are missing; for example, "According to global cancer statistics in 2020, there were as many as 2.2 million new cases of lung cancer worldwide." (Reference needed).

“The NF-κB signaling pathway was discovered in 1986, and its components include p50, p52, p65, RelB, and c-Rel. The NF-κB signaling pathway is divided into three types: the classical pathway, the non-classical pathway, and other pathways.” " (Reference needed).

1. I suggest the authors use 'TCM' after first mentioning traditional Chinese medicine (TCM).
2. There might be a logistic error: ”p50/p65 NF-κB to enter the cell nucleus to regulate genes, thereby controlling the expression of TNFα, LPS (Lipopolysaccharide)”.
3. Please replace the semicolons with commas in this sentence: 'NF-κB signaling pathway activation of Bcl-2 expression, inhibiting lung cancer cell apoptosis; regulation of MMPs expression, degrading extracellular matrix, promoting tumor metastasis and invasion; upregulation of VEGF and its receptors, promoting tumor angiogenesis.'
4. Please check whether 'Mek gene encoding ERK' should be *'MEK1* gene, encoding ERK'?
5. There might be a linguistic error in 'inducing apoptosis in lung cancer cells'; I suggest 'inducing lung cancer cell apoptosis' instead.
6. In section 3.2, I am not sure if the authors mention that the anti-cancer ability of Leonurine is mainly through MAPK in

lung cancer.

7. Also in section 3.2, reference 45 is 'the study in multiple myeloma' instead of 'in NSCLC'.
8. Same as “TCM”, I will suggest the author use 'NSCLC' after first mentioning Non-small cell lung cancer (NSCLC).
9. I suggest the author check if the gene is italicized.
10. Please check what “miR-186*” is.

Overall, there are some linguistic errors and a lack of cited references in this manuscript. I suggest the authors should make major revisions before it is accepted.