

Efficacy and Safety of Cytokine-Induced Kill er Cells (CIK) Therapy with Radiotherapy for Patients with Advanced Non-Small-Cell Lung Cancer

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Aims

One of the treatments for advanced non-small-cell lung cancer patients is the administration of Cytokine-induced killer cells (CIK) therapy together with radiotherapy. There is debate about the efficacy of combining these two treatments so that the results are not always clear.

This study aims to identify the safety and efficacy of cytokine-indu ced killer cells (CIK) therapy with radiotherapy in patients with advanced non-small-cell lung cancer.

Methods

- Several databases (PubMed, Cochrane Library) were used to look for randomized clinical trials (RCTs), systematic review.
 - keywords of "Cytokine-Induced Killer Cells plus Radiotherapy", "Advanced non-small-cell lung cancer", "Efficacy", and "Safety".
 - Studies were appraised using Mendeley and publish or Perish. Data were then summarized descriptively.

Results

- The results show that overall survival (OS), time to progression significantly affects the patient's survival for the better.
- The results of the study revealed that in some patients after combined treatment, cancer cells were more difficult to enter. There are side effects such as fever, joint pain and insomnia but the risk is low for leukopenia.
- Quality of life and longer survival for patients with advanced lung cancer with tolerable side effects after combined CIK plus radiotherapy.

Conclusions

• The results show that Treatment CIK plus radiotherapy is an effective therapeutic strategy to prevent cells, and prolong the survival of patients with advanced NSCLC. So there is efficacy and safety in this treatment.

References

- Xiao Z, Wang CQ, Zhou MH, Li NN, Liu SY, He YJ, Wang YZ, Feng JH, Yao XS, Chen L, Ma B, Yu S, Zeng XT, Li CW, Ding J. Clinical efficacy and safety of CIK plus radiotherapy for lung c ancer: A meta-analysis of 16 randomized controlled trials. Int Immunopharmacol. 2018 Au g;61:363-375. doi: 10.1016/j.intimp.2018.06.012. Epub 2018 Jun 23. PMID: 29945024.
- Xiao Z, Wang CQ, Feng JH, Zhou MH, Wang YZ, Li NN, Sun YP, Liu SY, Yao XS, Li CW, Ma B, Ding J, Chen L. Effectiveness and safety of chemotherapy with cytokine-induced killer cells in non-small cell lung cancer: A systematic review and meta-analysis of 32 randomized cont rolled trials. Cytotherapy. 2019 Feb;21(2):125-147. doi: 10.1016/j.jcyt.2018.10.011. Epub 2018 Dec 14. PMID: 30554868.
- Han RX, Liu X, Pan P, Jia YJ, Yu JC. Effectiveness and safety of chemotherapy combined with dendritic cells co-cultured with cytokine-induced killer cells in the treatment of advanced n on-small-cell lung cancer: a systematic review and meta-analysis. PLoS One. 2014 Sep 30;9 (9):e108958. doi: 10.1371/journal.pone.0108958. PMID: 25268709; PMCID: PMC4182599.