# Article information:

Sustained effector function of IL-12/15/18–preactivated NK cells against established tumors - PMC
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3526364/>

# Article summary:

1. Natural killer cell (NK cell)–based immunotherapy of cancer is hampered by the transient effector function of NK cells.

2. IL-12/15/18–preactivated NK cells were shown to persist with sustained effector function in vivo and reduce growth of established mouse tumors when combined with irradiation.

3. Human IL-12/15/18–preactivated NK cells also displayed sustained effector function in vitro, providing a better understanding for the rational design of immunotherapies of cancer that incorporate NK cells.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy, as it provides evidence from both mouse and human studies to support its claims. The article is well-referenced, citing relevant research papers to back up its claims. It also acknowledges potential limitations in the study, such as the need for radiation therapy (RT) to enhance the antitumor activity of transferred NK cells, and notes that clinical benefits have not yet been observed upon infusion of autologous IL-2–activated NK cells in patients suffering from solid tumors such as melanoma or renal cell carcinoma. However, there are some potential biases in the article which should be noted. For example, it does not explore counterarguments or present both sides equally; instead it focuses solely on the potential benefits of using IL-12/15/18–preactivated NK cells for immunotherapy of cancer without considering any possible risks or drawbacks associated with this approach. Additionally, there is no mention of any ethical considerations related to using these preactivated NK cells for immunotherapy purposes.

# Topics for further research:

* Risks of using IL-12/15/18-preactivated NK cells for immunotherapy
* Ethical considerations of using preactivated NK cells for cancer treatment
* Limitations of using autologous IL-2-activated NK cells for solid tumors
* Adverse effects of radiation therapy for enhancing antitumor activity of NK cells
* Comparison of mouse and human studies on preactivated NK cells for immunotherapy
* Clinical benefits of using preactivated NK cells for cancer treatment

# Report location:

<https://www.fullpicture.app/item/0e50b88e41453a0c7003919eaf83c241>