# Article information:

Functional T cells are capable of supernumerary cell division and longevity | Nature  
<https://www.nature.com/articles/s41586-022-05626-9>

# Article summary:

1. Early reports suggested that fetal chicken heart cells could grow in vitro for decades, but this was not reproducible and attributed to cell transformation or continuous introduction of fresh cells.

2. CD8+ T lymphocytes can sustain quiescence for years, yet engage in a differentiation programme within minutes of activation, followed by accumulation of an unusual number of rapid cell divisions.

3. An experiment was designed to test whether T cells have the intrinsic potential to expand indefinitely, and it was found that they could be sustained in culture for 10 years with no signs of senescence or exhaustion.

# 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 multiple sources to support its claims. The authors cite several studies throughout the article which provide evidence for their claims about the longevity and division potential of functional T cells. Furthermore, the authors provide a detailed description of their own experiment which tested the potential for T cells to expand indefinitely, providing further evidence for their claims.

However, there are some points that should be considered when evaluating the trustworthiness and reliability of this article. Firstly, while the authors cite multiple studies throughout the article, they do not explore any counterarguments or alternative explanations for their findings. Additionally, while they provide evidence from their own experiment to support their claims, they do not discuss any possible risks associated with this experiment or any limitations that may have affected its results. Finally, while the authors present both sides of the debate regarding diploid somatic cell immortality fairly equally, they do not explore any other potential explanations or theories which could explain why T cells can sustain quiescence for years without showing signs of senescence or exhaustion.

In conclusion, while this article is generally reliable and trustworthy due to its use of evidence from multiple sources to support its claims, there are some points which should be taken into consideration when evaluating its trustworthiness and reliability such as its lack of exploration into counterarguments or alternative explanations and its failure to discuss any possible risks associated with its own experiment or limitations that may have affected its results.

# Topics for further research:

* T cell quiescence
* Diploid somatic cell immortality
* T cell senescence
* T cell exhaustion
* Risks associated with T cell experiments
* Limitations of T cell experiments

# Report location:

<https://www.fullpicture.app/item/03fb8b0643d238fc388324b267a4a855>