# Article information:

ACE2-independent infection of T lymphocytes by SARS-CoV-2 | Signal Transduction and Targeted Therapy
<https://www.nature.com/articles/s41392-022-00919-x>

# Article summary:

1. SARS-CoV-2, the etiology of coronavirus disease 2019 (COVID-19), has spread quickly to many countries and caused great threats to public health.

2. Lymphopenia was observed in 83.2% of COVID-19 patients on admission, and fatal infections were associated with more severe lymphopenia over time.

3. This study provides evidence that activated T lymphocytes can be infected by SARS-CoV-2 in an ACE2-independent manner, leading to pronounced T-cell apoptosis in vitro or in patients with COVID-19.

# 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 “ACE2-independent infection of T lymphocytes by SARS-CoV-2” is a well written and comprehensive review of the current understanding of SARS-CoV-2 infection and its effects on lymphocytes. The authors provide a thorough overview of the literature on this topic, including studies on MERS and SARS CoV as well as single cell RNA sequencing studies on COVID 19 patients. The article is also supported by data from 22 COVID 19 patients which further strengthens the findings presented in the paper.

The article does not appear to have any major biases or unsupported claims, however there are some points that could be explored further such as the potential risks associated with SARS CoV 2 infection and how it affects different types of immune cells other than T cells. Additionally, while the authors do mention other possible causes for lymphopenia such as cytokine mediated cell death or tissue sequestration, they do not explore these possibilities in depth which could provide additional insights into this phenomenon.

In conclusion, this article provides a comprehensive overview of SARS CoV 2 infection and its effects on lymphocytes without any major biases or unsupported claims. However, further exploration into potential risks associated with this virus and other possible causes for lymphopenia could provide additional insights into this phenomenon.

# Topics for further research:

* SARS-CoV-2 infection risks
* Cytokine mediated cell death
* Tissue sequestration and SARS-CoV-2
* Immune cell response to SARS-CoV-2
* Lymphopenia and SARS-CoV-2
* ACE2-independent SARS-CoV-2 infection

# Report location:

<https://www.fullpicture.app/item/c3b19df63551fc3ef35e2efc5d1919e1>