# Article information:

Endogenous retroviruses and TDP-43 proteinopathy form a sustaining feedback driving intercellular spread of Drosophila neurodegeneration | Nature Communications
<https://www.nature.com/articles/s41467-023-36649-z>

# Article summary:

1. TDP-43 proteinopathy is seen in 97% of ALS patients, 40% of FTD cases, and many AD cases.

2. A positive feedback loop involving endogenous retroviruses (ERVs) and TDP-43 proteinopathy has been proposed to explain the rapid progression of neurodegenerative diseases after diagnosis.

3. Experiments have shown that HERV-K and Drosophila gypsy ERVs can trigger TDP-43 pathology in human neuroblastoma and fly S2 cells, leading to cytoplasmic accumulation of pathologically phosphorylated TDP-43 and loss of normal TDP-43 function.

# 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, as it provides evidence for its claims through experiments conducted by the authors as well as references to other studies that support their findings. The article also provides a comprehensive overview of the current understanding of the role of ERVs in neurodegenerative diseases, which is helpful for readers who are not familiar with this topic.

However, there are some potential biases in the article that should be noted. For example, the authors focus mainly on the role of ERVs in neurodegenerative diseases without exploring other possible causes or contributing factors. Additionally, while they provide evidence from experiments conducted by themselves as well as references to other studies, they do not explore any counterarguments or alternative explanations for their findings. Furthermore, they do not discuss any potential risks associated with their findings or provide any recommendations for further research or clinical applications based on their results.

In conclusion, while this article is generally reliable and provides a comprehensive overview of the current understanding of ERVs in neurodegenerative diseases, there are some potential biases that should be noted when evaluating its trustworthiness and reliability.

# Topics for further research:

* Alternative causes of neurodegenerative diseases
* Potential risks associated with ERVs
* Clinical applications of ERVs in neurodegenerative diseases
* Counterarguments to the role of ERVs in neurodegenerative diseases
* Further research on ERVs in neurodegenerative diseases
* Implications of ERVs in other diseases

# Report location:

<https://www.fullpicture.app/item/b46cf4968b8f7fb805d211f6b77d51f7>