# Article information:

PHGDH Inhibits Ferroptosis and Promotes Malignant Progression by Upregulating SLC7A11 in Bladder Cancer - PMC  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9461664/>

# Article summary:

1. PHGDH is highly expressed in bladder cancer (BCa) patients and its knock-down promotes ferroptosis and decreases the proliferation of BCa cells.

2. PHGDH binds to PCBP2, an RNA-binding protein, which stabilizes SLC7A11 mRNA and increases its expression.

3. NCT-502, a PHGDH inhibitor, promotes ferroptosis and inhibits tumor progression in BCa.

# 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 “PHGDH Inhibits Ferroptosis and Promotes Malignant Progression by Upregulating SLC7A11 in Bladder Cancer” is a well-researched piece that provides evidence for the role of PHGDH in promoting malignant progression of bladder cancer through upregulation of SLC7A11. The authors have used various methods such as RNA sequencing, western blotting, qPCR, immunohistochemistry (IHC), organoids, C11 probes, electron microscopy, protein profiling, co-IP and RIP assays to support their claims. The article also mentions the potential therapeutic implications of PHGDH inhibition with NCT-502 for treating bladder cancer.

The article does not appear to be biased or one-sided as it presents both sides of the argument equally. It also does not contain any promotional content or partiality towards any particular point of view. The authors have provided sufficient evidence to support their claims and have explored counterarguments where necessary. However, there are some missing points of consideration such as possible risks associated with PHGDH inhibition with NCT-502 that could have been discussed in more detail. Additionally, further research is needed to explore the long term effects of this treatment on bladder cancer patients before it can be recommended as a viable therapeutic option for treating this disease.

# Topics for further research:

* Bladder cancer treatment risks
* Long-term effects of PHGDH inhibition
* Therapeutic implications of SLC7A11 upregulation
* Clinical trials of NCT-502 for bladder cancer
* Mechanisms of ferroptosis in bladder cancer
* Potential side effects of PHGDH inhibition

# Report location:

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