# Article information:

An Embryonic Diapause-like Adaptation with Suppressed Myc Activity Enables Tumor Treatment Persistence: Cancer Cell
[https://www.cell.com/cancer-cell/fulltext/S1535-6108(20)30609-7](https://www.cell.com/cancer-cell/fulltext/S1535-6108%2820%2930609-7)

# Article summary:

1. 3D organoid cultures can simulate the emergence of treatment-persistent residual tumors.

2. Treatment-persistent tumor cells have a diapause-like molecular adaptation with suppressed MYC activity and reduced apoptotic priming.

3. Inhibiting MYC activity or interfering with the diapause-like adaptation may be potential therapeutic strategies against chemotherapy-persistent tumor 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 for its claims in the form of clinical studies, single cell studies, and 3D organoid cultures. The article also presents both sides of the argument by exploring potential therapeutic strategies against chemotherapy-persistent tumor cells, such as inhibiting MYC activity or interfering with the diapause-like adaptation. However, there are some points that could be further explored in order to make the article more comprehensive and balanced. For example, while the article mentions that “hundreds of molecular datasets exist for treatment-naive or relapsed tumors”, it does not provide any evidence to support this claim or explore how these datasets might be used to inform potential treatments for chemotherapy-persistent tumors. Additionally, while the article discusses potential risks associated with inhibiting MYC activity or interfering with the diapause-like adaptation, it does not provide any evidence to support these claims or explore possible counterarguments. Finally, while the article mentions that “clinically relevant doses of cytotoxic agents nearly eradicated cancer cells within 4–6 days” in 2D cultures, it does not provide any evidence to support this claim or explore why this might be different in 3D organoids.

# Topics for further research:

* Molecular datasets for treatment-naive or relapsed tumors
* Risks associated with inhibiting MYC activity
* Interfering with diapause-like adaptation
* Counterarguments to inhibiting MYC activity
* Clinically relevant doses of cytotoxic agents
* Differences between 2D and 3D cultures for cancer cells

# Report location:

<https://www.fullpicture.app/item/41ae70aa1e382aed213af5d46c214473>