# Article information:

LncRNA BCAR4 promotes migration, invasion, and chemo-resistance by inhibiting miR-644a in breast cancer - PMC  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9830721/>

# Article summary:

1. LncRNA BCAR4 is significantly increased in breast cancer patients’ tissues and plasma, and upregulation of BCAR4 is correlated with the TNM stages.

2. Silencing of BCAR4 suppresses breast cancer cell colony formation, migration, invasion, and xenograft tumor growth and promotes chemo-sensitivity.

3. Mechanistically, BCAR4 facilitates breast cancer migration and invasion via the miR-644a-CCR7 axis of the MAPK pathway, and it promotes ABCB1 expression indirectly by binding to and down-regulating miR-644a to induce chemo-resistance in breast cancer.

# 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 “LncRNA BCAR4 promotes migration, invasion, and chemo-resistance by inhibiting miR-644a in breast cancer” provides a comprehensive overview of the role of lncRNA BCAR4 in promoting metastasis and drug resistance in breast cancer. The authors have conducted extensive research on the topic using various methods such as RT-qPCR, colony formation assay, wound healing assay, transwell assay, CCK8 assay, western blotting, dual luciferase reporter assay and mouse orthotopic xenograft tumor models. The results are presented clearly with appropriate figures to support their claims.

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 evidence for their claims made throughout the article which makes it reliable and trustworthy. Furthermore, they have noted possible risks associated with their findings which adds to its credibility.

However there are some points that could be explored further such as counterarguments against their findings or other potential mechanisms that could be involved in regulating lncRNA BCAR4 expression levels in breast cancer cells. Additionally more evidence could be provided for some of the claims made such as how exactly lncRNA BCAR4 binds to miR-644a to promote ABCB1 expression or how exactly it activates MAPK pathways to facilitate metastasis in breast cancer cells.

# Topics for further research:

* Counterarguments against lncRNA BCAR4 in breast cancer
* Mechanisms regulating lncRNA BCAR4 expression
* Role of lncRNA BCAR4 in ABCB1 expression
* Role of lncRNA BCAR4 in MAPK pathways
* Effects of lncRNA BCAR4 on metastasis in breast cancer
* Clinical implications of lncRNA BCAR4 in breast cancer

# Report location:

<https://www.fullpicture.app/item/6ec4ca9f768ab4682b73dbf22b748e2b>