***Cite this as*:** Weiwen LI, Jialu ZHAO, Weihong LAN, Xiaofei YE, Kejing YING. Depleting CBR1 increases chemosensitivity by reducing stemness and quiescence traits in non-small cell lung cancer. *Journal of Zhejiang University-SCIENCE B*, 26(12):1216-1232.
https://doi.org/10.1631/jzus.B2400509

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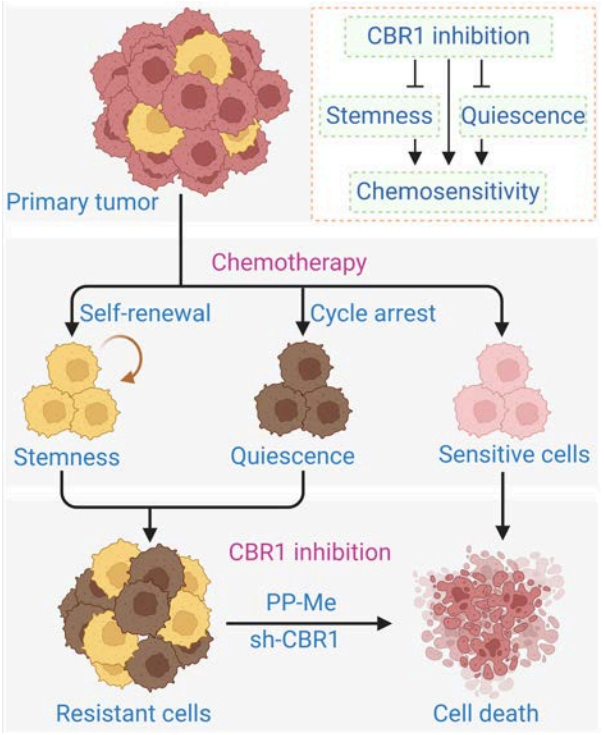
Depleting CBR1 increases chemosensitivity by reducing stemness and quiescence traits in non-small cell lung cancer

Key words: Carbonyl reductase 1 (CBR1); SET domain-containing protein 4 (SETD4); Chemosensitivity; Stemness; Quiescence; Non-small cell lung cancer (NSCLC)

Research Summary

The study focus on the malignant biological behavior of carbonyl reductase 1 (CBR1) in non-small-cell lung cancer. Especially, it's role in regulating the stemness, chemosensitivity, and quiescence.

- **Elevated expression of CBR1 in both NSCLC tissue and cell lines and further increased in the presence of CDDP**
- **CBR1 inhibition hinders the stemness property and quiescence, but enhanced the chemosensitivity of CDDP in NSCLC**
- **SETD4 mediated the stemness property, chemosensitivity, and quiescence of CBR1 inhibition in NSCLC cells.**



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Innovation points

- **Introduction** **of malignant biological behaviors of CBR1 in non-small-cell lung cancer**

- **Summary** **of mechanism of chemosensitivity regulated by CBR1 mediated stemness and quiescence in non-small-cell lung cancer**

- **Emphasis** **on depleting CBR1 increases chemosensitivity by reducing stemness and quiescence traits**

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