Cite this as: Xiao ZHANG, Zhicheng DONG, Hui FAN, Qiankun YANG, Guili YU, Enzhuang PAN, Nana HE, Xueqing LI, Panpan ZHAO, Mian FU, Jingquan DONG. Scutellarin prevents acute alcohol-induced liver injury via inhibiting oxidative stress by regulating the Nrf2/HO-1 pathway and inhibiting inflammation by regulating the AKT, p38 MAPK/NF-κB pathways[J]. Journal of Zhejiang University Science B, 2023, 24(7): 617-631. http://doi.org/10.1631/jzus.B2200612

Scutellarin prevents acute alcohol-induced liver injury via inhibiting oxidative stress by regulating the Nrf2/HO-1 pathway and inhibiting inflammation by regulating the AKT, p38 MAPK/NF-κB pathways

Key words: Scutellarin; Oxidative stress; Alcoholic liver disease; Inflammation

Research Summary

This review mainly focused on that scutellarin can protect against acute alcoholic liver injury as a preventive drug, and to further investigate the relevant mechanism.

- **Natural Medicine**
- **Alcoholic liver disease**
- **Anti-inflammatory**
- **Antioxidation**

JZUS-B

Innovation points

A series of comprehensive tables were generated to summarize the latest knowledge about effect of scutellarin

Table 1 | Scutellarin protects against acute alcoholic liver injury.

Table 2 | Effect of scutellarin on CYP2E1 expression and oxidative stress in the liver of mice.

Table 3 | Effects of scutellarin on the Nrf2/HO-1 pathway of mouse liver in vivo and in vitro.

Table 4 | Effect of scutellarin on acute ethanol-induced inflammatory mediators, the activation of NLRP3 inflammasome and NF-κB pathway.

Table 5 | Effect of scutellarin on AKT and MAPK pathways in HepG2 cells.

Table 6 | The inhibition of p-AKT and p-P38 by scutellarin was involved in NF-κB and Nrf2 signaling pathways.

JZUS-B