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# Roles of PANoptosis and related genes in acute liver failure: neoteric insight from bioinformatics analysis and animal experiment verification

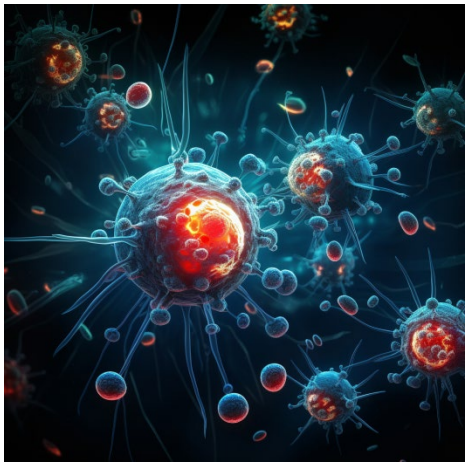
**Key words: Acute liver failure, PANoptosis, GEO, Biomarkers, Therapeutic target**

# *Research Summary*

This research mainly reveals the important role of macrophage PANoptosis in acute liver failure. Mainly through the following aspects:

- **Identification of hub genes through bioinformatic analysis**
- **Verified the cell localization and expression of hub genes through ALF animal model**
- **Verified the formation of PANoptosome through ALF cell model**





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# *Innovation points*

- **Discovery** of 7 PANoptosis-related genes associated with ALF

- **Confirming** that there was crosstalk between cell death types causing ALF.

- **Emphasis** the importance of macrophage and PANoptosis for ALF

- **Providing** vital directions for further study of the diagnosis, progression, and targeted therapy of ALF

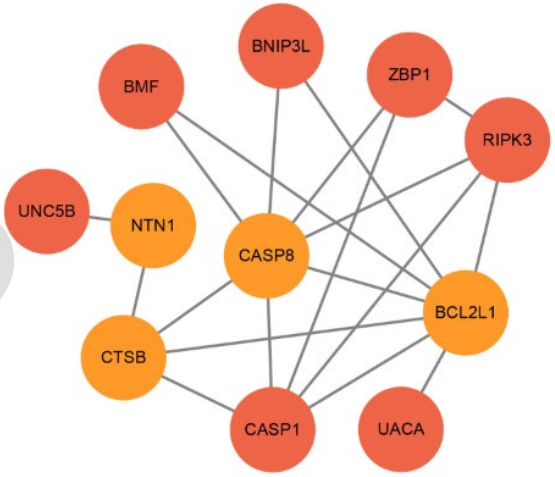


Figure 4B

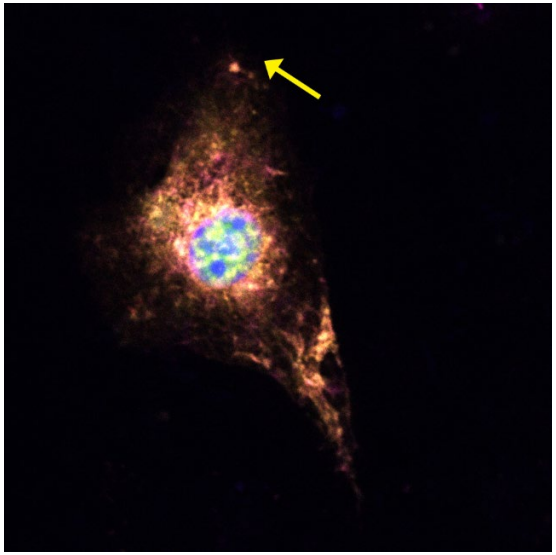

Figure 9F

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