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Title: Acute liver failure is associated with altered cerebral expression profiles of long non-coding RNAs

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**ACUTE LIVER FAILURE IS ASSOCIATED WITH ALTERED CEREBRAL****EXPRESSION PROFILES OF LONG NON-CODING RNAs**

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**Highlights**

- Azoxymethane-induced ALF in mice at coma stage results in many differentially regulated long non-coding RNAs (lncRNAs) in the frontal cortex.
- Analysis revealed these lncRNAs target pathways such as cytokine receptor interaction, mitogen activated protein kinase signaling, insulin signaling, NF- $\kappa$ B signaling and tumor necrosis factor signaling.
- FDR adjustment identified two upregulated lncRNAs which may contribute to lactate production and astrocyte cytoskeletal disruption/swelling.
- Findings suggest an important role for lncRNAs in inflammation, the neuropathological consequences of ALF, and in terms of the functional basis of HE.

**Abstract**

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