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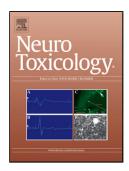
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## ACCEPTED MANUSCRIPT

### Neurobehavioral effects of 1,2-propanediol in zebrafish (Danio rerio)

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#### **Highlights**

- There is insufficient information concerning developmental toxicity of e-cigarettes
- Developmental toxicity of 1,2-propanediol (a principal component of e-cigarette liquid) was investigated
- Embryonic/larval exposure of zebrafish to 1,2-propanediol affected behavioral parameters in larvae and caused persisting behavioral effects in adults
- The behavioral effects were not associated with changes in neural or vascular development
- The behavioral effects were not associated with altered stress response or neurotransmitter concentrations
- This is the first study to demonstrate that developmental exposure to 1,2-propanediol has long-term neurobehavioral consequences in adult zebrafish

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