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Authors: Xiao Jiang, Ning Zhang, Li Yin, Wen-long Zhang, Fei Han, Wen-bin Liu, Hong-qiang Chen, Jia Cao, Jin-yi Liu



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A commercial Roundup® formulation induced male germ cell apoptosis by promoting the expression of XAF1 in adult mice

Xiao Jiang, Ning Zhang, Li Yin, Wen-long Zhang, Fei Han, Wen-bin Liu, Hong-qiang Chen, Jia Cao, Jin-yi Liu*

Institute of Toxicology, College of Preventive Medicine, Army Medical University, 30 Gaotanyan Street, Shapingba District, Chongqing 400038, PR China

* Corresponding author. Tel: +86 23 68772290

E-mail address: jinyiliutmmu@163.com (J-y. Liu)

Abbreviations: GBHs, glyphosate-based herbicides; XAF1, X-linked inhibitor of apoptosis-associated Factor 1; XIAP, X-linked inhibitor of apoptosis; TUNEL, terminal deoxynucleotidyl transferase dUTP nick end labeling; POEA, polyoxyethylene tallowamine.

HIGHLIGHTS

- Excessive apoptosis of male germ cell occurs after Roundup® exposure.
- Over-expression of XAF1 triggers germ cell apoptosis following Roundup® exposure.
- Roundup® exposure has potential toxicity on male reproductive health in mammals.

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