Retraction Note to: Licochalcone A induces apoptosis through endoplasmic reticulum stress via a phospholipase $\text{C}\gamma 1$ -, Ca^{2+} -, and reactive oxygen species-dependent pathway in HepG2 human hepatocellular carcinoma cells

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Retraction to: Apoptosis (2014) 19:682–697 <https://doi.org/10.1007/s10495-013-0955-y>

The Editors-in-Chief have retracted this article [1] because there are duplications in some of the figures:

In Fig. 6B, the β -actin bands of this gel are repeated three times, therefore all regulations of CHOP, ATF6 α (p90), and caspase-4C and P-eIF2 α by sunitinib and sorafenib are inconclusive. Additionally, the row of β -actin bands of Fig. 1E has been used in Fig. 3E as the row of eIF2 α . Therefore the conclusions of Fig. 3 or those of Fig. 1, or possibly both, may be incorrect.

The conclusions of this article are therefore unreliable. Please note that Figs. 1D, 5D and 7D have been previously corrected [2].

A-Young Choi and Ji Hyun Choi have contributed equally to this work.

The original article can be found online at <https://doi.org/10.1007/s10495-013-0955-y>.

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A written response from Dr. Insug Kang and Dr. Eui-Ju Yeo, representing all authors, confirmed that there were mistakes and errors in the article. Drs. Kang and Yeo expressed that they do not agree to this retraction.

References

1. Choi A, Choi JH, Hwang K et al (2014) Licochalcone A induces apoptosis through endoplasmic reticulum stress via a phospholipase $\text{C}\gamma 1$ -, Ca^{2+} -, and reactive oxygen species-dependent pathway in HepG2 human hepatocellular carcinoma cells. *Apoptosis* 19:682–697. <https://doi.org/10.1007/s10495-013-0955-y>
2. Choi A, Choi JH, Hwang K et al (2019) Correction to: Licochalcone A induces apoptosis through endoplasmic reticulum stress via a phospholipase $\text{C}\gamma 1$ -, Ca^{2+} -, and reactive oxygen species-dependent pathway in HepG2 human hepatocellular carcinoma cells. *Apoptosis* 24:200–203. <https://doi.org/10.1007/s10495-018-1493-4>

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