



## OPEN ACCESS

EDITED AND REVIEWED BY  
Alain Filloux,  
Nanyang Technological University, Singapore

## \*CORRESPONDENCE

Shi-Jun Li  
✉ zjumedjun@163.com  
Jie Yan  
✉ med\_bp@zju.edu.cn

<sup>†</sup>These authors have contributed  
equally to this work

RECEIVED 27 May 2025  
ACCEPTED 05 June 2025  
PUBLISHED 15 July 2025

## CITATION

Hu W-L, Dong H-Y, Li Y, Ojcius DM, Li S-J  
and Yan J (2025) Correction: Bid-Induced  
Release of AIF/EndoG from Mitochondria  
Causes Apoptosis of Macrophages during  
Infection with *Leptospira interrogans*.  
*Front. Cell. Infect. Microbiol.* 15:1635286.  
doi: 10.3389/fcimb.2025.1635286

## COPYRIGHT

© 2025 Hu, Dong, Li, Ojcius, Li and Yan. This is  
an open-access article distributed under the  
terms of the [Creative Commons Attribution  
License \(CC BY\)](#). The use, distribution or  
reproduction in other forums is permitted,  
provided the original author(s) and the  
copyright owner(s) are credited and that the  
original publication in this journal is cited, in  
accordance with accepted academic  
practice. No use, distribution or reproduction  
is permitted which does not comply with  
these terms.

# Correction: Bid-Induced Release of AIF/EndoG from Mitochondria Causes Apoptosis of Macrophages during Infection with *Leptospira interrogans*

Wei-Lin Hu<sup>1,2†</sup>, Hai-Yan Dong<sup>3†</sup>, Yang Li<sup>1,2</sup>, David M. Ojcius<sup>4</sup>,  
Shi-Jun Li<sup>5\*</sup> and Jie Yan<sup>1,2\*</sup>

<sup>1</sup>Department of Medical Microbiology and Parasitology, Zhejiang University School of Medicine, Hangzhou, China, <sup>2</sup>Division of Basic Medical Microbiology, State Key Laboratory for Diagnosis and Treatment of Infectious Diseases, The First Affiliated Hospital, Zhejiang University School of Medicine, Hangzhou, China, <sup>3</sup>Department of Medical Microbiology and Immunology, Wenzhou Medical University, Wenzhou, China, <sup>4</sup>Department of Biomedical Sciences, University of the Pacific, Arthur Dugoni School of Dentistry, San Francisco, CA, United States, <sup>5</sup>Institute of Communicable Disease Control and Prevention, Guizhou Provincial Centre for Disease Control and Prevention, Guiyang, China

## KEYWORDS

apoptosis, *Leptospira*, Bid, AIF, EndoG, macrophage

## A Correction on

**Bid-Induced Release of AIF/EndoG from Mitochondria Causes Apoptosis of Macrophages during Infection with *Leptospira interrogans***

By Hu W-L, Dong H-Y, Li Y, Ojcius DM, Li S-J and Yan J (2017). *Front. Cell. Infect. Microbiol.* 7:471. doi: 10.3389/fcimb.2017.00471

In the published article, there was an error in **Figure 1E** as published. The representative flow dot plots were misplaced. The corrected **Figure 1** appears below.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

## Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

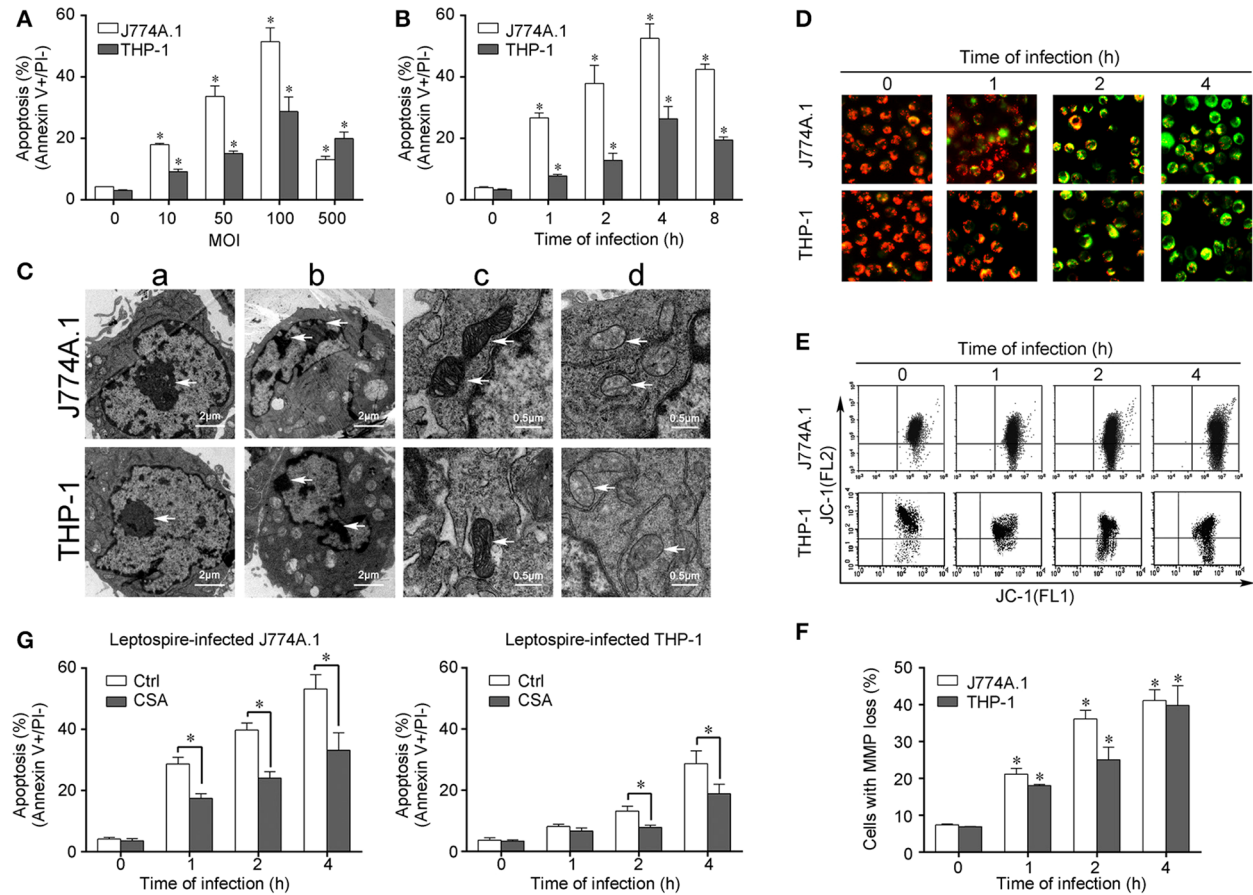


FIGURE 1

Apoptosis, pathological changes, and MMP decrease in leptospire-infected macrophages. **(A)** Apoptosis of macrophages infected with *L. interrogans* strain Lai at the optimal apoptosis-causing time for different MOIs. J774A.1 and THP-1 cells were infected with leptospires at 4 h. Bars show the mean  $\pm$  SD of three independent experiments. Five thousand cells were analyzed in each specimen. \* $p$  < 0.05 vs. apoptotic ratios in leptospire-infected macrophages with an MOI of 10, 50, 100, or 500. **(B)** Apoptosis of macrophages infected with *L. interrogans* strain Lai at the optimal apoptosis-causing MOI for different times. J774A.1 and THP-1 cells were infected at an MOI of 100. Bars show the mean  $\pm$  SD of three independent experiments. Five thousand cells were analyzed in each specimen. \* $p$  < 0.05 vs. apoptotic ratios in each macrophage type before infection. **(C)** The representative pathological changes in the nucleus and mitochondria in macrophages infected with *L. interrogans* strain Lai (MOI 100) for 4 h. a: healthy cells showed normal cellular morphology, b: chromatin margination in leptospire-infected macrophages; c: mitochondrial shape in healthy macrophages, d: disappearance of mitochondrial cristae in leptospire-infected macrophages. **(D)** The representative MMP changes in macrophages during infection with *L. interrogans* strain Lai for the indicated times determined by fluorescence microscopy. The red cells have a high MMP while the green cells have a low MMP. **(E)** The representative MMP changes in macrophages during infection with *L. interrogans* strain Lai for the indicated times determined by flow cytometry. The FL2 channel indicates high MMP (red) while the FL1 channel shows low MMP (green). **(F)** Statistical summary of MMP changes by flow cytometry in leptospire-infected macrophages. Statistical data from experiments such as shown in **(E)**. Bars show the mean  $\pm$  SD of three independent experiments. The values at "0" h show the MMP values before infection. Five thousand cells were analyzed in each specimen. \* $p$  < 0.05 vs. MMP value of the macrophages before infection. **(G)** CSA blockage of the apoptosis in macrophages infected with *L. interrogans* strain Lai. Bars show the mean  $\pm$  SD of three independent experiments. Five thousand cells were analyzed in each specimen. \* $p$  < 0.05 vs. apoptotic ratios in each macrophage type unpretreated with CSA infected with the spirochetes.