



OPEN ACCESS

Edited by:

George Grant, University of Aberdeen, United Kingdom

Reviewed by:

Nobuhiko Kamada, University of Michigan Health System, United States Shailesh K. Shahi, The University of Iowa, United States

*Correspondence:

Hongying Fan biofhy@126.com Xinmei Zhao zxm03172011498@163.com Fachao Zhi zhifc41532@163.com

Specialty section:

This article was submitted to Infectious Diseases, a section of the journal Frontiers in Microbiology

Received: 03 March 2019 Accepted: 11 March 2019 Published: 02 April 2019

Citation:

Deng H, Yang S, Zhang Y, Qian K, Zhang Z, Liu Y, Wang Y, Bai Y, Fan H, Zhao X and Zhi F (2019) Corrigendum: Bacteroides fragilis Prevents Clostridium difficile Infection in a Mouse Model by Restoring Gut Barrier and Microbiome Regulation. Front. Microbiol. 10:601. doi: 10.3389/fmicb.2019.00601

Corrigendum: *Bacteroides fragilis* Prevents *Clostridium difficile* Infection in a Mouse Model by Restoring Gut Barrier and Microbiome Regulation

Huimin Deng¹, Siqi Yang¹, Yucheng Zhang¹, Kai Qian¹, Zhaohui Zhang¹, Yangyang Liu², Ye Wang², Yang Bai¹, Hongying Fan^{3*}, Xinmei Zhao^{1*} and Fachao Zhi^{1*}

¹ Guangdong Provincial Key Laboratory of Gastroenterology, Department of Gastroenterology, Institute of Gastroenterology of Guangdong Province, Nanfang Hospital, Southern Medical University, Guangzhou, China, ² Guangzhou ZhiYi Biotechnology Co., Ltd., Guangzhou, China, ³ Guangdong Provincial Key Laboratory of Tropical Disease Research, School of Public Health, Southern Medical University, Guangzhou, China

Keywords: next-generation probiotic, gut barrier, gut microbiota, Clostridium difficile, commensal bacteria

A Corrigendum on

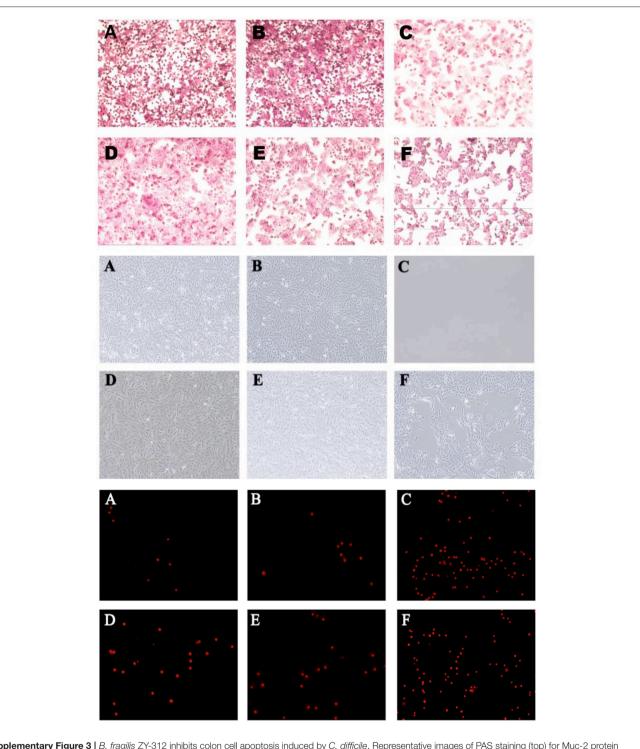
Bacteroides fragilis Prevents *Clostridium difficile* Infection in a Mouse Model by Restoring Gut Barrier and Microbiome Regulation

by Deng, H., Yang, S., Zhang, Y., Qian, K., Zhang, Z., Liu, Y., et al. (2018). Front. Microbiol. 9:2976. doi: 10.3389/fmicb.2018.02976

In the original article, there was a mistake in the **Supplementary Figure 3** as published. The same Figure 3 used in the original article was also used for **Supplementary Figure 3**. The corrected **Supplementary Figure 3** 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 Supplementary Material has been updated.

Copyright © 2019 Deng, Yang, Zhang, Qian, Zhang, Liu, Wang, Bai, Fan, Zhao and Zhi. 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.



Supplementary Figure 3 *B. fragilis* ZY-312 inhibits colon cell apoptosis induced by *C. difficile*. Representative images of PAS staining (top) for Muc-2 protein visualization in HT-29 cell monolayers are shown for all groups. Microscopic observations (middle) of Vero cell morphology and viability and PI staining (bottom) of Vero cells in all groups are shown. **(A)** Blank control group, 5×10^5 HT-29 or Vero cells were cultured without treatment; **(B)** *B. fragilis* group, cells were incubated with 5×10^8 cfu *B. fragilis*; **(C)** *C. difficile* group, cells were incubated with 5×10^7 cfu *C. difficile*; **(D)** Exclusion group, cells were infected with 5×10^8 cfu *B. fragilis* and *C. difficile*; **(F)** Substitution group, cells were infected with *C. difficile*; **(F)** Substitution group, cells were infected with *C. difficile* for the first hour and *B. fragilis* for the second hour. The cells were incubated at 37° C under anaerobic conditions for 2 h in total.