



Corrigendum: Molecular Epidemiology and Characteristics of CTX-M-55 Extended-Spectrum β -Lactamase-Producing *Escherichia coli* From Guangzhou, China

Shihan Zeng^{1†}, Jiajun Luo^{2†}, Xiankai Chen², LiShao Huang², Aiwu Wu^{1*}, Chao Zhuo^{3*} and Xiaoyan Li^{2*}

¹ KingMed School of Laboratory Medicine, Guangzhou Medical University, Guangzhou, China, ² Department of Clinical Laboratory, Fifth Affiliated Hospital, Southern Medical University, Guangzhou, China, ³ State Key Laboratory of Respiratory Disease, First Affiliated Hospital of Guangzhou Medical University, Guangzhou, China

OPEN ACCESS

Edited by:

Catherine Neuwirth,
Centre Hospitalier Regional
Universitaire De Dijon, France

Reviewed by:

Roger Stephan,
University of Zurich, Switzerland

*Correspondence:

Aiwu Wu
aiwwu66@163.com
Chao Zhuo
Chao_sheep@263.net
Xiaoyan Li
xiaoyanli@gzhu.edu.cn

[†]These authors have contributed
equally to this work

Specialty section:

This article was submitted to
Antimicrobials, Resistance and
Chemotherapy,
a section of the journal
Frontiers in Microbiology

Received: 31 December 2021

Accepted: 14 January 2022

Published: 15 February 2022

Citation:

Zeng S, Luo J, Chen X, Huang L,
Wu A, Zhuo C and Li X (2022)
Corrigendum: Molecular Epidemiology
and Characteristics of CTX-M-55
Extended-Spectrum
 β -Lactamase-Producing *Escherichia*
coli From Guangzhou, China.
Front. Microbiol. 13:846287.
doi: 10.3389/fmicb.2022.846287

Keywords: CTX-M-55, IncI1 plasmid, *ISEcp1*, ST1193, *E. coli*, IncFII plasmid

A Corrigendum on

Molecular Epidemiology and Characteristics of CTX-M-55 Extended-Spectrum β -Lactamase-Producing *Escherichia coli* From Guangzhou, China

by Zeng, S., Luo, J., Chen, X., Huang, L., Wu, A., Zhuo, C., and Li, X. (2021). *Front. Microbiol.* 12:730012. doi: 10.3389/fmicb.2021.730012

The author order was incorrectly listed as “Shihan Zeng, Jiajun Luo, Xiaoyan Li, Chao Zhuo, Aiwu Wu, Xiankai Chen and LiShao Huang”. The correct order is “Shihan Zeng, Jiajun Luo, Xiankai Chen, LiShao Huang, Aiwu Wu, Chao Zhuo, Xiaoyan Li²”. The author list and the correspondence section have been updated.

In the original article, there was an error. The sentence “There were only three single nucleotide differences between them.” is irrelevant.

A correction has been made to **Results, Genetic Environment Surrounding the bla_{CTX-M-55} Gene**, paragraph one:

“The genetic environment surrounding the bla_{CTX-M-55} gene is presented in Figure 6. Five structures were obtained by analyzing mobile elements around the bla_{CTX-M-55} gene and named type I to V. The mobile elements located upstream of bla_{CTX-M-55} mainly included *ISEcp1* (complete or incomplete) and IS26. Downstream of the bla_{CTX-M-55} genes ORF477 was consistently found. Among them, type II “*ISEcp1*-bla_{CTX-M-55}-ORF477” was the predominant (63.16%, 60/95) genetic environment of the bla_{CTX-M-55} gene and plasmids containing this structure included IncI1, IncFIB, IncFIC, IncFII, IncHI2, and IncI2 (Figure 6). Likewise, the genetic environment of the bla_{CTX-M-55} gene on the chromosome (12/13) was almost type II, the other is type I. Compared with type II, only a large deletion (489 to 1140 bp) of *ISEcp1* was found in type I. Moreover, the bla_{CTX-M-55} genes of isolate 75, 128, and 173 were found on both the chromosome and the IncI1 plasmid, and both of the genetic environments between them belong to type II. The bla_{CTX-M-55} gene of isolate N18 was found on both the chromosome and the IncFIC plasmid, among which the genetic environment on the chromosome was type II, and that on the IncFIC plasmid was type III “IS26- Δ *ISEcp1*-bla_{CTX-M-55}-ORF477.” The occurrence of the type III structure was similar to that of the type II structure, but *ISEcp1* of the type III structure was disrupted by IS26. Interestingly, IS26 mainly emerged upstream of the bla_{CTX-M-55} gene in

the IncFIC and IncFII plasmids. Type IV “IS26-*bla*_{CTX-M-55}-ORF477” mainly exists in IncFII plasmids (15/17).”

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.

Copyright © 2022 Zeng, Luo, Chen, Huang, Wu, Zhuo and Li. 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.