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LETTER

Response to Article "*Kaempferia parviflora* Extracellular Vesicle Loaded with Clarithromycin for the Treatment of *Helicobacter pylori* Infection" [Letter]

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Dear editor

We felt really encouraged to read and review the recent research report reported by Nemidkanam et al since the study provides interesting ideas in providing solutions for antimicrobial resistance in bacterial infection.[1] Clarithromycin is a second-generation broad-spectrum macrolide antibiotic and was generally used in the treatment of *Helicobacter pylori* infection.[2] In this study, clarithromycin was designed to be loaded into *Kaempferia parviflora* extracellular vesicles (KPEVs), while the drug delivery and final antibiotic activity of clarithromycin in KPEVs were examined and compared to the free form of clarithromycin in this in vitro study by using adenocarcinoma gastric cells.[1]

Since the growing number of cases of antimicrobial resistance (AMR) worldwide are still rapidly reported, the results of this study showed promising novelty as the effort to find a way out of this global health issue. KPEVs were shown and proven to be promising drug delivery vesicles. However, some effects shown by clarithromycin in KPEVs were only compared to the free-form clarithromycin in this study.[1] It could be better and convincing to compare to the KPEVs without clarithromycin as well. For example, the results of anti-inflammatory effects and cytotoxic effects of KPEVs alone on gastric cells were not shown in the results section of this study, even though a previous study of this research group had been showing the observation results of biochemical properties and bioactive compounds in KPEVs alone.[3]

Nanomedicine drug delivery systems can distribute antibiotics and target illness areas more effectively than traditional formulations, as reviewed elsewhere.[4] Specifically for site-targeted or certain cell type-targeted drug delivery purposes, the utilization of KPEVs as the vector to deliver the active compound should be further explored. Whether the use of KPEVs could also be utilized for the site-targeted nanomedicine delivery could be an interesting study to perform in this field. Overall, we believe that the novelties introduced and investigated in this work are promising and intriguing, especially since *Kaempferia parviflora* could be easily discovered and engineered for further use, such as studied also by a few previous studies.[5,6]

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Disclosure

The authors report no conflicts of interest in this communication.

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