Review Form 3

Journal Name:	**Archives of Current Research International**
Manuscript Number:	**Ms_ACRI_128736**
Title of the Manuscript:	**Detection of Plasmid-mediated Colistin Resistance Genes among Escherichia coli and Klebsiella pneumoniae Isolated from Poultry, Food and Human Clinical Samples: A One Health Approach for Antimicrobial Resistance in Brazil**
Type of the Article	**Original Research Article**

PART 1: Comments

	Reviewer's comment	**Author's Feedback** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This manuscript provides good information regarding the presence of the *mcr-1* gene in Brazil with a one-health approach. One of the highlights is the discovery of colistin-resistant E. coli with the mcr-1 gene in cheese products. This is very rare and shows that it is essential to carry out resistance research on processed animal products.	
Is the title of the article suitable? **(If not please suggest an alternative title)**	It is better to simplify the title so that there is no confusion: - Currently, it is known that the *mcr* gene type has reached *mcr-10*. Meanwhile, in this manuscript, testing is only carried out on 2 types of *mcr* genes, namely *mcr-1* and *mcr-2*. So, it's better if the title is corrected and just mentions these two genes. - *K. pneumonia* isolates are taken only from humans, whereas in the title it seems as if K. *isolates* are also taken from animals and food. Title suggestion: Detection of *mcr-1* and *mcr-2* genes among *Escherichia coli* and *Klebsiella pneumoniae* with One Health Approach for Antimicrobial Resistance in Brazil	

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Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	In the abstract, it is better to add the number of isolates and the percentage value of *E. coli* and *K. pneumonia* that have the *mcr-1* gene and the source of isolates. This is to show the high or low risk of the presence of *mcr-1* in the isolates.	
Is the manuscript scientifically, correct? Please write here.	**Materials and Methods** **Bacterial Isolates** Please explain, do human samples come from sick or healthy people? And isolated from what? For example: whether from sputum, rectal swab, or something else. For poultry, please explain what type of poultry was taken. Is it a layer/broiler, or a duck? Is it from rectal or organ swab or boot swab or else? For water, what water source is it taken from? River or other water source? Is it close to the farm where the poultry isolation was taken or close to the location where the human samples were taken? This information is very important because it helps link samples to each other in the approach to spreading colistin resistance, especially the *mcr-1* gene, in the one health system. Analysis of susceptibility profiles Please also clarify, have the *E. coli* isolates originating from poultry, cheese, and water been tested or have they never been tested for AST? **Discussion** In 2016, Brazil banned the use of colistin as a growth promoter, and in 2018 banned the use of colistin in poultry. Please explain, based on the results of this research, whether there is a decrease in resistance to colistin and the presence of the *mcr-1* gene in E. coli isolates from poultry. The *E. coli* isolates from poultry were taken in 2020, which means that the ban on the use of colistin is already underway. Please add to the possibilities of why still find out colistin-resistant *E. coli* from poultry. What other mitigation steps must be taken to further reduce the level of colistin resistance in poultry?	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Yes	
Is the language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General comments	This manuscript is quite good, but it needs a detailed explanation of the sample source so that it can truly show the one-health correlation between samples. Do the samples come from the same area or are they located close to each other? Additional information is needed regarding the policy on the use of colistin in Brazil, both in humans and animals, considering that Brazil banned the use of colistin in poultry several years ago. This is to support the importance of this research or what actions must be taken to further reduce colistin resistance in Brazil with a one-health approach.	

PART 2:

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

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Reviewer Details:

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