

Review Form 1.6

Journal Name:	Journal of Pharmaceutical Research International
Manuscript Number:	Ms_JPRI_80624
Title of the Manuscript:	Evaluation and quantification of resistant gene in antibiotic resistant ESBL producing E. coli in UTI samples with diabetes mellitus: A Molecular Study
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	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)
Compulsory REVISION comments	<p>Title: 1. The resistance genes should be written instead of resistant gene.</p> <p>Introduction: 1. We are now in 2022, and the relevance of this sentence, which is for estimating 2020, is not appropriate: It is estimated that it will affect 220 million people worldwide by the end of year 2020. 2. You mentioned that ESBL increased the treatment coat. It is incorrect. 3. In this study, resistance genes were examined, and virulence genes were not studied. But it is mentioned that: The present study was proposed to determine the frequency of important virulence genes.</p> <p>Materials and methods: 1. 20-30% glycerol should be used to maintain strains and 50% is incorrect. 2. The paragraph about the MIC is entirely unclear and it is questionable. 3. What is the need to use amoxicillin and ampicillin in selecting the antibiotic panel? While according to CLSI, the results obtained from the antibiogram of ampicillin can also be used for amoxicillin predicate. 4. According to CLSI, chloramphenicol is not used in strains isolated from urine and should not be reported but you use in your panel. 5. The urine preservative should be: 0.5 ml of freeze-dried boric acid-glycerol or boric acid-sodium formate. 6. How is the inhibitory zone for clavulanic acid measured when it is not defined in the CLSI? 7. According to CLSI you do not need a MIC to determine the ESBL and the sentence below is incorrect: According to the CLSI guidelines, MIC value of cephalosporin plus-clavulante disc was equal to or greater than 5 mm in diameter of inhibition zones around the disks and compared to the inhibition zones around disks free of clavulanic acid, interpreted as phenotypic confirmation of ESBL production. 8. Cotrimoxazole is one of the most important antibiotics used to treat urinary tract infections. Why is this antibiotic not used in the antibiotic panel? 9. Why was the MIC proposed while antibiogram was performed by disk diffusion? Which antibiotic did the MIC belong to? And how was it done? You just wrote MIC done without any information. 10. Which antibiotic refers to double-disc synergy? 11. If the annealing temperature is the same for all genes, why not be done as a multiplex? 12. Due to identifying genes by PCR, what was the need for a quantitative assay?</p> <p>Results: 1. As mentioned earlier, the need for quantitative real-time PCR is questionable. 2. If it was necessary why the results of the study are not mentioned quantitatively.</p> <p>Discussion: 1. The results do not indicate the prevalence of urinary tract infections among people with diabetes. Why has this been discussed? 2. As mentioned earlier, the study results are not mentioned quantitatively, and there has been no discussion about them either.</p> <p>References 1. Old references have been used, while new articles have been published on Escherichia coli infection, diabetes, and resistance genes.</p>	

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<p>Minor REVISION comments</p>	<p>Abstract:</p> <ol style="list-style-type: none"> 1. There is no need to write words with a capital letter in the case of In Diabetic patients and Urinary Tract Infections in line 1. 2. This sentence is vague: CTX-M was found to have resistance in the E. coli isolates, TEM and SHV respectively. 3. In the abstract, there is no need to mention the characteristics of the real-time PCR method. 4. In the abstract, first, a summary of the methods used and then the results should be given. This issue has not been observed. <p>Materials and methods:</p> <ol style="list-style-type: none"> 1. In the subtitle, the Antimicrobial assay is correct. Essay is incorrect. 2. There is no need to announce the results in materials and methods, including the prevalence of <i>Escherichia coli</i>. 3. To announce how to identification is done, first culture and then gram staining is done, which is not written in order. 4. Instead of cefotaxime-clavulanic, ceftazidime-clavulanic has been repeated twice. 5. Extracted DNA is corrected, not Isolated DNA. 6. There is no data about the control gene design you mentioned. 7. Why is the size of PCR products and ladder size not mentioned and marked in the figure? 8. Which ladder was used? 9. Light Cyclor 480 II system with software version 1.5 (Roche Diagnostics, Mannheim, Germany) is mentioned twice. <p>Results:</p> <ol style="list-style-type: none"> 1. Some parts related to the material and methods section is given in the results and should be reviewed 2. Some sentences are written twice. For example: 54 (36%) strains revealed the ESBL phenotype by using clavulanic acid as a β-lactamase inhibitor in the phenotypic confirmatory disk diffusion test. <p>Discussion:</p> <ol style="list-style-type: none"> 1. In the following sentence, no explanation is given in the material and methods and result sections. And what do you mean by duration of diabetes? The prevalence of bacteriuria and duration of diabetes had significant correlation in our study. 	
<p>Optional/General comments</p>	<p>Title: It is better to write urinary tract infection instead of UTI.</p>	

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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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As per the guideline of editorial office we have followed VANCOUVER reference style for our paper.

Kindly see the following link:

<http://sciencedomain.org/archives/20>

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