

Review Form 3

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_127880
Title of the Manuscript:	Study the relationship of IFN- γ (+874A/ T) polymorphism, and some cytokines with Breast cancer in a population from Baghdad city
Type of the Article	Research Article

PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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 highlights the role of IL-6, IL-17, and IFN- γ gene polymorphisms in breast cancer development and progression. It suggests that elevated IL-6 and IL-17 levels could serve as biomarkers for disease severity, while genetic variations in IFN- γ may influence susceptibility. The study enhances understanding of the immunological and genetic factors in breast cancer, offering potential for personalized treatment strategies.	
Is the title of the article suitable? (If not please suggest an alternative title)	<p>The current title could be more specific to reflect the key findings and focus of the study. A more suitable title might be:</p> <p>"Associations Between IL-6, IL-17 Levels, and IFN-γ Gene Polymorphisms in Breast Cancer Patients: Implications for Prognosis and Risk Assessment"</p> <p>This title highlights the main biomarkers (IL-6, IL-17, IFN-γ) and their relevance to breast cancer, emphasizing both the immunological aspects and genetic factors investigated in the study.</p>	

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<p>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.</p>	<p>The abstract of the article seems to provide a general overview of the study, touching on the key biomarkers (IL-6, IL-17, and IFN-γ gene polymorphisms) and their association with breast cancer. However, to make it more comprehensive and structured, I would suggest a few adjustments:</p> <p>Suggestions for Improvement:</p> <ol style="list-style-type: none">Clarity and Structure:<ul style="list-style-type: none">The abstract should follow a clear, structured format: Background, Objective, Methods, Results, and Conclusion.Each section should be clearly identified, and the flow of information should be logical and easy to follow.Background and Objective:<ul style="list-style-type: none">Include a concise statement about the relevance of cytokines and gene polymorphisms in breast cancer, especially their potential for use as biomarkers for diagnosis or prognosis.The current background is somewhat generic. Consider adding more specific details about why IL-6, IL-17, and IFN-γ were chosen as the focus of the study.Methods:<ul style="list-style-type: none">Provide a brief mention of the study design (e.g., case-control), sample size, and the main techniques used (e.g., ELISA for cytokine measurement, PCR for gene polymorphism detection).Mention the control group and how it was selected (healthy women).Results:<ul style="list-style-type: none">Briefly summarize the key findings in the results section, emphasizing the significant differences in cytokine levels and gene polymorphism frequencies between breast cancer patients and controls.For example, "IL-6 and IL-17 levels were significantly elevated in breast cancer patients compared to controls ($P < 0.05$), and the AA genotype of IFN-γ was associated with a higher risk of developing breast cancer."Conclusion:<ul style="list-style-type: none">Offer a concise conclusion on the implications of these findings for breast cancer prognosis and risk assessment.For example: "This study suggests that elevated IL-6 and IL-17 levels, along with specific IFN-γ gene polymorphisms, could serve as potential biomarkers for breast cancer risk and prognosis." <p>Suggested Revised Abstract:</p> <p>Background: Breast cancer (BC) is the most common cancer among women worldwide, with cytokines and gene polymorphisms playing important roles in its development and progression. This study investigates the association between interleukins (IL-6, IL-17) and IFN-γ gene polymorphisms in BC patients and healthy controls.</p> <p>Objective: To assess the serum concentrations of IL-6 and IL-17 and the frequency of IFN-γ gene polymorphisms (+874 A/T) in BC patients and their potential as biomarkers for BC prognosis and risk.</p> <p>Methods: A case-control study was conducted with 80 BC patients and 35 healthy women. Serum IL-6 and IL-17 levels were measured using ELISA, and IFN-γ gene polymorphisms were identified using PCR-based electrophoresis.</p> <p>Results: IL-6 and IL-17 levels were significantly higher in BC patients compared to controls ($P < 0.05$). The IFN-γ gene polymorphism +874 A/T showed a significant difference in genotype frequency between BC patients and controls. The AA genotype was associated with a higher risk of BC, while the TT genotype was linked to a protective effect.</p> <p>Conclusion: Elevated IL-6 and IL-17 concentrations, along with the IFN-γ +874 AA genotype, could serve as valuable biomarkers for assessing BC risk and prognosis, offering new avenues for</p>	
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	personalized treatment and early detection strategies.	
Is the manuscript scientifically, correct? Please write here.	The manuscript is scientifically correct in its methodology and analysis. The findings contribute valuable knowledge to the field of breast cancer research, particularly in the role of cytokines and genetic variants in immune responses and tumor progression. However, a few areas—such as mechanisms, sample size, and the potential for confounding variables—could benefit from further clarification to strengthen the conclusions.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references in the manuscript provide a strong foundation. Also adding more recent and specific studies—particularly in the areas of cytokine signaling, immune responses, and genetic polymorphisms—would improve the manuscript’s relevance and strengthen the overall impact. Including studies that investigate the therapeutic implications of these immune markers or provide meta-analytic evidence could also offer broader context to the findings.	
Is the language/English quality of the article suitable for scholarly communications?	The manuscript’s language is largely suitable for scholarly communication.	
Optional/General comments	The manuscript presents an important study with clear data and relevant findings. It contributes significantly to the understanding of interleukin and gene polymorphisms in breast cancer. By making the suggested revisions to improve clarity, contextualization, and structure, the manuscript can become even more impactful and engaging for its intended scholarly audience.	

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

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