

Review Form 3

Journal Name:	Asian Journal of Biology
Manuscript Number:	Ms_AJOB_123181
Title of the Manuscript:	Bridging Prenatal Diagnostics and AI: A Systematic Review and Meta-Analysis of the Efficacy of Advanced Algorithms in Identifying Congenital Fetal Abnormalities
Type of the Article	

Review Form 3

PART 1: Review Comments

Compulsory REVISION 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. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	This manuscript is of great value to the scientific community as it delves into the increasing role of Artificial Intelligence (AI) in prenatal diagnostics, an area of great significance due to its implications for the early detection and management of congenital fetal abnormalities. Through a systematic review and analysis of advanced AI algorithms, particularly in the prediction of fetal heart and brain abnormalities, this study provides crucial insights into how AI can enhance diagnostic accuracy, reduce infant mortality, and improve maternal healthcare outcomes. The manuscript's rigorous methodology, which includes adhering to PRISMA guidelines and utilizing meta-analysis techniques, contributes to the credibility of its findings. However, incorporating Mendeley or another reference management tool to track citations would strengthen the manuscript, as would ensuring the correct use of the PRISMA Flowchart diagram to enhance its organization and adherence to academic standards.	
Is the title of the article suitable? (If not please suggest an alternative title)	The topic is strong and effectively encapsulates the key aspects of the research	

Review Form 3

<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>Language and Grammar: Consider revising the phrase "Congenital fetal abnormalities appear as one of the major causes of infant mortalities globally" to enhance clarity, for example: "Congenital fetal abnormalities have emerged as a major cause of infant mortality globally." Rephrase "Our study aimed to evaluate the effectiveness of Artificial intelligence (AI) algorithms in the prediction of the fetal heart and brain abnormalities by using meta-analysis approach" to "This study aimed to evaluate the effectiveness of Artificial Intelligence (AI) algorithms in predicting fetal heart and brain abnormalities using a meta-analysis approach." Simplify "Research aim-oriented studies" to "studies aligned with the research aim and objectives."</p> <p>Clarity and Precision: The abstract mentions the use of PRISMA guidelines but lacks a clear explanation of how these guidelines were applied in the study. Briefly elaborating on key steps, such as inclusion/exclusion criteria and data extraction, would be beneficial. Clarify whether the statement "those researchers assessed all abstracts for eligibility" refers to abstracts or full-text articles.</p> <p>Methodological Details: While the use of the DerSimonian-Laird technique and bivariate random effect models is noted, briefly explaining why these specific methods were chosen would be helpful. Provide a brief description of the specific analyses conducted using RevMan 5.4 for statistical analysis, such as sensitivity analysis or publication bias.</p> <p>Results Presentation: The specific sensitivity and specificity ranges provided in the abstract are commendable. However, consider providing the significance of the statement "Figure 5's area under the SROC curve was 0.960" and its implications.</p> <p>Impact and Implications: The conclusion regarding the effectiveness of AI models could benefit from caution and acknowledgment of potential limitations or the need for further research. Strengthen the statement about strategies aiding in reducing infant mortalities and improving treatment outcomes by linking it back to specific study findings.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>It is recommended to include a literature review as a dedicated subsection.</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>the Study Selection section includes a comprehensive explanation of how the PRISMA flow diagram was utilized, clearly demonstrating the inclusion of the nine selected studies in the narrative. I also suggest refining certain parts of the manuscript, such as the initial lines of the Conclusion, to enhance the clarity of discussions related to deep learning and machine learning. Additionally, consistent language usage, particularly the term "about," which is used in both the second line of the Study Selection section and the abstract, should be given careful attention to improve precision in the text</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>Yes</p>	

Review Form 3

Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The language and English quality of the article are generally appropriate for scholarly communication; however, improvements are needed in terms of clarity, precision, grammar, sentence structure, and consistency in terminology. Enhancing these aspects will help ensure that the manuscript meets the high standards expected in academic writing.	
Optional/General comments		

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>	

Reviewer Details:

Name:	Nwokoro Chukwudi Obinna
Department, University & Country	University of Uyo, Nigeria