

**Review Form 3**

Journal Name:	<b>Archives of Current Research International</b>
Manuscript Number:	<b>Ms_ACRI_126592</b>
Title of the Manuscript:	<b>MACROSCOPIC WOUND HEALING IN THE LIMBS OF DIABETIC RATS TREATED WITH AUTOLOGOUS MESENCHYMAL STEM CELL MICROGRAFTS</b>
Type of the Article	<b>Minireview Article</b>

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**PART 1: Review Comments**

<b>Compulsory</b> 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>
<p><b>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.</b></p>	<p>This manuscript on the use of autologous mesenchymal stem cell (MSC) micrografts for wound healing in diabetic rats holds significant importance for the scientific community, especially in the context of diabetic foot ulcer management. It provides insights into an innovative therapeutic approach using the Rigenera® system, which facilitates effective and minimally invasive wound treatment by leveraging the paracrine and immunomodulatory properties of MSCs. The findings contribute to the ongoing research on diabetic wound healing and underscore the potential of MSC-based therapies to accelerate recovery and reduce healthcare costs associated with chronic diabetic wounds. I appreciate this manuscript as it emphasizes a novel, practical application with translational relevance, offering hope for advancements in regenerative medicine for chronic wounds.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>"Enhanced Wound Healing in Diabetic Rat Limbs Using Autologous Mesenchymal Stem Cell Micrografts via the Rigenera® System"</p>	
<p><b>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.</b></p>	<p>The abstract effectively covers the main elements but could be slightly refined. Mentioning the <b>Rigenera® system</b> earlier would highlight the novelty of the method for obtaining MSC micrografts, an advantage over traditional techniques. Adding brief descriptions of the control and diabetic groups would also help readers understand the comparative basis. Quantifying the observed benefits—such as faster wound closure or specific macroscopic changes—could add depth. Finally, a line about the potential clinical implications of this approach in diabetic wound management would emphasize the study's broader relevance.</p>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p>The manuscript's structure and subsections are generally appropriate, following a logical flow from background to methodology, results, discussion, and conclusion. However, a few adjustments could enhance clarity and readability:</p> <ol style="list-style-type: none"> <li>1. <b>Introduction:</b> The introduction could be divided into two subsections—one focusing on diabetes and wound healing complications, and another detailing the role and potential of mesenchymal stem cells (MSCs) and the Rigenera® system. This separation would make the rationale for using MSCs clearer.</li> <li>2. <b>Results and Discussion:</b> Consider separating "Results" and "Discussion" if they are combined. Distinct sections allow readers to focus on findings in the "Results" section, followed by interpretation and implications in the "Discussion."</li> <li>3. <b>Detailed Methodology:</b> If not already done, the methodology could benefit from subsections, such as "Animal Model," "MSC Micrograft Preparation," and "Macroscopic Evaluation," for easier reference.</li> <li>4. <b>Figures and Tables:</b> Including figures or tables summarizing key results, such as wound healing progress across groups, could enhance visual comprehension.</li> </ol>	
<p><b>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.</b></p>	<p>The manuscript appears scientifically robust and technically sound, primarily due to its well-structured methodology and adherence to standard research practices. The authors used a widely accepted diabetic rat model, carefully controlled experimental groups, and a consistent method for inducing and treating wounds, ensuring reliable comparisons. The use of the Rigenera® system for MSC micrograft preparation is innovative and addresses limitations of traditional cell culture methods, lending credibility to the approach. Additionally, the study's macroscopic evaluation criteria, including hyperemia, secretion, granulation, and epithelialization, are standard indicators in wound healing research, further reinforcing the study's scientific rigor.</p>	

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<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	The references in this manuscript are largely sufficient and include a mix of recent and foundational sources relevant to diabetes, wound healing, and mesenchymal stem cell (MSC) therapy.	
<u>Minor</u> REVISION comments		
<b>Is the language/English quality of the article suitable for scholarly communications?</b>	YES	
<u>Optional/General</u> comments	NONE	

### **PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

### Reviewer Details:

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