

Review Form 3

Journal Name:	Asian Journal of Biochemistry, Genetics and Molecular Biology
Manuscript Number:	Ms_AJBGMB_130454
Title of the Manuscript:	Sickle Cell Disease in Sub-Saharan Africa: Is CRISPR-Cas9 the Breakthrough We've Been Waiting For?
Type of the Article	Review 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.	Sickle cell disease (SCD), an autosomal recessive disorder has a significantly a high mortality rate in children less than five years of age in Sub Saharan Africa . The standard therapeutic modalities available for SCD treatment such as blood transfusion, use of hydroxyurea and glutamine etc fail to prevent its progression to chronic stage . The allogeneic haematopoietic stem cells transplantation in children at early stage is the only curative treatment but the availability of suitable donors and other associated complications like graft-versus- host rejection limit its application. It is in this context, the autologous transplantation of gene-edited haematopoietic stem cells, genetically modified by using CRISPR Cas9 gene editing tool, could possibly prove to be a significant alternative to cure patients with SCD though such studies are in very early stages. This article is a right step in this direction and explores the overall use of CRISPR Cas9 in treating the SCD particularly in respect of the Sub Saharan Africa.	Noted
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	Thanks
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.	Very much comprehensive	Ok
Is the manuscript scientifically, correct? Please write here.	Yes	Thanks
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Yes	ok
Is the language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General comments	This review article comprehensively covers the various aspects of use of CRISPR Cas9 gene therapy for the treatment of SCD and its potentials and limitation in its application in Sub Saharan Africa.	Noted

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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>	