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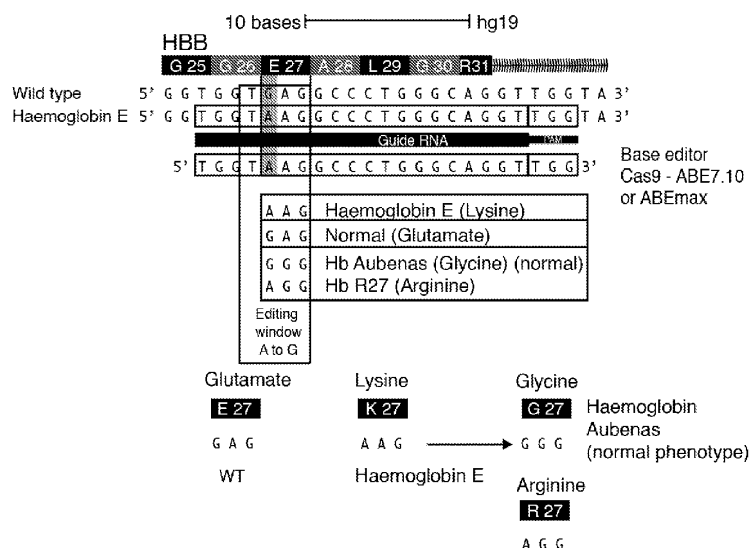
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(54) Title: EDITING OF HAEMOGLOBIN GENES

Figure 1



(57) **Abstract:** The present invention relates to a process for producing a modified nucleic acid, wherein the nucleic acid comprises a mutant haemoglobin B (HBB) gene encoding a mutant Hb- β polypeptide. The process comprises using a base editor, preferably with a gRNA, to edit the mutant HBB gene to change a first (mutant) codon in that gene into a second, non-wild-type codon, wherein the Hb- β polypeptide encoded by that edited HBB gene has a non-wild-type, yet phenotypically-viable, amino acid sequence. The invention also provides a population of isolated haematopoietic stem cells, the stem cells comprising edited HBB genes.

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