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Extensive multilineage analysis in patients with mixed chimerism after allogeneic transplantation for sickle cell disease: insight into hematopoiesis and engraftment thresholds for gene therapy

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Contributions: FB, CP, CA, AK, EG and JPV performed the transplantations, and provided family care and follow-up; MC, DB, FB, EG, CP, JM, ARM and AM, designed the study, collected and analyzed the data; FB, CP, AK and CA provided blood samples and clinical data; DB performed chimerism analyses; CR, AG, CC, EM and MF performed cell isolation, staining and sorting, the colonogenic assay, and DNA extraction, and provided technical support; NB and AM performed statistical analyses and figures/tables preparation; AM, MC and ARM wrote the manuscript; AM, MC, ARM, DB, FB, CP, EG, IA, ES, JM, MF and FT critically reviewed the manuscript.