

## Faculti Summary

<https://faculti.net/haemoglobin-concentration-improves-prediction-of-cognitive-outcomes-in-patients-with-sickle-cell-anaemia/>

This video discusses sickle cell disease (SCD), the most common inherited disorder globally, which is rapidly growing in the UK. SCD affects hemoglobin in red blood cells, leading to their sickle shape, which impairs oxygen transport throughout the body, particularly affecting the brain. This video can result in cognitive challenges, especially in processing speed and executive functions, crucial for daily life and education.

The author highlights a study aimed at examining the relationship between hemoglobin levels and cognitive outcomes over time, utilizing longitudinal data collected from children with SCD in the UK from 2005 to 2014. Results indicated that higher mean hemoglobin levels were significantly associated with better processing speed but not necessarily with working memory or the presence of silent infarctions in the brain.

This video also emphasizes recent advancements in treatments for SCD, including emerging drugs that specifically target hemoglobin improvement, which could lead to better cognitive outcomes. The author calls for more longitudinal studies and the integration of cognitive assessments in clinical trials for SCD treatments to provide a more comprehensive understanding of the disorder's impact on patients' cognitive functions.