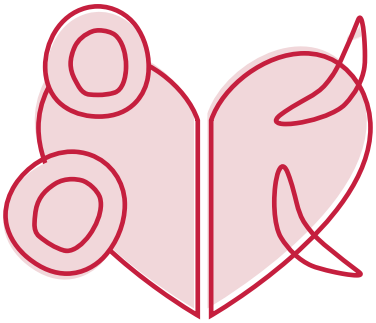


ASH Guideline Recommendations for Sickle Cell Disease: Stem Cell Transplantation

What it covers

- Evidence-based guidelines to support individuals with sickle cell disease and their clinicians considering allogeneic stem cell transplants.

Why it matters

- SCD is a common inherited blood disorder in the United States. SCD results in significant health complications and affects quality of life.
- Allogeneic Hematopoietic stem cell transplant (HSCT), a process in which the individual's blood-forming stem cells are replaced with healthy cells from a donor (allogeneic), is currently the only potentially curative therapy for SCD.
- Guidelines are needed to inform how to apply HSCT in clinical practice, particularly to weigh the risks and benefits versus disease modifying/supportive therapies or potential curative therapies under development, such as gene therapy.

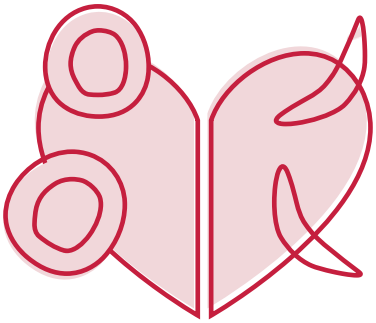
Who it affects

- **Hematologists, internists, general practitioners, pediatricians, and other clinicians:** Health care providers seeking clinical decision support to help identify which individuals with SCD should be considered for HSCT.
- **Individuals with SCD:** Individuals who may be discussing therapy options with their families and health care providers.
- **Researchers:** Those seeking to address potential gaps in evidence supporting treatment decisions.

For more information on the 2019-2021 ASH Clinical Practice Guidelines on Sickle Cell Disease, **visit www.hematology.org/SCDguidelines.**

ASH guidelines are reviewed annually by expert work groups convened by ASH. Resources derived from guidelines that require updating are removed from the ASH website.

The American Society of Hematology (ASH) (*www.hematology.org*) is the world's largest professional society of hematologists dedicated to furthering the understanding, diagnosis, treatment, and prevention of disorders affecting the blood. For more than 60 years, the Society has led the development of hematology as a discipline by promoting research, patient care, education, training, and advocacy in hematology.



ASH Guideline Recommendations for Sickle Cell Disease: Stem Cell Transplantation

What are the highlights

- HSCT should be considered over standard of care (transfusion) in individuals with SCD who have experienced a stroke or are at very high risk of stroke. Further, transplantation should be considered for all patients with neurologic injury who have a matched, related sibling donor. Recommendations point to evidence suggesting that children under age 13 who receive HSCT from a matched sibling donor have better outcomes than those older than age 13.
- For patients with frequent pain, as well as those with recurrent episodes of acute chest syndrome, the ASH guidelines suggest transplantation from a matched sibling donor over the standard of care.
- For individuals with an indication for HSCT who lack a matched sibling donor, the ASH guideline panel suggests transplantation from alternate donors only in the context of a clinical trial.
- In patients with an indication for transplant, the ASH guideline panel suggests transplantation with cells from a matched donor earlier in life due to the risk of irreversible SCD-related damage to the body that increases with age.

Total number of panel recommendations: 8 recommendations

REFERENCE
Kanter J, Liem RI, Bernaudin F, et al. American Society of Hematology 2021 guidelines for sickle cell disease: stem cell transplantation. Blood Adv. 2021;5(18):3668-3689.

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