



Stable Isotope to Measure Red Blood Cell Lifespan in Sickle Cell Disease

What is the purpose of this study?

The purpose of this research study is to test a new way to measure how long red blood cells live in the bloodstream of people with sickle cell disease.

This new test involves drinking, just one time, a natural substance called “stable isotope labeled glycine”. It is a concentrated form of a natural amino acid found in regular food that we eat every day. We can then measure this substance in your blood over time to help us figure out just how long your red blood cells live.

What is involved?

28 visits over 4 months. Visits will involve giving blood and urine samples, drinking the amino acid, glycine, dissolved in a glass of water (just once), and health history.

What are the benefits?

If you agree to take part in this research study, there may not be a direct medical benefit for you. The information learned from this research study may benefit other patients with sickle cell disease in the future.

What are the risks?

There are no known side effects of stable isotope glycine. A detailed list of the few potential risk of the study will be provided to those interested in knowing more about the study.



Will I be paid to participate?

Yes, you will be paid \$20.00 upon completion of each study visit, up to a total of \$560.00

Who Can Participate?

Anyone with sickle cell anemia (SS) or sickle β^0 thalassemia who is 18 years of age or older, and in the baseline or steady-state when you start the study.

Who cannot participate?

- Younger than 18 years of age
- Transfusion of blood in the past 3 months
- New liver or gall bladder disease with symptoms

Whom should I contact for more information?

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